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## Where to Place an Online Ad: An Eye-Tracking Experiment

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### Abstract

Internet advertising budget exceeds 100 billion \$ globally, therefore it is important to see if those money are well spent. The aim of this article is to investigate if Internet users are looking at advertisements and where they are looking at. An eye-tracking experiment was designed to test how much attention- in terms of fixation time and fixation counts - is allocated to advertisements when users are performing different online tasks. Tasks were selected based on complexity – low/high complexity – and involvement – low/high involvement. The results revealed that the longer it takes to accomplish a task, the more the user will look at advertisements. Regardless of task, users pay the most attention to the top advertising area followed by downright advertising area. Even if the study has some limitations, it has also some valuable managerial recommendations.

**Keywords:** Online Ad, Eye-Tracking, Attention, Advertisement, Internet.

**JEL classification:** C91, D83, L81, M31, M37.

### 1. Introduction

Nowadays we live in the so-called attention economy because in this new economy attention is the most precious resource. If for all other resources - capital, information, and labor - the offer is relatively large, attention is limited. Moreover, as the volume of information available increases, the level of attention decreases. Therefore, it is considered that attention will be the currency of future business (Davenport and Völpe, 2001). Thus, the most important factor of success nowadays is to understand and manage attention (Davenport and Beck, 2001).

Attention is the object of interest of many sciences - such as cognitive psychology, education, consumer sciences and marketing (Galloway, 2017) - and one of the most important applications is in the field of advertising. In 2018, the budget allocated to Internet advertising in the US was over \$ 100 billion, out of which 76% was allocated to search and banner advertising (IAB, 2019) and in 2019 it is expected that – at global level – Internet advertising will exceed for the first time the budget allocated to traditional media (Enberg, 2019).

At this scale, it is obvious that Internet users are bombarded with numerous advertisements and to ensure that messages are noticed, advertisers have developed various approaches. Initially, demographic and contextual targeting was used, which means that the advertising messages were displayed on relevant websites based on keywords or topics (Google Ads, 2019a). For example, if a user reads sports news, he will be shown advertisements for sports products. To increase efficiency, new approaches were developed such as geolocation targeting - delivering ads based on users' geographic locations (Google Ads, 2019b) and a more refined and complex one, behavioral targeting. This means delivering ads to online users based on their previous browsing behavior (Boerman et al., 2017).

Given recent regulations - the General Data Protection Regulation (GDPR) and the California Consumer Privacy Act (CCPA) - which prohibit or limit the collection of personal

information (such as online activity) without users' consent, behavioral advertising has been affected. Moreover, some consider that even the mechanism of programmatic advertising – automated selling and buying of online ads according to users behavior on the Internet - constitutes a violation of GDPR principles (Bilz, 2018, DecisionMarketing, 2018).

However, regardless of the type of targeting used by advertisers, Internet users learned to avoid advertising - a phenomenon known as advertising avoidance - and to focus on what they have to achieve. Users were actively avoiding looking at advertisements (Drèze and Hussherr, 2003, Wedel, 2015) following a process of habituation – learn to ignore a stimulus which is repeatedly presented. So, the research question is how much do Internet users look at advertisements, when and where exactly are they looking?

## **2. Literature review**

### **2.1 Visual attention**

Attention is not a unitary notion because it describes and explains a variety of psychological concepts - such as visual/auditory/ spatial attention, conscious/unconscious attention, overt and covert attention, divided and alternating attention and so on - and what it means is different in different situations (Styles, 2006). In principle, however, attention is a cognitive process by which we selectively focus on some type of information at the cost of ignoring other competing information (Anderson, 2015).

If we refer to visual attention in marketing, there have been three environments in which it was investigated: field environment (like retail), desktop environment, and nowadays virtual reality (Bigné et al., 2016, Husić-Mehmedović et al., 2017, Meißner et al., 2017). This classification is based more on the instruments used for measuring visual attention, desktop or mobile eye-tracking devices, but a comprehensive classification would be online versus offline activities and simulated versus natural environment.

Regardless of the environment in which it is researched, several theories have been developed that explain how we focus our attention. Since we have a limited ability to process visual information, it is important to allocate these resources efficiently not to waste important information (Woodman and Luck, 2015). Thus, top-down theories have emerged, that argue that attention will be allocated according to the task to be performed, so it depends on the viewer's mental representations. That is why the viewer will focus on the areas in which he considers he can collect the information he needs to fulfill his task (Foulsham, 2015).

Therefore, the main factors that explain how attention is distributed are task type or task complexity (Betz et al., 2010, Lo et al., 2014, Wang et al., 2014), impulsivity (Huang and Kuo, 2012) and involvement (Behe et al., 2015, Pieters and Warlop, 1999).

Other theories – called bottom-up theories - consider that how attention is allocated depends on the ability of some environmental factors to stand out. For example, in consumer behavior research, factors that attracted attention were related to design features such as shape and contrast (Orth and Crouch, 2014, Uggeldahl et al., 2016), product presentation and seller reputation (Wang et al., 2016), position (Boz et al., 2017), pricing information (Guyader et al., 2017, Menon et al., 2016) and other information display (Guyader et al., 2017), visual / content complexity, familiarity and navigation fluency (Clement et al., 2013, Otterbring et al., 2016, Otterbring et al., 2014).

In the online environment, numerous researches show how attention is allocated based on shape, size, color, and location of ads (Kuisma et al., 2010). This allocation of attention can be represented by so-called scan paths that can be highlighted with the help of eye-tracking devices. Some say that users follow an F pattern while scanning. This means that they focus on the upper and left part of the content area: two horizontal stripes followed by a vertical stripe, like an F shape pattern (Lam et al., 2007, Nielsen, 2006, Pernice, 2017) similar to how we read

a text. But there are other viewing patterns - such as - Z pattern, Gutenberg diagram (Heijmans, 2018), layer cake, spotted, marking and bypassing patterns (Pernice, 2017). So, the question is what are the factors that determine these different attention allocation strategies? While some authors consider that attention is distributed based on how the information is organized on the webpage - with or without a clear hierarchy (Babich, 2017), other authors consider that these viewing patterns are task dependent (Betz et al., 2010).

However, most researchers have come to a consensus that the way in which attention is allocated is determined by both bottom-up and top-down factors (Richardson and Gobel, 2015).

## **2.2 Task complexity**

Online users do not access the Internet to look at advertisements but for other purposes: reading news, buying, sharing information, searching for advice, entertainment, etc. Therefore, advertisements constitute distractors that disturb them in carrying out the tasks that they have to accomplish. And these tasks can be extremely varied from simple (a reading task) to complex (a decision or judgment task). The level of complexity of a task is determined by attributes such as multiple pathways to achieve the desired outcome, multiple desired outcomes, conflicting interdependencies among paths and uncertain linkages among paths and outcomes (Campbell, 1988).

For our research, we will test two activities currently performed online: reading about an event and choosing/buying a product. While reading a text is a simple task, choosing between competing brands and deciding which one to buy is a more complex one.

## **2.3 Involvement**

According to Behe et al. (2015) involvement can be defined as an individual's relevance of an item dependent on person's needs, values, or interests-. It can be evaluated from different points of view, for example, involvement as a participant or as an observer (Greenwald and Leavitt, 1984).

Previous research shows that we can gauge a person's involvement with various activities (task involvement) or objects (product involvement) using a context free scale (Zaichkowsky, 1985, Zaichkowsky, 1994). Involvement determines how much effort we put and influences our results. For example highly involved buyers give more consideration to the product and its specific information (Behe et al., 2015) and exhibit an active search behavior (Huang and Kuo, 2012). Accordingly, involvement ought to be utilized to check whether it influences how attention is allocated for online activities.

## **3. Methodology**

### **3.1. Experimentation outline**

The purpose of the experiment was to evaluate how much Internet users look at advertisements, when and where are they looking while they are performing different tasks.

Therefore, two distinct Internet pages were created, for two different tasks: one which resembles a news site and another one similar to an online store webpage. The two website pages are divided in two parts – one assigned to the task, called task area and what is left forms the advertising area (see Fig. 1). The task area is where information necessary to execute the task is displayed (1368 x 697 px).

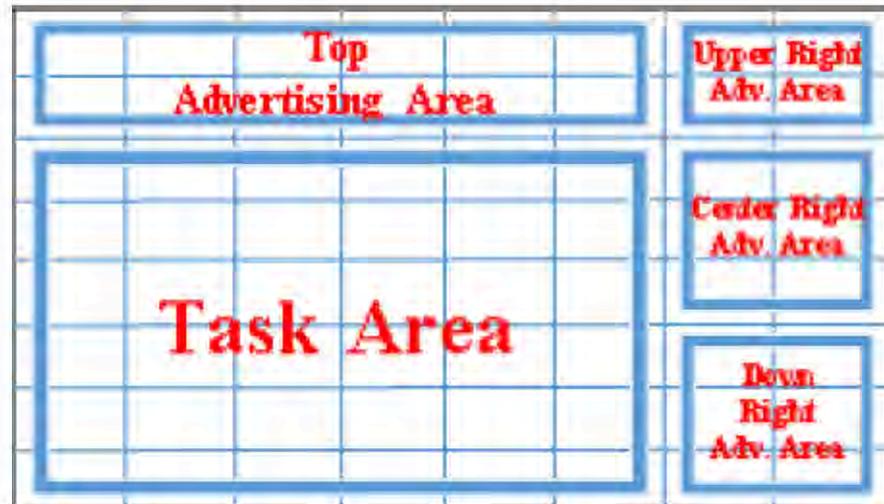


Figure 1. Undertaking and promoting zones on the testing pages

The advertising area is partitioned into four parts, according to Google advertisements guidelines (AdSense, 2017, Statista, 2014): top (970 x 90 px), upper right (300 x 250 px), center right (336 x 280 px) and down right (336 x 280 px) and in each area an ad was placed. The advertising area is divided as follows: 18,75% for top, 6,25% for upper right, 9,37% for center right and 9,37% for down right).

Complexity was controlled by asking participants to carry out an activity: either to read information about an event – on the news webpage - or to compare two products – on the e-commerce webpage. At the start of the experiment, subjects were told that the aim was to assess attention and the test consists of two stages, which were clarified in detail. The eye-tracking apparatus was presented and the procedure described. Firstly, the participants had to answer to a short survey designed to measure their level of involvement with the activity they have to execute. Secondly, after the calibration of the eye-tracking apparatus, subjects have been instructed to execute a task: those which had to read were presented with the news site webpage while those which had to compare were presented the e-commerce webpage. They were permitted to achieve the assignment they got in their own pace. During the test, the examiner recorded additional information for every subject on an observation form.

### 3.2. Subjects

Subjects were chosen among students from business and finance faculties from the Bucharest University of Economic Studies and were granted with credit points. The subjects are Romanians attending English-language under graduation program. because ads were in Romanian and English language.

According to specialists (Kuisma et al., 2010, Nielsen and Pernice, 2010), 30 records are needed for each group in order to get stabilized results. Therefore, to get approximately 60 valid record it was needed to test 82 subjects, which were randomly assigned to a group as follows: the first respondent was assigned to group 1, the second one to group 2, the third one again to group 1, the fourth to group 2, etc. Out of 82 records made, we kept 59 records for investigation (29 for the first group and 30 for the second one). As we have previously mentioned, subjects were 19 - 22 years old belonging to Digital Natives, a generation which lives most of its time. on the Internet.

### 3.3. Measurements

Visual attention is the dependent variable in our experiment, while task complexity and

task involvement are independent variables. Visual attention was measured with an eye-tracking apparatus which recorded fixations both in terms of quantity “fixation count” and time “fixation duration total time” for every area. While these indicators are usually utilized in eye-tracking research (Rayner and Well, 1996, Wątróbski et al., 2017, Holmqvist et al., 2011), they are measuring different dimensions. For instance, a higher number of fixations shows that users attempt to comprehend the content viewed (Poole and Ball, 2006), while longer time fixations might indicate a high interest and involvement (Poole and Ball, 2006, Galesic et al., 2008).

Task involvement was measured with a modified Zaichkowsky scale (Zaichkowsky, 1994). We calculated for each participant an involvement score based on three dimensions – the importance, the interest and the need.

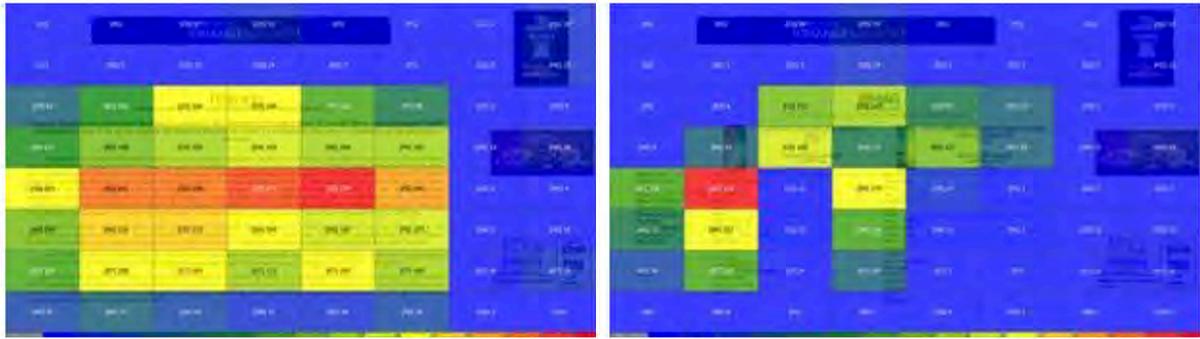
### 3.4. Device and software

The eye tracking apparatus utilized was SMI REDn Scientific System from SensoMotoric Instruments (SMI). The recommended manufacturer setting was utilized, SMI workstation and an extra screen, both with 1920 x 1080 HD resolution. The 24-inch size external screen was utilized at 60 Hz and Image Aspect Ratio was set to 16:9. The examiner sat in front of the SMI PC and the subjects in front of the stimulus external screen at a 45 to 84 cm (average 63 cm) distance from the eye-tracking sensor. Supplemental console and mouse were given to participants to use during the investigation. The experiment took place in similar brightness conditions for all participants.

For the examination the Software “Experiment Center <sup>TM</sup>” was utilized together with the online research platform “Lime Survey”. To analyze the collected data “SMI BeGaze <sup>TM</sup>” and “IBM-SPSS <sup>TM</sup>” software was used. When designing the test pages, the researchers paid attention that every area of interest (both task and advertising area) fits into the standard gridded AOI of the “SMI BeGaze <sup>TM</sup>” analysis software of 8 x 8 automatic AOI’s. To match this design, the advertising areas were included in the first two horizontal rows and the last three vertical columns. What was left represents the content area. Also, the automatic gridded 8 x 8 AOI helped us to partition the screen into 64 equal AOI that gave a reasonable delimitation between the task zone and the advertising zone. Since the AOI’s were bigger than the visual stimuli researched (Wang et al., 2018), the participants could clearly perceive them. For analysis, information recorded by the right eye was utilized as past investigations (Niehorster et al., 2018) consider that the right eye sees the data in a uniform way, regardless if it is placed on the left or right half of the focal position. Moreover, SMI eye-tracking device gathers by default the data for the right eye. Information collected for each AOI was processed according to each sub-area: content: top, upper right, center right and down right. All the tests were performed and the statistical significance of the observed variations was checked using “SPSS<sup>TM</sup>”. For statistical significance test, a series of independent samples T-tests were used at a significance level set at 95%.

### 4. Results

Using the 64 automatic AOI’s facility from the “SMI BeGaze <sup>TM</sup>” software, in Figure 2 it could be observed the area of interest most viewed in both scenarios – reading group and comparing group. Starting from red intense color (most viewed areas), thru orange, yellow, light green, dark green, light blue and dark blue (least viewed areas), it could be distinguished a colored map of attention distribution during the task performed.



*Figure 2. Grided AOI's  
Reading group versus Comparing group*

For reading group, the focus was more on the areas where the text was displayed. The map is more colorful, because in order to understand the text the subjects read line by line and needed a longer viewing time than the comparing group. Subjects in the comparing group quickly looked - back and forth - at the main features, of the two brands of mobile phones. Using focus map, it could be clearly seen the “F shape” distribution of attention in the reading task and the “I shape” in the comparing task (see Figure 3).



*Figure 3. Focus Map: F shape vs I shape  
Reading group versus Comparing group*

While performing the task, participants have looked sporadically to the advertisements displayed on the webpage(see Figure 4). Still, there are differences considering the viewing patterns of the two analyzed groups. Reading group subjects looked and looked again more often at the top and down right advertisements as somehow these points define the boundaries of the page from where the readers start and stop visualizing the page. On the comparing task, as there is no need of starting and ending points, the participants has looked in a more uniform way to all the advertising areas on the page.



*Figure 4. Scan Path  
Reading group versus Comparing group*

Based on “fixation count” and “fixation duration total time” recorded by the eye-tracking device for all AOI, we calculated attention indicators for the task area and the four advertising areas of the webpages. The values were analyzed in SPSS™ using t-test for independent samples to identify if the differences are statistically significant. In Figure 5 and 6 the values are presented both as nominal values and as percentages to better understand how attention is distributed. The values highlighted in green color (either Total time [T] in ms. or Fixation count [F]) are statistically significant different for the reading and comparing tasks.

<p>T 1.25% / 1,358 F 1.35% / 2.7</p>	<p>T 0.84% / 911 F 0.77% / 1.5</p>	<p>T 1.85% / 751 F 3.33% / 2.6</p>	<p>T 1.03% / 417 F 1.23% / 1.0</p>
<p>T 95.99% / 104,370 F 95.75% / 191.5</p>	<p>T 0.71% / 768 F 0.97% / 1.9</p>	<p>T 94.70% / 38,339 F 91.27% / 71.8</p>	<p>T 1.12% / 455 F 2.06% / 1.6</p>
	<p>T 1.22% / 1,324 F 1.17% / 2.3</p>		<p>T 1.29% / 522 F 2.11% / 1.7</p>

Figure 5. Task complexity

a) Reading

b) Comparing

Total time (T) ms., Fixation count (F).

Analyzing from the task complexity point of view for “Task area” could be observed that reading depletes more visual attention than comparing – both in fixation time (+172%) and fixation count (+167%). We must mention that both total fixation time [F (14.643) = 8.278,  $p < 0.001$ ,  $df = 57$ ] and fixation count [F (19.184) = 6.612,  $p < 0.001$ ,  $df = 57$ ] are statistically significant different for the reading and comparing tasks. A “simple” task seems to consume more attentional resources, which means that task complexity is not as important as visual complexity, in the way in which information is presented.

For “Advertising area” statistically significant differences are only in terms of total fixation time [F (7.887) = 3.123,  $p < 0.005$ ,  $df = 57$ ]. “Comparing” group allocates more attention to the advertising area (>5%) while “reading” group less (<5%). If the task needs more attentional resources, the viewer will also allocate more attention on advertisements.

The differences between the tasks and the four advertising areas are statistically significant only in terms of total fixation time for “Top advertising area” [F (3.089) = 2.618,  $p < 0.05$ ,  $df = 57$ ], “Upper right advertising area” [F (22.689) = 2.922,  $p < 0.005$ ,  $df = 57$ ] and “Down right advertising area” [F (12.080) = 2.648,  $p < 0.05$ ,  $df = 57$ ]. Regardless of task, “Top advertising area” and “Down right advertising area” are the mostly viewed zones.

If we consider the degree of task involvement, the results differ from the general situation presented above. As we mentioned previously, task involvement was measured on a scale from 1 to 7, and at the sample level the average was 4.73 and the median was 4.66. Regardless of the task performed, we have divided the respondents into two groups - high involvement and low involvement -, considering value 5 as separation point. Since value 4 signifies the middle of the scale - a “neutral” point, so to say -, everything which exceeds this value can be safely named as high involvement.

Considering the value 5 as a threshold 28 subjects are part of the “High involvement” group and 31 subjects form the “Low involvement” group. There are significant differences between the “High involvement” group and “Low involvement” group on the “Center right advertising area” based on total fixation time [F (12.864) = -2.364,  $p < 0.05$ ,  $df = 57$ ] and on the “Down right advertising area” based on fixation count [F (6.178) = -1.984,  $p < 0.05$ ,  $df =$

57]. Another result is that there are no more significant differences on the main task area considering the number of fixations, while considering the total fixation time the differences are still significant [ $F(3.672) = -2.674, p < 0.05, df = 57$ ], see Figure 6.

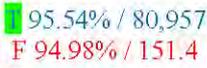
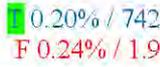
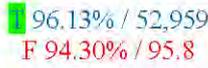
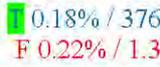
T 0.35% / 1,303 F 0.32% / 2.5	T 0.19% / 720 F 0.17% / 1.4	T 0.36% / 764 F 0.40% / 2.3	T 0.21% / 445 F 0.15% / 0.9
 95.54% / 80,957 F 94.98% / 151.4	 0.20% / 742 F 0.24% / 1.9	 96.13% / 52,959 F 94.30% / 95.8	 0.18% / 376 F 0.22% / 1.3
	T 0.27% / 1,012 F 0.27% / 2.2		T 0.26% / 544 F 0.23% / 1.3

Figure 6. Task involvement

a) Low involvement

b) High involvement

Total Time (T) ms., Fixation count (F).

It seems that a low involvement task consumes more visual attention than a high involvement task, considering fixation time (+52%), which means that a highly involved viewer executes the task faster. On the other hand, in the advertising area there are differences in terms of total fixation time and fixation counts between high and low involvement groups. If the task needs more attentional resources (low involvement), the viewer will also allocate more attentional resources on ads. Regardless of task, again, “Top advertising area” and “Down right adv area” are the most viewed.

## Conclusions

As we mentioned previously, the aim of this study was to identify how much do Internet users look at ads, when and where exactly are they looking.

Considering how attention is allocated on a website, we found out that, no matter what type of task is performed, the advertising area captures 4-6% of attention in terms of fixation time and 4-8% of attention in terms of fixation counts.

Nevertheless, there are differences in the way in which attention is allocated, depending on the complexity of the task. Based on our experimental data, we found that when the user reads (s)he will pay more attention (as a %) to the task and less attention to the ads than when (s)he performs a more complex task such as a comparison.

Although it seems counter-intuitive – because we assumed that a simple task will consume less attentional resources – there could be another explanatory factor, namely visual complexity, that is the way in which the information it displayed on a webpage. Thus, reading is a simpler cognitive task than comparing/decision making, but the fact that information is presented as text, sequentially and with a higher density, increases the visual complexity and implicitly the attention given to the task. And this will influence also the attention given to advertisements.

However, if we analyze the attention indicators (fixation time and fixation count) in absolute values – not as % - we find that when the task requires more attention, the user will pay also more attention to advertisements.

The same result was found in the case of the low involvement - high involvement task analysis. Because a low involvement task requires more time to complete, the attention paid to the advertisements will be higher. Simply put, the more attention a user allocates to a task, the more attention will be paid to distractors.

Considering the attractiveness of advertising areas, regardless of task type (low/high

complexity and low/high involvement) the "golden" areas are "Top advertising area" - which attracts the highest number of fixations and the highest fixation time - followed by "Down right advertising area". Thus, from a managerial point of view, the main recommendation is to place the ads on websites that consume more attention (such as news websites) and on the golden areas, such as "Top advertising area" or "Down right advertising area". Unfortunately, it is difficult to make recommendations based on task involvement, because we cannot estimate the individual level of involvement of a user.

Beyond all these analyses, we must not forget that less than 5% of visual attention is allocated to online banner ads. Given the fact that global online advertising budget exceeds \$ 100 billion, we wonder if this advertising model is efficient anymore. Additionally, current and future regulations limit the effectiveness of targeting strategies which will also affect online advertising efficiency.

Therefore, it is necessary to develop a new online advertising model, in which the advertisements will provide value-added to the user and not perceived anymore as distractors. To do so, some authors suggest adapting them according to user mood (Charlesworth, 2018). Thus, if the user is in information-seeking mood (search engine sites) he will be more open to ads containing details / characteristics of a brand, if he is in entertainment seeking mood (video-sharing platforms) the ad should be funny, if he is in advice mood (review site) the ad should provide recommendations from specialists, in a buying mood (e-commerce sites), the ad could provide information on deals, prices etc.

However, our research has some limitations. First of all, the participants in the experiment were students. Even if they are part of the digital natives - a generation of interest for advertisers - there are also other important generations of users who can exhibit different online behaviors that are worth studying.

Another limitation comes from the way in which we designed the task to be performed on a single webpage. However, when they have to accomplish something, users are not limited to just one page, but navigate back and forth, scroll, click on other pages etc. Additionally, we tested only display ads, not rich media ads which could be perceived as more appealing and we used demographic targeting which is less relevant than behavioral targeting.

A future research direction would be to test the memory. It is possible that users which didn't look at an advertising area to "see" it through peripheral vision and remember it, while those which looked at it could not remember it. This research was conceived as an initial part of a larger study on attention in the online environment. New independent variables should be investigated- such as type of advertisements or type of websites - and their effect should be tested on both attention and memory.

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## Holistic Tourist Experiences in Mature Destinations

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### Abstract

Tourism is one of the activities that most urgently requires innovation and creativity to keep its constantly booming. The aim of this paper is to figure out how mature destinations and their tourist managers provide innovative and sustainable actions in its daily management. Current demand tendencies require active experiences, that generate emotions, awaken feelings, experience content, doses of pleasure. The so-called holistic visits are composed of elements that offer participation, hedonism, knowledge, local identity, and nostalgia. Pinacoteca a Cel Obert (Open Air Art Gallery) is an innovative proposal of street art, and the case analyzed. This is a project promoted by the Barcelona local Government (Spain), with the collaboration of the merchants' association and with the participation of a cooperative of tour guides (Revivint el Patrimoni). Street art or the artistic intervention into 24 commercial shutters is the essence of this public action which also hides different objectives: the recuperation and embellishment of public spaces to the community, the provision of new cultural and social spaces to neighbors, the boost of small businesses in the territory, and the creation of a new icon or attraction to stimulate and strengthen another area to temporary visitant flows in a consolidated tourist city, as Barcelona is. It is a clear example of reactivation, recovery, urban development, but in this case, taken into account the complicity of the associative fabric and citizenship, under the local government push to empower this community participation to change the urban issues. In-depth interviews to the respective project managers; as well as the guides who execute the itineraries and a satisfaction survey to the visitors who enjoy the tour are used to analyze the viability and sustainability of this meritorious example of collaboration and consensus.

**Keywords:** Holistic experience, governance, street art, sustainability, Barcelona.

**JEL classification:** Z32, L26, Q01, L3.

### 1. Tourism governance and holistic experiences

Current societies stand out for the increase in the demand for tourism and leisure. Thus, these destinations focus its efforts to enhance its positions in attractive enclaves for consumption (Zukin 1995; Florida 2002; Miles & Paddison 2005; Smith, 2007; Domínguez-Pérez et al, 2015). Traditionally, tour operators and guided tours were the key elements in shaping these tourist enclaves, and they also had the leading role in transmitting to tourists a unified social feeling (Cocks, 2001). These tourism organizers designed a kind of contemplative tour to specific chosen scenes which were previously embellished (Huka, 1990; Judd & Parkinson, 1990; Sassen & Roost, 1999; Cocks, 2001; Harvey 2001; Blázquez y Murray, 2010; Crespi-Vallbona & Domínguez-Pérez, 2016; Sorando & Ardura, 2016; Gil & Sequera, 2018). These tourist enclaves usually included historic sites, monuments and cultural centres, often located in the central areas. Consequently, these central areas increase its physical, economic, social and cultural pressure, starting several processes of gentrification (van den Berg, 2003; Judd, 2003; Paskaleva-Shapira, 2007; Gladstone & Préau, 2008; Ashworth & Page, 2011; Rogerson & Rogerson, 2014; Montaner *et al*, 2014; Murray & Overton, 2014; Alabart et al., 2015; Wise, 2016; Postma & Schmuecker, 2017; López & Antebi, 2017), touristification (Prats 1997; Donaire, 2008; Herzer, 2008; Rosas Mantecón

2013; Martín, Martínez & Fernández, 2018) and tourismophobia (Lopez-Gay & Cocola Gant, 2016; Novy, 2017; Milano, 2017; Russo & Arias-Sans, 2017; Quaglieri & Scarnato, 2017; Huete & Mantecón, 2018; Crespi-Vallbona & Mascarilla-Miró, 2018).

In that hectic context, managers of tourism destination organizations (DMO) have a delicate and difficult challenge. They have to provide attractive resources, products and services to tourists; maintain the essence, authenticity and singularity of the host community; and try to reconcile interests of both users, that is, tourists and residents and public and private sector (Bramwell & Lane, 2011). Thus, current challenge of tourism governance focuses on sustainability (Lloyd, 2000; Hiernaux-Nicolás, 2003; Crespi-Vallbona, *et al.*, 2017). From a sustainability perspective, resident involvement in the governance of tourism is imperative (Presenza *et al.* 2013). Therefore, the current challenge focuses on the implication and collaboration of public sector, private organizations and citizenship in the planning, development, and the design of a tourism destination. In short, amongst the many challenges of tourism governance, balancing stakeholder interests is one of the most common and difficult objective, introducing networks (Hall, 2011) as the best type of management.

So, according to Hall's statement, governance can be broken up into two main concepts: public authority and social autonomy. Public authority is about state intervention for policy creation and enforcement. Social autonomy represents the need for public administration to regulate itself. It should be noted, however, that the constant political shifts and practices that occur regularly throughout many governments make having one single definition impossible. Furthermore, Hall classifies the tourism governance in four typologies. But, currently, network approach, that is the public-private collaboration has been gaining popularity in the tourism sector, to balance stakeholder interests (van der Zee *et al.*, 2017). These networks are typically referred to as DMO's or CVB's (Convention and Visitors Bureaus). According to van der Zee *et al.* (2017), the strategic placement of managers, both within and outside of the network is important for funding, information, and other resources. However, due to the complexity of the industry, it is difficult for bottom-up networks to be successful without some sort of public-private partnership (Hall, 1999). Public-private partnership refers to the different forms of cooperation between public authorities and the private business world, whose objective is to guarantee the financing, construction, renewal, management or maintenance of an infrastructure or the provision of a service (European Commission, 2003). Therefore, there is no doubt that mixed entities generate positive externalities that all tourism suppliers share and appropriate (Cambrils, 2016). Definitely, it states the need of a sustainable governance model with the complicity and collaboration of public sector, private organizations and adding also the citizenship participation. To this triple helix, sustainability, innovation and competitiveness are the central aims (Crespi-Vallbona, 2019).

Local resident support is critical for the successful tourism development in an area (Nunkoo & Ramkissoon, 2011). A key indicator for successful tourism development is trust, because it builds relationships that underline economic development, legitimacy of governance institutions and promotes outcomes which are in the best interest of society (Nunkoo *et al.*, 2012). Power distribution is another important factor when considering level of support for tourism development amongst residents, for the formulation and implementation of tourism policies" (Nunkoo, 2017). The amount of power that residents have, or believe they have, is proven to have a direct positive effect on their perceptions of tourism development (Madrigal, 1993; Kayat, 2002). Acquiring trust amongst residents in conjunction with empowering them by involving them in the decision-making process of tourism development are the keys to success for tourism governance. Definitely, residents are key stakeholders whose perceptions can heavily influence tourism development. To gain or maintain local support for tourism projects and initiatives requires policymakers to first be informed about resident perceptions of

tourism and potential directions of new development (Presenza et. al 2013). It is only after key stakeholders are heard, that sustainable tourism development can take place. In a nutshell, the sustainable governance strategy involves a new destination management model based on a close relationship with the private sector, the public intervention and citizenship support.

Lastly, there is a required strategy to design and create competitive products. That is, to originate new tourist products to integrate the cultural identity, the emotions and the memorability. Current customers' behaviours or tourists' interests have changed. Contemplative visits have nearly disappeared. Participative experiences and fulfilled emotion proposals emerge vigorously everywhere, as a result of new demand's tendency (Vogeler & Hernández, 2002; Bordas, 2003; Richards, 2004; Bonilla Moya, 2006; de Rojas & Camarero, 2008; Cuenca & Prat, 2012; Rivera Mateos, 2013). Changes in tourism demand mean a research of new experiences far from the daily routine, new activities with the opportunity to discover and know different cultures, other leisure spaces to feel and revive memories of the past (Crespi-Vallbona, 2019). Thus, the attributes that shape these holistic experiences are: participation, hedonism, local identity, knowledge, tasting and nostalgia (Figure 1). These attributes join different tourists' needs, interests, motivations, and expectancies, providing a global experience. Consequently, a new strategy based on these market trends are needed. All these set of elements generate high added value; competitive and differentiated products. Thus, public sector has to force the design of these new, innovative and specialized products based on experiences and emotions. It supposes a holistic and global vision; it means to know the customers' functional needs, as well as their cultural, social and emotional requirements.

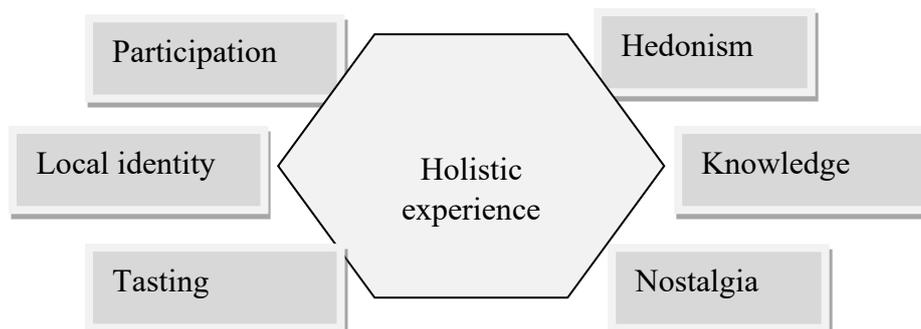


Figure 1. Attributes of holistic experiences

Source: Own elaboration.

## 2. Case study: Pinacoteca a Cel Obert

The case study analysed is Pinacoteca a Cel Obert (Open Air Art Gallery), as it joins all these aforementioned variables that shape holistic experiences and innovative tourist activities. Furthermore, it represents a proposal to replicate due to its sustainable governance, with the implication, collaboration and complicity of public sector, private organizations and citizenship.

*Pinacoteca a Cel Obert* is defined as a consumption experience in a public space. It consists of 24 shutters of shops (Pictures 1 and 2) in a commercial area painted by two famous street art artists. They are geographically located in the city of Barcelona (Spain), specifically in two neighbourhoods (named *Sants* and *Les Corts*), where there is an active network of shopkeepers (named *Associació de Comerciants Sants-Les Corts*), who concern with the economic, social and cultural dynamization of its area. This project was planned and designed from the bottom-up structure, that is, from the *Associació de Comerciants Sants-Les Corts*, and with the political and economic support and drive of the local administration (specifically, from the economic, promotion and tourism area of the Sants-Montjuïc and Les Corts Districts).

Furthermore, the cultural organization, named *Rebobinart*, executed this pictorial project through two recognized street art artists: Jalon de Aquiles and Lucie Blin. Finally, this project consolidates through a group of citizens, who established a cooperative to work as tour guides (named *Revivint el Patrimoni*). These tour guides decided to create a tourist visit based on holistic experience attributes. All these stakeholders play a leading role in this current trend of contemporary “urbanscapes” (Sherry, 1998; Wang, 2005; Bonfantini, 2015). The 24 painted shutters from different commercial businesses, reproduce classical pieces, well-known in the history of art.



*Picture 1. “Ruby” by Alfons Mucha at Europa Jewelry, in 21 Europa street*



*Picture 2. “Bubbles” by Claude Joseph Bail, at the shop Goccia Verde, in 111 Galileu street*

Source: Own elaboration.

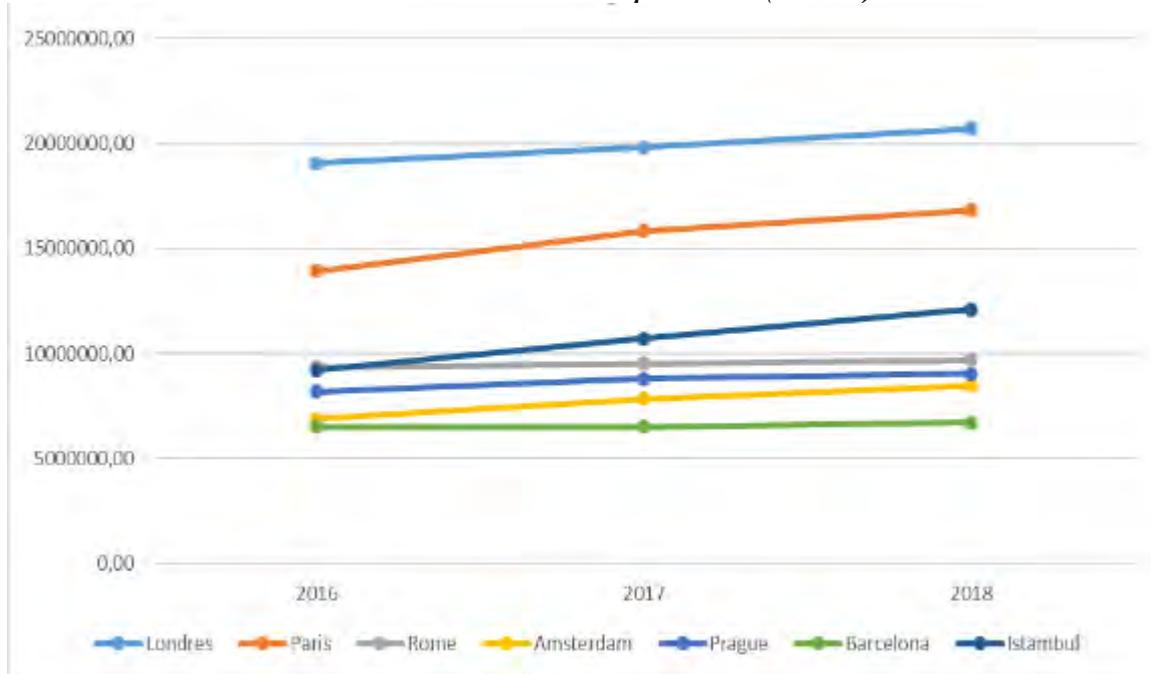
The *street art* as a graphic intervention in the public space is a very studied topic at the scenic art field from the aesthetic and ideological approach, as well as in urban studies from the right of the city perspective and the urbanscape production. In this context, street art is analysed as a leisure and cultural product, as a strong tourist and commercial reaction, due to its embellishment aim. Therefore, in this research, street art is not analysed from the pure and strict conception of street art. Street art refers to artistic expressions that transform the public scene (walls, metro stations, public transport, benches, sing posts, etc.), showing personal feelings, beliefs and ideologies (Gastman, et al., 2006; Rose & Strike 2004; Quintavalle, 2007), and usually without permission (Abarca, 2010). Most of them try to embellish the public scene (Banksy, 2006). Thus, these artistic expressions create new formula of social interactions (Goodsell, 2003; Sacks, 2005), and have a public and urban dimension, as they exhibit in consumption and public spaces. In the case analysed, *Pinacoteca a Cel Obert*, the painted places are shutters of private businesses.

## **2.1. Barcelona: a mature tourist destination**

According to Euromonitor International (2018), Barcelona emerges as one of the most visited cities in Europe (Table 1). A brief historic analysis states that the first tourism plan made by the City Council (1988-1992) had the clear objective to position Barcelona in the world tourist scene and provide the accommodation capacity to participants and visitors to 1992 Olympic Games. Therefore, the XXV Olympic Games celebrated in Barcelona put the city in the mind of any potential tourist around the world, creating an image and a brand linked

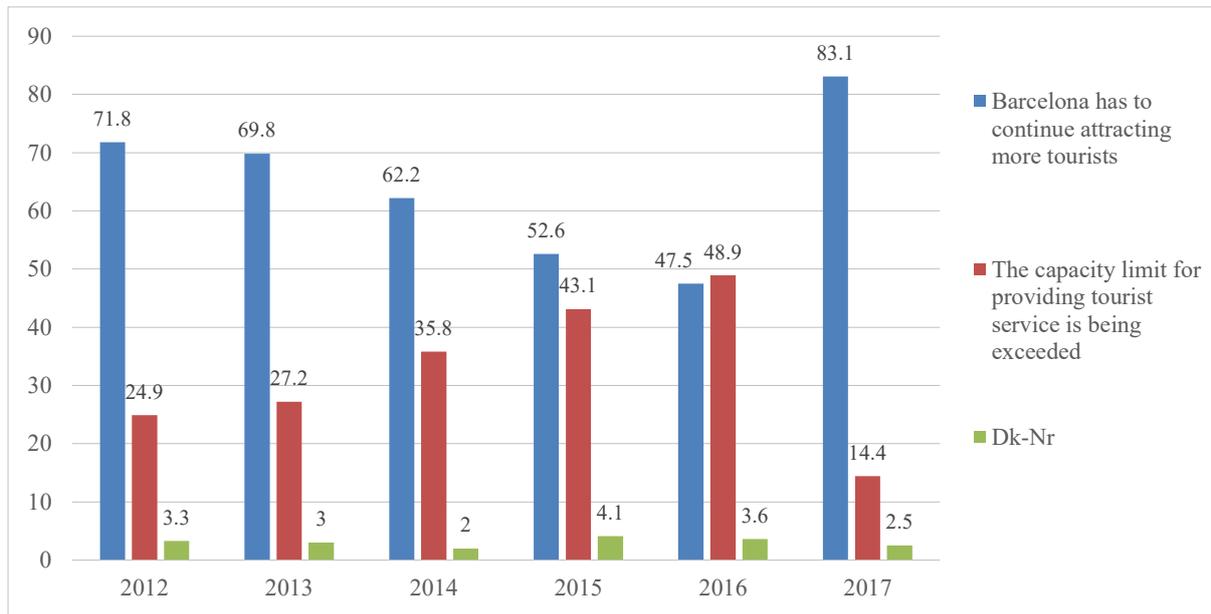
to the cosmopolitanism, modernity, design and tradition, with open-minded, welcoming and friendly residents (Alabart et al, 2015).

*Table 1. Most visited European Cities (2016-18)*



Source: Own elaboration from Euromonitor International Report, 2018

Barcelona cultural icons and attractions are located in the historic centre: the Rambla, the Cathedral, the Gothic Quarter, etc. They are the most visited places. Consequently, the overcrowding and oversaturation in these central spaces involves the emergence of different social movements against the tourist activity. It has also generated the government reaction with the approval of different decrees and plans to regulate and control the uses and licenses of touristified spaces. However, it is worth to mention, that regular survey of the Tourism Administration to citizens reflect their support to tourism activity (Table 2). In such controversial context, this paper stands up for this new model of act in the urban space: artistic expressions into the street furniture, specifically on the shutters of private commercial businesses, using aerosol, with the local administration permission, made by urban street artists and painting classical pieces of art. The final aim is not transgressing or mark the territory, but embellish, converse, decorate, make visible the local and traditional trade in the city, providing a new consumption experience to tourism and visitors, and emphasizing the public-private and citizenship participation in its design and implementation. That is, looking for the local support and the project sustainability.

**Table 2. Evolution of residents' tourism support/rejection in Barcelona (2012-2017)**

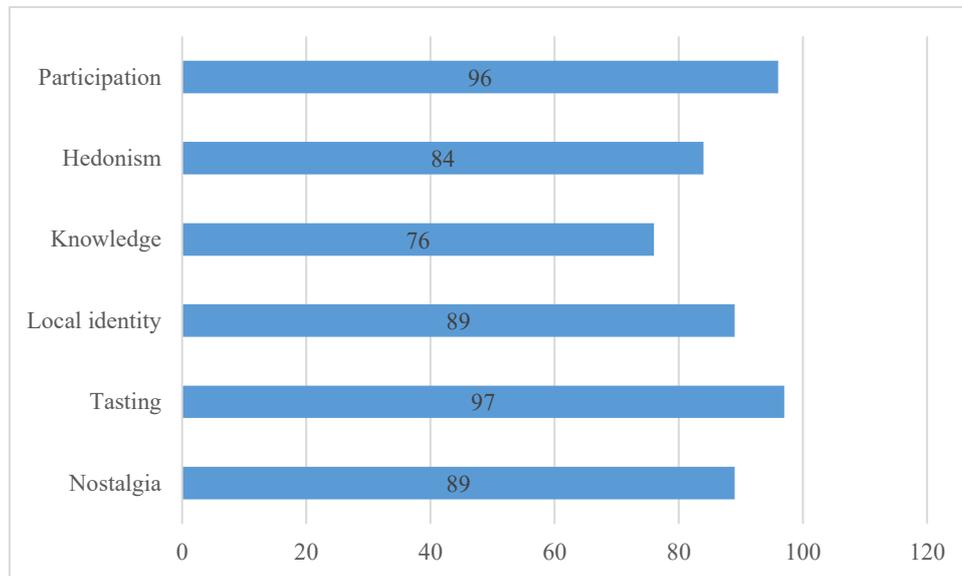
Source: Own elaboration from Tourism Barcelona Statistics, 2017

### 3. Discussion

Quantitative and qualitative methodology used in this research states the sustainable mark of this project, named *Pinacoteca a Cel Obert*. Primary data is collected by in-depth interviews to organizers, designers and tour guides of *Pinacoteca a Cel Obert* itinerary, participant observation during the visits and a survey to visitors conducted at the end of the tours. Secondary data comes from Strategic Plans of City Council, related to tourism and commerce.

This sustainable mark comes from the governance model, this bottom-up network based on the co-partnership and joint responsibility among the different stakeholders leading the economic and social activity in the city: public administration, private organizations and citizenship. A model that strengthens ties between the involved participants to the project and the local community; driving new management and organizational ways to generate shared value to the mutual profit.

Related to the attributes of the holistic experience designed by the tour guides, survey results conclude the significance of each of them (Table 3), emphasizing the interactive nature of the tour, the nostalgic moments emerged during the visit, the fruits tasting at the end of the visit, as a surprise end, the amount of knowledge and local information achieved in a funny atmosphere. However, participation (96%) is the most appreciated value because respondents highlight how they had fun sharing information, trying to guess or deduce the questions suggested by the tour guide.

**Table 3. Perception of satisfaction according to the attributes of the holistic experience Pinacoteca a Cel Obert**

Source: Own elaboration

The breaking point of all the visits was always the same: when visitors had to build a paper magnifying glass to observe the painted shutter on the Fap business (which it is specialized in the restoration of ancient cars). The painting is “Death on ridge road”, by Grant Wood (Pictures 3 and 4). So, these social interactions planned in the itinerary are the most highlighted aspect from respondents.



**Pictures 3 and 4. Admiring “Death on ridge road”, by Grant Wood, at Fap business in 140 Galileu street**

Source: Own elaboration

Finally, the paper reinforces the new conception of street art, as a pretext to increase the community value, to revitalize a commercial area, to embellish the public space. Moreover, it becomes a new icon to decentralise the touristified central areas of Barcelona.

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## The Antecedents of the Sources of Value of Mass Customization According to Different Categories of Products: Individual and Contextual Variables

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### Abstract

This research has for main goal the identification of the individual variables (involvement product, expertise and perceived risk) and contextual variables (level of complexity and perceived level of personalization) according to different categories of products and their relationship with the sources of value of mass customization (MC) (mass customized product value and co-design process value). Through analysis of a netnography of 200 comments left by people who have customized three different categories of product corresponding to private/public consumption (swimsuit, shoe, game controller), we have demonstrated that the individual and contextual variables influencing the perception of value differ from one customizable product to another, and the sources of value of MC are not identical for all products. We have shown that involvement product can have an effect on the utility value but not on the value of interpersonal differentiation. We have also shown that perceived expertise can have an impact on the values related to MC experience, such as hedonic value. When we live a MC experience several times, it will be more fun to customize the product. In addition, we found that the level of perceived complexity can have an effect on the value of interpersonal differentiation. The easier the MC process is to use, the more the individual tends to spend time customizing the product to make it unique. This uniqueness value is also related to the perceived level of customization. In other words, the more choices we have, the more we will create a unique product.

**Keywords:** mass customization (MC), sources of value, individual variable, contextual variable, private/public consumption.

**JEL classification:** M31

### 1. Introduction

To reconcile the maximization of profits via mass production and willingness to meet the diverse expectations of consumers, firms are increasingly offering mass customization (MC) programs. In MC "the same large number of customers can be reached as in mass markets of the industrial economy, and simultaneously treated individually as in the customized markets of pre-industrial economies" (Davis, 1987). Several marketing studies have sought to understand the motivations and brakes associated with MC. They were studied *via* contextual and individual variables: such as the involvement product, the perceived risk or the perceived expertise for the individual variables; perceived level of customization or perceived level of complexity for contextual variables. No research has been interested in studying the antecedents of the valuation of MC according to the products concerned. However, Franke et al., (2010) in their study on the effect of 'i designed it myself' on the valuation of the MC, raises the question of the generalization of their results on categories of utilitarian products such as computers or private consumer products such as mattresses. According to these authors, the relationships studied might be somewhat smaller in such product categories. They also highlight the importance to analyze whether constructs such as product category involvement, a person's desire for unique products, or more generally their level of extroversion as individual

variables influence the MC process.

The purpose of our study is to determine which motivation, for which product category, is likely to influence the consumer's interest in participating in a MC program and to purchase the customizable product accordingly. Previous studies in this field of research (Merle et al., 2010, Franke and Schreier 2010, Franke et al., 2010) show that interest in MC is influenced by the mediation of the perceived value of MC, composed of a value related to the product (utility, expression of its individuality and interpersonal differentiation (uniqueness) and a value related to the experience of MC (hedonic and creative). The contribution of this research lies in the identification of motivations and obstacles to the purchase of a customizable product within the framework of categories of products corresponding to public versus private consumption and hedonic versus utility product.

After presenting the theoretical and methodological framework, we will analyze the main results and draw the necessary academic and managerial conclusions.

## **2.Theoretical framework**

### **2.1. Individual variables related to the relationship to the product category**

There are three individual variables related to the category of products that may have an impact on MC's sources of value (Merle, 2007): the product involvement, the perceived expertise and the perceived risk in the product category. In addition, Rivière (2009) shows that individual variables have an impact on perceived characteristics (eg perceived price, perceived learning cost, perceived functional advantage, perceived complexity, etc.) that are influenced by product information elements (price, place of purchase, design ...) and are themselves susceptible to the formation of the perceived global value.

#### **2.1.1. Product involvement**

According to Roerhich (2001), the involvement is the central variable of the relation between a person and a category of products. It is defined as "an unobservable state of motivation, excitement or interest. It is favored by external variables (situation, product, communication) and by internal variables (ego, values ...)"(Rothschild, 1984). Involvement is considered by Fiore et al (2004) as a two-dimensional variable composed of "development of one's individuality" and "experience of one's appearance". These authors show that product involvement has a significant link with the willingness to use the MC to obtain a unique product. In the same vein, Biedron and Anderson-Connell (1999) show that there is a significant link between involvement and interest in MC. In contrast, Ulrich et al. (2003) validate a non-significant correlation between involvement and comfort in the co-design process, satisfaction with the co-designed product, and ease of decision-making. However, studies on the link between involvement and interest in MC are not all based on the same scales of measurement. For example, the measurement scale of Laurent and Kapferer (1986) takes into account the perceived risk, a dimension considered as distinct from the product involvement by other authors (Merle, 2007). Guilabert and Donthu (2006) suggest that perceived risk may affect the level of personalization desired by individuals. Similarly, according to Rivière (2009), the perceived risk refers to the perception of uncertainty about the negative consequences potentially associated with an alternative of choice and may have a negative influence on the adoption of a new product.

#### **2.1.2. The perceived risk in the product category**

The principle of perceived risk is that consumers are sensitive to both the likelihood and the extent of the potential loss associated with a purchase (Macintosh, 2009). Moreover, it is generally accepted that individuals are motivated to reduce risk by different strategies, such

as doing more research (Beatty and Smith, 1987) or being more loyal to brands or products. Sensitivity to personalization may be related to the perceived risk in the sense that it may be an antecedent of sensitivity to personalization. Perceived risk associated with the purchase and use of customized products could affect the way consumers can customize these products.

### **2.1.3. Expertise in the category of products**

It is defined as "the ability of the consumer to successfully perform tasks related to the product" (Merle, 2007). Aurier and Ngobo (1999) distinguish subjective expertise defined as "the subject's perception of his ability to perform tasks in relation to the product" of objective expertise. According to Dellaert and Stremersch (2005), the more the consumer is expert in the product category the less he finds the MC program complex. They also identify a moderating effect of expertise in the product category on the relationship between the perceived complexity and the utility of the product. Godek et al. (2002) show from a study of two different product categories (pizzas and travel) that consumers are more satisfied with the customized product if they perceive that they have the capacity to modify it themselves. In addition, most MC research suggests that users of this type of program are lead users (Merle, 2007). One of the characteristics of these individuals is their expertise in the product category (Beheur and Gollety 2006).

## **2.2. Contextual variables related to the product category**

Such as individual variables, contextual variables are related to the product category. They have different names according to the authors. We note the MC toolkits or online sales configurator, the variables related to the offer or software of co-design. Merle (2007) studies the impact of two contextual variables on the value of MC: the level of perceived complexity and perceived level of customization. These two variables have an impact on the value of the product and the value of the experience of co-design.

Otherwise, according to Dellaert and Stemesch (2005), the level of complexity is not considered as a variable linked to the product but rather a mediator between the contextual variables (related to the co-design software) and the utility of the product. The complexity is considered here at the same level as the usefulness of the customized product and is close to the ease of use of the Technology Acceptance Model (TAM) considered as a belief influencing the intention to adopt a new product. Dellaert and Stremersch (2005) have studied the influence of several contextual variables on the utility of the customized product (measured by the probability of purchase). The independent variables integrated into their experimental design are the level of customization, the level of heterogeneity, the existence of a default version and finally the integration of the price of each module. Rivière (2009) distinguishes two types of complexity: the complexity of use and the complexity of understanding the operating principle of the new product. Works show that a minimum degree of complexity is better for the adoption of a new product. Conversely, too much complexity can cause misunderstanding and possible rejection of the product. Sandrin et al (2017) empirically show the existence of an effect of the co-design software on the valuation sources of the MC. Apart from the two factors identified by Schreier (2006), these authors highlight three other factors that play a key role in improving the perceived value of MC: the ease of comparison, communication about costs and benefits and finally assisted navigation.

## **3. Methodology**

This research adopts an exploratory approach in order to identify the antecedents of interest at MC according to different product categories (private vs public consumption). We made a netnography of the discussions on the internet of people having made a purchase of a

customizable product and giving their opinions on this experience. Netnography was developed by Robert Kozinets (2002) to study individuals in a non-intrusive natural community. By choosing different product categories and brands, we want to show that consumer behavior towards MC may differ depending on the buying context. The brands selected are in the shoe markets (Nikeid), swimwear (Surania) and video game controllers (Xbox and Scuf). Reviews on Nikeid were collected via the website «igraal». Reviews on Surania have been collected via several fashion forums (Ex: femmes-référence.com or lesfillesduweb.com). The comments on Xbox were collected on a geek forum. And finally, the comments left on the official site of "Scuf" and a video of a YouTuber, presenting the customizable video game controllers, served as a basis for netnography on this brand. A total of 200 comments were analyzed using NVivo software with thematic analysis. The interpretation of the comments is based on the dimensions of our variables previously defined in the literature to provide an objective reading of the studied corpus (Robert and Bouillaguet, 1997).

*Table 1. Variables and prescribers selected*

Variables	Prescribers	Occurrences
Product involvement	According to Roerhrich (2001), involvement is the central variable of the relation between a person and a category of products. It is expressed in comments with prescribers such as "it interests me, suits me, gives me pleasure, who we are, be sure" (Becheur et al., 2006)	50
Perceived expertise	It is defined as "the ability of the consumer to successfully perform tasks related to the product" (Merle, 2007). It is expressed in comments with prescribers such as "I know more, I know the latest innovations, I have experience" (Laurent and Kapferer, 1986)	9
Perceived risque	According to Bauer (1960), perceived risk describes a consumer who develops decision strategies and ways of reducing the risk that enables him to act with confidence. It is expressed in comments with prescribers such as "time, price, delivery time, being afraid that size/quality is not appropriate" (Forsythe et al., 2006)	40
Perceived complexity/ Ease of use	Individuals attach greater utility to simple MC programs (Dellaert and Stremersch, 2005). Complexity is expressed in comments with prescribers such as "difficult, complicated, complex/easy to use"	11
Level of personalization	According to Dellaert and Stremersch (2005), the level of customization increases the utility of the customized product and does not influence the complexity of the program. The level of personalization is expressed in comments with prescribers such as "great choice / limited choice, free, autonomous, customize everything you want"	24

## 4. Results and discussion

### 4.1. Individual variables according to the product category

#### 4.1.1. Product involvement

Individual variables influencing the perception of values differ from one customizable product to another. In addition, the sources of value of MC are not identical for all products.

For example, the value of interpersonal differentiation is not perceived by people who customize the video game controller unlike the two other products studied (swimsuit and shoe). This is because geeks do not feel the need to feel different when they play alone in front of a console at home. People who have customized video game controllers care about the ergonomics of the controller and usually choose a customizable model based on a more powerful feature offered by the brand: *"It is especially in a FPS that it will do the job. The difference, allowing the player to win those few tenths of seconds that make the difference between life and death. For the other games, where the reflexes are perhaps a little less put to the test, it will offer at least the comfort of having two keys comfortably in the hollow of the hand under the pallets"*. This result corroborates the results of Fiore et al (2004) who consider involvement as a two-dimensional variable composed of "development of one's individuality" and "experience of one's appearance". These two components are not felt by consumers of game controllers. The customization of game controllers is curiously considered here as a non-involving purchase. Non-existent involvement in a product category, therefore, precludes any desire to feel different and unique or to have a MC experience. Nevertheless, we can suppose that the less we are involved the more we perceive the utility value linked to the customizable product.

#### 4.1.2. Perceived risk

The cost of uncertainty is greater for customizable swimsuit corresponding to private consumption. People who left comments about their buying experiences say they had a hard time choosing the exact measurements and some of them claim that the received product was *"too small"* or *"too big"*. It has been proven in the literature that the perceived risk in the product category influences the sources of valuation of MC and their antecedents such as the price: *"buy a swimsuit without trying it, I admit, it's a bit risky! Basic models are really cheap, but I'm not going to hide it, prices go up easily depending on the options you choose"* The perceived risk can be linked to the fear that the quality is not good but also the fear that the size does not correspond *"I would like to know if it enhances the breast and does not crush it, because that makes me this effect when I look at the photos of the coup I hesitate to order mine"*. In addition to the difference in values / costs perceived according to the category of product to be customized, we can cite the tendency to offer a customizable product that seems to be present only in comments about customizable shoes Nikeid corresponding to public consumption. To offer, the buyer must know the exact measurements or sizes of the person to whom he will offer. It is, therefore, easier to know the size of shoes than a swimsuit where measurements are considered more "personal". As a result, consumers perceive a high risk when they customize a swimsuit to offer it. Conversely, offering customizable shoes does not present a perceived risk and can positively influence the intention to purchase the product. The perceived risk and intention to offer did not appear in the game controllers comments probably because of the expertise felt by the user and the very individualistic nature of its use. However, it would be appropriate to explore this behavioral intent related to offering a product that hitherto was ignored by marketing work on the MC.

#### 4.1.3. Perceived expertise

Note that previous research has shown that the more the consumer is expert in the product category the less he finds the MC program complex. It even turned out that the perceived expertise is likely to influence the values related to the MC experience as the hedonic value. *"I work in the swimsuit field and I, therefore, find this concept funny"*. In other words, the more comfortable the consumer is with the co-design process, the more he perceives the hedonic value. By repeating participation in a MC program, the consumer will find the process

less complex and appreciate the level of personalization of the product: *"I started 4 years ago to order on this site. The only big lie: deadlines! Do not count 2 weeks but rather for 1 month! Otherwise, they are nice :) I like the fact of choosing colors for every detail"*. Conversely, a lack of expertise leads to a lack of confidence in his creativity and a frustration in the MC experience. In addition, perceived expertise is not mentioned in comments about game controllers.

#### 4.2. Contextual variables according to the product category

According to thematic content analysis, people who have customized shoes or swimsuits express their perception of the benefits of the customized product through the ease of use of the MC website and tools: *"The site online is very well composed, it navigates very easily, the various elements are well set up to easily and quickly create the swimsuit for his holidays, and thus no longer look like the neighbor on the beach"*. The ease of navigation on the site, therefore, has a direct effect on the value of interpersonal differentiation (source of valuation of the MC). This result corroborates with the results of Sandrin et al. (2017) validating a research model linking the benefits of MC and a number of MC toolkits.

These authors show that the "user-friendly product" tool has a positive impact on the utilitarian, social, interpersonal differentiation and expression of its individuality benefits. Franke and Piller (2003) also identify three MC tools: (1) a configuration software presenting the different possible variants, and guiding the user through the customization process, (2) a feedback tool to represent visually the product that the individual customizes in real time, particularly useful in case of uncertain choice, and (3) an analysis tool that transcribes the consumer's order into a list of materials, plans of construction (...) sent by the following production (Merle et al., 2010). The link between the experience of the product and the ability to customize appears a dozen times in the comments on swimsuits and shoes. According to Merle (2007), the contextual variable "level of personalization" also has an effect on the sources of valuation of the MC: *"And that does not go only by the choice of the fabric, which by the way offers a wide choice of 'printed and fluorescent colors, but also by the model and accessories that will make your swimsuit a unique piece. Because everything is possible! The mismatched jersey, with floral print. From headband style to one-piece swimsuits"*. Based on this verbatim, we can suppose that the higher the level of personalization is, the more the consumer perceives a value of uniqueness and value of interpersonal differentiation.

The table below summarizes our results in this study about links between contextual/individual variables and MC valuation sources (utilitarian, hedonic, creative, uniqueness, price and quality). We also identified a new consequence of the perceived value of the MC : the intention to offer.

Table 2. Identification of associations between variables by product category

Variables	Link with another variables	Comments	Category of product	Occurrences
Product involvement	-Valeur d'unicité	-Value of uniqueness is not perceived when the customer is not involved.	Swimsuit	26
	-Valeur utilitaire	-Utility value is perceived when the customer is not involved in the category of the product	Shoess Game controller	40
Perceived expertise	-Hedonic value	-The more the consumer is an expert in the MC process, the more he perceives a hedonic value.	Swimsuit	6
	-Creativity value	-The value of creativity is not perceived when the individual lacks experience in the MC.	Swimsuit Shoes	5
Perceived risque	-Price	The higher the price is, the higher the perceived risk will be.	Swimsuit	15
	-Quality	It is easier to offer a customizable product when there is no perceived risk.	Swimsuit Game controller	30
	-Intention to offer		Shoes	9
Perceived complexity/ Ease of use	-Value of uniqueness	-The easier the process of MC is to use, the more one perceives a value of uniqueness.	Swimsuit	6
Level of personalization	-Value of uniqueness	-The higher the level of personalization is, the more the consumer will perceive the value of uniqueness.	Swimsuit Shoes	14

## Conclusion

Our research objective is to study the individual (product involvement, expertise, and perceived risk) and contextual variables (level of complexity and perceived level of personalization) and their relationship with the perceived value of the MC according to different categories of products in private consumption versus public consumption or hedonic versus utilitarian product. We have shown that product involvement can have an effect on the utility value but not on the value of interpersonal differentiation, as opposed to the perceived

risk that seems to have a direct link with it. We also showed that perceived expertise can play a role in the values related to MC experience, such as hedonic value. When one has lived a MC experience several times, it will be more fun to customize the product. In addition, we were also interested in contextual variables and found that the level of perceived complexity has an effect on the value of interpersonal differentiation. It seems that the easier the MC process is to use, the more the individual tends to spend time customizing the product to make it unique. This uniqueness value is also related to the perceived level of customization. In other words, the more choices we have, the more we will create a unique product. Otherwise, there is a multitude of MC contextual variables that are not present in the sample of products studied in this paper. It would, therefore, be interesting to study in future research the relationship between MC toolkits and the perceived values of MC in other programs offering a wide range of tools. For example, the feedback will probably reduce the uncertainty that arise from the perceived complexity and thus increase the perceived functional benefit (utility value), price acceptance or the perceived global value of MC (Rivière, 2015). From a managerial point of view, the understanding of the sources of value of MC and their relationship with the individual and contextual variables permits to identify values that have not been exploited until then by the brand. For example, it would be appropriate for a firm proposing customizable products for public consumption to highlight the act of offering in its advertisements. From an academic point of view, the contribution of this paper lies in its originality to apply the theoretical framework of the value of MC in order to identify the sources of valuation of MC according to products corresponding to public versus private consumption. It has been shown that some sources of value have greater effects depending on the category of the product concerned. Finally, a quantitative study with an experimental nature highlighting both types of consumption would reinforce these results.

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## Technology Market Dynamics: Fifth Generation Networks and Huawei Market Leadership

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### Abstract

The extant research has established that there is a pioneering market share advantage when the product category is successful, and under certain other conditions. This finding has been found across many product categories. Applying this database of empirical knowledge, the paper addresses the following two important research questions. 1) How does the market share advantage to early entrants impact the Fifth Generation (5G) network technology market structure? 2) How is financial strength of a firm related to market entry of its brand? To analyze and understand these questions of import, we examine the Fifth Generation (5G) network market. And in this context, we assess the position of the market pioneer Huawei and other players. We show that the early entrants enjoy a sustained market share advantage in technology product/service markets. More specifically, we show that the market share advantages (disadvantages) can be quantified in a monotonic relationship using a generalized empirical formula. We also show that financially stronger firms (operationalized by percentage change in earnings per share) tend to enter the market early, and thus secure the market share advantage. Huawei benefits from these market phenomena.

**Keywords:** Pioneer, Early Entrants, Technology Market, Fifth Generation (5G) Networks, Huawei, Earnings Per Share, Financial Performance.

**JEL classification:** L10, L96, M31, M38.

### Introduction

The extant research has established that there is a pioneering market share advantage when the product category is successful, and under certain other conditions. This finding has been found across many product categories.

Applying this database of empirical knowledge, the paper addresses the following two important research questions. These research questions have substantial impact on scholarship and practice.

1. How does the market share advantage to early entrants impact the Fifth Generation (5G) network technology market structure?
2. How is financial strength of the firm related to market entry of its brand?

We chose the 5G market because 5G is transforming every-day consumer experience in many ways, and altering the landscape of our society, commerce and economy, and polity in substantial ways. 5G is making Artificial Intelligence (AI) applications seamless. 5G and AI, together, are revolutionizing the Internet of Things (IoT) (Schulte and Lee 2019, Lee and Low 2018, Liu and Tsyvinsky 2018, Liu and Liu 2016, and Narula 2016). In this context, we assess the position of the market pioneer Huawei and other players.

The paper is organized thus. In the next section, we provide a very brief overview of the relevant literature. Then we present the empirical models that have been employed with many datasets and product categories to estimate the effect of order of entry on market share, and the effect of a firm's financial strength on its ability to accelerate its entry into the market. The following section discusses the generalized formula quantifying the order of entry effect, and its applications to 5G market. Then we present a brief discussion of the effect of financial

strength of a firm on its market entry strategy, and its implications for the 5G market. We finally close the paper with a brief discussion of managerial implications, limitations and opportunities for future research.

### Brief overview of relevant literature

The extant research has documented that there is a sustained market share advantage for early entrants/pioneers if the product/service category is adopted by the consumers (Bond and Lean 1977, Urban et. al.1986, Robinson 1988a, Parry and Bass 1989, Kalyanaram and Urban 1992, Kalyanaram, Robinson and Urban 1995, Kerin, Kalyanaram and Howard 1996, Berndt et. al. 1995, Shankar et. al. 1999, Kalyanaram and Raguvir 1998, King 2000, Vakratsas, Rao and Kalyanaram 2003, Shamsie, Phelps, and Kuperman 2004, Kalyanaram 2008, 2009 and 2013, Yu and Gupta 2014, Zammit and Montaguri 2017). The analyses have been conducted across many product/service categories using both time-series and cross-sectional data.

There are many economic (e.g. Schmalensee 1982) and behavioral (e.g. Kardes, Kalyanaram, Chandrasekar, and Dornoff 1993, Kardes and Kalyanaram 1992, Carpenter and Nakamoto 1989, Zammitt and Montaguri 2017) reasons for this pioneering phenomenon, including that the pioneer becomes the proto-type for the category and that later entrants suffer from an asymmetric comparison in favor of the pioneer.

### Empirical framework: underlying empirical models

Here we discuss the Share and the Entry Models that have been commonly employed for empirical estimation of effect of order of entry on market share, and the effect of a firm's financial strength on its ability to accelerate its entry into the market.

#### Share model

Empirical research has used a variant of the underlying model structure (Kalyanaram and Urban 2013, Kalyanaram 2017). The complete model states that share is a function of order of entry, marketing variables, product quality, and time dynamics. All variables except order of entry are expressed as ratios to the first brand to enter the category. The formal equation is:

$$S_{it} = (E_i^{\alpha}) (Q_i^{\lambda}) (P_{it}^{\beta}) (A_{it}^{\delta}) (M_{it}^{\eta}) (D_{it}^{\pi})$$

where:

$S_{it}$  is the market share of  $i^{\text{th}}$  entrant expressed of as ratio ( $S_i / S_1$ ) at time  $t$

$E_i$  is the order of market entry (2, 3, 4, 5 ...) of the brand  $i$

$Q_i$  is a measurement of the perception of the quality of the brand  $i$

$P_{it}$  is price of  $i^{\text{th}}$  entrant expressed as ratio ( $P_i / P_1$ ) at time  $t$

$A_{it}$  is advertising of  $i^{\text{th}}$  entrant expressed as ratio ( $A_i / A_1$ ) at time  $t$

$M_{it}$  is promotion of  $i^{\text{th}}$  entrant expressed as ratio ( $M_i / M_1$ ) at time  $t$

$D_{it}$  is distribution of  $i^{\text{th}}$  entrant expressed as ratio ( $D_i / D_1$ ) at time  $t$

The above model structure has many interesting features. One, being multiplicative model in structure, it allows for nonlinear response and interaction effects between the variables. Two, as the constant ratio model formulation, it assumes that successive entrants draw shares from all earlier entrants proportional to their respective shares. Accordingly, the curves of relative share versus time become smooth. Three, ratios of the variables carry the important property of eliminating cross-category differences that arise solely because of the differences in number of entrants in categories. We are thus able to make reasonable comparisons across categories with different numbers of brands. For instance, in a three-brand as well as in a two-brand category, we assert – rightly so -- that the share ratio will be the same

between the second and first entrants even though the absolute share may be very different (e.g., 40% vs. 60% in a two-brand market and 33.3% vs. 50% in a three-brand market).

The share model presented above can be converted into a linear model by taking logs on both sides. For estimation purposes, this is a linear time series cross-sectional model. Accordingly, the linear model specification is as follows.

$$\log(S_{it}) = (\alpha) \log(E_i) + (\lambda) \log(Q_i) + (\beta) \log(P_{it}) + (\delta) \log(A_{it}) + (\eta) \log(M_{it}) + (\pi) \log(D_{it})$$

This is a linear regression with no additive constant. The additive constant would confound the interpretation of the magnitude of coefficients because with an additive constant, the share index will not equal to one for the first brand in the market as is required by logical consistency.

### Entry model

The entry models are generally represented as a function of expected market share and the firm's size and performance. Many models assume perfect foresight (see Prescott and Visscher 1977 and Lane 1980). Accordingly, the models use the maximum share achieved by the nth brand as the measure of share potential. Models use total sales as a surrogate for size and market power of a firm. As a surrogate for skill, the models use the average rate of growth of earnings per share over 5 years. The entry equation is represented thus.

$$E_i = (V_i^{\tilde{A}}) (R_i^{\hat{E}}) (Z_i^{\hat{U}}) (Y^{\check{K}})$$

where

$E_i$  = order of market entry of brand  $i$

$V_i$  = anticipated share defined as maximum market share of  $i$ th brand divided by the first brand  
 $R_i$  = ratio of average earnings per share growth over five years for  $i$ th brand to average earnings per share over five years for the first brand.

$Z_i$  = ratio of total dollar sales for brand  $i$ 's firm to the total dollar sales for first brand's sales.

$Y$  is a constant, and  $V_1, V_2, V_3, V_4$  are parameters to be estimated.

We can linear the entry model too by taking logs on both sides. This model then is a linear regression model for estimation purposes as shown below.

$$\log(E_i) = (\tilde{A}) \log(V_i) + (\hat{E}) \log(R_i) + (\hat{U}) \log(Z_i) + (\check{K}) \log(Y)$$

### Generalized formula for estimating the market share advantage

Based on extensive empirical research using the above described models across numerous datasets and product categories, the following generalized formula has been established for estimating the market share as a function of order of market entry (Hauser and Wernerfelt 1990, Kalyanaram et. al. 1995, Kalyanaram and Raguvir 1998, Riemer, Mallik and Sudharshan 2002, Kalyanaram 2008, Kalyanaram 2009.)

### The formula

The entrant brand's forecasted market share divided by the pioneer's/first entrant's market share roughly equals one divided by square root of order of entry. The market share advantage can be quantified using this formula.

$$\frac{S(n)}{S(1)} = 1/\sqrt{n}$$

where  $S(n)$  is the market share of the  $n$ th entrant/brand and  $S(1)$  is the market share of the first/pioneering entrant, and  $n$  is the order of market entry.

This formula postulates that the pioneer enjoys a sustained market share. Applying the formula, the forecasted market shares relative to the first/pioneering brand are 0.71, 0.58, 0.51, 0.45 and 0.41 for the second, third, fourth, fifth and sixth entrants respectively. That is the market share of the second entrant will be 71 percent of the first/pioneering entrant's market share, and those of third, fourth, fifth and sixth entrants will be 58, 51, 45 and 41 percent respectively. As we note, the pioneer continues to enjoy a market share advantage.

Table 1 summarizes the forecasted market share ratios as calculated using the generalized formula.

**Table 1: Forecasted market share relative to the pioneer/first entrant using the formula**

<b>Order of Market Entry</b>	<b>Forecasted Market Share</b>
First/Pioneer	1.00
Second	0.71
Third	0.58
Fourth	0.51
Fifth	0.45
Sixth	0.41

Applying the formula and using the arithmetic that the market shares must be add up to 1 (100 percent), we can compute the relative market shares.

For instance, when there are only two brands/players in the market, what will be the market shares of the first entrant and the second entrant? We know that the market share of the second entrant (say,  $S(2)$ ) is 0.71 of the first entrant's market share (say,  $S(1)$ ). We also know that the market shares,  $S_1$  and  $S_2$ , should add up to 1. Thus, we have the following two equations:

$$\begin{aligned} S(1) + S(2) &= 1 \\ S(2) &= 0.71 S(1) \end{aligned}$$

Therefore, market shares of the first and second entrants are 58 and 42 percent respectively.

What about the relative market shares of six market players? We would compute thus.

$$\begin{aligned} S(1) + S(2) + S(3) + S(4) + S(5) + S(6) &= 1 \\ S(2) &= 0.71 S(1) \\ S(3) &= 0.58 S(1) \\ S(4) &= 0.51 S(1) \\ S(5) &= 0.45 S(1) \\ S(6) &= 0.41 S(1) \end{aligned}$$

Therefore, the market shares of the first, second, third, fourth, fifth and sixth entrants are 31, 22, 18, 16, and 13 percent respectively.

Table 2 summarizes the above computation and lists the market shares (in percentages) as a function of the number of market entrants.

*Table 2: Market shares (in percentages) as a function of number of market entrants*

Number of Market Entrants	First Entrant	Second Entrant	Third Entrant	Fourth Entrant	Fifth Entrant	Sixth Entrant
One	100	--	--	--	--	--
Two	58	42	--	--	--	--
Three	44	31	25	--	--	--
Four	36	25	21	18	--	--
Five	31	22	18	16	13	--
Six	27	19	16	14	12.5	11.5

### **Predictive power of the formula in technology market**

Kalyanaram and Raguvir (1998) have applied the above formula in the context of wireless markets in Europe. Their analyses demonstrated that “first entrants are also market leaders in most countries.”

Mapping very closely to the prediction by the formula, they found that the average market share of all the first entrants in various countries was about 58.5 percent, and that of the second entrant was about 41.5 percent. Exactly the same numbers as predicted by the formula. The analyses included the following wireless markets: Belgium [Belgacom Mobile (first entrant) and Mobistar (second entrant)]; France [France Telecom (first entrant) and SFR (second entrant)]; Germany [Mannesman (first entrant) and T Mobil (second entrant)]; Italy [Telecom Italia Mobile (first entrant) and Omnitel Pronto Italia (second entrant)]; Netherlands [PTT Telecom (first entrant) and Libertel (second entrant)]; Spain [Telefonica Moviles (first entrant) and Airtel (second entrant)]; and Britain [Vodafone (first entrant) and Cellnet (second entrant)].

### **Estimating Huawei’s market share leadership in 5G market**

Huawei has become the leader of fifth-generation (5G) with an estimated market share of 28 percent. The competitors are: Ericsson and Nokia, the European companies, and the three big US carriers, Verizon, AT&T, and T-Mobile and Sprint (they are merging.)

Applying the generalized formula, Huawei’s market share can be forecast to be about 27 percent in the long run, even when five other viable competitors – Ericsson, Nokia, Verizon, AT&T and T-Mobile/Sprint – emerge. Huawei is currently the leader, and it is

Given that Huawei’s current market share is estimated to be about 28 percent, and the forecasted market share when all the competitors are fully functional is 27 percent, Huawei is expected to continue to be the market share leader even when the other expected players enter the 5G market.

### **Empirical findings on the relationship between the order of entry and financial strength of the firm**

The empirical insights relating to the ability of a firm to accelerate market entry to its financial performance are described briefly here (Kalyanaram and Urban 2013).

Order of market entry is directly related to the expected maximum share. That is, higher share expectations are correlated with earlier entry (lower entry values).

The change in earnings per share are negatively correlated with entry order. That is, financially successful, growing firms tend to be earlier entrants.

Accordingly, entry is not exogenous, but rather endogenous phenomena related to the firm's skill and strategy of entering high potential markets early.

However, size of firm is not correlated to entry.

In the 5G market, all the players are of roughly even financial strength. We do not expect any significant advantage to any of them in particular. So, the market share advantage granted to Huawei as a result of its pioneering entry is likely to be sustained unless the later entrants design a dramatically different positioning.

### **Strategic implications, limitations and future research**

In this section, we briefly outline the strategic implications of the findings, limitations of the research, and opportunities for future research.

#### **Strategic implications**

The strategic implications of this research are as follows.

1. Pioneers enjoy a sustained market share. So, Huawei is here to stay for a long time with an in-built share advantage.
2. If the pioneer becomes an intermediate choice as a result of entry of a competitor, then the pioneer will lose its market share advantage (Zammitt and Montaguri 2017). The only way to retain the competitive edge is through differentiated positioning. Suarez and Lanzolla (2005) explain how in technologically evolving market place, the pioneering advantage could be short-lived if the later entrants design and offer new and attractive features. This suggests that firms need continuous innovation with new and improved attributes to maintain the share advantage. Here, Huawei can lose its competitive edge if Verizon or any of the competitors is able to differentiate itself from Huawei and force it to an intermediate choice. But this appears unlikely because Huawei is also at the forefront continuous innovation.
3. The firms that are most likely to enter early are those with demonstrated skill as measured by the growth in earnings per share and foresight in identifying high share potential market opportunities. Here, Huawei's investments in 5G technology, including designing exclusive 5G chips, has been enabled by its strong and sustained superior financial performance.
4. For a pioneer to become a market leader, the brand/firm must exhibit vision, persistence, commitment, innovation and asset leverage (Golder and Tellis 2006). Huawei has done just that by designing cost-effective equipment and solutions.
5. What should be the Pricing Strategy for 5G offerings and services? As proposed by Bertini and Reisman (2013), optimal pricing has to be dynamic letting the customer determine the value of the service and determine the price. Implicit in this is recognition of heterogeneity in framing and utility function of customers (Kalyanaram and Little 1994). If the customer-determined price is not viable for offering the service, then the firm may withdraw the offering. Called as FairPay architecture, Bertini and Reisman describe the approach as defined by empowerment of the customers and continuous dialog between the firm and customers (Reisman and Bertini 2018).

#### **Limitations**

There are two important limitations that must be stated.

1. The pioneering effect and the resultant market share reward happens only when the product category succeeds, and the first entrant as a corollary succeeds. There are many instances of pioneering failing, when the product category did not find adoption by the consumers. In empirical estimations, non-survivors do not obviously get included. Accordingly, the estimated effects of the order of entry are

conditioned on the success of the category. See Golder and Tellis (1993 and 2006), and Suarez and Lanzolla (2005) for an excellent discussion of this.

2. The research needs to be replicated in many more technology product categories to further refine and enrich the formula, and deepen the understanding.

### Directions for future research

Three directions of future research are evident.

1. First, the model could be extended to account for the time between entrants and include structures that assess how enduring the entry advantage is.
2. The second direction of research is to find the fundamental causes of the innate order of entry effect. Because behavioral and economic phenomena might explain the effect, more behavioral experiments are needed to uncover the underlying causative relationship between market share and order of entry.
3. The third is employing more sophisticated estimation methodologies such as varying-parameters approach where the parameters are allowed to vary to fit each observation and, accordingly, dynamically estimated. Or consider incorporation of heterogeneity in parameter estimates. Or a Bayesian approach. These will certainly enhance the accuracy of the empirical estimates. Research has, though, established that more advanced technologies may lead to a slightly better estimate of the magnitude of effects but the direction and/or statistical significance of the results is very unlikely to change. So, we are confident of our empirical results and findings.

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## Childhood Brand Nostalgia, Perceived Self-Continuity and Brand Loyalty

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### Abstract

Research on retro and nostalgic consumption has gathered much interest in the recent past, but little is known about the role of nostalgia in buffering psychological threats such as loneliness, particularly in the context of brand consumption. In this study, we adopt the perspective of emotional loneliness with which we examine the role of childhood brand nostalgia in building brand loyalty. We posit that the negative emotion of loneliness triggers individuals to engage in nostalgia, particularly towards brands that relate to their childhood. This phenomenon is operationalized in this study by the construct of childhood brand nostalgia. We draw on consumer brand relationship theory and develop a sequential mediation model to explain the mediating processes of how emotional loneliness, nostalgia and perceived self-continuity create childhood brand nostalgia and ultimately contribute to brand loyalty. The results from a sample of 211 respondents suggest that when individuals are emotionally lonely, they are likely to engage in nostalgia to enhance their need for perceived self-continuity. Subsequently, the need for perceived self-continuity is fulfilled by the consumption of childhood brand nostalgia as well as by developing a long-term relationship with the brands that are associated with their childhood. Most importantly, our findings imply that emotionally lonely individuals use childhood brand nostalgia to retrieve their fond childhood memories to enhance their perceived sense of connectedness, which in turn may be a means to manage emotional loneliness.

**Keywords:** childhood brand nostalgia, brand loyalty, perceived self-continuity, emotional loneliness, consumer-brand relationship.

**JEL classification:** M31

### 1. Introduction

Retro marketing and nostalgia marketing have become growing marketing trends. For example, consumers tend to indulge in retro consumption informed by reminiscing about old automobile models (Brown, et al., 2003). As for nostalgia consumption, past research has demonstrated that individuals use products or brands to evoke positive affective memories from their childhood as a means to reconnect with their past (Holbrook and Schindler, 2003). Over the years, the stream of research on nostalgia in marketing has expanded from the effects of nostalgia on advertising (Merchant, et al., 2013; Muehling and Pascal, 2011) and differences in individual experiences of nostalgia, with need to belong as a predictor of nostalgic consumption preferences (Loveland, et al., 2010) to building consumer-brand relationships with nostalgic brands (Kessous, et al., 2015). However, little is known about how nostalgic brands may help to buffer the psychological distress of consumers.

Previous psychology literature has identified an interesting phenomenon about the dual-role function of nostalgia, which is both a trigger and a natural resource that promotes psychological well-being. According to Wildschut, et al. (2011), nostalgia is a self-relevant positive and social emotion triggered during emotional distress such as loneliness. Its psychological function of increasing self-perceptions of social connectedness and fostering self-continuity could help individuals make psychological adjustments and infuse meaning into in their lives (van Tilburg, et al., 2019). For example, nostalgia is triggered by negative experiences of loneliness (Wildschut, et al., 2006; Zhou, et al., 2008), the need to belong (Loveland, et al., 2010), threats to feelings of value and purpose (Routledge, et al., 2011), awareness of one's own mortality (Juhl, et al., 2010) and boredom (van Tilburg, et al., 2013). On the other hand, when nostalgia is regarded as a social emotion, it restores positive feeling through heightening perceived social connectedness and social support (Zhou, et al., 2008). In addition, as nostalgia is a self-relevant emotion, it fosters self-continuity (Sedikides, et al., 2015; Zou, et al., 2018) as a compensatory mechanism that enhances self-identity across time.

Drawing upon the aforementioned literature on nostalgia, this study aims to examine the role of nostalgia and how it may serve as a personal means to help people reduce loneliness through developing a long-term brand relationship with their childhood brands. The study makes a twofold contribution. First, our study is the first attempt to provide a framework that explains the processes of the development of brand loyalty through childhood brand nostalgia from the perspective of loneliness. Second, our study highlights the importance of the role of perceived self-continuity in nostalgia marketing with regards to building a long-term consumer-brand relationship.

## **2. Theoretical background and hypotheses development**

Nostalgia is the yearning for products or activities that are linked with one's idealised past (Sierra and McQuitty, 2007). Often, nostalgia reminds individuals of their personal past (Davis, 1979), and it increases feelings of interaction with close others in the context of momentous life events (Holak and Havlena, 1992; Wildschut, et al., 2006). Empirical evidence shows that consumers are fond of purchasing popular brands that have a rich heritage such as childhood brands to feel reconnected with their significant others, with whom they have felt attached to since they were a child (Ju, et al., 2016). Subsequently, nostalgic bonding develops. Over time, this form of nostalgic attachment leads to the development of a strong consumer-brand relationship (Fournier, 1998). Previous psychology literature demonstrates that the need for nostalgia increases when one is lonely (Wildschut, et al., 2006). As nostalgia is a self-relevant positive and social emotion, it can be used to foster social connectedness and provide social support to alleviate loneliness (Zhou, et al., 2008). However, we question whether lonely individuals could feel emotionally connected to their childhood brands to reduce loneliness; how this can be done is still unclear. Thus, this line of inquiry becomes the focal point of our study.

### **2.1 Understanding loneliness**

Loneliness is defined as the discrepancy between actual and ideal social relationships (Peplau and Perlman, 1982). In addition, Weiss (1973) posits that loneliness is comprised of both emotional loneliness (i.e., the lack of intimate relationships with significant others, such as friends, family and loved ones) and social loneliness (i.e., the lack of social relationships). In the current research, we focus on the study of emotional loneliness by aiming to re-establish emotional bonding with close others through nostalgia instead of increasing physical interactions through social relationships. Specifically, we develop a model that emphasises how emotionally lonely individuals could fulfil their emotional and attachment needs – that is, to

feel emotionally connected with close others – through nostalgic engagement with their childhood brands.

## 2.2 Emotional loneliness and nostalgia

Previous literature suggests that individuals need to have a sense of belongingness for survival. Baumeister and Leary (1995) posit that the need to belong is a basic human need to maintain physical and psychological well-being. In turn, unmet needs of belongingness will lead to social anxiety and loneliness (Mellor, et al., 2008). On the other hand, literature from psychology reported that nostalgia is a psychological resource for managing loneliness (Wildschut, et al., 2011). Empirical evidence shows that nostalgia provides perceived social support (Zhou, et al., 2008) and fosters a sense of belongingness (Loveland, et al., 2010) with which one can manage loneliness. Drawing on the need-to-belong theory, we posit that lonely individuals could engage in nostalgia to reduce loneliness by establishing a sense of belongingness when a physical relationship with close others is not available. Therefore, it is postulated that:

H1: Emotional loneliness has a positive effect on nostalgia.

## 2.3 Childhood brand nostalgia

According to attachment theory (Bowlby, 1969), individuals have an innate need to feel attached to their attachment figures – such as parents, romantic partners or friends – for protection. This notion of attachment needs begins in infancy and extends into adulthood, in which individuals seek parental love to romantic intimate relationships and social relationships to avoid loneliness (Weiss, 1973). Consistent with attachment theory, consumers feel attached to nostalgic objects or brands, which produces feelings of security and protection (Zhou, et al., 2013). In this study, we examine whether the consumption of childhood brands, prompted by nostalgia, could trigger memorable nostalgic reverie and, in turn, foster perceived closeness and strengthen social connectedness with close others. Specifically, the construct of childhood brand nostalgia is operationalized in this study to measure this phenomenon. Shields and Johnson (2016, p. 368) define childhood brand nostalgia as ‘a positively valenced emotional attachment to a brand because of the brand’s association with fond memories of the individual’s non-recent lived past’. In this study, we posit that nostalgia induces childhood brand nostalgia. Therefore, it is hypothesized that:

H2: Nostalgia has a positive effect on childhood brand nostalgia.

## 2.4 Perceived self-continuity

Besides increasing social connectedness, nostalgia also fosters self-continuity (Sedikides, et al., 2015). Self-continuity is conceptualized as an important self-function in autobiographical memory that link remembered selves consistently over lived time (Ju, et al., 2016). Psychology literature suggests that self-continuity is associated with psychological adjustment (Sedikides, et al., 2008). This can be further explained by looking through the lens of identity continuity. For example, lonely individuals connect their past self-identity to their present self-identity. As a result, this constancy of self-identity helps lonely individuals to manage uncertainties that they experience in life, which in turn helps them to enhance their life meaning (van Tilburg, et al., 2019). Consistent with the aforementioned psychology literature, nostalgia is found to signal and reinforce consumers’ self-identities (Sierra and McQuitty, 2007). Recent marketing research demonstrates that nostalgic marketing has an impact on perceived self-continuity, which in turn leads to purchase intention (Ju, et al., 2016). However, the relationship between perceived self-continuity and identity construction – developed through nostalgic consumption to build a long-term brand relationship – is still unclear.

Previous literature demonstrates that nostalgia counteracts perceived self-discontinuity (Best and Nelson, 1985). In other words, Best and Nelson (1985) contend that individuals who suffer from a lack of perceived self-continuity will have a greater need for nostalgia. Specifically, we assert in this study that lonely individuals have a desire to maintain perceived self-continuity to manage psychological distress and uncertainty caused by loneliness. By doing so, lonely individuals are triggered to maintain a consistent self-concept drawn from the past through nostalgia, especially from their childhood memories. Thus, we posit that the engagement of childhood brand nostalgia could help lonely consumers to use their past self-identity to construct their present self-identity, which in turn enhances perceived self-continuity. Therefore:

H3: Emotional loneliness has a positive effect on perceived self-continuity.

H4: Perceived self-continuity has a positive effect on nostalgia.

H5: Perceived self-continuity has a positive effect on childhood brand nostalgia.

## **2.5 Building a strong consumer-brand relationship**

In our study, we hypothesize that childhood brand nostalgia is a predictor of the development of a long-term brand relationship between childhood brands and lonely individuals. According to the consumer-brand relationship theory (Fournier, 1998), consumers can develop a relationship with nonhuman agents such as brands in the same fashion as they would cultivate an interpersonal relationship. However, not all types of brands are suitable for becoming a ‘relationship partner’ that can develop into a lasting consumer-brand relationship. In light of the ‘relationship partner’ paradigm (Fournier, 1998), we posit that lonely consumers would regard their childhood brands as ‘emotional childhood partners’. We posit that these childhood brand partners could enable lonely consumers to rekindle nostalgic fond memories of past consumption with their childhood close others, which in turn enhances perceived social support. Thus, we posit that emotionally lonely individuals are likely to develop a long-term relationship with their childhood brands to fulfil their needs for security and protection from close others. Thus, it is postulated that:

H6: Childhood brand nostalgia has a positive effect on brand loyalty.

## **2.6 The mediating role of childhood brand nostalgia**

We postulate that childhood brand nostalgia plays an important mediating role in our study. First, we hypothesize that emotionally lonely individuals desire to enhance their perceived self-continuity to manage fear and uncertainty in life. We posit that they would draw upon their past identity through childhood brand nostalgia to construct their current self-identity in order to form perceived self-identity, which in turn develops brand loyalty. Therefore:

H7: Childhood brand nostalgia mediates the relationship between perceived self-continuity and brand loyalty.

Second, we posit that emotionally lonely individuals need to engage in nostalgia to enhance their sense of belongingness with close others, which in turn increases their need to engage in childhood brand nostalgia and, ultimately, builds brand loyalty. Thus, it is hypothesized that:

H8: Childhood brand nostalgia mediates the relationship between nostalgia and brand loyalty.

In addition, we also examine the processes of how emotionally lonely individuals develop brand loyalty through childhood brand nostalgia through a multiple sequential mediation model in our study. Therefore, it is postulated that:

H9: Perceived self-continuity and childhood brand nostalgia sequentially mediate the relationship between emotional loneliness and brand loyalty.

H10: Nostalgia and childhood brand nostalgia sequentially mediate the relationship between emotional loneliness and brand loyalty.

H11: Perceived self-continuity, nostalgia and childhood brand nostalgia sequentially mediate the relationship between emotional loneliness and brand loyalty.

## 2.7 Research model

Based on the above discussion, we posit that emotionally lonely individuals are triggered by both perceived self-continuity and nostalgia. In addition, we postulate in our study that the engagement of childhood brand nostalgia could be used as a personal mechanism to reduce loneliness. Specifically, we hypothesize that lonely individuals would seek their perceived self-continuity in childhood brand nostalgia. Ultimately, this strong emotional bond with their emotional childhood partners would lead to brand loyalty. Accordingly, we examine both the direct and indirect relationships of emotional loneliness, nostalgia, perceived self-continuity, childhood brand nostalgia and brand loyalty in our proposed model, which is presented in Figure 1.

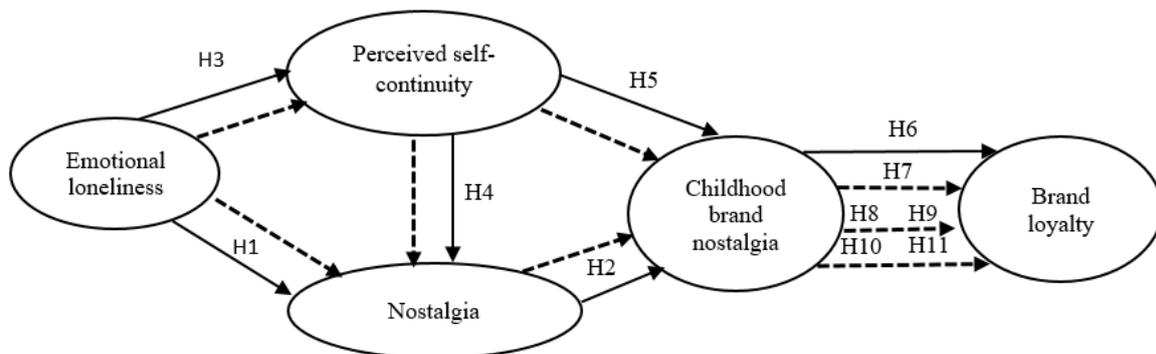


Figure 1. Research model

\*the dotted line represents the mediating relationships

## 3. Data collection

The convenient sampling method was used in this study. Online questionnaires were distributed to 600 respondents in Malaysia via email. A total of 280 respondents completed the online questionnaires, and 211 usable questionnaires were obtained for this study. The respondents ranged from 18 to 60 years old.

## 4. Measurement of variables

To increase the validity of the study, the items in the questionnaires were adopted from previous studies. All items were measured using seven-point Likert scales. Emotional loneliness was accessed using the UCLA Loneliness Scale (Version 3) developed by Russell (1996). Nostalgia was measured by adopting the scale constructed by Barrett, et al. (2010). Perceived self-continuity was measured using the scale developed by Ju, et al. (2016). Childhood brand nostalgia was measured with a scale adopted from Shields and Wiggins (2016). Brand loyalty was measured using the scale adapted from Toledo and Lopes (2016).

## 5. Model testing

Model testing was conducted using PLS-SEM (Partial Least Square Structural Equation Modelling) with SmartPLS Version 3.2.7 software.

### 5.1 Measurement model

The reliability and validity of the constructs were tested in the measurement model. Table 1 shows that all items have Cronbach alpha  $> 0.7$ , and composite reliability ranged between 0.86 to 0.96, which was above the recommended threshold of 0.7 (Hair, et al., 2018). The results indicated that this study has high internal consistency and reliability. When assessing the validity of the constructs, both the convergent and discriminant validity were measured. The results showed that the average variance extracted (AVE) for all constructs was found to be greater than the recommended value of 0.5 (Hair, et al., 2018); thus, convergent validity was confirmed. In addition, the square root of AVE for all constructs was greater than the latent variable correlations (Fornell and Larcker, 1981), thus establishing discriminant validity.

*Table 1. Results of the Measurement Model*

Constructs	Items	Loading	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Emotional loneliness	EM1	0.835	0.914	0.933	0.698
	EM2	0.838			
	EM3	0.861			
	EM4	0.765			
	EM5	0.848			
	EM6	0.861			
Perceived self-continuity	PS1	0.806	0.791	0.862	0.810
	PS2	0.827			
	PS4	0.723			
	PS5	0.763			
Nostalgia	NO1	0.846	0.922	0.939	0.719
	NO2	0.856			
	NO3	0.882			
	NO4	0.884			
	NO5	0.810			
	NO6	0.830			
Childhood brand nostalgia	CB1	0.932	0.948	0.962	0.864
	CB2	0.945			
	CB3	0.923			
	CB4	0.919			
Brand loyalty	BL1	0.872	0.868	0.908	0.712
	BL2	0.844			
	BL3	0.077			
	BL4	0.701			

### 5.2 Structural model

After evaluating the reliability and the validity in the measurement model, the structural model was analysed. Table 2 presents the results of the coefficients of the direct paths with the t-statistics and the significant level resulting from bootstrapping with 5,000 subsamples.

As hypothesized, the results of the path coefficient revealed that emotional loneliness had a significant and positive effect on nostalgia ( $\beta = .172$ ,  $p < .05$ ) and perceived self-continuity ( $\beta = .252$ ,  $p < .001$ ). Therefore, H1 and H3 were supported. The results suggested that emotionally lonely individuals tend to have needs for perceived self-continuity and nostalgia. In addition, the results showed that perceived self-continuity had a positive effect on nostalgia ( $\beta = .351$ ,  $p < .001$ ). Thus, H4 was supported. Subsequently, the results of the path coefficient showed that both nostalgia ( $\beta = .180$ ,  $p < .05$ ) and perceived self-continuity ( $\beta =$

.347,  $p < .001$ ) had a significant impact on childhood brand nostalgia. Therefore, H2 and H5 were supported. However, the effect of perceived self-continuity on childhood brand nostalgia was much greater than nostalgia ( $\beta = .347$  versus  $\beta = .180$ ). Thus, the results implied that the desire to engage in childhood brand nostalgia was triggered more by perceived self-continuity, which was the need to construct consistent self-identity from past to present life rather than the need to engage in nostalgic feelings from the good old times of childhood. In addition, the results revealed that childhood brand nostalgia had a significant impact on brand loyalty ( $\beta = .307$ ,  $p < .001$ ). Therefore, H6 was supported.

*Table 2. Results of the Structural Model and Hypotheses testing (Direct effects)*

Hypotheses	Relationship	Path Coefficient	T-statistics	P-value	Decision
H1	Emotional loneliness → Nostalgia	0.172	2.455	.014	Supported
H2	Nostalgia → Childhood brand nostalgia	0.180	2.416	.016	Supported
H3	Emotional loneliness → Perceived self-continuity	0.252	3.486	.000	Supported
H4	Perceived self-continuity → Nostalgia	0.351	5.666	.000	Supported
H5	Perceived self-continuity → Childhood brand nostalgia	0.347	4.544	.000	Supported
H6	Childhood brand nostalgia → Brand loyalty	0.307	5.317	.000	Supported

Table 3 presents the results of the mediation analysis between the indirect relationships of (i) perceived self-continuity and brand loyalty (H7), (ii) nostalgia and brand loyalty (H8) as well as (iii) the sequential mediation of emotional loneliness and brand loyalty (H9–H11).

Based on the findings in Table 3, the results indicated that the relationship between perceived self-continuity and brand loyalty mediated by childhood brand nostalgia was significant ( $\beta = .107$ ,  $p < .01$ ). Thus, H7 was supported. In addition, the results showed that the relationship between nostalgia and brand loyalty mediated by childhood brand nostalgia was marginally significant ( $\beta = .055$ ,  $p = .053$ ). Thus, H8 was marginally supported. As for the sequential mediation relationship, the results imply that the sequential mediation of emotional loneliness and brand loyalty through perceived self-continuity and childhood brand nostalgia ( $\beta = .027$ ,  $p < .05$ ) was significant. Thus, H9 was supported. However, the sequential mediation of emotional loneliness via nostalgia and childhood brand nostalgia to brand loyalty was not significant ( $\beta = .009$ ,  $p = .141$ ). Thus, H10 was not supported. Similarly, the sequential mediation of emotional loneliness via perceived self-continuity, nostalgia and childhood brand nostalgia to brand loyalty was not significant in H11 ( $\beta = .005$ ,  $p = .164$ ). Thus, H11 was not supported. As shown in Table 3, the mediating effects in H1 to H9 were further confirmed by the absence of a zero value between the lower level bootstrapped confidence interval (LLCI) and the upper level bootstrapped confidence interval (ULCI) (Preacher and Hayes, 2004; Zhao, et al., 2010). Thus, all the aforementioned mediating relationships were confirmed except for H10 and H11, as both have p-values exceeding .05.

The model's predictive accuracy of the research model was assessed with the coefficient of the determination score of  $R^2$  (Hair, et al., 2018). The  $R^2$  results of the model indicated that 8.5 percent of the variance in perceived self-continuity, 5 percent of the variance in nostalgia, 20 percent of the variance in child-brand nostalgia and 9.4 percent of the total variance in brand loyalty explained the model. At first glance, 9.4 percent of the total variance in brand loyalty may seem a rather low predictor of the model. This is because the objective of this study was to examine the process of how emotional loneliness can be triggered by childhood brand nostalgia, which in turn leads to brand loyalty. Therefore, in this model, the childhood brand construct was only used as a direct construct to predict brand loyalty rather than being used in

combination with several constructs to predict brand loyalty. In addition, Henseler, et al. (2016) recommended that the standardized root mean square residual (SRMR) be used as a measure for the goodness of fit for PLS-SEM. A value less than 0.08 is considered a good fit (Hu and Bentler, 1999). Since this study's model SRMR was 0.07, we can report that this study's model had a good fit.

*Table 3. Mediation Analysis*

Path	Path Coefficients	T-statistics	P-value	Confidence interval (95%)	
				LLCI	ULCI
H7: Perceived self-continuity → Childhood brand nostalgia → Brand loyalty	.107	3.193	.001	.050	.181
H8: Nostalgia → Childhood brand nostalgia → Brand loyalty	.055	1.939	.053	.009	.120
H9: Emotional loneliness → Perceived self-continuity → Childhood brand nostalgia → Brand loyalty	.027	2.153	.031	.009	.058
H10: Emotional loneliness → Nostalgia → Childhood brand nostalgia → Brand loyalty	.009	1.474	.141	.001	.026
H11: Emotional loneliness → Perceived self-continuity → Nostalgia → Childhood brand nostalgia → Brand loyalty	.005	1.391	.164	.001	.014

## 6. Discussion and future research directions

The purpose of this study is to examine how lonely individuals engage in nostalgia, construct consistent self-identities through their childhood brands, and ultimately build long-term brand relationships to reduce loneliness. The use of childhood brands is crucial in our study for the following reasons. First, we posit that emotionally lonely individuals could restore their perceived social connectedness with their close others by evoking their memorable past consumption experiences through engaging with their childhood brands. Second, we posit that emotionally lonely individuals are triggered by nostalgia because of their needs to construct self-identities that are consistent with their past selves, in particular, from their childhood. Third, we predict that childhood brand nostalgia leads to brand loyalty.

As hypothesized, the results suggest that emotionally lonely individuals engaged with childhood brand nostalgia as a coping mechanism to manage loneliness. Specifically, the findings suggest that emotionally lonely individuals may trigger to form perceived self-identities to manage uncertainty first. Subsequently, these individuals may engage with childhood brand nostalgia to enhance their perceived social connectedness with their close others. Therefore, the results imply that emotionally loneliness individuals may regard childhood brands as trusted emotional brand partners, whom they have known since their formative years (i.e., childhood) and with whom they can form long-term brand relationships. As a result, the findings revealed that childhood brand nostalgia is the outcome to perceived self-continuity and a predictor of brand loyalty.

This paper contributes in several ways to both theoretical and practical aspects. First, a novel brand relationship model (i.e., emotional loneliness, childhood brand nostalgia, perceived self-continuity and brand loyalty) was developed and validated as a potential mechanism to manage loneliness in this study. Second, the paper further expands the

understanding of the relationship partner metaphor through the lens of lonely individuals from the consumer-brand relationship context. We examined how lonely individuals develop an intimate bond with their childhood brands, similar to the bonds of an interpersonal relationship. Third, we extended the retro and nostalgia marketing literature by examining the psychological effects of nostalgia in relation to childhood brand nostalgia. Specifically, we have identified childhood brands as the potential emotional brand partner that may trigger memorable nostalgia moments that foster perceived social connectedness with close others, even when physical interactions with significant others is momentarily absent. Fourth, we examined the psychological construct of perceived self-continuity as a predictor of child brand nostalgia. We contend that emotionally lonely individuals have a desire to maintain perceived self-continuity, by extending their past self-identity to the present self-identity, through childhood brand nostalgia to manage psychological distress and loneliness. As a result, the development of a trusting, committed and loyal brand relationship with their childhood brands reduces loneliness. Lastly, we further examined how emotional loneliness individuals develop long-term brand relationship. We have found that both perceived self-continuity and childhood brand nostalgia sequentially mediated the relationship between emotional loneliness and brand loyalty. These findings support practical contributions by enabling brand managers to devise marketing communication campaigns that emphasise the formation of deep emotional connections with lonely individuals through their childhood brands to help them ease the pains of loneliness.

This research is not without limitations. Though this research provides a novel contribution to studies of emotional loneliness, it only focuses on using childhood brands as emotional partners to build a long-term relationship with lonely individuals. However, there is still a lack of consumption experience in this study. Thus, we recognise that future research may use a sensory marketing approach to stimulate the real customer's experience – such as using perfume, oldies music or mum's homecooked food – to establish perceived social connectedness with close others through external sensory cues that trigger nostalgia and reduce emotional loneliness. Further, the current findings restrict the understanding of social loneliness and the symbolic meanings that brands may play in the construction of social identity to combat loneliness. Thus, we recommend looking at research on brand communities to manage social loneliness in future research.

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## Consumer Behaviour of "Young Adults" as a Determinant of the Development of Product Innovation

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### Abstract

Consumption patterns and related consumer behaviour are changing alongside the development of globalization and computerization processes. These changes force companies to take special care of their own innovativeness. The aim of this article is to present changes in the consumer behaviour of the "young adults" generation and the consequences that may arise as a result of these changes for the development of innovative products. In order to achieve the assumed research objective, quantitative research was carried out, using a questionnaire survey conducted on a sample of young people aged 18-29, referred to in Poland as a generation of "young adults". The analysis of the research was carried out in two stages. The first one presented the frequency distribution of selected answers, while the second stage analysed the correlation of the innovation degree of "young adults" with the most common indicated types of purchasing behaviour. Research results indicated that the consumer behaviour of "young adults" is to a large extent determined by technology this generation grew up with. In particular, the use of online tools, including social media, is closely related to the way of acquiring innovative products. The specificity of "young adults" behaviour described in the research indicated that companies that intend to develop innovative products should especially take into account the new way of communication, perception of product value and motives for consumer behaviour when designing and developing innovative products.

**Keywords:** Consumer behaviour, Millennials, Innovation.

**JEL classification:** M31, D12, D40.

### 1. Introduction

Millennials are a generation of young people born in the 1980s, characterized by a strong integration of technology with various areas of their lives and a different specificity of consumer behaviour. This is an interesting research group, also due to its size and purchasing power, which constitutes a population of about two billion people in the world that spends 200 billion a year (Moreno at al., 2017).

Direct communication with the outside world has become an important indicator for this generation and thus changed their consumer behaviour when compared to previous generations. It is important to analyse Millennials' behaviour profile, as it is a generation that has adapted to the process of continuous change, adjustment and reconfiguration (Moreno at al., 2017).

In this article, the term "Millennials" is mentioned alongside "Young Adults", which refers to the same generation. The two meanings result from the lack of consistency among researchers regarding the specific date of birth and the age range of members of this group. "Young adults" is a generation of people aged 18-29, born and living in Poland, whose development was affected by intense social and economic changes taking place in this region of Europe. Despite some differences in the standard of living, mainly related to the access to technology, "Young Adults" exhibit features typical of Millennials, as presented in the research.

Therefore, the author of the article will use the term "Millennials" to illustrate certain general characteristics of the described generation, whereas when referring to special behaviours mainly in relation to innovative products, the term "Young Adults" will be used.

The aim of this article is to present the consumer behaviour of "young adults" that may have an impact on the development of product innovation and the innovativeness of companies.

## **2. The essence and changes in consumer behaviour of the generation of Millennials and "Young Adults"**

Today, Millennials constitute a significant population in terms of size, whose purchasing power is growing and becoming a challenge for companies from various industries. It is also a group of consumers that exhibits different consumer behaviour compared to previous generations (Smith, 2011). Generally, it can be said that consumer behaviour is understood as the entirety of activities that relate to the process of acquiring goods and services by final recipients. This process includes preparation for purchase, making a decision about choosing a specific product, its purchase and use. Consumer behaviour is determined by many factors of different character and importance, thus is complicated and undergoing constant changes. (Dąbrowska et al., 2015).

According to the literature on the subject and researchers who deal with the subject of Millennials, the consumer behaviour of this group is especially distinct from earlier generations in the areas of: communication, used sources of product information, approaches to product and brand value, as well as the purchase process itself.

Millennials are a generation that sets the boundaries between the before and post digital worlds. People born in the '80s gained access to the latest technologies in their early youth. They acquired new technical competences, following the development of information and communication technologies (Moreno et al., 2017). Focused on the use of the latest solutions and the potential that in the following years provided the development of the Internet, they have developed their own ways of communication, which are primarily based on speed, immediacy, dialogue and interaction. Millennials are accustomed to information processing at a very fast pace, show little understanding of the lack of immediate contact, are quickly bored and have difficulties focusing for longer time (Weyland, 2011).

When looking for information on products or brands, they rely more on the opinions of friends and electronic word of mouth (eWoM). They do not want to be the target of the advertising companies, and thus the information that reaches them must be honest, direct and efficiently conveyed (Weyland, 2011). Millennials are constantly following their peers in social media to determine the value of the product (Smith, 2011). Wanting to stay in a real and direct contact with the seller, they are significantly eager to download applications and special programs approved by other participants of Internet communities (Moore et al., 2012).

Millennials show a different approach to the value of product and brand. They are looking for interaction and participation in project teams responsible for product development (Moreno, 2017). Brands can engage young consumers through social media, as well as can allow Millennials to express and meet their expectations in the process of product and service development. Young consumers want to engage in products and services of a strong brand. (Biligihan, 2016) They often choose and consume products that help them determine their identity (Ordun, 2015).

The percentage of purchase, which is significant in terms of both value and quantity, is carried out by Millennials in online stores. In e-commerce, young buyers are looking for utility benefits: the ability to compare prices, visually attractive storefronts that provide positive experiences during purchases. Purchase for Millennials is not only a process of buying goods, but also a source of pleasure (Biligihan, 2016). Positive navigation experiences related to the place of purchase have a positive impact on the beliefs and, consequently, on the intention to purchase (Küster et al., 2016). Research shows that the representatives of the described group prefer buying products from online retailers operating on Facebook and Instagram, and that the

positive image of e-traders in social media increases the inclination to purchase in this group of clients (Muda, et al., 2016).

Moreover, the research carried out in the group of buyers referred to as Millennials shows that they are trustworthy, tolerant, individualistic, well-educated and prepared to use technology in many areas of life much better than previous generations (Furlow, 2012). They are open, social, innovative, energetic, ambitious, reliable, motivated and intelligent young people (Ordun, 2015).

As it was already included in the introduction, Millennials have developed a bit differently in various countries due to the effect of socio-economic conditions. The development of information technologies, free access to the Internet, especially in Central and Eastern Europe, took place with some delay. This had an effect on the slower pace of the dissemination of certain behaviour patterns. However, due to the strong need of the inhabitants of this part of Europe to break free from the social, cultural and economic isolation, the 1990s witnessed intense changes taking place in the consumer behaviour of the described group. Currently, Polish Millennials are very much like their peers in other countries. However, they are often described by Polish researchers as "Young Adults".

Therefore, the group of "Young Adults" on the Polish market consists of people aged 18-29. These are people whose adolescence took place after 1989, as a result of which they are definitely different youth than young people from previous generations. This was determined by circumstances related to the period of systemic transformation and the opening of Poland to the West. In this new world, young people move much more freely than their parents. They perceive new values and norms as obvious, among which freedom, pragmatism and individual success are of the greatest importance. "Young Adults" show sensitivity to efficiency incentives that differ from the incentives of previous generations, and display new consumer behaviour.

The literature on the subject and research carried out in the group of "Young Adults" justifies the importance of this group for the following reasons (Ostrowska, Gracz, 2014):

- a high share in the demographic structure of Poland – people aged 18-29 currently constitute about 18% of the population of Poland,
- increase in the standard of living for young people who take up a job, receive scholarships while studying, and at the same time are still supported by their parents, which means that young adults can be administrators of valuable income,
- making independent purchasing decisions – the representatives of the analysed group purchase items to satisfy their own needs as well as support their family members decisively. They constitute a significant purchasing group on the Polish market of many types of services (e.g. entertainment, catering, hairdressing, cosmetic, cultural, recreational, mobile telephony, but also banking and insurance).

It should be noted that the distinction of the group of "Young Adults" (18-29 years) was mainly caused by the growing market activity of this group and the increase of funds spent by them. The group of "young adults" seems to be important also because it is the first generation who spent their entire adult life in a market economy, and from the early years of their youth, has had knowledge about developing communication technologies. At the time when Internet access became a common feature, the representatives of this group became the biggest advocates of using technology in many areas of life. The consumer behaviour of "Young Adults" in many respects is similar to the behaviour of peers living in other countries, especially Western Europe.

### 3. Methodology and research results

Own research was carried out from October 2017 to March 2018 on a sample of 350 people from all over Poland, deliberately selected in terms of age, so they constitute a homogeneous, representative sample of "Young Adults" aged 18-29. The research was carried out applying surveying methodology with the use of a paper questionnaire. While preparing the completed questionnaires, it turned out that 19 of them were incomplete and a sample of 331 people was accepted in the further study and conclusions. The analysis of the results was carried out using the IBM SPSS software.

The presented research results regard: reactions to innovative products and significant behaviour related to the purchase of innovative products.

The research problem was included in the following questions:

- how "Young Adults" react to innovative products,
- which sources does the researched group use when seeking information on innovative products,
- what are the reasons and motives for purchasing innovative products,
- where and how "young adults" buy innovative products.

The main hypothesis of the study assumed that changes in consumer behaviour of "Young Adults" affect the way of acquiring innovative products.

The analysis of the results was divided into two parts. The first described the results taking into account the frequency of the selected answers, whereas the second deepened the analysis by looking for relations between the most frequently chosen responses and the innovation of "Young Adults" described as reaction to innovative products.

The results of conducted and developed research in groups of "Young Adults" are presented below.

The process of purchasing decisions regarding innovative products comprises several stages, namely: awareness of the existence of new products on the market, interest, acceptance and purchase. In the first stages, mass media plays an important role thanks to which the consumer learns that the novelty is on the market, while at the stage of product acceptance, personal sources of information, namely friends and family, are more important (Mazurek-Łopacińska, 2003). In the performed research, "Young Adults" indicated that they mainly use social media as a source of information about innovative products (73.6%) and opinions of other users (66.3%). Moreover, they neither read articles in the specialized press (81.2%) nor watch TV programs on product news (78.9) to gain information.

An important factor in the process of making decisions about the purchase of innovative products is the consumer's attitude towards the novelty, the so-called consumer innovation understood as readiness to buy new products (Sojkin, 2012). An innovative consumer is a person who uses and knows how to use novelties, as well as is open, demanding, and knows their needs. People who define themselves as innovative positively respond to innovative products, use new solutions, like new products, know what they want (Kucharska, 2013). In order to determine the degree of innovation among "Young Adults", the respondents' reaction to innovative products was examined. 66.5% of the respondents react positively to product innovation, 28.4% respond very positively, 4.4% react in a negative way and 1.7% react very negatively.

The main reasons for "Young Adults" to buy innovative products presented in the research were:

- 49.8% of the respondents indicated that the need to use new functionalities offered by innovative products was very important, whereas 20.5% considered it rather important,
- 52% of the respondents indicated the curiosity to try a new product as very important, and 24.5% as rather important,
- 54.4% of respondents said that the desire to try a new product was a very important reason,

whereas 23.5% considered it rather important.

The described motives of behaviour of "Young Adults" indicate their openness and interest in purchasing innovative products, but also a conscious effort to satisfy their needs.

The next important stage in the decision-making process is the purchase of a product. It should be noted that a positive attitude towards innovation is not always associated with decisions about buying them. According to the researchers, only a small percentage of consumers (16%) like to buy new products to try them out (Szul, 2016). Thus, the place of purchase may be an important factor influencing the final decision to buy innovative products. The surveyed group of "Young Adults" in 68.8% indicated that they almost always look at and buy products in the online store.

Considering the fact that some of the answers characteristic for consumer behaviour were chosen more often, the author decided to deepen the analysis towards finding relations between the innovation of "Young Adults" group, described as reaction to innovative products, and the most frequently chosen answers in other questions. In order to do this, Pearson's  $\chi^2$  correlation analysis were performed, including the Fisher test. The strength of the relation was calculated using Cramer's  $V$  test. The significance level was found to be  $\alpha = 0.05$ , however the results of the test statistic probability at  $0.05 < p < 0.1$  were interpreted as significant at the level of statistical tendency.

It was therefore decided to investigate how the way in which the respondents look for information on innovative products is related to the reaction to them, taking into account the results regarding the selection of information sources on innovative products.

**Table 1: Relations between reactions to innovative products and the way of finding information about them.**

	Reaction to innovation products		
	$\chi^2$	$p$	$V$
Using social media to acquire information about innovative products	12.69	0.004	0.22
Using opinions of other users to acquire information about innovative products	10.25	0.011	0.19
Using articles in the specialized press to acquire information about innovative products	7.52	0.042	0.17
Watching TV programs about new products to acquire information about innovative products	9.41	0.016	0.18

Source: own work

Statistically significant correlations were observed between reactions to innovative products and searching for information in social media, using articles in specialized magazines, watching programs about new products as well as using the opinions of other users. Relations that were statistically significant were characterized by a weak strength (Table 1). In order to check their direction, a frequency analysis was carried out, which showed that among the surveyed "Young Adults", the majority of people had a positive opinion, and at the same time used social media to look for information about innovative products. On the other hand, people who reacted badly to new products mostly did not look for information in social media.

Another way to look for information that was a statistically significant correlate of reactions to innovative products turned out to be the use of other users' opinions. Among those

who positively reacted to new products, more respondents gained information from other users' opinions.

Then, a correlation describing the relations between looking for information on innovative products in specialized press and reactions to these products was examined. It turned out that the largest number of people who responded positively to new products at the same time did not use specialized press.

Moreover, watching TV programs on new products has been correlated with the reaction to innovative products. The respondents who responded positively to innovative products did not watch programs on new products to obtain information about them.

Following the same principle as above, the next stage investigated whether there was a relation between the reaction to innovative products and the reasons for buying them. In order to achieve this goal, three reasons for buying new products were analysed.

**Table 2: Relations between reasons for buying innovative products and a reaction to them.**

	Reaction to innovation products		
	$\chi^2$	$p$	V
Buying innovative products due to the need to use new functionalities offered by the new product.	25.67	0.001	0.17
Buying innovative products due to the curiosity of trying a new product	40.58	<0.001	0.23
Buying innovative products due to the desire to try a new product	22.49	0.002	0.17

Source: own work

After the analysis, it was noticed that there are relations between the three selected reasons for buying innovative products and the response to them (Table 2). Although all correlations were at a weak level ( $V < 3$ ), it was decided to test them as above.

Most often, respondents declared a positive reaction to innovative products and recognized the need to use new functionalities offered by new products as a valid reason to buy them. The most common response among respondents, regardless of their approach to innovative products, was the "important" answer. Differences appeared in the case of "very important" answer, which was most often declared by people with a very positive attitude to product novelties, and least often by people with a negative reaction.

Furthermore, buying new products out of curiosity was statistically and significantly correlated with the reaction to innovative products.

People who reacted very positively to new products, most often considered curiosity as a very important reason. Over half of the people who felt that they responded positively to innovative products said that curiosity is an important reason to buy them.

Another example of statistically significant and weak relation was the correlation between the reaction to innovative products and buying them due to the desire to try a new product.

The respondents who had a positive or very positive reaction to innovative products most often considered the willingness to try a new product as an important reason to buy them. In both groups, the least common answer was "completely unimportant".

#### 4. Research conclusion

As the literature studies on Millennials show, this generation, which grew and developed in the world of technology, freely uses the available solutions to communicate with the outside world and build relationships with the environment. The Internet, and especially social media, have become a natural environment for cooperation, collaboration and coexistence of this generation. Due to the fact that this phenomenon is lasting, it is treated as the natural tendency to be more present in social media rather than to look for relationships outside of it. Social media has become a place where Millennials are looking for and sharing knowledge, information, opinions about products, services, brands and organizations.

The carried out research shows that "Young Adults" primarily use social media as a source of information about innovative products. Moreover, a relation between the use of social media and a positive attitude to product innovation was found, which might suggest that there is a large group of innovators in social media. At the same time, "Young Adults" with a positive attitude towards product innovation do not use traditional media as a source of information about new products. This refers to previous information, according to which Millennials are distrustful of advertisements presented in traditional media and prefer direct information passed on by other users. It should be emphasized that companies that intend to reach the generation of "Young Adults" with the information about product novelties should engage in social media. In practice, this means that organizations should actively participate in the life of the community and focus not only on presenting the advantages of their products. Lack of authenticity and openness by the company will be efficiently noticed and verified by the "young adults" community.

Another important aspect of the Millennials' behaviour is their attitude to brands and values of products offered on the market. This generation wants to experience the possibility of co-creating value at both brand and new product levels. The research carried out indicates that "Young Adults" are guided by curiosity about new products and are eager to try them out. However, it should be remembered that as a generation they are ambitious and well-educated, have knowledge and access to information which enables them to verify the values that an innovative product provides. In this sense, it is more beneficial to engage "Young Adults" in the process of co-creating value than to create ready-made solutions for them. This information is very beneficial for companies that intend to include consumers in the process of creating innovation. The conscious attitude of Millennials combined with the need to gather experience confirm the readiness of this generation to be an active co-creator in the process of creating product innovation. Referring to the above, studies carried out on the same group of recipients can be presented, where respondents were asked to participate directly in the process of product innovation development. 59% of "Young Adults" confirmed their participation in the case of testing of ideas and product prototypes.

Another distinctive behaviour of Millennials is the manner of buying and the place of purchase. The group buys mainly on the Internet and uses various applications provided by trade companies for this purpose. It expects from online stores not only useful shopping functions but also an interesting shopping atmosphere that generates new experiences. Moreover, the examined group of "Young Adults" indicated online stores as the most frequently chosen place of purchase of product novelties. In practice, this means that companies selling products, including product novelties, should adapt their sales methods to the expectations of the generation in question. They should combine sales in online stores with sales in the social media because, as research indicates, this increases the trust and willingness to buy of the discussed generation of buyers.

## 5. Summary

Consumption patterns and related consumer behaviour are changing alongside the development of globalization and computerization processes. These changes force companies to take special care of their own innovativeness.

According to C.K. Prahalad and M.S. Krishnan, innovation is understood as shaping consumers' expectations, and at the same time constantly responding to their changing requirements and behaviours (Prahalad, Krishnan, 2008). It can be concluded that consumers' needs and expectations can be an important basis for creating innovations in enterprises and, on the other hand, organizations, creating new products, shape innovative consumer behaviour.

The described situation is illustrated by changes in Millennial behaviour. This generation grew in the era of intensive technologization of the economy and uses modern tools for communication with its communities as well as enterprises. This group is focused on dialogue and cooperation, recognizes the need to engage in the development of brands and products since it notices the benefits for each of the parties. Thus, the discussed generation is, on the one hand, a challenge for companies with well-established schemes of development, but on the other, appears to be a perfect partner for creating products that are attractive for buyers.

Bearing in mind the fact that Millennials is a large group of consumers in the world, which is important in terms of purchasing power, it seems that companies should draw on the knowledge and resources offered by the group in question.

Referring to the research (Cooper, Edgett, 2008), which for at least two decades has been deliberating on too low effectiveness of product innovation development processes and frequent market failures of new products, it is worth noting that on the market there is a group of buyers who openly declare willingness to cooperate during the development of innovation at every stage. Access to modern communication technologies and social media significantly facilitates this kind of cooperation and becomes a natural environment in which the boundary between the organization and its clients is lost.

Millennials, "Young Adults", set new directions for the development of product innovation, as well as indicate the need for openness and adaptation of enterprises to new conditions in accordance with the principle they themselves follow.

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## Types of Users and their Activities in Social Media and their Possibilities to Engage in Activities

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### Abstract

The aim of social media is to improve communication between people, as well as between companies and potential customers. The extent to which certain activities will be shown by social networks depends on factors related to their behavior, as well as preferences in terms of the way in which they are shown. The author decided to examine to what extent a group of young adults using social media channels would be willing to share their knowledge - information and skills. In order to be able to make the above assessment, the author has previously analyzed the divisions of social media user types adopted in literature and online publications on the basis of the research conducted by the author. The author in the article discusses what type of users we are dealing with nowadays in social media, and then to what extent their various activities can be used in the process of acquiring, sharing knowledge, engaging them in research and project processes, etc. In order to assess to what extent social media would allow the indicated actions, the author conducted quantitative research among young adults on a sample of 362 users. The research aimed to assess the possibility of engaging this population through social media. According to numerous reports indicated in the publication, the selected respondents are the most numerous users of social media and are therefore the most appropriate reference group for the analysed topic. The research included: 1) analysis of the level of users' activity, 2) determination of the types of users in terms of behaviour and 3) analysis of the activities they perform in various social media channels. As the research has shown, the type of user and the level of his/her involvement affects the possibilities of this involvement in various activities carried out through various social media channels. The conducted and presented research results constitute a contribution to the concept developed by the authors on the basis of the conducted research project.

**Keywords:** social media, communication channel, customer, knowledge acquisition, typology of social media users.

**JEL classification:** M31, O32.

### 1. Literature review

As rightly underlined by LaRose and Eastin „Segmentation is a traditional marketing tool which allows marketers to divide the market into heterogeneous groups”. In the literature on the subject one can meet different typologies of social media users by adopting different criteria.

The division of users from the point of view of the generation they represent is most frequently described. Robbins, Judge, 2011, Fenney, 2012; Aniszewska, 2015, adopted in this respect the division of the generation into five groups: These include: builders (born 1925-1945), baby boomers (born 1946-1964), generation X, i.e. the years 1965-1980 (in Poland the years 1961-1985 are indicated), generation Y (Millennials, Internet Generation) - the years 1986-1994/1995; 1999 - no clearly defined date closing the generation, generation Z (also called generation C - born after 1995).

The conducted research referred to the generation of young adults representing the Y and Z generations, who treat social media as a space where they can share opinions, comment, evaluate, create new goods and services, manifest their attitude and obtain the information they need. (Peszko, 2016)

Consumers are segmented on the basis of attitudes toward social network marketing. Within this division, it is assumed Passive, Talkers, Hesitant, Active, and Averse (Campbell,

Ferraro, Sands, 2014): The adopted division focuses on this how consumers engage with social media by employing three segmentation bases: brand engagement, purchase intention, and WOM.

The conducted research was not directly related to the purchasing process, therefore the author did not refer to it directly during the analysis of the conducted research. However, this division is an interesting approach from the point of view of observation of users' activity in the decision-making process.

Research conducted in 2015 by Shao, Ross, Grace has tended to focus on consumers' relationship with the brand using social media. „This research developing a motivation-based typology of Facebook users, and demonstrates how consumers from these segments can exhibit significant divergent behavioural and demographic characteristics”. Motivation it is argued to be an influential determinant of virtual community membership (Ross et al., 2009).

Autors extract the five segments of consumers were identified with distinctions based on the level of brand engagement, word-of-mouth referral behaviour and purchase intention following their exposure to social network marketing. The authors distinguished within this division: Socializing (This community members seek emotional support (Hiltz and Wellman, 1997), a sense of belonging (McMillan and Chavis, 1986) and friendship (Parks and Floyd, 1996)., Entertainment (these group are looking a experiential, hedonic and entertainment value of the internet), Self-status seeking (they use social media to increase feelings of self-importance or peer admiration), Information seeking - Consumers increasingly use social media when searching for information (Shao, Ross, Grace, 2015).

A separate segment related to the acquisition of information is related to a particularly important aspect of the author's analysis. It shows the potential of social media channels in this area, but also in terms of the possibility of acquiring knowledge from users, both passively, but also actively, through direct contact with them. Therefore, one of the author's assumptions was to take a broader look at this group.

Another division that can be found in literature points to the growing importance of social media by consumers as an integral part of everyday life (Faull, 2013) In the published research conducted by the Dram service, 12 different types of personalities appearing in social media were presented. The division was prepared in cooperation with Dr. David Giles, an expert in the field of social media user behaviour. Their short description is presented below (FAULL, 2013):

- **The Ultras**, who are fanatically obsessed with Facebook or Twitter. They have smartphone apps and check their feeds dozens of times a day. The survey revealed 14 per cent of Facebook users spend at least two hours a day on the network – rising to one in five (21 per cent) of 18 to 24-year-olds.

- **The Deniers**, meanwhile, claim social media doesn't control their lives, but the reality is very different. In the survey, 20 per cent of Facebook users said they would feel “anxious” or “isolated” if they had to deactivate their accounts, compared to 17 per cent of Twitter users.

- **The Dippers** access their pages infrequently, often going days – or even weeks – without tweeting or posting an update with 30 per cent of Facebook and Twitter users saying they access the sites for less than 30 minutes a day”

- „**The Virgins** are new people who sign up to social networks and may struggle initially to get to grips with the workings of Facebook and Twitter,

- **The Lurkers** “hide in the shadows of cyberspace,” and rarely participate in social media conversations

- „**The Peacock** will compete with friends for followers or fans, or how many ‘likes’ or re-tweets can get. Important for them is to have more ‘followers’ on their feed than their friends.

- „**The Ranters** are highly opinionated online, This users said the networks allow them

to be more opinionated than they are in reality.

- „**The Ghosts** create usernames to stay anonymous or have noticeably sparse profiles and timelines. ‘Security’ is cited as a reason for not using their real names

- **The Changelings** adopt different personalities entirely online, confident in the knowledge that no-one knows their real identity. Around five per cent of Facebook and Twitter users say hiding their identities in social media allows them more freedom to express their opinions.

- „**The Quizzers** like to ask questions in order to start conversations and avoid the risk of being left out.

- „**The Informers** like to be the first to spot something interesting and share it.

- „**The Approval-seekers** worry about how many likes/comments/re-tweets they get, constantly checking their feeds and timelines, because they link endorsement to popularity.

The presented division is focused on the activity shown while using social media. The author in her research also decided to look at this aspect to determine to what extent it can translate into the willingness of individual types of users to engage in the processes of knowledge sharing. As A. Szwajlik pointed out: “testing the solution with the participation of users increases the market potential of the new product”.

During the analysis described in the literature and in the network of personality types, the author also met with two divisions of social media users determining their behavior and indicating their specific characteristics. One of the divisions also included a clue how to reach the described groups. These divisions are shown in Table 1 and Table 2.

*Table 1 Divisions social media users by S. Ayres*

<b>1. The Social Athlete</b>
Their particular advantage is diligence, well-developed ability to concentrate and organize. They are focused around a set goal. It is important for them to live a safe and peaceful life. The profile is characterized by completeness, a picture representing a professional, belonging to numerous groups on different platforms. Active in daily tweeting and posting.
<b>2. The Social Luddite</b>
Type of user loyal to his/her peers and values. Quiet, without complicated desires. Not interested in the latest technologies. Reluctant to participate in the world of social media, quite often he/she does not have own profile.
<b>3. The Social Nurturer</b>
Quite often he/she puts the needs of others above his/her own. Has a high sense of responsibility and duty, open to others, cordial, liked. They do their work conscientiously, but they need positive reinforcements to feel good. They value traditional qualities. On the profile they often appear in the company of their attractive friends or animals. He/she likes to publish positive emoticons or content containing motivational statements.
<b>4. The Social Lazies</b>
He/she usually has many profiles, as well as likes to run different groups and online communities. Despite this, he/she is quite calm, quiet and reflective with an idealistic soul. Often a talented writer, seeing many different possibilities. He/she can adapt himself/herself until his/her value system is compromised. They like to help others. Although they often get involved in various social fields, their enthusiasm is decreasing every day and after 2 weeks it ceases to exist.
<b>5. The Social Geek</b>
They like to act, they are called natural leaders, long-distance thinkers determined to achieve their goals. Very active, efficient, valuing knowledge and competence in others. Original, independent, as well as analytical. His/her profile likes photoshop, therefore his/her status often depicts a star warrior character, or a person with an attractive appearance or a managerial position.
<b>6. The Social Doer</b>
Focused on immediate results, he/she does not like waiting and long explanations. He/she often does not pay attention to rules and regulations if they interfere with his/her performance. He or she has a lot of skills. He/she takes risks because he/she likes adrenaline and fast lifestyle. He/she lives here and now. They are

friendly towards people, flexible and loyal to his/her peers. Profile photos often show drunken escapades or extreme sports.
<b>7. The Social Lurker</b>
Traditional, hardworking and loyal as a leader. Organized and capable of implementing numerous activities, yet not geared towards greater involvement and active participation in social media. So called good citizen, who values peaceful life and safety. His/her activity is expressed in reading posts, the profile does not always contain all the data, usually those that are the necessary minimum. A default profile photo or a lack of it.
<b>8. The Social Inspirer</b>
He/she has a wide range of interests and is excited about new ideas, but they don't like to focus on details. He/she does what he/she is interested in and is in line with his/her value system. Still open and flexible, characterized by great creativity and idealistic approach. You can often see that their wallpapers are the best personalized, especially on Twitter.
<b>9. The Social Ranter</b>
Person-oriented, sensitive and therefore popular and liked. He/she conducts numerous group discussions, tries to see the point of view of others, because he/she does not like impersonal analysis. Careful, focused on what others feel and think. He/she willingly shares his/her ideas with others. He/she has profiles on various social accounts, where he/she has discussions with numerous representatives focused on environmental interests.
<b>10. The Social Visionary</b>
He/she likes to think about different problems, even on his/her own. He/she learns quickly, is creative and resourceful. He/she is very excited about new ideas and projects, which translates into stimulating work in the company. He/she happens to ignore the routine activities of life. Honest and assertive.

Source: [www.postplanner.com/10-social-media-personality-types/](http://www.postplanner.com/10-social-media-personality-types/);

*Table 2 Divisions social media users by M. Dodaro*

<b>1. The Listener</b>
An active user of social media, however, does not like to be controlled and observed. Although they will like the post, this does not mean that they will mark it so that others will know about it. In addition, he/she does not comment too often, and posting on his/her panel is uncommon to them. Only friends or family can reach them.
<b>2. The Activist</b>
He/she is aware of the power and reach of social media through which they try to make their voice heard, to make the power change something. To reach them, it is worth getting involved in what he/she cares about by, for example, sharing what he/she cares about.
<b>3. The Spammer</b>
This is a person who claims that his or her posts count as "high quality content," and sending weekly promotional messages directly to his or her friends' inbox is cool after all, it's friends on Facebook. The best way to get there is to delete him/her as a friend. Then you'll get a message from them.
<b>4. The Passionist</b>
The kind of social media users who devote their time to discovering and sharing their passion with others on the Internet. To reach them it is worth to observe what he/she is interested in and in this way show that there is something that connects us with them. It is worth sharing with them ideas for conversations, which cannot be directly related to our brand, but allow to share them with similar recipients.
<b>5. The Social Butterfly</b>
It's a social media user who likes to be in the spotlight and never stops showing how small the world is by marking himself in the pictures. If you want to know how popular he/she is, just check out social channels. To reach them, you must be sociable and include them also in this group.
<b>6. The Troll</b>
These are people who are not worth being friends, and if they already appear there, it is a good idea to use the block button. They feed on open hate speech, no matter what the topic is.
<b>7. The Influencer</b>
The most influential social media users who produce high quality content and share their knowledge with the social community. They are usually passionate about the topics they write about and also like to educate others. They live the content they publish every day and care about its quality. In order to reach them, it is necessary to involve them and their content in their message.
<b>8. The Early Adopter</b>

It is a group of users who are the first to go to places that will be trendy soon. They are pioneers among their friends. In order to engage them you have to stand out, overtake others in order to interest them. They are a difficult group to satisfy, because it is hard to surprise them with what is new and unique.
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<b>9. The Black Booker</b>
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This user is focused on building relationships. He/she treats social media as the best way to communicate with others. They always have contact with the person they are looking for. In order to reach them, it is necessary to provide them with the possibility of contact with others and ensure that they will have a chance to establish new relationships.
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<b>10. The Family Person</b>
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For this type of user, social media is to ensure that they keep in touch with family members wherever they are. This is the greatest added value for them. The best way to involve this type of Internet user is a competition which will focus on the possibility of getting closer to the family, while remaining focused on a message important for the brand.
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Source: [www.topdogsocialmedia.com/10-types-of-social-media-users/](http://www.topdogsocialmedia.com/10-types-of-social-media-users/), 08.07.2019r.

The presented divisions are an interesting point of view of the authors. The proposed methods of contact with a given group are helpful and in the process of acquiring knowledge they are particularly important.

The analysis of other authors' concepts allowed the author of the article to distinguish important aspects of the research, which, as shown by the divisions, are particularly important and determine the types of personalities of users of social media. This is key in the process of assessing to what extent the existing community groups would be open to the process of sharing information.

Own research on the analyzed topic, related to the above considerations is presented in the further part of the article.

## 2. Research methodology

The studies and analyses were carried out in May-August 2018. The study group included young adults - according to the Erikson's segmentation division of human developmental stages (Erikson, 2004), which classifies young adults as persons aged 18-35 years. The respondents were two groups aged 18-24 and 25-29. This group of users is referred to as the dominant population in social media, which is confirmed by numerous research results.

The research problem was contained in three questions, i.e:

- what is the level of activity of network communities,
- what types of users can be found in different social media,
- to what extent can the activities performed by network communities in social media channels be used to engage them in numerous activities such as acquiring knowledge, sharing it, engaging in research, project processes, etc.

The formulated problems allowed the author to assess the possibility of engaging this population by means of social media in various cognitive processes. The main hypothesis of the study was adopted as: The level of involvement and type of user influences the possibilities of their involvement in various activities carried out through social media channels.

The sample was calculated from the general population representing inhabitants of the whole Poland who use social media. According to the report "Digital in 2019 Global Overview, We Are Social, Hootsuite, 2019" in Poland we have 18 million active social media users, which corresponds to 47% of the population. Within the entire population, 11% of women and 11% of men are aged 18-24 and 15% of women and 14% of men are aged 25-34 (Detailed report at: <https://datareportal.com/reports/digital-2019-poland>).

As a research tool, the questionnaire of the survey was adopted as the PAPI survey method. The survey was based on semi-open and closed questions, with the use of simple and complex, nominal, ordinal and interval scales.

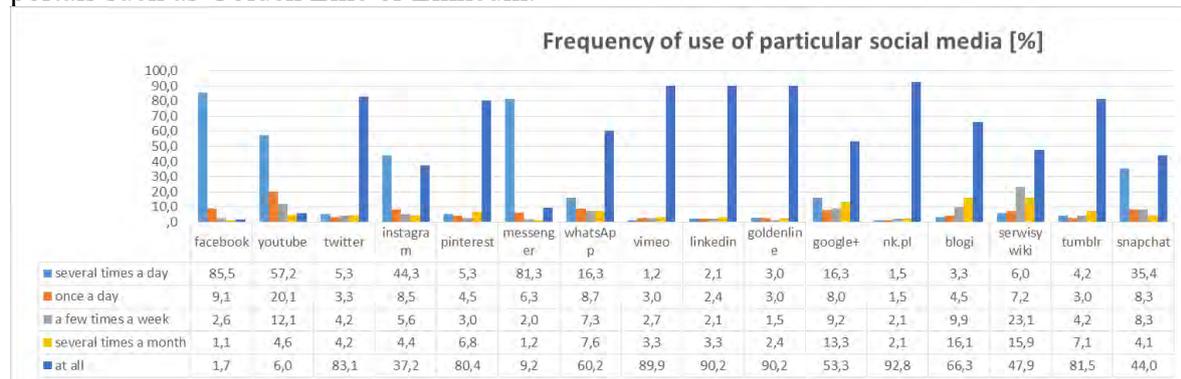
The questionnaire was a multi-thematic quantitative research during which information on various topics was collected and analysed by individual researchers constituting one research team. The minimum sample size was determined at the level of 384 respondents, which corresponds to 5% statistical error at 95% confidence level. During the analysis of the results, part of the questionnaires, in the examined part was rejected due to methodological errors of selection or lack of response. As a result, 362 questionnaires were used for the final analysis. The analysis of the results was carried out with the use of IBM SPSS software.

### 3. Results and finally

In order to assess the level of activity of social media users, the respondents were asked how often they use particular social media.

Overall, 22.4% of respondents use the social media repeatedly during the day. The results within each channel are presented in Figure 1.

As the survey results showed, Facebook is a channel used by users many times a day (85.5% of respondents) along with related Messenger (81.3% of respondents). The next most popular and most frequently used are Youtube (57.2% use multiple times a day and 20.1% at least once a day) and Instagram (44.3% many times and 8.5% once a day). Among the group of young adults with the lowest frequency of use was the nk.pl channel, but also business portals such as Golden Line or LinkedIn.



**Figure 1 Frequency of use of particular social media [%]**

Source: own elaboration

Over 90% of respondents do not use this channel at all, which may also indicate insufficient knowledge of the extent to which this channel could be a source of information or contact with organizations.

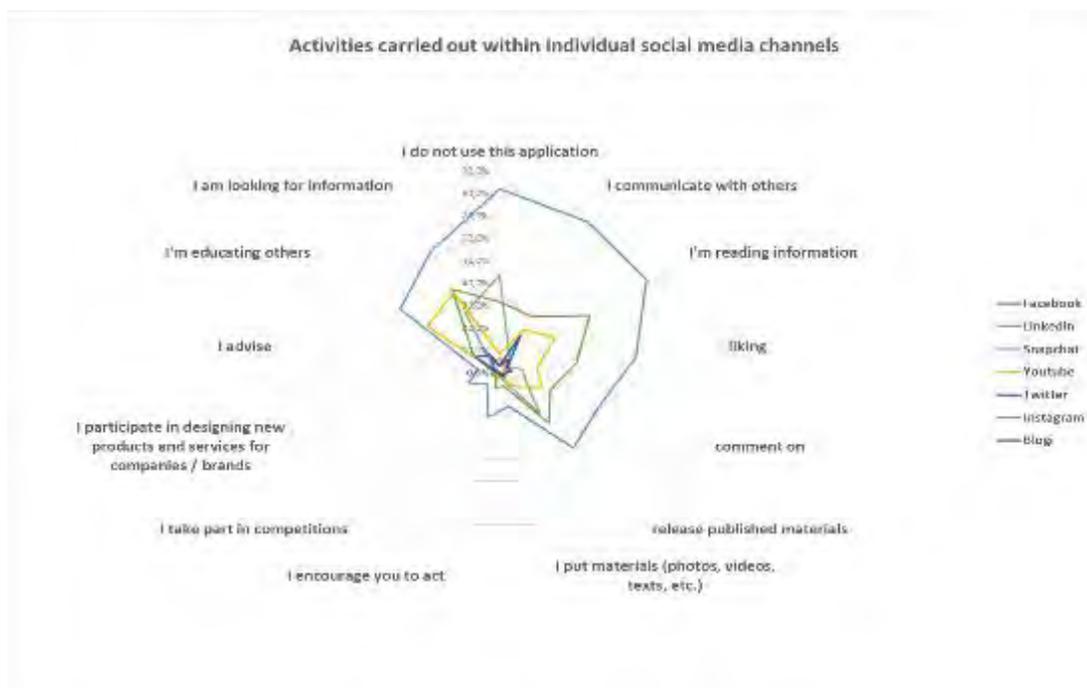
The results show that the frequency of use of the most popular social media channels such as Facebook, Messenger, YouTube and Instagram is significant. It gives the possibility to use it in contact with users in a variety of activities that allow to obtain and share information and skills. In order to assess the potential for possible ways of obtaining knowledge from users, the respondents were asked "What attitude do they adopt as a social media user" – Table 3.

**Table 3 Attitude represented as a social media user**

Category of answers	Frequency	Percentage
1) I am active (commenting, sharing, liking, taking part in competitions, etc.)	66	18,2
2) I am active, but I do not post my own materials, only refer to those posted by others.	52	14,4
3) I publish my materials, but I do not comment the materials published by others	28	7,7
4) I am sporadically active - I post something or comment on others	129	35,6
5. First of all, I observe others	62	17,1
6. I take a passive attitude, I focus on searching for information, without engaging in contact with others or observing them	25	6,9
<b>Total</b>	<b>362</b>	<b>100</b>

Source: own elaboration

A significant group of respondents is active, allowing to be contacted by other users or companies and to obtain feedback. The most active is a group of 18.2% - they engage directly - comment, share, like, take part in competitions, etc. The group of 14.4% of respondents is also active, but they prefer to refer to what they see and not to engage through their own publication. The third group, the most numerous, is made up of people who show both of the above mentioned forms of activity, however, they define themselves as sporadically active. The author decided, by asking about the activities performed within the framework of particular social media channels, to determine to what extent the indicated attitudes take on the declared meaning - graph 2, and to present them with declared attitudes- graph 3. As shown by further analyses, a group of sporadically active people, despite their lower intensity, shows a lot of different activities constituting a potential as a segment of social media users. These results will be presented later.

**Figure 2 Activities carried out within individual social media channels**

Source: own elaboration

The results are highly differentiated between social media channels in terms of the number of respondents being their active users.

The indicated results, however, show some dependencies that are worth noting.

Facebook is used as the main channel to communicate with others. Facebook is also used as a source of information, along with Blogs by people who use them. In their category, they are the main area of activities. Moreover, in the category of Liking i.e. performing specific reactions to the posted content, both Facebook and Instagram, as one of the two main activities, besides observing others, are used. Keeping an eye on others is a dominant activity within Instagram, but also within YouTube, Facebook, Twitter and LinkedIn (among those who have these channels). A small number of respondents is active in designing new products/services, but this does not mean that this category has no potential, as 7.2% of respondents declared that they also carry out such activities through Facebook. Similarly, in the case of participation in competitions, 20.6% in the case of Facebook and 7.4% through Instagram or encouraging 15.7% of Facebook and 6.5% of Instagram. The question about the attitude they take is summarized in the following table along with answers concerning the most frequently performed activities in particular social media channels. A list of questions allowed us to observe and determine the real types of users with whom we can meet in social media. Table 4 presents the results of the most popular social media channels such as facebook.

**Table 4 Listing user type and activities performed on facebook**

		Activities performed on facebook													
		I don't use this application	I communicate with others	I read information	I click liking	I posting comments	I share information	I publish materials (photos, films, texts, etc.)	I encourage to action	I take part in competitions	I take part in designing new products, services and company/brand names	I advise	I educate others	I look for information	I observe others
<b>Listing user type</b>	I am active	42,1%	18,3%	18,0%	19,6%	24,5%	28%	25%	27%	28%	42%	33%	36%	18%	17%
	I am active but I do not post	5,3%	15,0%	16,4%	17,9%	18,5%	15%	10%	21%	10%	21%	22%	18%	21%	18%
	I post my materials	15,8%	7,0%	6,4%	7,1%	4,9%	7%	10%	12%	10%	8%	7%	7%	4%	5%
	I'm sporadically active	10,5%	42,5%	42,8%	41,7%	42,9%	38%	44%	35%	45%	21%	29%	25%	43%	42%
	I primarily observe	26,3%	17,2%	16,4%	13,8%	9,2%	11%	10%	6%	7%	8%	9%	14%	15%	18%

Source: own elaboration.

As the results showed, those who declare sporadic activity they perform various activities, not only of Facebook, but also of other social media channels.

In the case of channels such as YouTube, Instagram, people who declare occasional activity or activity related to their sharing in social media primarily point to: YouTube - searching for information and then click liking; Instagram - watching others, then click liking and posting comments and publish materials. Similarly, Snapchat, which primarily serves users to observe others and share their materials. Blogs are primarily reading and searching for information, and Twitter focuses on observation. Moreover, as part of correlation analyzes, a strong correlation was observed for such social media channels as: YouTube, Instagram, WhatsApp, Google+ (functioning during the study period), discussion groups / forums, Snapchat and wikis and moderate correlation - as part of other social media channels surveyed

for frequency of use and the attitude that users represent. In the case of correlation of attitudes and activities performed within particular social media channels, the author referred to the three most-used social media channels - Facebook, YouTube and Instagram - the list and conclusions are presented in Table 5.

**Table 5 Correlation of attitudes and activities performed within the three most-used social media channels - Facebook, YouTube and Instagram**

The occurrence of correlation between attitudes and activities performed within particular social media	Facebook	YouTube	Instagram
<b>Moderate correlation</b>	With the exception of participation activities related to the education of others, which reached (0.309), other categories expressed moderate correlations of these variables.	Moderate correlation between attitudes towards social media and the following variables: - I read the information - I click liking - I posting comment - I make it available - I look for information - I observe others.	Moderate correlation between attitudes towards social media and the following variables: - I communicate with others - I read the information - I click liking. - I posting comments - I make it available - I post materials - I educate others - I look for information - I observe others.
<b>Lack of correlation</b>	No correlation with the variable: - Attitude towards social media and designing new products, company services and brands Pearson correlation: (0,296)	No correlation in the case of dependencies with the indicated variables: - I communicate with others - I publish materials - I encourage to act - I take part in competitions - I take part in designing new products, services and company/brand names - I advise - I educate others	No correlation in the case of dependencies with the indicated variables: - I encourage to act - I take part in a competition - I take part in designing new products, services and company/brand names - I advise

Source: own elaboration.

#### 4. Conclusion

The analyses carried out allowed for the verification of the main hypothesis and finding answers to the research problems posed. Analyses have shown that users engage in various activities that they can undertake in social media.

Their specific attitude to activity is much higher than they declare, as indicated by their declared activities, along with the higher intensity of social media use during the day. Almost half of those declaring sporadic activity actively participate, supported by their activities, e.g. 45% take part in Facebook contests or 44% post materials on their panels, which is more often indicated than those who define themselves as active users. Moreover, in the case of engaging the studied groups in the processes of sharing and acquiring knowledge, as well as project

processes, there are groups that participated in such activities - 7.2% of indications from among the whole surveyed population, 42% of which are people declaring an active attitude.

The literature on the subject indicates directions within which it is possible to observe different types of users, assigning them to specific cognitive areas. The presented typologies are based on the results of research, which gives grounds for to the possibility of appealing to them.

However, it is also particularly important to select channels for specific activities that users are able to undertake. The results showed which of the channels have greater potential within the framework of individual activities, which is an added value of the analysis.

In conclusion, the type of user and the level of his/her involvement affects the possibilities of this involvement in various activities carried out through various social media channels. That giving rise to further in-depth analysis of the areas and ways in which there would be sufficient involvement of social media users in the group of young adults.

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## **Place of Customer Relationship Building Tools in Relation to the Customer Knowledge Management Model**

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### **Abstract**

Building customer relations is a key element of the company's functioning, focused on maintaining close contact with its customers. The diversity and multiplicity of communication tools makes it necessary for companies to choose them skillfully to the group of their customers. Therefore, when selecting tools, it is worth asking consumers themselves about their preferences in this area. The author, on the basis of her own research indicates the usefulness of selected marketing activities in the process of the company's contact with customers and then indicates the tools which the respondents most often meet on the market. The aim of the article is to indicate that the knowledge of the communication tools preferred by the customer of a given company is the basis for work on the components of the CKM model, which the author of the publication works on and researches. Within the framework of the CKM model, having knowledge about the preferred tools for communication by consumers constitutes an element of knowledge about customers and a basis for communication in the aspects of knowledge from and for customers. The article uses own research, which is a part of nationwide omnibus research conducted by the Department of Service Marketing at the University of Szczecin on a group of young adults.

**Keywords:** relationship, CKM, social media.

**JEL classification:** M31, L82, L86.

### **1. Introduction**

With the development of new technologies and progressive digitalisation, consumer tastes are changing in the marketplace and new communication tools are emerging that can translate into customer relationships. This progress is accompanied by the development of science, which examines the influence of individuals on others, organizes existing ones and draws conclusions.

A lot is written in the literature about building relationships with customers, as an essential element of the development of the organization, thanks to which this development is much less threatened by having a group of regular and faithful customers. However, it is very difficult to acquire such a group of clients, especially nowadays, when competition is growing and it is also trying to create such a group of clients.

Knowledge management and customer relationship management in organization is the starting point for the development of the Customer Knowledge Management model. This model is to a large extent to "activate" customers to share their insights, reflections, knowledge, create innovations, etc. Thanks to such management, the organization is an intelligent structure, acquiring knowledge in various areas, which can then be used for further development and even better adjustment of the offer to market needs. On the other hand, consumers gain a sense of co-creation of certain values, products/services, ideas - something that translates into the real use of their knowledge. Consumers also have a sense of real influence on "something" and a sense of being part of an organization. In the author's opinion, the implementation of the CKM model in the organization is a difficult task, however, it may bring very important results..

## 2. Tools to build relations with customers

Building customer relations is still one of the most important activities of the company, because the company's functioning depends on the quality and strength of customer relations. Tools for building customer relations may be subject to different divisions depending on the type of customer, the industry in which the company operates, the characteristics of the target group of activities.

Taking into account the group of respondents taking part in the own research described in the article, it is necessary to look in particular at the tools addressed to this group. In the literature on the subject, the segment of young adults is defined differently. It depends to a large extent on the place of residence, development of the country and technology in a given country. According to Erik H. Erikson, young adults are between 18 and 35 years of age. According to other divisions of the generation in literature, people in this age group are members of generation Y (millennials) and generation Z (Z).

For the purposes of the article, young adults are assumed to be between 18 and 29 years of age.

Young adults can be characterized in many aspects, both sociological and purchasing behaviors. According to L. Player and I. Ostrowska it is the first generation of Poles who have had contact with computers and the Internet since birth. They have no fear of shopping on the Internet and constant access to information 24 hours a day (the Internet) plays an essential role in shaping the young generation. Young people get used to real-time communication - mobile phones, instant messengers, email. This communication is characterized by fast response time and low cost. When they have to wait for a reply, they are impatient and look for another source of information. (Gracz, Ostrowska 2014)

Such characteristics of the surveyed group immediately indicate that young adults like to know a lot, they search for knowledge according to their own needs and if they cannot find it, they want it "immediately" from someone. From the perspective of the organisation, this has an impact on the adaptation of communication activities to the needs of this generation. Therefore, the research group described above will first of all have dedicated tools related to new technologies and solutions appearing within them. Social media is one of such tools.

Popularization of the Internet made it possible to personalize products and improve communication, which contributed to the separation of the Y generation. They quickly adapted to the world of technology, not imagining functioning without access to the network. Thanks to this, they are able to efficiently obtain the information they need. (Peszko 2012)

The use of social media for marketing activities makes the user, due to the environment in which he/she is staying, more confident in the information presented. The process of initiating and creating relations using social media can be presented using the Levinger model, which consists of the following stages: getting to know each other, beginning of the relationship, continuation, "digging in" and weakening of the relationship. (Kowalska 2015)

Analyzed generations are a challenge in communication and other marketing activities for companies. According to G. Aniszewska (Aniszewska 2015):

- the consumer is increasingly better informed, aware of his/her position in negotiations with the other party, more and more resistant to the traditional marketing message. Since childhood, they have been subjected to building brand awareness, so they look for uniqueness and a tailor-made offer, and thus the brand change is easy for them. The concept of loyalty to the bidder is slowly ceasing to exist.

- Companies try to build online communities around their own brands, especially in those industries where the target group consists of young, dynamic people. In addition, companies use every way to exist in their awareness, not only through strictly marketing

activities, but also through actions not directly related to the core business. Marketing content is somehow conveyed at the same time.

- communication with the customer will be based on kinesthetic stimuli and will take place to a large extent on the Internet - especially on social networking sites.

The above statements show even more how difficult a group of consumers are the participants of the survey, how many more activities an organization has to perform in order to build relationships with such a group. Therefore, it becomes crucial to adapt the communication tools accordingly. Of course, this is not a guarantee of building relations with a group of loyal customers, but the adaptation of communication tools increases the probability of reaching the message and its reception by the consumer. It is like a basis for starting a dialogue with consumers of this generation, even if the content is "passed over on by the way basis".

### **CKM model**

The CKM model concerns customer knowledge management and is used in companies that have the perspective of thinking about the customer in their strategy. This model originates from knowledge management (KM) and customer relationship management (CRM). It should also be assumed that an organization that uses the CKM model should already have built relationships with its customers, because they are the basis for the development and functioning of this model.

“The thrust of CKM is to capture, organize, share, transfer and control knowledge related to customers for organizational benefits. It helps organizations address specific needs of their customers, and make them more effective in enhancing customer satisfaction”. (Yeow-Kuan Chua, 2013)

The philosophy of CKM is to stimulate the customer, from passive to active involvement, and to focus the company's activities on the knowledge it possesses in order to improve innovation processes. (Mikuła 2016)

"CKM therefore consists in planning, organizing and controlling undertakings related to the knowledge and innovative potential of the client, aimed at acquiring this knowledge and its development by combining it with the knowledge of the company, as well as joint creation of new knowledge with the client for the improvement of the company's operations and creation of innovative solutions. (Mikuła 2016) The knowledge received from the client is useful not only in the sphere of innovation but also in the marketing activities of the company.

CKM model includes 4 basic pillars: knowledge for customers, knowledge from customers, knowledge about customers and knowledge retained by customers for their own purposes.

Within the framework of knowledge for customers, the organization, by prior selection of an effective medium for communication, provides customers with information about products/services, offers, discounts or other information that may be interesting for consumers.

As part of the knowledge from customers, the company can gain knowledge in the area of new products, innovations that should be included in them, their appearance, etc. The company can also gain knowledge in the area of new products, innovations that should be included in them. This is knowledge that can influence the development of an organisation and better match its services/products to market needs. It is important to skilfully acquire this knowledge from customers and then translate it into practical actions. It is also important to have a group of active customers who want to share their knowledge selflessly.

Knowledge about customers is derived from various data held by the organization. These can be CRM databases, reports, google analytics or brand24 tools, social media, etc. A good

analysis of this knowledge allows for tracking the purchasing behavior of consumers, changing trends, reactions to individual marketing activities, etc.

CKM - unlike classic CRM - focuses on the knowledge held by the customer and his/her potential to use this knowledge in the process of creating new knowledge. The customer's activation is therefore to stimulate the customer to disclose and use in the process of knowledge conversion all the knowledge possessed, including the knowledge retained by the customer for their own purposes. (Mikuła 2016)

Certainly, the CKM model can be a perfect tool for the development of customer relations but also a treasury of knowledge for the organization both about the needs of customers and the effectiveness of individual activities performed by the organization and can indicate the direction of further development of the organization.

## Results

The results of quantitative research presented below come from the omnibus research conducted by the Department of Service Marketing at the University of Szczecin.

The research was conducted in the period from May to August 2018. The study group consisted of young adults, i.e. people between 18-29, as the dominant population in social media.

As a research tool, a questionnaire was adopted as a survey tool, and as a PAPI survey method. The questionnaire consisted of semi-open and closed questions. Simple and complex scales, mostly Likert scales, were adopted.

The minimum sample size was determined at the level of 384 respondents, which corresponds to 5% statistical error at 95% confidence level. During the analysis of the results, some questionnaires were rejected due to methodological errors in selection or lack of response. As a result, 361 questionnaires were adopted for the final analysis.

The analysis of the research results was performed with the use of IBM SPSS software.

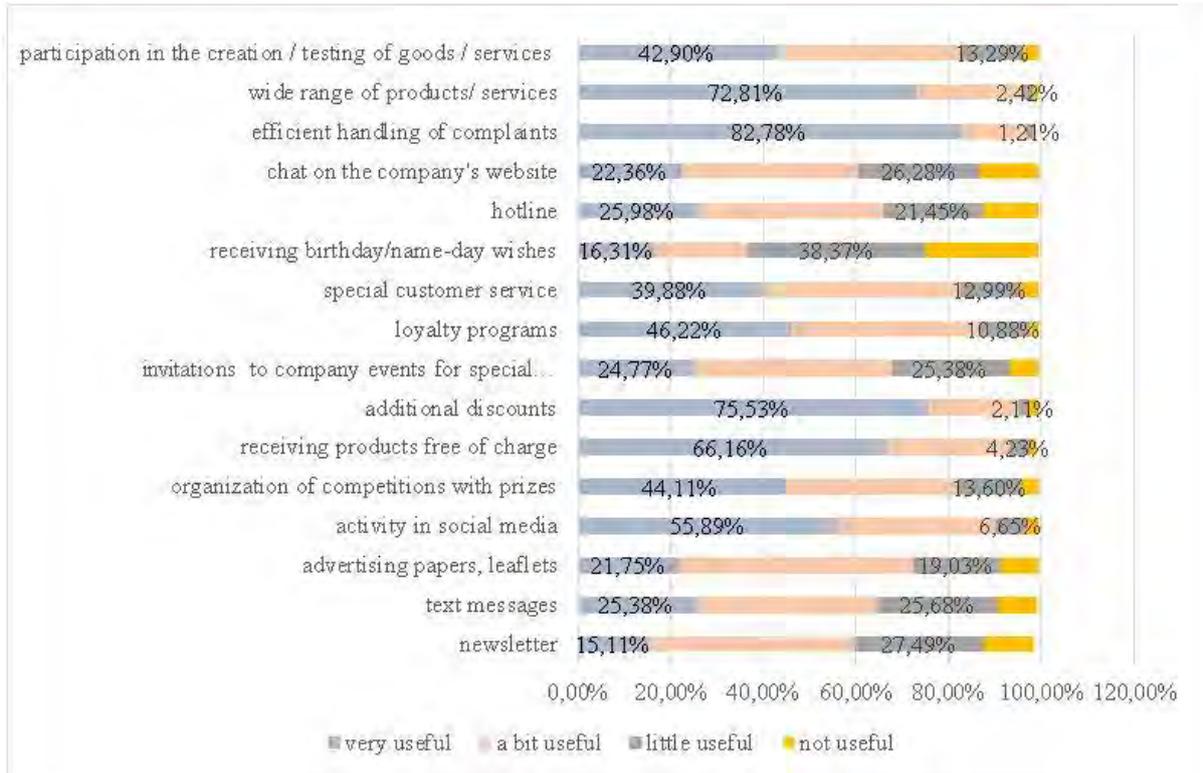
The following results present the outcome of the research concerning:

- 1) the usefulness of particular marketing activities in the relationship between a company and a customer,
- (2) the most common marketing activities among the consumers surveyed.

The research problem was contained in two questions, i.e:

- which of the indicated marketing activities are very useful and which are not,
- which, in the opinion of the respondents, are the most frequent and rare marketing activities carried out by enterprises,
- to what extent are the selected tools consistent with the characteristics of the study group?

Graph 1 shows the answers given to the question about the usefulness of particular marketing activities in the process of the company's contact with the customer.



**Figure 1. The usefulness of marketing activities in the process of the company's contact with customers;**  
Source: own elaboration

Among the tools assessed as very useful, the following were ranked highest: efficient complaint handling (83%), additional discounts (76%), wide range of products/services (73%), freebies (66%), activity in social media (56%).

On the other hand, among the tools that were not useful, the highest scores were given to: receiving birthday wishes, chat on the company's website, hotline, newsletter.

The survey was conducted on a group of young adults and these results are somewhat surprising.

First of all, they show that the surveyed group does not need to maintain contact with the brand. The most frequently chosen tools that allow direct contact with the brand, e.g. a chat on the company's website or a hotline, were considered not useful. Customers also do not want to receive information from companies in the form of newsletters, occasional wishes, text messages. However, what they are interested in among the activities of companies is to derive benefits for themselves in the form of efficiently handled complaints, discounts, freebies, a wide range of products.

From the perspective of the company it is difficult to maintain contact with this type of customer. Perhaps the solution is social media, because they were rated relatively high, and it is also a communication tool in which they are still present.

Chart 2 presents the results of a question concerning the most common marketing activities among the surveyed consumers. Most, as much as 78%, indicated the activity of companies in social media. This may result from the fact that respondents spend a lot of time in social media, which is why they can see the activities of different brands there.

Subsequently, with a slightly lower result, only 76% of respondents placed advertising newspapers and leaflets. On the one hand, it is a communication tool that has been operating on the market for a long time, while on the other hand, it is still a popular device, especially in trade. Respondents have to make food and industrial purchases, therefore, in connection with

Figure 1, where a significant group of their interests were discounts, free of charge, a wide range of products, it can be concluded that looking for these opportunities they are browsing through advertising leaflets.

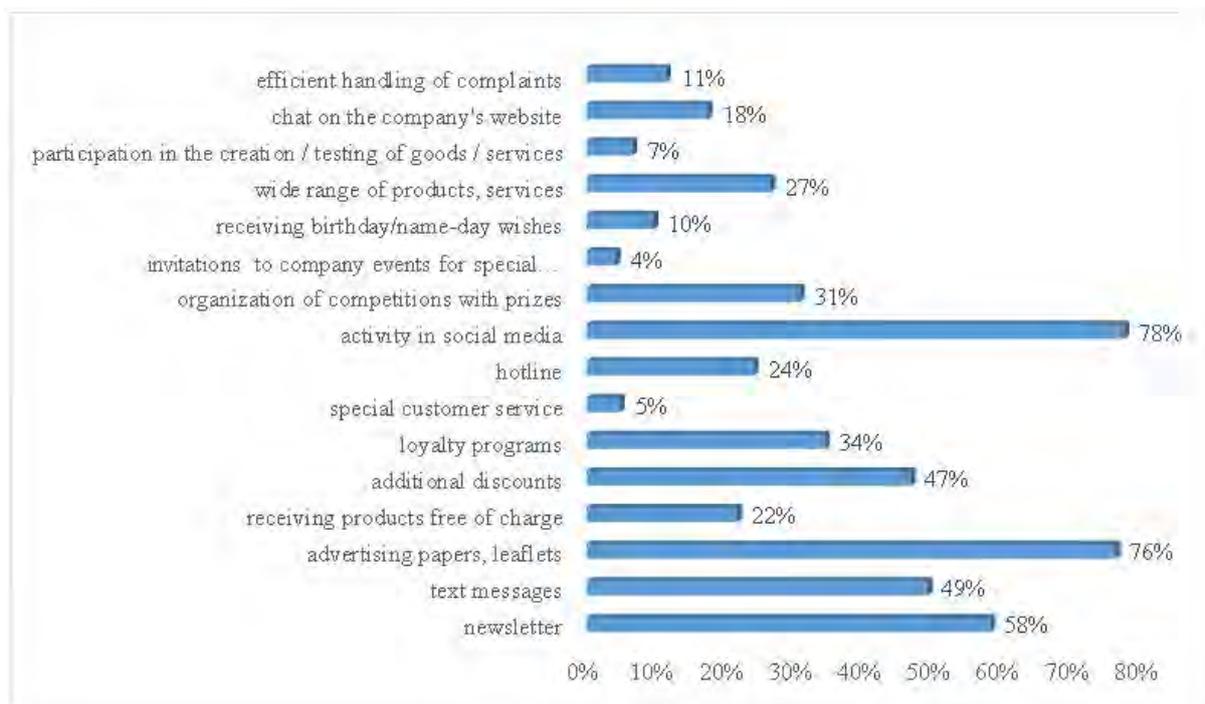
The following places were taken by newsletters (58%), text messages (49%), additional discounts (47%).

On the one hand, we can see that these are tools often used by companies, but in the opinion of the surveyed group (comparison to chart 1) they are not useful. That is why it is so important to match the communication tools to the group of its recipients, because thanks to the established contact it is possible to build relationships.

On the other hand, it is a waste of time and money on the part of companies that use tools that are not adapted to the needs of the consumer.

The most rare tools included invitations to company events for special customers (4%), special customer service (5%) and participation in the creation/testing of goods or services of companies (7%). It can be assumed that the indicated measures are not very common because the companies do not use them very much. This is a frightening result at a time when there is so much talk on the market about the role and importance of the consumer and the consumer has no sense of e.g. applying special customer service to him/her.

All these rarely mentioned tools are also the basis for the development of the CKM model in the organisation. If they are so poorly evaluated by consumers, it means that it will be difficult to manage the CKM model in many companies.



*Figure 2. Most frequently chosen marketing activities*

Source: own elaboration

## Conclusion

One of the goals to be achieved by the CKM model in the company is certainly the development of previously built customer relations, introducing them into a different dimension, to an even higher level. The client is to take part in product testing, provide opinions, share his/her knowledge with the company in areas that interest him/her.

The analysis shows that this model is quite a complicated tool and requires many actions in its individual parts in order to finally influence the building of relations. Each of the stages of gaining customer knowledge is inter-connected and there is no possibility for the model to operate if any of the stages of gaining knowledge does not work.

The starting point for the implementation of the CKM model in a company must be the company's strategy putting the client first and the personnel who have the knowledge and skills to work with the client in this model.

The multitude of communication tools functioning on the market indicates that companies must select them and choose the ones that will be tailored to the needs of their customers. However, for this to be the case, the company must ensure a dialogue with its customers.

The results of the presented research indicate that companies use communication tools, which are not expected by their customers (of course in the analysed generations). This indicates a big problem that should be addressed in the next research.

The objective assumed in the article that the marketing communication tools must be closely adjusted to the target group and only then will it constitute the basis for the introduction of the CKM model to the organisation was fulfilled.

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## Voluntary Migration to the Online Channel in the Service Purchase Process - How Close We Are?

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### Abstract

The purpose of this article is to analyze the behavior of service buyers in a multi-channel environment. The main research question is: Whether and which consumers generations tend to voluntarily migrate to the e-channel in the process of purchasing services. Author used data from survey based on CAPI method that was conducted in 2015 on a group of 1103 respondents, the research sample was determined using a quota-random method. In the analysis service purchase process was divided into four stages: pre-purchase stage, service purchase stage, post-purchase stage, resignation from service. Two marketing channels were taken into consideration – online channel and offline channel. Quantitative data was used in MANOVA analysis. In order to answer the research question, author considered the potential differences in intention to use online channel and offline channel at each of four stages in service buying process and in case of each of three consumer generations (BB, X, Y). Depending on the nature of this difference it was possible to identify one of three situations in reference to customers' (service buyers') multichannel behaviour: a) difference in the intention to use both marketing channels is not statistically significant, so both offline channel and online channel is equally important for customers in service buying process – it refers to only Y generation in two stages of the purchase process (pre-purchase and post purchase stage); b) intention to use offline channel is significantly higher than the intention to use online channel – there is no real customers migration to the online channel and offline channel is still preferred in the purchase process – it refers to BB and X generation in the whole service purchase process and Y generation at the purchase and resignation stage. c) intention to use online channel is significantly higher than the intention to use offline channel, these are the research signs of voluntary migration to the online channel – such a situation was in no case. It turned out that only the Y generation channel shows a real interest in the buying process online, what is important only at the pre-purchase and post-purchase. The key stages (purchase and resignation) will still be implemented in the offline channel. Both older generations have strong preferences for the offline channel regardless of the stage in service buying process. Such research findings can be significant for better understanding of service buyers behaviour in multichannel environment, especially in the context of e-channel migration strategy. Research findings provide the basis for a significant implication for service supplies. Still a lot of effort should be put in convincing service buyers about the benefits of online channel. Each stage in service buying process demands separated attention in order to reduce perceived risk. The results of the study show the current consumer behavior in multichannel environment. It is valuable to point out rather poor intention of Polish consumers to voluntarily migrate to the online channel when purchasing services. The results of the study indicate the non-obviousness and lack of automatic transition to the online channel, even among the younger generation of consumers.

**Keywords:** multichanneling; online channel migration; online service; e-channel migration; service purchase process.

**JEL classification:** M31

### 1. Introduction

One of the crucial characteristics of the contemporary retail environment is consumers' demand of entertaining and effective shopping experiences (Savastano et al., 2019). According to researchers the provision of seamless experience constitutes the essence of omnichanneling (Berman and Thelen, 2018; Verhoef et al., 2015; Yrjölä et al., 2018) that has the vital impact on the behavioral intention as well as on the competitive advantage (Huré et al., 2017; Stein and Ramaseshan, 2016). It was rightly stressed by Pookulangara and Natesan (2010, p. 99), *the quality of the consumer experience is the new differentiator in the retail world*. When exploring the definition of customer experience, please indicate the importance of customer freedom to

choose his/her preferred point of contact with the brand at any time. According to Lemon and Verhoef (2016), customer experience should be seen as perceived outcome of the customer interacting with the firm during the service process. The author notices the relationship between the meaning of consumer experience and voluntary migration to the online channel (which is the subject of this article). The voluntary use of the online channel is a proof that the online channel meets the consumers expectations. It can therefore be assumed that the voluntary choice of an online channel indicates the possibilities of the e-channel in generating positive experiences for the user. The fact is that it is now fully justified to think more in terms of omnichannels than multi-channel (Cao, 2015). However, to understand the role of the online channel in shaping the omni-channel (holistic) customer experience, it is important to identify the consumers' tendency to choose the online channel while the brick and mortar store is also available.

The aim of this study is to identify the research signs of voluntary migration to the online channel. Specifically, this paper investigates whether this migration to e-channel strategy truly exist in reference to different generations of customers (Baby boomers [Hereafter BB.], X, Y). The remainder of this paper is organized as follows. Following a review of the extant literature relating to consumer behaviour in multichannel environment, a research sample as well as a general research approach is proposed. Survey data is analysed using MANOVA. Finally, author presents her results and discuss research implications of presented findings.

## **2. Theoretical background**

### **2.1. Challenges of multichanneling**

Shopping via multiple channels is a rapidly growing market phenomenon (Beck and Rygl, 2015) that generates new challenges for multichannel retailers. A myriad of opportunities through which consumers can realize their purchase process makes that achieving customer satisfaction becomes even more difficult. As it is stated in Neslin and Shankar (2009, p. 75), ideally retailer could simply provide the set of potential marketing channels with the goal of making a self-selection into the appropriate channel by customer. Researchers asked a crucial question about customers “right-channeling” (Neslin and Shankar, 2009) and the next one - can right-channeling be achieved through incentives and self-selection rather than strong-armed methods. Right channeling means making sure that right customer use the right channels (Blattberg et al., 2008). One of the vital problem is the free-riding behaviour that refers to customers who gather information from online channel of one company, although they purchase from the offline channel of another company (Chou et al., 2016). According to Verhoef et al. (2007), ROPO effect is the most popular channel switching behavior. Such cross-channel switching behavior has a negative impact on online stores' profits and generates a vital challenge for multichannel service suppliers.

### **2.2. Customer migration phenomenon**

Ansari et al. (2008) emphasized that channel migration affects firm profit due to its influence on cost and revenue. Whereas Ackermann and von Wangenheim (2014, p. 262) noted that channel migration affects customer relationship breadth and depth. Trampe et al. (2014) distinguished between voluntary and forced customer e-channel migration strategies. The first variant is based on the consumer's freedom to choose a marketing channel – both online and offline channel is available. Whereas forced e-channel migration refers to the process of moving customers from one channel to the e-channel by forcing them to expected behavior (Trampe et al., 2014). The desired effect of this strategy is the channel switching and efficiency improvements while the undesirable effect is customer migration to another retailer. As it is stated in Li et al. (2017), multichannel shopping behavior also depends on the channels offered

by competitors. According to Neslin and Shankar (2009), forcing customers to use certain channels may turn them off because it steers them to use channels that are contrary to their preferences. Researchers pay attention to some additional negative effects of forcing customers to use online channel – frustration and emotional discomfort among customers (customer reactance) that can create customer dissatisfaction and subsequently disloyalty (Chea and Luo 2008). For these reasons, Li et al. (2017) recommend caution in redirecting consumers from an offline channel they know to a new online channel. They point to the justification for the gradual migration to the e-channel.

According to researchers, two groups of factors identified in the push-/pull-paradigm of human migration movements can be used to encourage consumers to use target channel. This concept was taken from the theory of human migration and urban expansion (cf. Jedwab et al., 2017). ‘Push and pull’ theory that was first proposed by Lee in 1966, encompassing economic, environmental, social and political factors pushing out from the individual homeland and attracting him/her towards the destination country (Castelli (2017). Push-pull theory can be also used in the area of entrepreneurship. According to Kirkwood (2009), entrepreneurial motivations are often defined as fitting into “push” or “pull” categories. According to this theory, the first group, push factors, consists of factors motivating consumers to move away from their place of origin (in a multichannel environment these are factors encouraging customers to resign from the origin channel). The second group, pull factors, consists of features of distant places that increase their attractiveness (in a multichannel environment these are factors that increase attractiveness of target (online) channel). Bansal et al. (2005) noted the importance of the mooring variables – personal and social factors that can both anchor the consumer in his/her current location, and facilitate his/her transition to the new channel. These authors adopted the push–pull–mooring paradigm from the human migration literature to explain consumers’ switching behavior. According to Chiu et al. (2011), the mooring effect, or within-firm lock-in, has a negative influence on above mentioned cross-channel free-riding intentions. Some researchers payed attention to multichannel self-efficacy, which indicates the ability and confidence of consumers to employ multiple channels. If customers believe that they will not cope with purchase process in online environment, they will not engage in the online behavior, even if they are aware of the advantage of online shopping. In effect, it persuades these customers to use the offline channels (Chiu et al., 2011). Chang et al (2017) noted in their research on m-commerce that push and pull effects have direct impacts on switching intention, with the exception of the perceived cost of the search. M-shopping self-efficacy as one of the mooring effects has a varying degree of moderating effect on the information search behavior, perceived value, mobile store attractiveness and switch intention. As it is stated by Bansal et al. (2005), mooring variables can be strong due to high switching costs and this can be a reason for customer remaining with the original service provider even if push and pull factors are strong as well.

The concept of customer migration understood as the dynamic process of using different marketing channels before making a purchase is related to the theory of planned behavior (TPB) (Pookulangara and Natesan, 2010) which is the development of the theory of reasoned action (TRA). The theoretical basis for further analysis of the online channel acceptance made by customers was given by the Davis’s technology acceptance model as well as the Rogers’ model of innovation diffusion. Thomas and Sullivan (2005) paid attention to so called nonstationarity, that is the potential change over time in the consumer’s channel choice probabilities. According to Valentini et al. (2011) there is an explanation why newly acquired customers may react differently to retailers’ channel choice suggestion than more experienced customers. Researchers identified a “deliberative” mind-set – when a new customer is in that mind-set he/she is open to retailers’ suggestions about which channel to use, while the customer

learns more about the channels options, he or she becomes less sensitive to all external suggestions.

### 3. Methodology

The research sample was collected using quota-random method. The quotas referred to the characteristics such as: age, gender, place of residence (a provincial town, a city/town other than a provincial one, a village). The structure of the sample was maintained at the regional level. The number of respondents in the sample was proportional to the number of inhabitants of each of the 16 voivodships in Poland.

CAP (Computer Assisted Personal Interview) method with a standardized questionnaire was used to collect data. The study was conducted in September-November of 2015. The sample encompassed 1103 respondents, detailed characteristics of the study sample are presented in Table 1 [Another fragment of extensive research carried out under the same scientific grant was presented in the article: Lipowski and Bondos (2016).].

*Table 1. Characteristics of the study sample*

Characteristics		Number of respondents	Percentage of sample
<b>Gender</b>	Female	565	51.2
	Male	538	48.8
<b>Generation</b>	Baby boomers (1946-1964)	357	32.4
	X (1965-1980)	390	35.4
	Y (1981-1996)	356	32.3
<b>Employment status</b>	Full-time employed	608	55.1
	Part-time employed	82	7.4
	Self-employed	74	6.7
	Unemployed	123	11.2
	Retired	185	16.8
	Other	51	2.8
<b>Number of people in the household</b>	1	108	9.8
	2	329	29.8
	3	323	29.3
	4	245	22.2
	5 or more	98	8.8

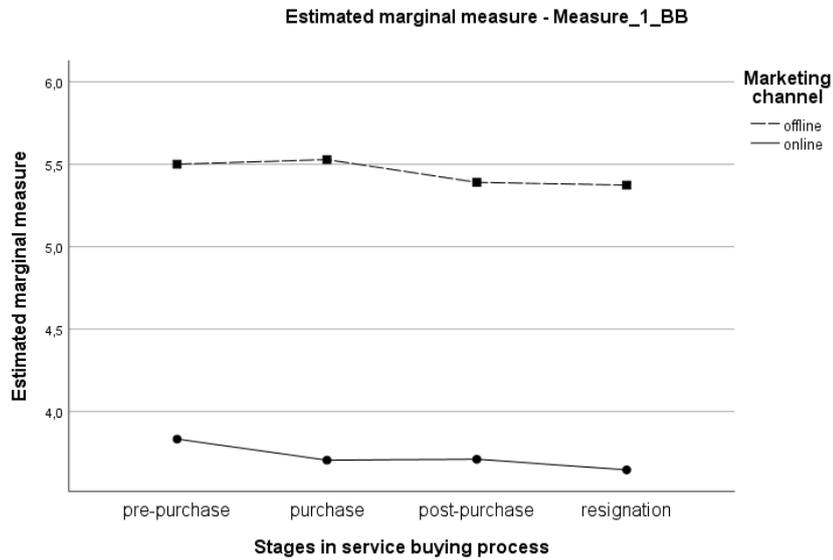
Source: Own study.

The main research question is: Whether and which consumer generations tend to voluntarily migrate to the e-channel in the service purchase process. In order to find the answer to this research question MANOVA was used. Items defining the intention to use a particular marketing channel (IU) was adapted from: Roschk et al., (2013): IU1: *There is a good chance that I will use the online (offline) channel during after-sales service*; IU2: *Most likely I will use*

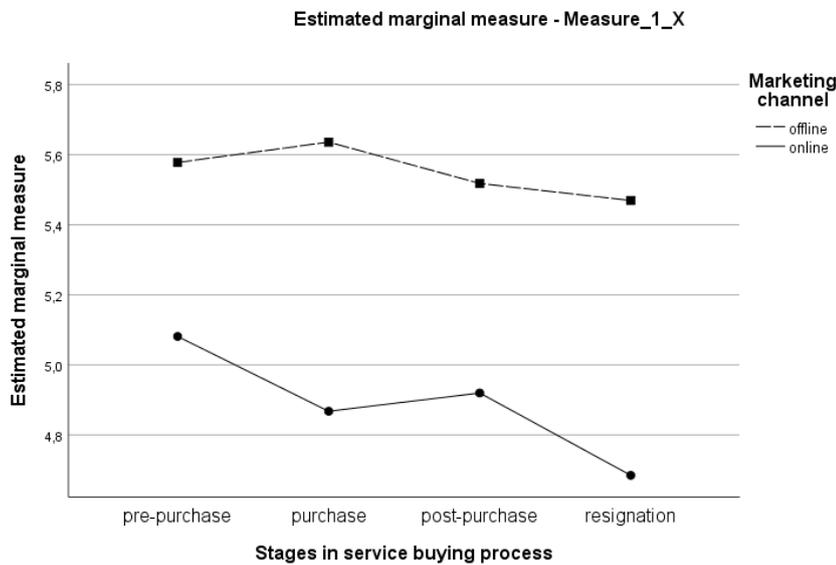
the online (offline) channel  $t$  during after-sales service; IU3: I intend to use the online (offline) channel in the future in order to after-sales service.

#### 4. Research results

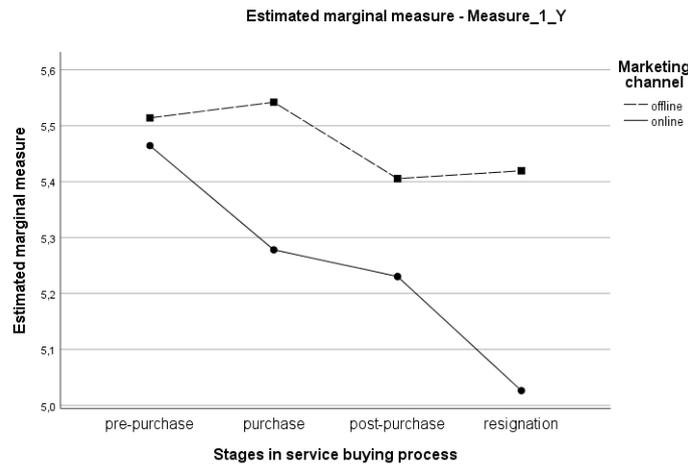
In analysis three consumer generations were taken into consideration – BB (figure 1), X (figure 2) and Y (figure 3).



**Figure 1. Intention to use offline and online channel in four-stages service buying process – BB generation**  
Source: Own study.



**Figure 2. Intention to use offline and online channel in four-stages service buying process – X generation**  
Source: Own study.



**Figure 3. Intention to use offline and online channel in four-stages service buying process – Y generation**  
Source: Own study.

Table 2 is a necessary complement to the data presented in the figures above. Based on the data from the table 2, it can be seen that only in the case of Y generation, there are visible signs of the real interest in the online channel that is comparable to the offline channel. Pairwise comparisons based on estimated marginal means pointed the lack of differences only in case of pre-purchase stage and post-purchase stage in service buying process.

**Table 2. Pairwise comparisons**

Measure: Measure 1								
Generations	Stages in service buying process	(I) Offline_ online	(J) Offline_ online	Mean Differences (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confidence Interval for Difference <sup>a</sup>	
							Lower Bound	Upper Bound
<b>BB (1946-1964)</b>	Pre-purchase	1	2	1.668*	.086	.000	1.499	1.836
		2	1	-1.668*	.086	.000	-1.836	-1.499
	Purchase	1	2	1.824*	.094	.000	1.640	2.007
		2	1	-1.824*	.094	.000	-2.007	-1.640
	Post-purchase	1	2	1.680*	.089	.000	1.504	1.855
		2	1	-1.680*	.089	.000	-1.855	-1.504
	Resignation	1	2	1.727*	.090	.000	1.552	1.903
		2	1	-1.727*	.090	.000	-1.903	-1.552
<b>X (1965-1980)</b>	Pre-purchase	1	2	.497*	.082	.000	.336	.658
		2	1	-.497*	.082	.000	-.658	-.336
	Purchase	1	2	.768*	.090	.000	.593	.944
		2	1	-.768*	.090	.000	-.944	-.593
	Post-purchase	1	2	.598*	.086	.000	.430	.766
		2	1	-.598*	.086	.000	-.766	-.430
	Resignation	1	2	.785*	.086	.000	.617	.953
		2	1	-.785*	.086	.000	-.953	-.617
<b>Y (1981-1996)</b>	Pre-purchase	1	2	.050	.086	.563	-.119	.218
		2	1	-.050	.086	.563	-.218	.119
	Purchase	1	2	.264*	.094	.005	.080	.448
		2	1	-.264*	.094	.005	-.448	-.080
	Post-purchase	1	2	.175	.090	.051	-.001	.351
		2	1	-.175	.090	.051	-.351	.001
	Resignation	1	2	.393*	.090	.000	.217	.569
		2	1	-.393*	.090	.000	-.569	-.217

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Bonferroni.

Source: Own study.

## 5. Discussion

### 5.1. Key findings and implications

Marketing channels are an extremely important element of customer management strategy (Gensler et al., 2012). The Internet has become a mainstream purchase channel (Li et al., 2017), however among Polish customers there is no sign of an authentic e-channel customer migration. Depending on the nature of the difference between intention to use offline channel and online channel it was possible to identify one of the three situations in reference to customers' (service buyers') multichannel behaviour:

- a) difference in the intention to use both marketing channels is not statistically significant, so both offline channel and online channel is equally important for customers in service buying process – it refers only to Y generation in two stages of the service purchase process (pre-purchase and post purchase stage);
- b) intention to use offline channel is significantly higher than the intention to use online channel – there is no real customers migration to the online channel and the offline channel is still preferred in the purchase process – it refers to BB and X generation in the whole service purchase process and the Y generation at the purchase stage and resignation stage.
- c) intention to use online channel is significantly higher than the intention to use offline channel, these are the research signs of the voluntary migration to the online channel – such a situation was in no case.

It turned out that only the Y generation shows a real interest in the online buying process, what is important only at the pre-purchase and post-purchase stage. The key stages (purchase and resignation) will still be implemented in the offline channel. Both older generations have strong preferences for the offline channel regardless of the stage in service buying process. Such research findings can be significant for better understanding of service buyers behaviour in multichannel environment, especially in the context of e-channel migration strategy.

To conclude, in case of both older consumer generations (BB and X), the difference between intention to use online channel and offline channel in service buying process is statistically significant. Furthermore, even in case of Y generation, the stage in service buying process also makes a difference in the context of e-channel voluntary migration. On this basis, it should be noted that Polish consumers are not yet interested in voluntary migration to the e-channel in the service purchase process. There is still a strong preference for the offline channel. Only at the stage of seeking information and after-sales support, young consumers show the intention to use the online channel on a par with the offline channel. Therefore, referring to the question contained in the title of the article - Polish consumers are still far from voluntary migration to the e-channel.

This provides the basis for a significant implication for service suppliers. Still a lot of effort should be put in the process of convincing service buyers about the benefits of online channel. Each stage in service buying process demands separated attention in order to reduce the perceived risk. One can suppose that Y generation is the most prepared for such argumentation. Researchers pay attention to their (Y generation's) high positive perception of online channel media richness and its impact on the intention to use this channel during purchasing service (Lipowski and Bondos, 2018). The younger generation, the greater the perceived media richness of the e-channel noticed by them. This may partly explain the higher interest in realization the first and third stage of service purchase process in the online environment. Service suppliers should aim to reinforce perceived media richness as well to eliminate potential perceived risk and improve trust to service in online channel. What is more,

also perceived easy to use the target channel (online channel) demands service suppliers' attention. There is no doubt that the indicated goals pose a significant challenge for service providers. However, according to the study, the existing activities appear to be inadequate in terms of voluntary migration to the e-channel.

## 5.2. Limitations and suggestions for future research

Like all studies, this one is not without its limitations. The first one refers to research sample, that consists of only three customers generations without the Z generation. The second limitation is connected with the research approach. This paper opens up interesting possibilities for future research. First, it is recommended to verify the presented results on other research groups. Currently, it seems fully justified to include in the study the youngest generation active on the market - the Z generation. One can suppose that the tendency towards an online channel that has only been signaled in the case of the generation Y will be confirmed in relation to the younger consumers. Second, the results of the study can be verified on a group of consumers who as a society are more technologically advanced. Another research suggestion is different method of statistical analysis that can be helpful in exploring the issue of e-channel customer migration. Finally, a deeper understanding of switching costs in reference to new channel offered by the actual service supplier is also recommended (cf. Pick, 2014).

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## Facilitating the Development of Innovative Competencies and Strategic Marketing Sustainability Commitment

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### Abstract

Innovations are the main driving force of enterprise development. Therefore, many enterprises improve their performance on the market through fostering of innovation. Sustainable development must be incorporated into business models helping enterprises and industries to become more responsible and at the same time efficient. It represents the *conditio sine qua non* for enterprise positioning as a successful and competitive factor that delivers top value to consumers and other stakeholders, directly or indirectly involved in building a sustainable society. The aim of the paper is to determine how and to what extent innovations are contributing in shaping of a strategic marketing orientation for sustainability. The purpose of the paper is to present utility of innovations in responsible and sustainable enterprises on their applied marketing strategy. In this sense, it is assumed that the enterprises which are encouraged to develop sustainable innovations, apply a strategic marketing orientation for sustainability. The survey was conducted on a sample of experts of largest successful Croatian enterprises. In order to establish the importance of innovation adaptation to and its impact on achieving sustainability marketing strategy, a correlation analysis was conducted between independent and dependent variables that represent the attitudes of respondents regarding strategic sustainable marketing issues and applied innovation. Correlation analysis showed strong connection between factors that drive innovation implementation and some factor of marketing efficiency. This model represents a good basis for organizational adaptation since it represents an innovative approach in marketing planning and thus strategic commitment to the sustainability principle.

**Keywords:** innovation, strategic marketing, sustainability, strategic marketing orientation for sustainability.

**JEL classification:** M31, O31, Q56.

### 1. Introduction

Reasons for development and application of enterprise innovations focused on the sustainability derives from different expectations. Some motives are regulation driven, while others are voluntary reactions, both in order to alleviate public criticism coming from activists or societies. Also, increased demand through consumer awareness of environmental production related issues is a kind of motivation for enterprises to develop or foster more sustainable approach in delivering sustainable products and / or services. In addition, the recognition of its own social responsibility should be added, which encourages the corporate sector to initiate sustainability programs in co-operation with an extended spectrum of stakeholders.

The issue of sustainability-based innovation is a consequence of the negativity that results from economic growth that has not been in line with environmental, economic or social systems for a long time.

Sustainable development must be incorporated into business models helping enterprises and industries to become more responsible and at the same time efficient (Hart and Milstein, 2003). Efficiency requires synergies between economic, social and ecological components that have a long-term impact on business success by creating value for stakeholders. Therefore, the key question is how is possible to interconnect sustainability and innovations and what would be the models which synergic enable them.

Increasing public awareness forces the corporate sector to introduce new products, processes or business models by implementing innovations. Moreover, it is considered that sustainability requires the development of innovations which will altogether help in solving

economic, environmental and social. This will represent changes in the existing socio-economic system. (Bocken et al., 2014). It is commonplace that the debate on sustainability and innovation includes a discussion on sustainability-oriented innovations (Klewitz and Hansen, 2014; Maletič et al., 2015; Adams et al., 2016), sustainable innovations (Boons et al., 2013; Clausen and Fichter, 2016), eco-innovation (Ekins, 2010), innovations oriented to socially responsible business (Gallego-Álvarez et al., 2011) as well as discussing the development of more sustainable (improved) management systems (Maas and Reniers, 2013; Verboven and Vanherck, 2015).

Sustainability as a dominant component of corporate culture is directly or indirectly manifested through the delivery of specific values to consumers and other involved stakeholders. This is a consequence of innovations being implemented in business processes. The marketing strategic orientation for sustainability comes from the such defined corporate culture. This is the framework for the development of responsible business policies. Therefore, organizational innovation, business process, product and / or service innovation is a key component of a strategic marketing orientation for sustainability.

## 2. Methodology

For the purposes of empirical research, primary data on attitudes and opinion of relevant respondents, primarily marketing experts and experts actively pursuing sustainable development policy, have been collected.

The research was conducted on the sample of representatives of successful Croatian enterprises. The survey included the four hundred largest companies registered in the Republic of Croatia in 2017, selected according to the criterion of total income, export income, after tax profit, asset value, profit share in total revenue and total assets, share of total exports, income, and net profit margins generated in 2016 (Jerčinović, 2019). The enterprise list was formed according to the Croatian Financial Agency data. The argument for choosing such a sample is the fact that, according to Vrdoljak-Raguž and Hazdovac (2014) larger enterprises are more prone to implement sustainable development measures through socially responsible behaviour policies. Also, these enterprises are carriers of all-important changes and set standards for other, especially smaller market participants.

The survey was conducted during the second half of 2018. The questionnaire was sent to 392 e-mail addresses from enterprise list. Ultimately, 112 fully completed questionnaires were collected.

To measure the construct *Strategic Marketing Sustainability Commitment* five-degree Likert scale was selected and an exploratory factor analysis was performed to establish a smaller number of relative factors of the final construct. Factorization yielded two factors.

For the purpose of examining the differences of the arithmetic levels achieved for the scale "*strategic marketing sustainability commitment*", i.e. its two components "*differentiation through sustainability*" and "*sustainable marketing management*", a t-test for independent samples was performed. In order to establish the initial relationship, i.e. the strength of the relation between the variables in the proposed model (dependent and independent variables) a matrix of correlations has been calculated to determine which independent variables have the greatest influence on the dependent variables (Jerčinović, 2019). For the same purpose, Pearson's correlation coefficient was calculated, and 2-tailed testing correlation significance.

## 3. Innovative Competencies and Strategic Marketing Sustainability Commitment

To be determined how the innovations of responsible and sustainable enterprises have a beneficial effect on the development of the marketing strategy of the company, it was assumed that the enterprises which are encouraged to develop and / or implement a notable number of

organizational and productive sustainable innovations have strategic Marketing Sustainability Commitment (Jerčinović, 2019).

### 3.1. Marketing Sustainability Commitment

For the purpose of enterprise's representatives attitude research, an exploratory factor analysis of the 19 items scale Marketing Sustainability Commitment with Varimax rotation factor was conducted. Factorization yielded 11 items and two factors. Based on the theoretical construct developed for this purpose, two variables were established (Table 1). They were named: “*differentiation through sustainability*” and “*sustainable marketing management*” (Jerčinović, 2019).

*Table 1. Extracted components and explained variance*

Component	characteristic root	% variance	cumulative %
<b>1. Differentiation through Sustainability</b>	7,911	52,739	52,739
<b>2. Sustainable Marketing Management</b>	1,568	10,453	63,192

Source: Jerčinović, 2019, p. 185

After component matrix rotation, simple factor structure has been achieved (Table 2).

*Table 2. Component analysis of the scale "strategic marketing orientation of successful enterprises"*

items	component	
	1	2
we systematically research and consider the needs and desires of our customers in a way that always aligns with the concern for social and ethical issues	0,169	0,899
in production we strive to use as much environmentally friendly raw materials and packaging as possible	0,075	0,916
sustainability is an opportunity to emphasize the greater value (differentiation) of products and / or services	0,341	0,648
strategic marketing planning implements elements of the triple bottom line concept	0,765	0,078
information regarding environmental management and corporate social responsibility are regularly provided to all stakeholders	0,740	0,245
different departments (marketing, production, procurement) work intensively on sustainability issues	0,777	0,261
eco-labels and environmental certificates are used	0,778	0,273
market research is conducted to obtain information about the meaning of the "green" / "sustainable" concept for consumers	0,814	0,183
market research is directed towards detecting the "green" and "sustainable" needs and desires of the consumers	0,803	0,328
environmental issues are considered in the design process of new products and / or services	0,630	0,364
our enterprise strives to meet the environmental, social and economic requirements of all stakeholders	0,671	0,160

Source: Jerčinović, 2019, p. 185

Furthermore, the scale reliability was established with the Cronbach alpha coefficient. For subscale „*differentiation through sustainability*“ and for subscale „*sustainable marketing management*“ (Table 3).

**Table 3. Cronbach  $\alpha$  reliability factor for Marketing Sustainability Commitment**

Subscale	$\alpha$	N
<b>1. Differentiation through Sustainability</b>	0,833	4
<b>2. Sustainable Marketing Management</b>	0,915	4

Source: Jerčinović, 2019, p. 186

Cronbach alpha coefficients have proven to be reliable for both components. For component „*differentiation through sustainability*“ it was  $\alpha = 0,833$ , and for component „*sustainable marketing management*“ it was  $\alpha = 0,915$  (Jerčinović, 2019). So, it can be argued that the reliability of the components is very good

### 3.2. Factors of organizational-productive sustainable innovativeness

There is obvious mutuality between the commitment for sustainability and enterprises that are driven by innovation. The outcome of such a link has beneficial effect which is contributing to development of possible competitive marketing strategy (Maletič et al., 2014). In that sense, it can be assumed that enterprise which has been researching, developing and / or implementing a notable number of organizational and production sustainable innovations in the last two years, has applied a strategic marketing commitment for sustainability (Jerčinović, 2019).

For the purpose of examining the differences between arithmetic levels achieved for the “*marketing sustainability commitment orientation*” scale, i.e. its two components “*differentiation through sustainability*” and “*sustainable marketing management*”, t-test for independent samples was carried out. Namely, those enterprises that have been promoting, developing and / or implementing a notable number of organizational and productive sustainable innovations in the last two years have achieved a higher value on the “*differentiation through sustainability*” scale ( $M = 3,47$ ,  $SD = 0,86$ ,  $n = 89$ ) in comparison with enterprises that haven’t been doing it ( $M = 3,14$ ,  $SD = 1,15$ ,  $n = 23$ ), with a difference that is statistically significant ( $t = 1,435$ ,  $p = 0,003$ ). The similar is achieved for same enterprises when they have been realizing higher values for “*sustainable marketing management*” scale ( $M = 3,30$ ,  $SD = 0,11$ ,  $n = 89$ ) in comparison with enterprises that haven’t been realizing it ( $M = 3,14$ ,  $SD = 1,15$ ,  $n = 23$ ) with a difference that is statistically significant ( $t = 1,140$ ,  $p = 0,014$ ) (Jerčinović, 2019).

T-tests for independent samples have been conducted for those enterprise that have been developing, approving, and / or producing / realizing a significant number of viable innovative products and / or services in the last two years in comparison with enterprises that haven’t been doing it. Those enterprises have also achieved a higher value on the „*differentiation through sustainability*“ scale ( $M = 3,84$ ,  $SD = 0,81$ ,  $n = 92$ ) in comparison with enterprises which haven’t been generating development, approving the adopting and / or producing/ realizing a significant number of viable innovative products and services ( $M = 3,53$ ,  $SD = 1,94$ ,  $n = 20$ ) with a difference that is statistically significant ( $t = 1,682$ ,  $p = 0,032$ ). The similar is achieved for same enterprises when they have been realizing higher values for “*sustainable marketing management*” scale ( $M = 3,96$ ,  $SD = 1,28$ ,  $n = 92$ ) in comparison with enterprises that haven’t been realizing it ( $M = 3,68$ ,  $SD = 0,73$ ,  $n = 20$ ), with a statistically significant difference ( $t = 1,064$ ,  $p = 0,029$ ) (Jerčinović, 2019).

The development of competencies that encourage the organization's ability to develop sustainable development are prerequisites for competitiveness (Van Kleef and Roome, 2007) because these capabilities allow them to create a new product and / or service with new added value by improving organizational or production processes and making it easier to adapt to changes on the market. In order to establish the importance of adaptation to innovation and its impact on achieving sustainability marketing strategy, a correlation analysis between the variable "*differentiation through sustainability*", "*sustainable marketing management*" and "*Organizational-production Innovation*" and "*Innovative Products*" was conducted. They represent attitudes of respondents regarding strategic marketing management in sustainability conditions through the promotion, development and implementation of organizational, productive, sustainable innovations that have occurred in the last two years to the beginning of the research, as well as development, approved adoption and production and / or realization of viable innovative products and / or services (Jerčinović, 2019). Previously, the normality distribution by Lilliefors' modification of Kolmogorov-Smirnov test was verified (Table 4).

*Table 4. Test of normality of distribution factors of organizational-production innovation and strategic marketing orientation for sustainability*

Variables	N	Kolmogorov-Smirnov Z	Sig.
<b>Differentiation through Sustainability</b>	112	0,144	0,000
<b>Sustainable Marketing Management</b>	112	0,098	0,010
<b>Organizational-production Innovations</b>	89	0,223	0,022
<b>Innovative Products</b>	92	0,193	0,000

\* Lilliefors' modification of Kolmogorov-Smirnov test

Source: Jerčinović, 2019, p. 198

The conducted normality distribution test of "*organizational-production innovation*" factor and "*strategic marketing sustainability commitment*" is significant, which means that the distribution of the results from the sample is statistically significantly different from the normal distribution. Therefore, correlation analysis, which examines the relationship between variables, will use the Spearman correlation coefficient. This correlation has confirmed the statistically significant relationship between the variables that represent the commitment to organizational-production innovation and variables "*differentiation through sustainability*" ( $r_s = 0,816$ ,  $p = 0,000$ ) and „*sustainable marketing management*“ ( $r_s = 0,840$ ,  $p = 0,000$ ) (Jerčinović, 2019). Correlation analysis is given in Table 5.

*Table 5. Correlation analysis between variables "Differentiation through Sustainability", "Sustainable marketing management", "Organizational-production Innovation" and "Innovative Products"*

Variables	Differentiation through Sustainability	Sustainable marketing management	Organizational-production Innovation	Innovative Products	
<b>Differentiation through Sustainability</b>	correlation coefficient* Sig. (two-tailed) N	1,000 . 112	0,481** 0,000 112	0,616** 0,000 89	0,033 0,756 92
<b>Sustainable marketing management</b>	correlation coefficient* Sig. (two-tailed) N	0,481** 0,000 112	1,000 . 112	0,541** 0,000 89	0,042 0,688 92
<b>Organizational-production Innovation</b>	correlation coefficient* Sig. (two-tailed) N	0,616** 0,000 89	0,541** 0,000 89	1,000 . 89	0,012 0,908 89
<b>Innovative Products</b>	correlation coefficient* Sig. (two-tailed) N	0,033 0,756 92	0,042 0,688 92	0,012 0,908 89	1,000 . 92

\*\* Statistical significance 0.01 (two-tailed), \*Spearman's rho

Source: Jerčinović, 2019, p. 201

Stimulating development and implementation of organizational and productive sustainable innovations, which are a good basis for organizational adaptation since they represent an innovative approach in marketing planning and thus a strategic commitment to the sustainability principle.

#### **4. Some limitations of the research**

Researches conducted in Croatian enterprises have been traditionally encountering latent resistance because of various demotivating factors within respondent's population. The same thing happened with this research, refusing to cooperate meant returning many unanswered questionnaires.

Mostly large Croatian enterprises are included in this research. Total of 392 questionnaires were sent, from what 112 or 28.57% completed questionnaires were fully collected.

In the specific research context of Croatian enterprises there is no similar research has been conducted, so this could be one of significant contribution. Considering the mentioned shortcomings, there are no previously tested measuring instruments, so there is no possibility to compare the obtained results.

In this case quantitative method was carried out, so in some future research it would be good to be used qualitative methods as well in order to gain a more complex insight into this very complex issue.

#### **5. Conclusion**

The strategic marketing component can be leveraged through the two main assumptions of innovation in the enterprise: one that involves the promotion, development and implementation of organizational and production sustainable innovations. Both marketing components main goal is generating enterprise development and growth by adopting proposals for innovative production or products. In the case of the researched enterprises, it can be concluded that the most significant influence is organizational product innovation. They are located within the company's internal domain and are important for organizing production and management processes where marketing has a prominent role. After all, in earlier researches a major shift has been established in the marketing paradigm of Croatian enterprises. The process of organizational innovation is likely to be the result of early adoption of modern marketing management trends by domestic managers. Such adaptation can be interpreted through education as well as dynamic monitoring of changes in marketing environment. According to the attitudes of Croatian managers, it is difficult to be original or innovative because of the large market saturation.

It is obvious that organizational innovation, business process innovation, product or service innovation significantly influence the formation of a strategic marketing orientation for sustainability. Without a strategic marketing approach that sublimates the basic marketing postulates through the sustainability paradigm, it is not possible to expect enterprises to strive for organizational-productive innovation to a greater extent.

Strategic marketing commitment to sustainability as a new marketing paradigm shift, as well as the values it delivers to the business, can serve managers as an excellent management tool. A strategic marketing commitment for sustainability acts favourably on business outcomes and overall market efficiency. This enables companies to position themselves at a higher level of business competitiveness and market efficiency. By applying the sustainable marketing principle, managers can more effectively utilize the existing resources and capacities of the enterprise. Therefore, the results of this research could be used as a strategic template

for planning and implementing marketing plans that combine innovation and sustainability principles.

The strategic marketing commitment to sustainability is conditioned by innovation processes which enables the creation of an authentic marketing strategic domain that clearly emphasizes the principles of sustainability and as such clearly defines modern marketing as an important lever in achieving fundamental sustainability issues

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## **Studying the Digital Marketing Strategy through Big Data in Banking Sector**

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### **Abstract**

Along with the development of the Internet and IT technologies, there were noted changes in Digital Marketing Strategy also in Banking Sector. Until recent times, the customers have not had access to a wealth of information about a particular financial product, nor a wide range of financial products available from which to choose at the time of purchase. Thus, until a commercial product was purchased, the buyer went through several stages of the buying process. Banks made real efforts to understand their customers better, why they choose certain financial products, and what their needs are. Researches, tests, and studies were conducted on customers behavior, for the banks to be able to deliver financial products and services that matched the expectations of its customers so that they can be satisfied. But now, in a century of speed and permanent change, more and more customers use the internet in all daily activities from work to leisure activities, social networking, information, shopping and perform banking transactions. These online activities are recorded as datasets and become parts from the Big Data technology. Using the Big Data technology both customers will be able to find the right financial product or desired information, and the Bank to better understand their customer's behavior and thus better address digital marketing campaigns.

**Keywords:** Big Data technology, Digital Marketing, customer behavior, customer experience, financial product.

**JEL classification:** M31

### **1. Introduction**

The same word, the same question can be set aside for each of our height. They can be interpreted clearly in a diametrically opposite way because they are unique, different, and all of them can stimulate the care of provoking individual reactions with a robust psychological significance. But if we look at the whole can be covered individually or a universal pattern is revealed, we observe that it is respected with a set of laws that defines human nature. The field of study consumer behavior is necessary to put into practice a private marketing system, which may be in care during the care period more and more prominent because the strategy can succeed in businesses being consumer-oriented.

The Financial-Banking Services analyzes by the same principles the behavior of the consumers to identify the banking services suitable for each need of the consumers as well as the most efficient means of communication with them.

## **2. Influence factors in the study of consumer behavior**

The concept of marketing refers to any economic activity that focuses on the satisfaction of consumers. Consumer behavior is a side of industrial business, which in turn represents a side of human behavior. (Balaure, et al. 2002)

According to Balaure, et al. (2002) "Consumer behavior can be defined, as a whole approach, as representing all the decisions made individually or by group, directly related to the obtaining and use of goods and services, to meet current and future needs, including decision-making processes. That precedes and determines these acts".

There are four types of factors that are influential in consumer behavior, and these are individual influencing factors. These factors are classified in four ways: cultural, social, personal, and psychological. Cultural factors are the most substantial component of consumer behavior because they are based on patterns of behavior created from childhood.

Social factors are influenced by reference groups, family, social status, and role. The reference groups represent all the groups directly or indirectly involved. The groups that are part of the direct influence are those people from the service team, professional associations, party associations. The degree of control of the reference groups differs from product to product. The influence varies according to the product life cycle by the novelty of the product just out of the market, the importance of buying the product being caused by the buyers and not by the brand.

Another important social factor is the family, and here we refer to the influence between children and parents, but also the impact between spouses. The implications between children and parents are given for example by the mother's remembrance of how she taught the children to make tasty food, and the influence between the husbands is granted by choice of the wife when it comes to detergents.

The last social factor of influence is social status and role.

Personal factors give the third category of influences on consumer behavior. These factors are also classified into an occupation, material situation, life cycle stage, lifestyle, personality, and self-esteem. Preferences differ from man to man, as it varies according to age; for example, we do not dress the same at the age of 10, 20 years, and so on. The life cycle stage differs from person to person, and some are jealous, live with parents or are recently married.

The choice of a product is different for each one because it depends on the real situation of the respective person. Another factor of influence is the lifestyle of consumers, which is different because the way of life and activities of each individual are not alike. (Balaure, et al. 2002).

Personality and self-esteem are other personal factors of consumer behavior. According to Pinzaru, (2009), "Personality is usually analyzed according to characteristics such as self-confidence, mastery, independence, respect, sociability, defense capacity, and adaptability. On the other hand, many marketers resort to a concept related to personality - the self-image of the person. That's why marketers are trying to create brands whose images match the self-image of the people in the target market. "

The last category of influencing factors is psychological factors that include motivation, perception, learning, attitudes, and conceptions. From the latter category comes Maslow's theory, which is classified as physiological needs, safety needs, social needs, personal needs, and the need for self-improvement, which implies the feeling of self-realization. (Balaure, et al. 2002)

According to O'Sullivan and Hill, (1996): "The consumer can become aware of a certain need through an internal imbalance, whether of a physical or psychological nature, which can be solved by purchasing a good or service."

The financial savings represent the primary benefit for promotional sales, and the primary benefits represent the savings, the quality of the products, the comfort in the market, the expression of the value obtained and the entertainment. Consumer behavior falls into two categories: utilitarian and hedonic.

According to Tong, et al. (2012) "Situational factors are the causes of the influence on consumers in promoting the sale, such as the environment, the physical circumstance, the temporal perspective and the definition of the tasks. The social experience of consumers can influence the time of shopping because they would prefer the choices of social companies. Social factors can increase consumers' preference to buy products or services. Consumers can enjoy shopping and perceive it as a chance for social interactions. A pleasant physical environment can have a significant value for consumers' attraction to the mall. "

The time perspective consists of the sales period and the time consumption during the sale.

Following studies on factors that influence consumer behavior during shopping, several insights have been drawn about a survey done on personal factors on the decision to buy consumers in the cosmetic industry versus men's skincare products in Vietnam.

According to Khuong and Duyen (2016): "The study applied a quantitative approach to collecting data through a survey based on questionnaires and analyzed the data collected using descriptive statistics and ANOVA. The study concluded that personal factors could affect the purchase decision of consumers in the cosmetics industry. Also, other studies have determined that personal factors influence the buying behavior of consumers"(Rehman, et al. 2017).

Practitioners competing in the virtual world have always been interested in understanding the mechanisms of virtual shopping and online consumer behavior. Most buyers prefer to buy their stuff online, and this accounts for more than 20% of most countries. In the US, over 50% of buyers already purchase their online shopping.

A study conducted on this topic identifies two groups of uncontrolled factors, these being consumer characteristics and environmental influences, followed by three controllable groups: product characteristics, standard features, and trader characteristics.

It is emphasized that most researchers argue that in traditional markets, the interaction of controllable and uncontrollable factors underlies the online decision-making process.

"In addition to the individual and external uncontrolled factors that influence the purchasing behavior, exposing customers to the company's marketing can affect the decision-making process by providing information for the black box of the consumer where the data is processed before the final consumer's decision. Online marketing can influence the decision-making process of virtual customers by involving traditional physical marketing tools, but mainly by creating and providing a correct online experience, the Web experience: a combination of online functionality, information, emotions, indices, stimuli and products / services, in other words, a complex mixture of elements that go beyond the 4P of the traditional marketing mix. "- according to the statements made by Kotler, (2003).

### **3. Use of Big Data in banking services**

Evolved technology influenced the behavior of consumers, being observed significant changes in the way in which these decisions in the purchasing process and the interaction with the organization. Impressing them, they became the most admirable and the most intolerant of marketing communications. They no longer trust the message for an organization product, so they access social forums, search for user reviews, and watch video demonstrations during the

information search stage. The evaluation of alternatives is also done in the online medium through specialized websites for the comparison of products so that you can see the characteristics of quality prices.

Consumers are consuming what is most of them digitally. Media consumption is completely digital at this time (Netflix, Pandora, news sites, Kindles, iTunes). The offline part of the lights is shrinking

Big Data refers to the large volume of data sets flowing at a very high speed. If actual data sets are processed, they can be extracted from valuable information. In the meantime, there are five differentiated characteristics of data sources: volume, variety, speed, veracity, and values.

Big Data grows every second; you grow up. Social media customer behavior is a significant factor in the phenomenon. The exponential increase resulted from the use of non-social media consumers and the growth of IoT.

There is information generated by all consumer decision-making cycles, including what the consumer does, how it is done, where it is consumed, when consumed with whom it consumes.

In marketing, the main engine of interest for Big Data is its potential utility for informing marketing decisions and for conducting marketing campaigns. Some authors have suggested that the analysis of big data consumers has transformed the significant way in which marketing is carried out.

Two Big Data analysis techniques are predictive analytics and machine learning. Analytical analysis refers to the anticipation of actions based on predictors by which the prediction methods are built.

Some of the values created by Big Data are the collection of some data on the most detailed performance (real-time or near time) about everything, segmentation of populations for the purpose of customizing actions, replacing / supporting the decision-making processes, the help of the product, the service of the enterprise, the function of the algorithm.

Many organizations have implemented Big Data-type applications, conducting business activities to make money from big data analytics. Such organizations can create customer images and use them as the foundation stone profiling tools to build custom documents for customers.

Big Data is also the next frontier for innovation, competitive advantage and productivity, the Big Data Adapter has become a vital tool in the organizations' activities, and they have never wanted to survive in a competitive era. Also, the notions of "artificial intelligence" and "cognitive computers" are meant to represent the next step in the Big Data study and behavior. The ability to learn how to apply human thinking processes to machine learning opportunities when it comes to testing and optimizing marketing campaigns.

In the area of banking services, the use of large volumes of Big Data type data has become an action included in the marketing and communication strategies, both to realize the behavioral models of the clients and to identify the most efficient methods of communication with the clients.

#### **4. Methodology research**

Within the article, a qualitative study was conducted using the interview guide as a research tool. It consisted of a set of 6 questions that contained indications and references to the topic of the discussion and which was addressed to specialists in the banking financial field. The purpose of the research was to identify the efficiency of using large volumes of data in knowing the needs of consumers, and among the objectives were to determine the impact that the evolution of banking services in the online environment had on consumers, to identify the

most used means of communication implemented by banks in the relationship. With customers, determining the measures imposed by the bank to understand the clients' needs better, identifying the big data tools implemented by the respective bank and the extent to which the online applications and the use of Big Data in their optimization represent an advantage for the bank.

Following the application of the interview guide, the following answers were obtained:

**1. With the development of the Internet and IT technologies, changes have been observed in the digital marketing strategy and the banking sector. What changes do you think have happened in the relationship with the clients within your company?**

*- I believe that closeness to the client was created, in the sense that now he had communicated interacting with the clients/prospects, the majority of the media in the social networks. The marketing/communication strategy has become mapped, with the information coming exactly where it is needed, the customers getting the information about the products they would be interested in.*

*-Visibility in the online environment is more accentuated with the evolution of technology (social media, partnerships with big customers on the side of online payments, etc.)*

*-Delivery of offers for the defining product having as basis the information of the client's behavior in using the Internet resources.*

*-Sending the information to the customers in the online medium thanks to the help the customer knows precisely what interests them.*

*-Clients use all the online media for communication with the bank. Offering applications in the online environment to meet the needs of the clients as well as the client is no longer needed in the branch.*

*-Customers have quick access to information. The new digital marketing strategy for communicating with customers has become a reality.*

*-Customers are expecting high-speed access to financial information, and they will simplify banking operations (fewer documents, fewer steps, more comfortable to access).*

*Also, the customers expect that the information about the operations carried out about the bank will be transferred quickly and the simplest of the computer applications.*

**2. Until recently, customers did not have access to a lot of information about what is called a financial product, a wide range of financial products available to choose the most advantageous outcome. What means of informing and promoting the use of communication with clients?**

*-Website, Facebook page, Instagram account, Google Ads, newsletter, SEO, branch offices, Participation in events/fairs/ conferences*

*-Email, SMS, phone, online marketing: facebook*

*-Forms of promotion banners provided through the medium of social media platforms and content analysis platforms. Email marketing campaigns with personalized content for the client.*

*-Company site, Facebook page, Instagram account, Participation in profile fairs,*

*-Advertise radio, TV, Internet advertising, a website of the company, Facebook page, Instagram account.*

*-Participation in trade fairs, mobile sales offices in shopping centers*

*-Bank branches, radio ads, TV, Internet advertising, website, company page, Facebook page, Instagram account, Google Ads, newsletter, SEO,*

*-Participation in trade fairs, events, conferences, mobile sales offices in shopping centers*

- Advertise radio, TV, Internet advertising.
- Participation in profile fairs (such as real estate), mobile sales offices in shopping centers.

**3. Until the purchase of a financial product, the buyer passed through most of the calls of the buying process. What do you consider to have been enforced in this regard in the bank where you work?**

- Marketing budgets for the customer's approach.
- Optimizing the client-bank relationship (updating data in the call center, activating/deactivating services from the bank's account)
- Attempting to know the customer's needs at a certain point in the delivery of some dedicated products.
- Use of information related to the accession number for certain products produced by the company
- Completion of some customer questionnaires for businesses.
- Improve the relationship between the customer and the customer by providing services and options that are customized according to the customer categories.

**4. In a century of speed and permanent change, all the most frequent cyclists use the Internet to return daily activities, from work to leisure activities, social networks, information, shopping, and transactions. These online activities are registered as datasets and separated from Big Data technology. The bank you work in. Do you use such data sets? By what means are they implemented and utilized?**

- Techniques of monitoring, analyzing traffic on the leading site to collect information about the typology of the clients to offer personalized products.
- Analyzers of performance indicators automatically deliver product types.
- We use the techniques of monitoring the traffic analysis of online platforms to collect the relevant data.
- The large company manages some customer information on the facebook page.

**5. Do you consider that using the volume of data within the product strategies represents a competitive advantage of the Bank you work in? Why?**

- Yes, I think it is an advantage over the competition. The company is a well-known customer, as well as the products/services offered, are necessary.
- Yes, because the information about financial products becomes easier for the customer.
- The possibility of optimizing the offers in a short time depending on the performance and the impact had during the promotion.
- Yes, I think it represents an advantage in the face of competition for the bank that can offer products customized for the customers.
- Yes, I believe it represents an advantage in the face of competition for the bank as it could have customized products for customers.

**6. Do you think that using Big Data technologies, the Bank will be able to meet the needs of the customers? Why?**

- Yes. The company is also the right customer, and the products/services are offered.
- Yes, due to the trends resulting from using these technologies.
- Yes. Knowing the needs of the customer, they can offer a product as close to the criteria as possible.

*-Yes. Using Big Data technology, the company understands the customer's need to provide the services and products that are customized for the child.*

*-Yes. Using Big Data technology banks can know the customer so that they can offer the product to the customers.*

*-Yes. Using Big Data technology banks can better understand the behavior of new customers and the power of providing personalized services*

*-Yes, the use of Big Data offers competitive advantages for organizations that use them to enable them to make the most of the customer needs and offer them personalized products.*

**7. Do you think that the use of Big Data technologies is an efficient tool for developing online marketing campaigns? For what reason?**

*-Yes. Marketing companies will target the categories of customers interested in a particular product/service.*

*-Yes. More and more customers use the internet in all their daily activities. The online environment is the most used in marketing campaigns*

*- Yes. Online marketing companies will promote the product of each client's needs.*

*- Yes. By using Big Data technologies in the development of online marketing campaigns, we can target every client.*

*-Yes. By using Big Data technologies in the event of online marketing campaigns, we can promote the individual products of our clients' needs.*

*-Yes. By using Big Data technologies in the development of online marketing campaigns, we can get the attacks of each client's needs individually.*

*-Yes, because they allow the understanding of the client's profile, and once this information is available, it can be used to promote a particular product according to the client's capabilities.*

As a result of the obtained results, we can observe that the specialists working in banks agree that the development of online communication tools with clients and the emergence of mobile banking applications have significantly increased the satisfaction of the clients and their degree of information regarding the banking services offered. Customers are satisfied because they have high-speed access to financial information and simplify banking operations (fewer documents, fewer steps, more comfortable to access).

As a means of promoting and communicating with clients we can see that the banks have used numerous channels such as Website, Facebook page, Instagram account, Google ads, newsletter, SEO, affiliates, Participation in events / fairs / conferences, Email, SMS, telephone, forms of promotion banners provided through social media platforms and content analysis platforms, participating in profile fairs and so on, to get as close as possible to the different categories of customers and to inform them about at the financial services available.

Through technological development, the use of Big Data tools for collecting information about clients of financial and banking services has become a competitive advantage of companies on the market. Through them, we can offer personalized products according to the needs and possibilities of the clients, and we can also design efficient marketing campaigns to reach where the right customer is.

**Conclusions**

We can conclude by saying that for more profound identification of customer needs, banks have used various methods of research and optimization of customer relationships, including optimizing the customer-bank link (updating the call center data, activating / deactivating services on their own account. of the bank), trying to know the needs of the client at a given time in the delivery of dedicated products, using information regarding the accession

number for certain products produced by the company, completing questionnaires for clients for businesses. All these approaches have been used to increase the satisfaction of users of financial-banking services.

In trying to identify which are the most efficient big data tools used by banks for collecting information by customers, we could see that they are varied, mentioning monitoring techniques, analyzing traffic on the leading site to collect information about the typology of customers to offer personalized products and even the collection of information through the Facebook pages of the users.

As for the attitude of the bank's specialists regarding the usefulness of using Big Data tools for analyzing customer needs, most of them mentioned that this aspect represents a competitive advantage over other banks because the information about the financial products becomes more comfortable for the customer, it appears the possibility to optimize the offers in a short time, depending on the performance and the impact had during the promotion, and the financial products can be adapted to the needs of the customers and can thus offer them personalized services.

Also, the use of Big Data tools is an advantage in designing online campaigns, because using Big Data technologies in the development of online marketing campaigns, individual battles of the needs of each client can be obtained and allow understanding of the customer profile and, once this information is available. It is possible, and it can be used to promote a particular product according to the client's capabilities.

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## Romanian Consumers' Perception on Carpooling Phenomena – A Successful Example of Collaborative Consumption

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### Abstract

Sharing economy represent a complex concept that is intensively debated in the last decade. Proposes an economic model based on collaborative consumption and four different layers: circulation of goods, increased utilization of durable assets, exchange of services, and sharing of productive assets. The present article wants to investigate how Romanian consumers relate to a carpooling application - BlaBlaCar. Consumer perceptions are measured in a quantitative research as an online field survey addressed to users of the BlaBlaCar platform who have completed at least 3 trips in the past 2 months. The results of the research are discussed and analyzed not only from the point of view of factors that are determining the consumption decision for this kind of services but from the point of view of future implications regarding consumption social models and the development of sharing economy and collaborative consumption within the context of Romanian economy. The findings are showing that a large part of educated, young and middle age consumers from the urban area with medium to large incomes are embracing on a wide scale a new model of consumption, which is characterized by the sharing of resources, intense social engagement and a new type of free transactions.

**Keywords:** collaborative consumption, carpooling, consumption behavior, sharing economy.

**JEL classification:** D16, M31, R40.

### 1. Introduction

Economic crisis, shifts and developments within information technology field with a special stress on digital platforms brought to life new forms of consumption and without any exaggeration a new supply- demand paradigm.

This new paradigm implies the fall of traditional boundaries between producers of goods and services and consumers due to distance, price, hard to established communication channels and so on.

The travel experiences are having nowadays a broader horizon, both temporally and spatially. That is to say the capacity of nowadays consumers to create personalized service experience using their own knowledge and communication resources. (Lu, C., Geng, W., & Wang, I., 2015).

Many travel services interactions are made within the virtual marketplace of digital products like taxi online order mobile applications etc. The main characteristics of these new way to deliver services is that the limits where the customer experience begins and ends are becoming blur and hard to define, because interactions with digital platforms are creating customer experience during all stages of the consumption process. Another essential element is represented by the fact that all actors implied in transport services creation and delivery can contribute to the creation of customer experience (customer itself, digital online platform l,m, taxi drivers, public transport companies etc). In a collaborative consumption process this feature is more enhanced by the fact that consumers themselves are creating and delivering consumption experiences to each other.

## **2. Literature review concerning collaborative consumption**

### **2.1. The collaborative economy between innovation and re-socialization: the theoretical framework**

The new model of consumption puts into the center the citizen-consumer and his capability of production and creativity in the same time. After the promotion of Web 2.0 and social networks the interactive digitalization has been facilitated and developed. The next step further was the boom of sharing that has modified the economic exchange.

Collaborative consumption represents a new form of mass sharing among individuals.

These new forms of reciprocity have been defined with different verbal phrases: "sharing economy", "collaborative economy", "common-based" economy" (Belk R., 2014). These are new production models, distribution and consumption capable of leaving the pattern of individuality, looking at potential of the community economy and the recovery of the value of reciprocity in the Polanyian sense. The practices of collaborative economy fit into this scenario thanks to the enabling and disintermediation force promoted by digital platforms, leading to the emergence of new forms of integration between the economy and companies, which expand the boundaries of traditional reciprocity mechanisms in a hybridization perspective with the market and redistributive logic (Pais I., Provasi G., 2015): from the collaboration, based on instrumental motivations, where the cycle of reciprocity becomes "short" and the relationship is based on forms of trust live; to sharing, which distinguishes clan or community structures, based on a dimension of belonging and mutual recognition that even crosses the identity dimension, defining a "We" as a noun reference, not limited to the simple summation of the transiting parts, which traces the boundaries of a generalized but not universal trust. The organizational model is based on "Common-based peer production" (Benkler Y., 2004; Benkler Y., Nissenbaum H., 2006) which makes use of it collective intelligence (Lévy P., 2008, p.154; Brabham D.C., 2013) distributed in the networks of open collaboration, in the absence of rigid forms of intermediation and managerial hierarchies.

This determines some fundamental implications inherent in the paradigm of the collaborative economy, starting a redefinition of the concepts of reputation and community:

1) The boundaries between consumption and production, as between amateurism and professionalism (not by chance we talk about prosumer and pro-am), they become more and more opaque and fluid. It is therefore a model that puts at the center the empowerment of the citizen-consumer and his creative and productive abilities (Bruns A., 2008). If, we can talk about an augmented society in which the distinction between on and offline appears increasingly blurred, so what exists and has relevance in the digital sphere has a significant impact in our sphere of relationship and physical action, the systems of digital reputation and online trust building play a fundamental role. These are mechanisms powered by algorithms that process a plurality of information by building digital reputation of the members of a platform. If, as Coleman says (1990) the concept of trust can be defined in terms of willingness

to make a collaborative task even before we may assess how it will involve the effort of other persons. The collaborative economy is developed based on interpersonal or community relationships, having the trust that develops from the reputation of the members who use the service. In the so-called "trust age" (Mazzella F., Sandurajaran A, 2016, p. 13) a user has access to the share capital of another that is made evident on the platform. These reputational mechanisms can have ambivalent results: promoting attitudes and virtuous behavior oriented towards quality and the common good (Arvidsson, A. Peitersen N., 2016), may be subject to the fear of some form of negative retaliation by others users (Resnick P., Zeckhauser R., 2002) and at the same time can be characterized by a deep one opacity (Pasquale F., 2015) or even promote a sense of renewed individualism and exclusivity of his own relational circle (Hearn A., 2010).

2) The strongly relational nature of this paradigm that supports collaborative transactions contributes to the creation of new social aggregations, the so-called OSCC, online social change community. The concept of community, which has always been at the center of sociological thought, has assumed different connotations and specificities in the theoretical elaboration of the discipline. (Farajallah, M., Hammond, R. G., & Pénard, T., 2019). In Classical sociology the term tended to indicate formations like the family nucleus, or pre-modern like the small village communities, with a low division of social work (Durkheim, 1974), to the point of outlining the importance of the transition from the *gemeinschaft* (community) to the *gesellschaft* (company) (Tönnies F., 1963). However, it has also been thematized as a set of individuals who "Share a territorial area as a base of operations for daily activities" (Parsons T, Shils E.A., Smelser N.J., 1965, p. 97) and this concept has also animated the tradition of community studies, developed in after the Second World War, and focused on the importance of the dimensions of originality of relationships and contextual climate that the community is able to generate (Tosi S., Vitale T., 2016). The culturalist approach he then began to thematize the theme of the community as a semantic field or boundary expressing symbol (Kebulsek L., Giles H., Maass A., 2017), which is articulated in the composition of the meanings attributed by the actors through communication and social interaction processes. This meaning has become more important relevance in the era of communication platforms (Paccagnella L., 2000), leading to the birth of communities that aggregate around more than territorial / linguistic affiliation mechanisms new identity and hedonic symbols (for example the brand), or to specific functional needs (as in the case of many sharing economy platforms including those of shared mobility) or a issues of global interest (the Avaaz or Open Street Map case). These new communities, on a par of their territorial counterparts, develop distinctive features that, however, are common to them traditional community systems (Muñiz A., O'Guinn T., 2001): from species consciousness, or rather an identity distinctive linked to belonging to the group, sharing traditions and rituals, even up to sense of moral responsibility felt towards other members.

## **2.2. Carpooling and the BlaBlaCar platform: successful ways to implement the collaborative economy?**

Mobility, together with hospitality, is among the most developed sectors of sharing economy around the world. In a phase in which the city rethinks mobility and redefines transport practices, tools such as car sharing and/or carpooling represent a strategic lever with a strong potential for impact on sustainability and urban liveability. The success of these practices fits into a growing one expansion of the collaborative mobility market

With particular reference to the studies on ride-sharing and car-pooling, most of the analyzes available are technical and focus on service design (Kamargianni M., Li W., Matyas M., Schäfer A., 2016; Furuhata M., et al., 2013; Agatz N., Erera A., Savelsbergh M., Wang X.,

2012) or its impact on traffic and the environment but much less on the relational impact generated by these practices (Novaco R. W., Collier C., 1994; Mazzella F., Sandurajaran A., 2016).

As Belk notes (2014), it is necessary to distinguish collaborative services based on access and based services on sharing: in the first case, there is no form of co-ownership or shared use, it is not an altruistic action, not even oriented to sociality; in the second, however, access can be free, yes share the burdens and responsibilities among users, with a greater connotation in a pro-social sense. (Belk R., 2014)

Car sharing, in fact, remains a market service on demand. It is characterized by being a service based on access as none of the users owns the property or develops any sense of identification / appropriation through use, the reasons are mostly dominated by the need individual and personal of a single user. (Arcidiacono D., Pais I., 2016)

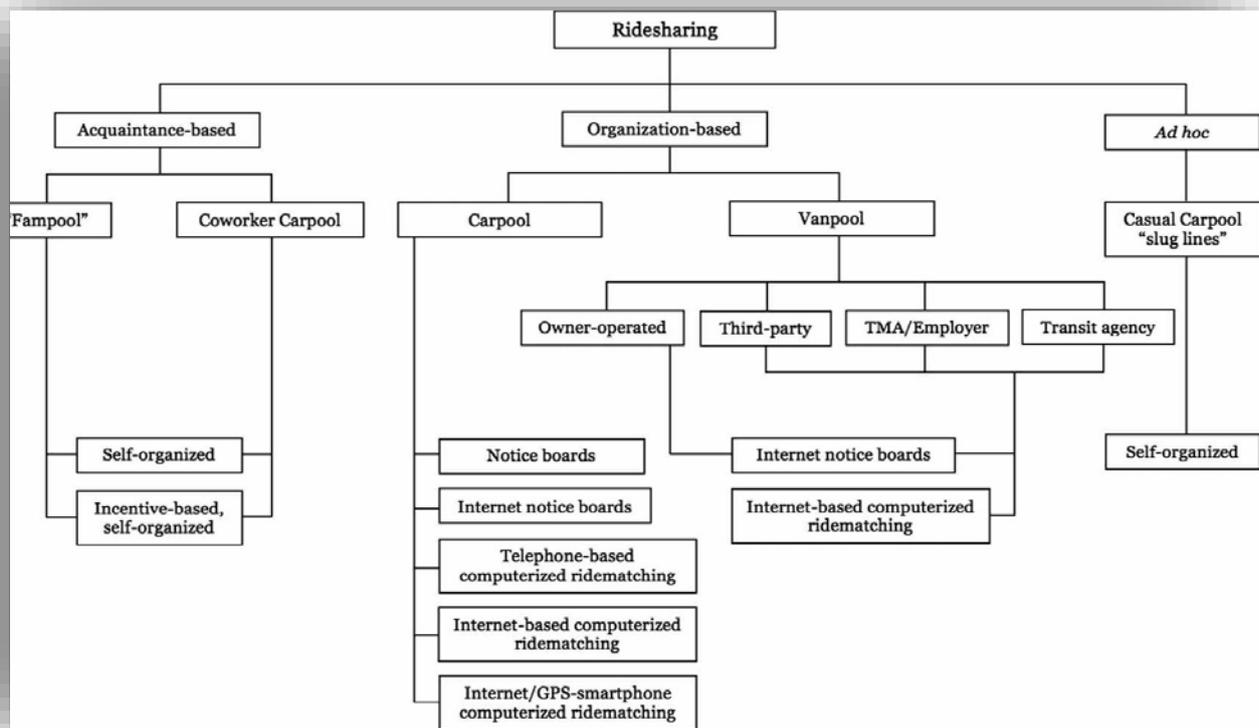
Bardhi and Eckardt (2012) attribute to car sharing a mechanism of "negative reciprocity" for which a single subject (in this case the provider) appropriates the most of the benefits generated by the transaction; the service does not develop any sense of identification community, not even to the provider's brand, but rather it could manifest almost a kind of embarrassment in the show that the item used has been rented. (Li J., et al., 2007)

Carpooling, on the other hand, is based more largely on relational and sharing aspects among users of the platform, which work together as peers, dividing the costs and costs of the move. (Arcidiacono D., Mainieri M., Pais I., 2016) Carpooling is based on the shared use of an asset that belongs to one of the users and that is in fact shared with a not owner. The mechanism that is generated is one of positive reciprocity (Bardhi F., Eckhardt G. M., 2012) in which the two subjects, however, obtain an equal advantage from the transaction. Furthermore, the relational dimension is the recognizability of belonging to a group of people who usually use this system facilitates exchanges between users, acting on the "universes of meaning" that guide the ways of consuming cars and vehicles mobility habits (Bhappu A., Schulteze U., 2019). It is a positive sum system that creates distributed advantages equally between drivers and passengers in terms of reducing the monetary and / or temporal costs of a travel, but also creates benefits of a collective nature to those who are not involved in the transaction, in terms of reduction of traffic congestion, pollution or consumption of fossil fuels (Charles K.K., Kline P., 2006; Ferguson E., 1997; Kelley K.L., 2007; Chan N.D., Shaheen S.A., 2012).

The success of car-pooling has been limited for a long time in that in the past it has been structured mainly in informal and disorganized manner. This would have prevented users from using it systematically as a form of alternative mobility, also due to the difficulty of matching routes and timetables between the transients (Furuhata M., Dessouky M., Ordóñez F., Brunet M., Wang X., Koenig S., 2013). The evolution of communication technologies, especially mobile, combined with those of geo-localization, allowed to overcome these problems making the user experience more dynamic and in real-time with respect to the displacement needs of the subjects (Agatz N. Erera A., Savelsbergh M., Wang X., 2012) also simplifying the payment methods and the building of mutual trust or towards the service in general. In the last decade these services have multiplied, both in Europe and in the US, both for long and short distances, also with the support of different municipalities, with the aim of reducing traffic congestion (76% journeys between 100 and 800 km are made by car with 1.4 passengers per vehicle) (Handke V., Jonuschat H., 2013).

The one generated by platforms like BlaBlaCar is a shared mobility system that is part of the forms of ridesharing (see chart 1) and has also been defined as dynamic ride sharing (Agatz N. Erera A., Savelsbergh M., Wang X., 2012), as it incorporates these technological innovations and provides independent subjects, drivers who do not are employees of the platform or service provider, the sharing of parking spaces and the costs of the shift so that it

is mutually beneficial for all those involved. (Orden D.G., Andrada A.V., Sánchez-Serrano, J.L.S., 2015) It is a service tend to be non-recurring (compared to other forms of car-pooling, for example organized at the level company), based on an instant pre-agreement between subjects who are not in the same place (such as in random ride-sharing) and on an automated matching of supply and demand (see fig 1).



**Figure 1. Car-pooling within the classification of forms of ride-sharing**

Source: Chan, N. D., & Shaheen, S. A. (2012). Ridesharing in North America: Past, present, and future. *Transport Reviews*, 32(1), 95.

### 3. Methodology of research

A research was conducted in order to assess the main hypothesis regarding collaborative consumption in the field of transportation services within the Romanian market. As we stated above, collaborative consumption has been developing in more and more different ways across national economies within the world. New profile of the postmodern consumer implies a propensity over this type of consumption model along all complex implications at the level of goods and services exchange process. In this context we can advance the main research hypothesis - Romanian consumers are more and more involved in collaborative consumption models and especially young population from urban areas are embracing new ways of consumption in the field of transportation services. Young urban consumers at bachelor level of education are using on a large scale mobile applications for taxi companies especially for in town travels and, in the same time they are beginning to use more and more carpooling applications for long distance travels like BlaBlaCar.

The research was implemented as a interview based field type survey, using an online type questionnaire in order to maximize the number of responses in a short period of time.

The final number of responses validated have been of 540, mainly students from economic specialties.

#### 4. Results and discussion

The frequency of travels using BlaBlaCar platform during the last 6 months is between 20 to 29 for 21% of the respondents showing that the propensity of using this type of services is pretty high.

Most of the users, meaning 38% are beginners in terms of the level of experience within the BlaBlaCar platform, followed by experienced users with 25% and Ambassador with 16%. The amount of users that declare themselves having a high level of experience within the platform is up to 40% if we consider together experienced users along expert and ambassador.

Most of the respondents are using the platform mainly as travelers, with 40% them being only drivers. This means that the propensity for traveling as a user for the transportation service itself is higher within the analyzed sample, as the main profile of the respondents is the one of a typical student.

Taking a look to the main reasons for traveling with BlaBlaCar, 32 % of the travelers respondents have the need to go with the family or visit family using the platform, followed by 22% that are going to friends, 17% that are going to faculty, 14% that are going to work and just 8% that are using the platform for make holidays and pleasure trips. The structure of the sample actually consist in 78% of the respondents that are young people between 18 and 27 years of age, followed by 18% from the age interval between 28 and 37 years of age and 4% with 38-47 years of age. Regarding level of instruction we have mainly high school as the last level achieved, a common situation for the typical student with a personal revenue interval between 2000 and 4000 Ron for as much as 82% of the respondents, followed by 16% from them with a personal revenue between 4001 and 6000 Ron.

As consumption motives we can assess that 69% of respondents are sharing the vehicle cost and 10% are using the service for convenience, meanwhile 8% of the respondents are enjoying traveling with others, as it can be seen in the figure 2.

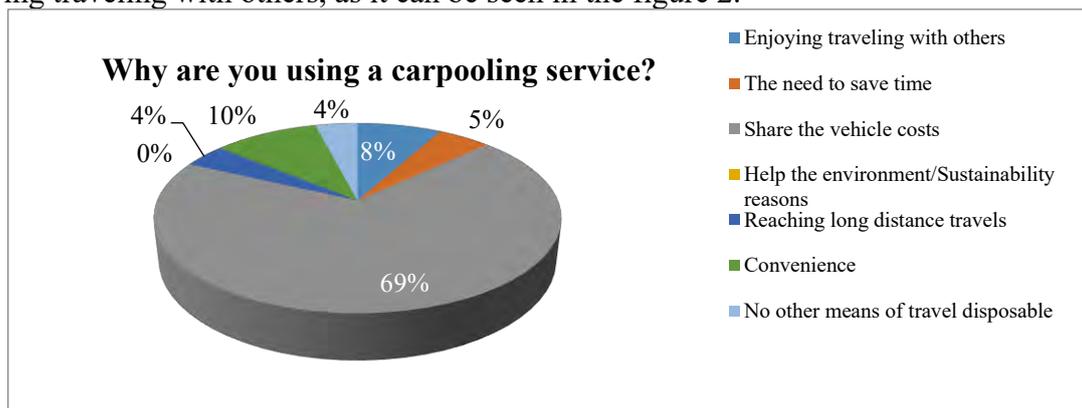


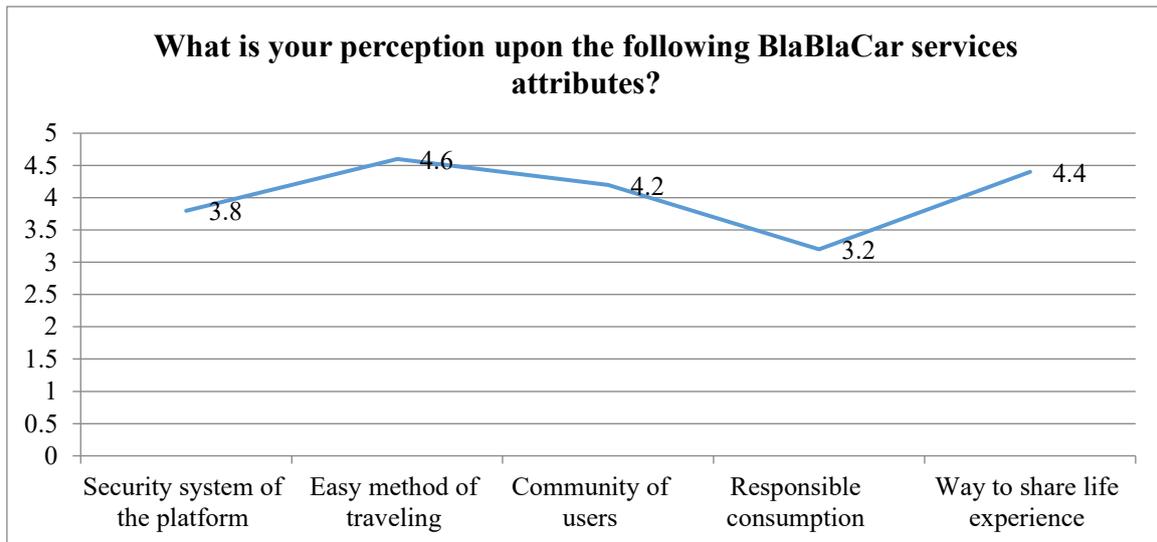
Figure 2. Consumption usage motives for carpooling service

Using a semantic differentiation scale for the degree of satisfaction related with BlaBlaCar services, we have obtained 4.8 mark that is indicating a rather high degree of general satisfaction.

71% of the respondents, before traveling are taking a look to the profiles of the various drivers and choose who they travel with. About 18% of respondents take a look at the profile but then generally travel with anyone, while 11% don't look at the profile and travel with anyone.

The perception regarding traveling with strangers has brought to our attention the fact that most of the respondents are trusting the persons that are using BlaBlaCar followed by the fact that the platform gives them relevant information within the user profile. A percent of 14% of the respondents are considering to share life experiences and 12% are considering BlaBlaCar an safe system.

As regarding different attributes of the services delivered through the platform the highest mark was received by the easy method of traveling, followed by a way to share life experience and the fact that you gain access to an attractive community of users.



*Figure 3. BlaBlaCar services attributes*

Respondents have declared also that the feedback that they offer through the platform after a travel is quite important with a mark of 4.5 on a semantic differentiating scale with 5 steps. The information provided by the platform regarding the quality of other users (drivers and travelers the same) is satisfactory for the most of the respondents.

The utility of BlaBlaCar service in comparison with other transportation modalities is very high.

In order to decide regarding the traveling modality for most users the importance of information provided by the platform regarding other users and their level of experience is the highest possible.

Among the hypothesis of research we have tested if the level of experience of the users within the BlaBlaCar platform is correlated with the perception upon service attributes. As we can see below there is a strong and direct correlation between the two variables.

**Table 1. GDP Index evolution**

		Correlations				
		Security system of the platform	Easy method of traveling	Community of users	Responsible consumption	Way to share life experience
Level of experience within the BlaBlaCar platform	Pearson Correlation	.622**	.854**	.766**	.615**	.833**
	Sig.(2-tailed)	.000	.000	.000	.000	.000
	N	540	540	540	540	540

This means that perception upon service attributes are evolving as much as the status of the user and his experience with the platform is evolving too. More experienced users tend to appreciate the service that is a easy method of traveling and a way to share life experience.

If we analyze correlation between the degree of importance for the feedback offered through the platform after a travel and the degree of importance regarding the information provided by the platform about other users and their level of experience from the point of view of decision to travel or not with a particular user, it may be highlighted also a strong and direct correlation. For assessing the correlation it was used the Pearson coefficient because both of the variables have been measured with the interval type scale (Pearson Correlation = 0.712, Sig.(2-tailed) = .000, correlation is significant at the 0.01 level (2-tailed), a sample size N = 540).

It means that users who are appreciating most the information provided by the platform regarding the others are considering also very important their feedback registered by the platform after a travel. Here it has to be made a nuanced observation: the level of importance regarding information provided by the platform about the other users is measured for both categories: travelers and drivers alike. This occurs because both categories have to take the decision to travel or not with a certain company.

The research conclusions are showing that the collaborative consumption regarding traveling services becomes a reality also into the Romanian economy. The utility of the mobility carpooling services analyzed is very high, also the degree of satisfaction perceived by the users. The way in which respondents are involving themselves in terms of consumption shows that these consumers are tend to be more mature and are embracing the sharing economy values on a large scale. Consumption motives are related off course with the profile of the users, mainly represented within our research by students, but the emotional involvement shows a high propensity for present consumption and a future intention too. The profile of urban type student from a large city implies the need to visit home family frequently and the need to optimize time and expenses associated with long distance traveling. Taking account of the answers given, BlaBlaCar platform users are showing the willingness to build a long term commitment within the platform by giving the possibility for other users to assess their individual preferences and profile in order to become reliable as future travelers or drivers.

This means the predisposition to assume responsibility and to offer trust to other participants in collaborative consumption model. The success of the platform indicates the viability of the collaborative consumption model within traveling services field and offers a strong framework for future research in the field. Possible new lines of research can involve qualitative type studies than can assess multiple layers of consumption motivations taking into account the socio-economic profile of the users. Another interesting topic can relate to the fact that carpooling users can develop also other forms of collaborative consumption as well, for example into the field of tourism. How the involvement in different collaborative consumption context can affect the consumer behavior and long-term motivations it can be measured through separate research into the field. Also the effort to evaluate the propensity of consumption into the future for the same users, as they evolve, personally and culturally can be very helpful to understand the phenomena of sharing economy and its trends at least a the level of Romanian economy. The question that remains unanswered is if in the long run, collaborative consumption can outgrow or even replace the traditional ways of consumption, and if these can be the case for any type of product or service or it will be limited to certain types or even certain brands.

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## Trends in Bulgarian Consumers' Behavior Regarding Bio Foods

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### Abstract

**Purpose:** The present paper aims to identify if Bulgarian consumers (on the example of Ruse region) follow the world trend for increased bio foods consumption defining the changes in the attitudes and behavior towards the bio foods in Bulgaria and in the major factors influencing the different consumers' reactions (adoption and resistance), so that companies could use these results in their marketing decisions. **Methodology:** First, secondary data is gathered through different sources showing the trends in bio foods production and consumption. Second, empirical data have been collected through two researches conducted in 2017 and 2019 in Ruse region in Bulgaria. The "complex random sample" method is used for sample units selection. The population sizes in 2017 and 2019 are respectively 195 447 and 200 164. The minimum sample size for representativeness of the studies is 384 units. This number of respondents have been inquired. The questionnaire is exactly the same in the two researches for comparing the results. The methods of descriptive statistics and comparative analysis have been applied. **Major findings:** The level of awareness about bio foods increases but also does the distrust in the organic origin of these products on the Bulgarian market. This is one of the major reasons for resistance to bio foods. On the other hand, main factors influencing the adopters' decision to buy include the importance of healthy life style and the better health effects of bio foods compared to conventional. **Conclusions:** Consumers' profiles are formulated by analyzing the influence of different factors on their behavior towards bio foods and the various reactions to these factors resulting in adoption or some kind of a resistance. The results would be useful for bio foods producers, distributors and retailers. The paper offers some possible measures for overcoming the identified obstacles to the adoption of bio foods.

**Keywords:** consumer behavior, bio foods, factors for adoption or resistance.

**JEL classification:** M31, M39.

### 1. Introduction

Bio foods are a market that reports a steady growth trend, both globally and within Europe, and in particular in Bulgaria. Demand for organic food is steadily increasing while organic farming is expanding at a very fast pace (Golijan, Popović, 2016). The three main prerequisites linked to such positive changes are: 1. Consumers' intent to know in detail the risks endangering their health from the point of view of the consumption of conventional foods and the tools that would help to avoid them; 2. the desire of more and more people to join in one way or another to environmental protection activities; 3. an opportunity for development of rural areas in the countries.

Those identified changes in the consumption of organic (bio) foods correspond to *the goal of this elaboration*, namely to determine the trends in attitudes, consumer behavior and factors for adoption or resistance (postponement, rejection or opposition) to bio foods on the Bulgarian market on the basis of a secondary data survey as well as a comparative analysis of the primary data from two empirical studies conducted in 2017 and 2019 (Kleijnen, Lee, Wetzels, 2009). Profiles of the two groups of consumers - adopters and non-adopters to bio food are also developed.

## 2. Bio food market

Organic food production is a complete management system of the farms and the companies, processing these products. It combines best environmental practices, maintaining a high level of biodiversity, preserving natural resources and implementing high animal welfare standards. Organic production is part of a larger supply chain covering the processing, distribution and import of food (ECA Organic Food Audit, 2018). Since organic food products cannot be identified by a laboratory test or physical check, their biological status is verified by a certification system provided for in the EU legal regulation and controlled by the European Commission. The aim of this system is to provide consumers with confidence that when they buy an EU-labeled product as organic, the product they receive is truly organic. The system is implemented by Member States and inspections are made by public and private bodies (Council Regulation (EC) No 834/2007).

National authorities are a central element of the control system. They check the level of individual producers. Typical inspections include physical checks at the production or processing premises, document verifications and sampling of finished and raw products, leaves or soil to verify the use of unauthorized substances. On the other hand, national control bodies are controlled by the Directorate-General for Health and Food Safety, which assesses compliance with applicable EU standards. For non-EU countries, the Directorate also assesses private control bodies that provide recognized certificates for the export of organic products to the European Union. (The European Commission, 2017)

### 2.1. Trends in the organic food market in the world and Europe

Between 2000 and 2015, the organic market has increased fourfold. Organic food sales in the world in 2015 amounted to 72.9 Euro per capita, with the North American market boasting more than half of the organic food consumed. Organic food is produced by 2.4 million producers in 179 countries all over the world. About 90% of the sales are reported in Europe and North America. Concerning regional distribution, the largest market, with a value of 39.5 billion Euro, is North America, followed by Europe (29.8 billion Euro) and on third position - Asia (6.2 billion Euro). The forecast till 2022 shows that the Asia-Pacific region will have the fastest market growth, estimated at 22.9% (FiBL, 2017).

The countries with the largest organic food market are the United States with a total of 35.8 billion Euro, followed by Germany - 8.6 billion Euro, France - 5.5 billion and China – with 4.7 billion (FiBL, 2017). The leading market segments of bio products on the world market are: fruits and vegetables, bread and cereals, beverages, milk and meat. (Golijan, Dimitrijević, 2018).

The highest consumption per capita in Europe is reported in 2015. Switzerland takes the leading position in this indicator as it is highest not only for Europe but also for the world (189 Euro - 2012, 262 Euro - 2015). The next position is for Denmark - 191 Euro in 2015 (showing a significant increase compared to 2012 - 159 Euro). Third is Sweden by 177 Euro (FiBL 2017; Willer and Lernoud, 2017).

In 2017, retail sales of organic food in Europe are now estimated at 37.3 billion Euro (34.3 billion Euro in the European Union). The European Union is the second largest single market for organic products in the world once again after the US (40 billion Euro). The largest market in the EU is Germany (10 billion Euro).

Many of the main organic food markets enjoy double-digit growth rates. Among the key markets in Europe with the largest total volume of consumption in 2017 are: Germany, followed by France with a 22% growth compared to the previous year, and third, Italy with an increase of 16% compared to 2016. (FreshPlaza, 2018) Typical for the Italian market is that

families become a dominant consumer group with 26% of total sales. According to the Swiss Federal Office of Agriculture, from September 2017 to August 2018, in Swiss shops 7% more organic vegetables were sold and 13% more organic fruits compared to the same period of the previous year. (Leo Frühschütz, 2018; Karin Heinze, 2018)

For 2017, organic producers in Europe are 400 000, of which almost 310 000 are in the EU. The highest is their number in Turkey (over 75 000), followed by Italy (over 68 000) and Spain (34,673). Only in 2017 the number of these growers has grown by almost 7% in Europe (almost 4% in the European Union) (FiBL, 2019).

The global projections for changes in the organic food and beverages market by 2022 show significant growth thanks to the unique benefits of this type of products. These advantages include: the natural origin, the lack of pesticides, the higher environmental friendliness and healthfulness compared to conventional foods.

Driving factors that are expected to stimulate growth in the organic food market are: Raising consumer awareness of the benefits of consuming these foods; increasing consumer income levels; improving their standard of living; increasing environmental problems; increasing the risk of diseases due to the consumption of conventional foods. Additionally, introducing organic food production is also a form of a company product innovation, so increasing the innovational activeness of the producers and suppliers in the food sector is supposed also to increase the growth in that market (Stoycheva, B., D. Antonova, 2018).

In addition, it should be pointed out that investments in the world organic food sector are also on the increase both by private investors and by individual governments. It is not only because of the growing demand and eventual future profits, but also because of the wider application of the concept for sustainable business and social development, which integrates the long-term business goals with the social welfare (Antonova, 2017; Kunev, S., I. Kostadinova, B. Stoycheva, 2017).

Along with the factors leading to the expansion of the organic food market, there are also some constraints linked to the high cost of these products, a significantly shorter shelf life and distrust of their biological origin.

### **2.3. Production and consumption of organic food in Bulgaria**

Until 2015, the processing sector for organic agricultural products in Bulgaria is underdeveloped. A change in this trend occurs in late 2015 and early 2016, when the number of processing companies increases sharply. This is mainly due to EU subsidies and increased consumer demand. (Alexiev et al., 2018). Recent data from the European Statistical Office, Eurostat, show that in Bulgaria the growth rate of organic production for 2016 is over 310%, with our country having the largest share of EU areas that are becoming completely organic land - 77.5%, followed by Croatia with 69% (Bio Verlag GmbH, 2018). Over the last ten years, the number of operators in this sector has increased more than 35 times and the areas with biologically arable land have grown from just over 30 thousand acres to over 880 thousand acres.

In bio beekeeping, for example, Bulgaria is the first in the world. The Research Institute of Organic Agriculture said in its annual report that Bulgaria ranks first in the world by number of organically grown bee-keeping families (over 230,000 according to Ministry of agriculture and food's data for 2016), ahead of Italy and France. Bulgaria ranks first in the world in the export of bio-certified oilseed rose and lavender. Due to the increased interest in the production of organic wine in the last few years there has been an increase in the land areas, planted with grape varieties, grown organically. (Economedica, 2018) The improved economic situation in Bulgaria in 2014-2015 leads to an increase in the average income of the population and an increase in the interest in healthy eating. This leads to a breakthrough in the organic food

market, which includes not only households with the highest incomes looking for high-quality products but also middle-income households. The fact is that the concept of healthy lifestyle and the purchase of organic food has passed the boundaries of big cities and is oriented to regional and local markets. The total number of different organic food stores in Bulgaria is about 2,000. Organic foods are available from all major retailers as well as many independent and smaller supermarkets. All types of retail channels registered growth in sales of organic products, with organic sales by retailers increasing from 44.5% in 2010 to 61.4% in 2015.

Organic food sales for 2015 are estimated at approximately 15 million Euro, which is with 7% more than 2014, with projected sales levels of these products by 2020 expected to be higher than 19.5 million Euro. This would represent a growth of 30% (2015-2020) (Aleksiev, Kostadinova, 2018).

Retail chains are the main channel for the sale of bio-packaged foods with 61.4% of organic products' turnover. Small independent retailers account for 20.9% of organic sales, and their share drops with 17.9%, compared to 2010. The third channel, representing 16.8% of bio-packaged food, is retailers (specialized stores). These stores offer the greatest variety and quality of the products, have a very good market penetration and are growing in popularity. Another popular channel is the farmers' markets, which are preferred by local organic farmers and small organic food producers. Their number increases several times, due to the fact that they are looking for more direct contact with consumers. This makes them a major competitor of specialized stores.

As for the categories of organic food products on the market for 2015, the largest share is for the baby foods - 36%. Secondly, the category of milk and dairy products is positioned by 18%. For the Bulgarian market, organic beverages are an emerging category of bio products whose price is high and often exceeds 300-500% that of their conventional equivalents. For this reason, experts believe that it is unlikely that sales of this product category will develop rapidly in the future without additional marketing efforts. Optimistic forecasts for higher sales are given for the category of processed organic products that are built on the already popular basic organic products (Balieva, Huliyan, 2015; Aleksiev, Kostadinova, 2018).

According to data from a survey of factors determining the local consumption of bio-products in the southeastern region of Bulgaria, conducted by a team working at the Thracian University in 2015 (Aleksiev et al., 2018) it is stated that 38.8% of the respondents do not consume organic products. The analysis shows that these are young people still studying and not working, i.e. they do not generate their own income but rely on family help. Among the main factors impeding the purchase and consumption of organic food products, these consumers point too high bio food prices, a lack of confidence in their characteristics and a lack of interest in them as a whole.

The remaining 61.2% of respondents consume bio products. They are aged between 18 and 35 years, with 75% of them being women. Their incomes are average for the country and they occasionally buy organic food from several times a year to several times a month. The factors, determining the choice for the purchase of bio-foods are: product quality, manufacturer's certificate, product price, recommendations from acquaintances already using the product. The most commonly bought types of organic products from these consumers are fresh fruits and vegetables, honey, bee products and spices.

### **3. Empirical study of Bulgarian consumers' behavior towards organic foods**

#### **3.1. Research methodology**

As a research method an inquiry has been used as it gives the possibility for a quantitative analysis of data. All 22 questions in the questionnaire are divided in 3 parts – introducing, essential and demographic. The first two parts are formulated using Likert scales. The

introducing questions aim to collect data about the consumer behavior regarding organic foods. The essential questions aim to identify key factors influencing the different consumer reactions and decisions – to adopt or to stay resistant towards organic foods. The last part of questions aims to collect information about consumers' demographic and socio-economic characteristics. They give an opportunity to describe consumer profiles depending on their behavior and adoption or resistance reactions to bio foods. (Todorova, Ruskova, Kunev, 2018)

The first study has been conducted in the period from 01.05.2017 to 15.07.2017 and the second one – two years later from 01.03.2019 to 30.04.2019. The respondents in the both inquiries are people living on the territory of Ruse and administrative district Ruse, Bulgaria.

Sample sizes are calculated by the statistical electronic calculator (Raosoft, 2004) with margin of error 5% and confidence level 95%. Population size in 2017 is 195 447 and in 2019 it is 200 164 (National Statistical Institute, 2019). The minimum sample size needed for a representative research based on these population sizes is 384.

The sample model used for the research is a complex random sample called a systematic sample. The sample step is calculated 521 and the Ruse region election lists are used for including each 521-st person in the sample. As the necessary and sufficient condition for representativeness of a sample is that it must be big enough in size and all its units must be selected in a random fashion, the samples for the studies in 2017 and 2019 could be defined as representative.

For the purpose of the concrete studies the research team chooses to use the methods of descriptive statistics – relative shares and cross tables. For data processing SPSS software is used. For the purpose of the present paper the method of comparative analysis is of great importance.

### **3.2. Changes and trends in Bulgarian consumers' behavior towards organic foods**

The research found out that in 2019 half of the respondents 51% have a common idea about bio foods, while in 2017 this share has been much bigger (67%). In the same time the share of those who have just heard about this type of food is 17% and 27% know just some kinds of bio foods they have tried. Compared to the first study in 2017, the share of those who have deep knowledge about bio foods increased from 7 to 10% in 2019. The trend is obvious – more people have already tried some bio foods and the number of those who know their features is also bigger.

70% of the respondents in total buy bio foods and can be considered as adopters. In 2017 the results show the same share of adopters. Consumption frequency results show that 42% in 2019 (41% in 2017) buy bio foods each week or at least several times monthly. 28% are those who buy bio food products from time to time - once per several months which is not that often but means repeated purchases. In 2019 17% (13% in 2017) of the respondents have just tried once some type of bio food and 13% (17% in 2017) have never bought. 30% of the enquired Bulgarians have not adopted this type of product yet as one purchase is not considered as adoption of a product. (Mahajan, Muller and Wind, 2000) The share of those who have never tried, decreases although the total share of the non-adopters of bio foods keeps the same.

Regarding the preferred suppliers of bio foods by Bulgarian consumers the common trend keeps the same as producers and specialized bio shops are most often used, but the results show that people already feel more confident to buy this type of product from supermarkets and also online from specialized bio shops.

The most important reason to choose a certain supplier is to sell only products from certified producers (39%) as well as the sign for bio product on the packages (38%). Therefore, consumers' awareness about the ways for distinguishing bio foods from conventional ones has improved. Other reasons are recommendations from friends and specialists in healthy nutrition

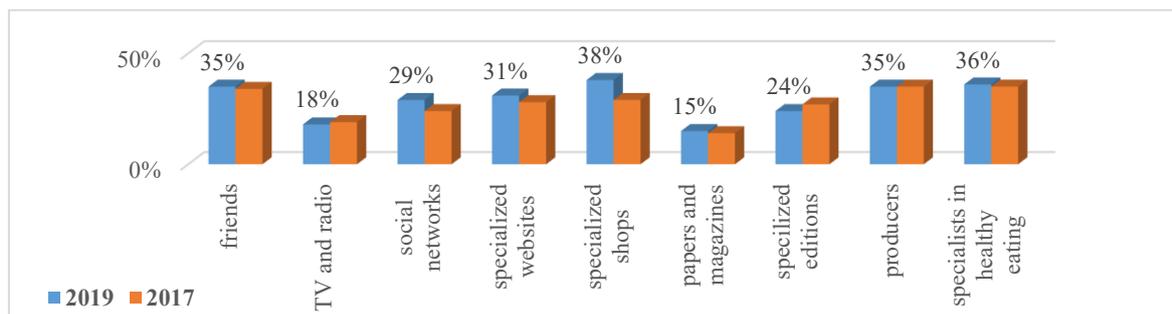
which corresponds to the sources of information they trust.

The information sources preferred by consumers are producers themselves (35%), specialists in healthy nutrition (36%) and consultants in specialized retail shops (38%). The respondents trust most these direct channels of communication as they can receive more detailed information and some personal approach.

The most significant increase of trust is for the specialized bio food retail shops - from 29 to 38% and it becomes the most influential channel for communicating the advantages and reasons to consume organic food to people who have interest in them. This corresponds to the secondary data analysis above showing that this channel is perceived by consumers as the most reliable.

Influence of specialists in healthy nutrition is on the second position (36%) but it is almost as strong as the influence of friends (35%) who have experience with bio foods and know about them and there is not a significant change in this aspect comparing the results from 2019 to those of 2017. There is an increase in the influence of social networks as an important source of information about bio foods (from 24 to 29 %) and specialized websites (from 28 to 31%). The reason is in the possibility for a fast direct communication and feedback that cannot be done in mass media communication (Fig. 1). That is why mass media like TV, radio and press is not that important for communicating bio foods.

In 2019 as was in 2017, most of the respondents prefer to buy bio vegetables and fruit (35%), followed by milk (31%) and meat products (30%) as well as spices and tea (29%).



**Figure 1. Preferred information sources about bio foods**

*[The respondents had the possibility to choose more than one answer and that is why the total is not 100%.]*

Bulgarian consumers' beliefs about bio foods change in the following way: 43% compared to 53% two years earlier, believe that organic foods are produced without additional chemical substances or processing and 40% compared to 50% in 2017 are convinced that bio foods do not contain GMOs. The share of those who think that bio foods are equal as qualities to home-made foods or even do not reach their taste and quality decreases from 42% in 2017 to 37% in 2019. It could be due to more information and higher awareness. In the same time, in 2017 the respondents who claim to distrust the label "bio" or "organic" is 22% and it increases to 29% in 2019. Their ultimate answer is that on the Bulgarian market there are no original bio foods although they are offered like that. The main reason is the distrust in the proper functioning of the supervising and controlling institutions, therefore in the way producers are certified as bio. (Economedia, 2018)

### 3.3. Factors for adoption of and resistance to organic foods by Bulgarian consumers

*Determining factors for adoption of organic foods* by Bulgarian consumers are: the wish to have a healthy living (43%) and in this regard, the belief that bio foods are healthier than conventional (40%) as well as the higher nutrition value of bio foods (38%). Those who buy because of having a health problem keep 37%. (Fig. 2)

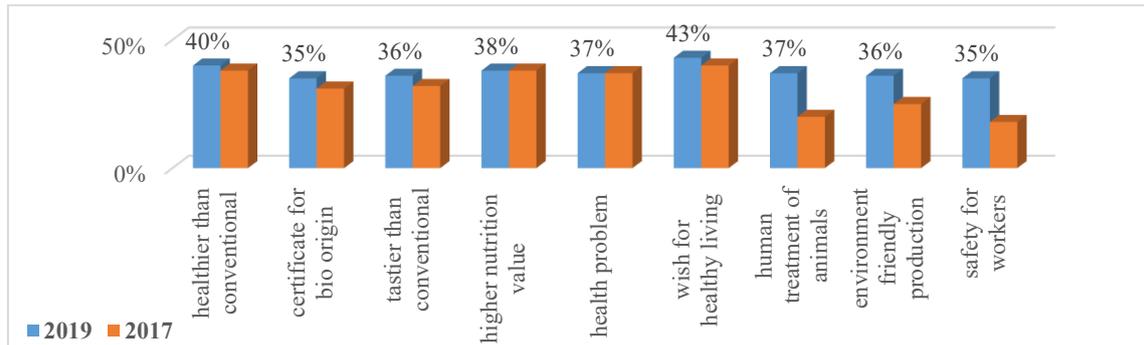


Figure 2. Determining factors for buying bio foods from Bulgarian consumers

Changes in the reasons for Bulgarians to buy organic foods include the higher percentage who need a certificate for bio origin (Fig. 2) which corresponds to the increased level of distrust and the need to have some kind of a proof. Another important trend is that Bulgarian consumers are more concerned about the social effects from bio foods production. These are getting more significant factors to buy bio foods.

11% (compared to 10% in 2017) of the respondents who consume bio foods claim that nothing can make them stop buying them in future. These are actually the consumers who have adopted permanently bio foods. 53% of the inquired consumers are very sensitive to prices of bio foods and their increase could make them stop buying. 30% would give up organic foods only in case of buying imitation products more than once.

*Determining factors for resistance to bio foods* include at first position consumers' suspicion and distrust in the bio origin of those foods (36%) which increases in a two years period (Fig. 3). It is followed by the too high price (35%) as more people find them too expensive than in 2017 (22%). This is connected with the relation between price and benefits and the perceived discrepancy between price and health effect (33%) and between price and taste (32%). The part of the respondents who do not feel need to buy bio food is lower than in 2017 (24%/ 26%) which means that more people realize the benefit of organic food but in the same time the financial limitations in spite of the desire to buy are very important burden to the adoption of this type of products. There is an increasing part of the respondents who claim that they do not buy bio foods because of this reason - 30% (compared to 22% in 2017). All these results show that the economic risk for the Bulgarian consumers, connected with the bio foods as an innovative product, is very high and even getting higher. It leads to the weakest form of resistance – *postponement*, because in a situation of higher income or lower prices those people are willing to buy and consume bio foods.

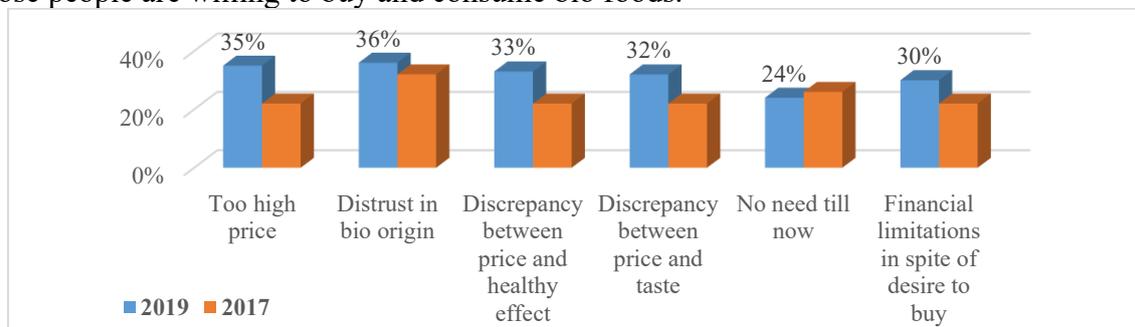


Figure 3. Determining factors for not buying bio foods by Bulgarians

The increasing distrust to bio foods is confirmed by the following result: 84% compared to 70% in 2017 estimate the possibility to purchase a false product of this type very high. It is

connected also with functional risk – they will pay a high price for a product that will not have the expected quality and will not gain the desired health benefits by purchasing it.

Regarding the most probable effects of purchasing an imitation product, 36% believe that health problems for them and their families could follow. This relates to the physical risk that causes the strongest form of resistance – opposition. 11% of the respondents share that in case they buy a false “bio” product, they would react by trying to prevent other people through social networks and 17% say they would warn only their referent groups. The trend in this direction could be estimated as positive because two years ago the share of the consumers that would react by opposition has been bigger – 41%. The reason is in the higher level of awareness about bio foods offered on the market. 31% (26% in 2017) expect from an imitation product no health damages but only the lack of positive effects which means the functional risk prevails. The economic risk is most significant for 21% of the respondents (27% in 2017). That shows a change in the dominant factors while in 2017 economic and functional risks are equal in its importance, in 2019 the functional risk influences more people in the decision making process regarding bio foods consumption. Only 9% of the respondents will cease buying bio foods in case of imitation product purchase. The same part was in 2017. Most people will try to be better acquainted how to distinguish original bio foods from imitations (34%) or just will change the supplier after a short research (23%).

### **3.4. Consumer profiles of adopters and non-adopters of bio foods on Bulgarian market**

*Profile of Bulgarian adopters of bio foods* (on the example of Ruse region) has been formed as these are mostly women who work, in the age scope 26 - 45, mostly with higher education and medium income. This group of consumers search for information directly from the producer or from a healthy eating specialist as well as trusts friends' opinion and recommendations. Main factors that influence their decision to buy bio foods include the willingness to have a healthy life style, the better qualities and health effects of bio foods compared to conventional. Most of them buy bio foods not only for themselves but or their family too. For them the presence of certificate is as important as the positive social effects of bio production on workers and environment. They buy mostly fruit and vegetables, milk and meat products.

*Profile of non-adopters of bio foods on the Bulgarian market is made in two variations.* Half of them are young people from 18 to 25 years old with average income or lower. Most of them do not feel the need to buy bio food. For them healthy way of living is still not a priority. They are mobile and do not take much care about what they eat, even more – for them it is more important to have tasty food than if it is healthy. It is shown by their answers that prices of bio food do not correspond to the taste. These consumer behavior is related to the rejection as a form of resistance. Other people who also reject bio foods have tried some once but have not appreciated the relation between price and benefits as worthy.

There is another big part of the non-adopters who are people from different age groups and different family status. What is common is that they do not buy bio foods mostly because of economic reasons although they are willing to do it and are convinced in the positive health effects. They are related to the slightest form of resistance – postponement. In case their income increases they are going to adopt this products. Most of them have tried some kind of bio food but do not have the financial possibility to purchase regularly.

## **4. Conclusions**

The comparative analysis of the results of the two studies of the consumer behavior regarding bio foods and the reasons for it among Bulgarian consumers show the following trends and results:

✓ The level of awareness about bio foods increases but also does the distrust in the bio origin of these products on the Bulgarian market. The reason is that people doubt in the proper functioning of the supervising and controlling institutions and therefore in the way producers are certified.

✓ Most trusted suppliers are producers and specialized retail bio shops as the preference to the latter increases considerably. Supermarkets and inline shops of bio foods also are used more frequently compared to 2017 but still are on third position.

✓ The influence of specialized shops increases also as an information source about bio foods and it has a leading role followed by specialists in healthy nutrition, producers and friends with equal position.

✓ The structure of purchased bio foods keep the same as follows: fruit and vegetables, milk and meat products, spices and tea.

✓ The significance of social effects of bio production increases considerably as a factor influencing the decision for bio foods purchase. The reason for this is the increased social status and life style change of Bulgarians.

✓ People are getting more sensitive to prices of bio foods – more people would stop buying bio foods in case of price increase than in case of a false product. Financial limitations are getting more and more important obstacle to the consumption of bio foods.

✓ There are no people who react by opposition to bio foods as the most active negative reaction of resistance, but in case of purchase of false products one third of the respondents claim that they would feel risk for their health and will try to prevent other people. An increasing share of people estimate the possibility to buy false bio food on Bulgarian market as high or very high.

Based on these conclusions some measures could be offered as follows.

One possible activity for increasing the level of trust by convincing consumers in the bio origin and clarifying the health benefits of bio foods is if the specialized bio shops organize together with specialists in healthy nutrition and bio producers common information campaigns offering possibility to taste and answering all questions of consumers.

Bio producers and retailers should use more actively the social networks in order to share positive consumers' feedback and the ways they care about people's health, to explain bio technology of production. This will help consumers overcome some of their prejudices and worries about the origin of bio foods.

Another channel that should be used more is YouTube influencers. At first companies should attract them and convince them in bio foods advantages by giving samples and interesting information so making them opinion leaders about their products. By showing bio foods and talking about them in their videos, influencers can have a very strong positive impact over a large number of people of different ages and with various interests. This could increase awareness and interest, as well as decrease the distrust especially among the younger people who trust this media and follow their favorite vloggers.

More researches should be done in order to find those consumers who are dissatisfied by their purchases of bio foods and to understand the reasons for their negative reaction. Thus, these consumers could become more loyal to bio foods and some producers even than the satisfied ones, due to the appreciation of their opinion. They could be a source of improvement ideas as the most critical buyers.

In order to overcome the distrust in the bio foods, producers should realize that it is good for them if those consumers who are most active and interested in healthy way of living have the opportunity observe the process of control on the system of certifying and production of bio foods.

In order to decrease the share of those who estimate the possibility to buy food with false “bio” labels, it would be very useful if a software product or an application is available that will help distinguishing the credibility of the label information as well as the validity of the certificates of different suppliers.

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## **Flexibilisation at the Workplace and its Impact on Leadership Methods in Germany / Leadership for the Generation Z**

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### **Abstract**

Tomorrow's workplace is going to be very different from today's nine-to-five office: The so called "Generation Z" (people who were born after 1997) is now entering the German labour market. These potential employees have grown up in a totally different political and social environment and have been very much influenced by technological progress. Web 2.0 and social media have not only created a whole new set of possibilities, they also have shaped the expectations on the workplace: Flexibility and individuality are a must. Indeed, the use of mobile data has made the former standard of a nine-to-five office obsolete: Theoretically employees can work wherever and whenever they want, individual arrangements can be easily realised. But are the German companies ready for this? In this paper the author will throw a light on the necessary leadership changes, which cover a whole range of implications. In order to do this, he will present the finding of a set of personal interviews with employees of the relevant age group. Also, he will check how German companies are dealing with these challenges and what their experiences are. A main point is the shift from "controlling workplace attendance" to a more content-related focus and result-oriented leadership and the creation of so called "objective agreements", which helps to formulate the goals to be reached at the work place. A major part of this paper therefore focuses on the process: How can these goals be defined? How can leaders monitor progress remotely and how does it shape the hierarchy in the company? The author will present several studies and surveys that underline the importance of these changes. Up to now nearly half of the German enterprises rely on result-oriented leadership, and the number is growing.

**Keywords:** Flexibilization at the workplace; Generation Z; Motivation; objective agreement; leadership.

**JEL classification:** M5

### **1. Introduction**

Finding qualified personnel seems to be one of the biggest challenges on the German labour market: According to a representative company survey of the Institute for Employment Research (IAB) [INSTITUTE FOR EMPLOYMENT RESEARCH (INSTITUT FÜR ARBEITSMARKT UND FORSCHUNG / IAB) 2018 Representative Company Survey, <https://www.iab.de>] about 1,2 million job posts could not be filled in 2018. Companies of the automobile and engineering sector and in the manufacturing industry registered approximately 160.000 vacancies in the fourth quarter of 2018, which means the number increased by around a third in comparison with last year, claims the same survey. The reasons for this are manifold: First of all the number of people that enter the labour market has significantly decreased. Less and less graduates enter the market and the companies have to increase their efforts to attract them.

According to the „Labour Market Forecast 2030“ of the Federal German Ministry of Labour and Social Affairs [Labor market forecast 2030 A strategic forecast on the development of supply and demand in Germany („Arbeitsmarktprognose 2030 Eine strategische Vorausschau auf die Entwicklung von Angebot und Nachfrage in Deutschland“) Editor: Federal Ministry of Labour and Social Affairs Department Information, Publication, Editing 53107 Bonn July 2013] until the year 2030:

- the number of economically active persons (employed and unemployed) decreased by 2.9 million to 40.8 million;
- the number of employed persons decreased by 1.4 million to 39.2 million;

- the number of unemployed will fall by 1.4 million to 1.7 million.

Overall economic indication				
Year	2010	2020	2025	2030
Labor force (in 1000)	43.712	42.561	41.786	40.846
Employed persons (in 1000)	40.603	40.627	39.975	39.169
Unemployed (in 1000)	3.109	1.933	1.811	1.677
Unemployment rate (%)	7,1	4,5	4,3	4,1
Working hours (index)	100,0	99,9	102,0	104,0
Labor productivity (GDP / employed, index)	100,0	122,1	133,0	145,0

*Table 1. Chart declining population at working age / Labor market forecast 2030 A strategic forecast on the development of supply and demand in Germany („Arbeitsmarktprognose 2030 Eine strategische Vorausschau auf die Entwicklung von Angebot und Nachfrage in Deutschland“) Editor: Federal Ministry of Labour and Social Affairs Department Information, Publication, Editing 53107 Bonn July 2013, page 5, [http://www.bmas.de/SharedDocs/Downloads/DE/PDF-Publikationen/a756-arbeitsmarktprognose-2030.pdf?\\_\\_blob=publicationFile](http://www.bmas.de/SharedDocs/Downloads/DE/PDF-Publikationen/a756-arbeitsmarktprognose-2030.pdf?__blob=publicationFile)*

„The forecast of the labor market up to the year 2030 clearly points to the challenges and efforts needed. If the concept of skilled workers is not pursued and the reforms are suspended, threatens a decline in the workforce of more than four million and a significant loss of growth. At the same time it becomes clear that the already met and planned

Steps can be effective and can largely absorb the demographic effect.

This forecast should therefore be an incentive to further strengthen the efforts of all design partners in the provision of skilled workers, and a long - term and to follow a systematic concept.“ [Labor market forecast 2030 A strategic forecast on the development of supply and demand in Germany (Arbeitsmarktprognose 2030 Eine strategische Vorausschau auf die Entwicklung von Angebot und Nachfrage in Deutschland), page 40, [http://www.bmas.de/SharedDocs/Downloads/DE/PDF-Publikationen/a756-arbeitsmarktprognose-2030.pdf?\\_\\_blob=publicationFile](http://www.bmas.de/SharedDocs/Downloads/DE/PDF-Publikationen/a756-arbeitsmarktprognose-2030.pdf?__blob=publicationFile)]

Labor force by age and sex (in 1000)		change			
Age group and gender	number year 2010	2010-2020	2020-2030	2010-2030	number year 2030
Male, 15-19 years	891,1	-102,1	21,8	-80,4	810,7
Male, 20-24 years	1949,3	-298,5	-162,6	-461,1	1488,2
Male, 25-29 years	2218,1	-200,6	-193,5	-394,1	1824,0
Male, 30-34 years	2323,6	184,1	-327,0	-142,9	2180,7
Male, 35-39 years	2413,5	35,8	-151,3	-115,5	2298,0
Male, 40-45 years	3250,3	-892,4	255,2	-637,2	2613,1
Male, 46-49 years	3436,2	-1066,9	95,5	-971,4	2464,8
Male, 50-54 years	2899,2	150,7	-772,7	-622,0	2277,2
Male, 55-59 years	2351,9	711,1	-864,3	-153,2	2198,7
Male, 60-64 years	1300,8	546,7	322,5	869,3	2170,1
Male, 65-69 years	292,3	138,0	495,4	633,5	925,8
Male, 70-74 years	162,6	1,1	170,4	171,5	334,1
Male, 75+ years	0,0	0,0	0,0	0,0	0,0
<b>Male, all ages</b>	<b>23489,0</b>	<b>-793,3</b>	<b>-1110,4</b>	<b>-1903,7</b>	<b>21585,3</b>
Female, 15-19 years	737,0	-70,2	8,5	-61,7	675,3
Female, 20-24 years	1747,4	-247,3	-125,9	-373,2	1374,2
Female, 25-29 years	1970,4	-148,2	-133,2	-281,4	1689,0
Female, 30-34 years	1941,8	212,4	-190,3	22,1	1963,9
Female, 35-39 years	2020,2	110,6	-71,3	39,3	2059,5
Female, 40-44 years	2804,8	-679,3	214,0	-465,3	2339,5
Female, 45-49 years	3021,0	-864,0	92,7	-771,3	2249,7
Female, 50-54 years	2583,8	143,7	-644,5	-500,8	2083,0
Female, 55-59 years	2056,2	599,6	-684,5	-84,9	1971,3
Female, 60-64 years	974,5	455,8	287,0	742,9	1717,4
Female, 65-69 years	231,5	130,5	458,0	588,4	819,9
Female, 70-74 years	134,7	-1,4	185,1	183,6	318,3
Female, 75+ years	0,0	0,0	0,0	0,0	0,0
<b>Female, all ages</b>	<b>20223,2</b>	<b>-358,1</b>	<b>-604,1</b>	<b>-962,2</b>	<b>19261,0</b>

**Tabel 2. The forecast of the labor market up to the year 2030 by age and sex (in 1000).** A strategic forecast on the development of supply and demand in Germany (Arbeitsmarktprognose 2030 / Eine strategische Vorausschau auf die Entwicklung von Angebot und Nachfrage in Deutschland), 2013, page 40, [http://www.bmas.de/SharedDocs/Downloads/DE/PDF-Publikationen/a756-arbeitsmarktprognose-2030.pdf?\\_\\_blob=publicationFile](http://www.bmas.de/SharedDocs/Downloads/DE/PDF-Publikationen/a756-arbeitsmarktprognose-2030.pdf?__blob=publicationFile)

At the same time technological progress has changed the world of work: Remote access via internet, digital conferences, collaboration via clouds and internet platforms have of course left their mark: The physical presence at the workplace seems no longer essential.

Regarding these aspects, it is no wonder, that the current generation of young people at the beginning of their work life have quite a different set of expectations and ideas – and the employers have to take a closer look, because there is a strong competition for the young academics of the so called “Generation Z”.

## 2. The starting point

But what is the Generation Z and how is it defined? According to the Pew Research Institute [Defining generations: Where Millennials end and Generation Z begins. Pew Research Center, Dimock, M. 2019. <https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/>] this term comprises the age cohort since 1997 (a view that is mostly shared by the scientific world, plus/minus one or two years) and stands in

contrast to the earlier Generation X (born 1965-1980) and Generation Y (born 1981 – 1996). Approximately 15 Million people belong currently to that generation in Germany [Von Babyboomer bis Generation Z, Martina Mangeldorf, Gabal,2015, Offenbach, page 13].

At the first glance Generation Y and Z have a lot in common: They both grew up with the Internet, digital innovation is an integral part of their lives. A life without Google, YouTube and Instagram? Impossible! Computers, the internet and Social Media have shaped not only their consumption and leisure behaviour, but also their conception of education and work. Financially both generations are better off than their parents' generation.

But for the Generation Z the influence of the new digital world is substantial. The so called “digital natives” who grew up with a smartphone in hand, as puts it the Harvard Business Review [How to Market to the iGeneration, Harvard Business Review, Joan Schneider, May 06, 2015, <https://hbr.org/2015/05/how-to-market-to-the-igeneration>], sometimes are aptly named iGeneration (aka iGen). Economically they grew up without any concerns, very often in small families with abundant funds and extensively cared for. As to communication and education style, many live in families, that see the relationship between Parents and children rather as a partnership than a top-down-hierarchy.

As a result, many members of the generation Z find it difficult to follow orders or execute orders without knowing the background. On the other hand, the Generation Z wants clear structures, safe jobs and a strict separation between work and leisure. Relying big compensation packages is not enough anymore: In order to attract promising graduates, companies now have to offer the right mixture: “It’s all about “me” for iGens – which is not necessarily a negative, but means brands and organizations need to work harder to understand their interests, hobbies, and goals, then deliver custom experiences” writes<sup>6</sup> Joan Schneider.

**3. The survey [Survey (by Laurentiu Hauser) conducted during the job fair LZ Karrieretag in Frankfurt am Main at the Goethe University on 23.06.2018 (<https://en.xing-events.com/LVWCLUL.html>) and Triesdorf Connect 2018 in Triesdorf at the Weihenstephan-Triesdorf University), on 27.11.2018-28.11.2018.]**

The question is: How to deal with the new generation at the workplace? Are the German companies ready for this? How will the new generation fit into the existing structures? And what exactly are their expectation at to the workplace? Radical changes in the German School and university system in the last 10-15 years, like the Bologna process to align the German educational system with the rest of Europe and the reduction of school years from 13 to 12 have also big repercussions: Instead of a 26 years-old M.As., German bosses now face 22 year old B.A.s when looking for now staff – and get to meet the new generation much earlier!

In order to understand the motivation and mindset of this generation, the author has conducted a survey among 200 members of the age range 20 to 24 during a job fair for university graduates in October and November 2018 aiming at graduates of business studies. All of them had either recently graduated or were at the end of their B.A. studies and were looking for employment. A part from the standardized questions as cited in table below, there was also a short interview of five-minutes, where the respondents could freely express their thoughts on future employment.

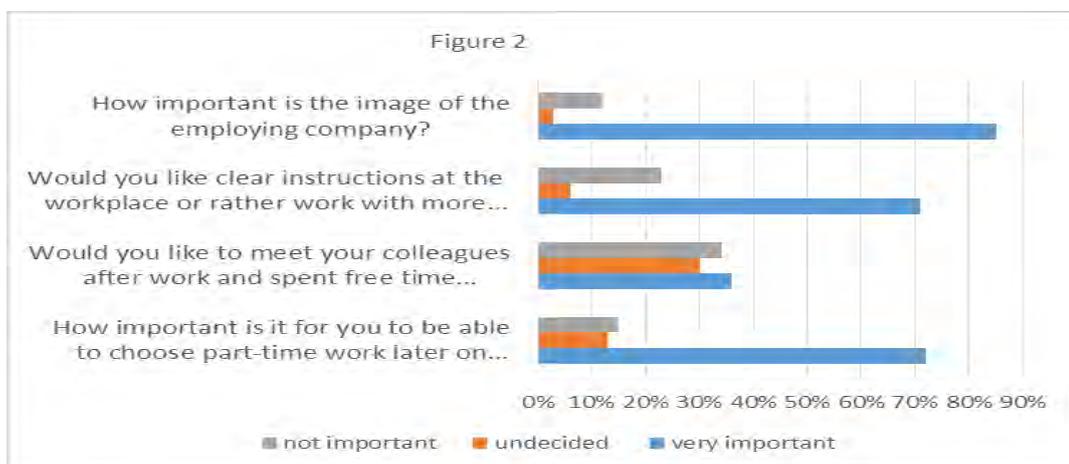
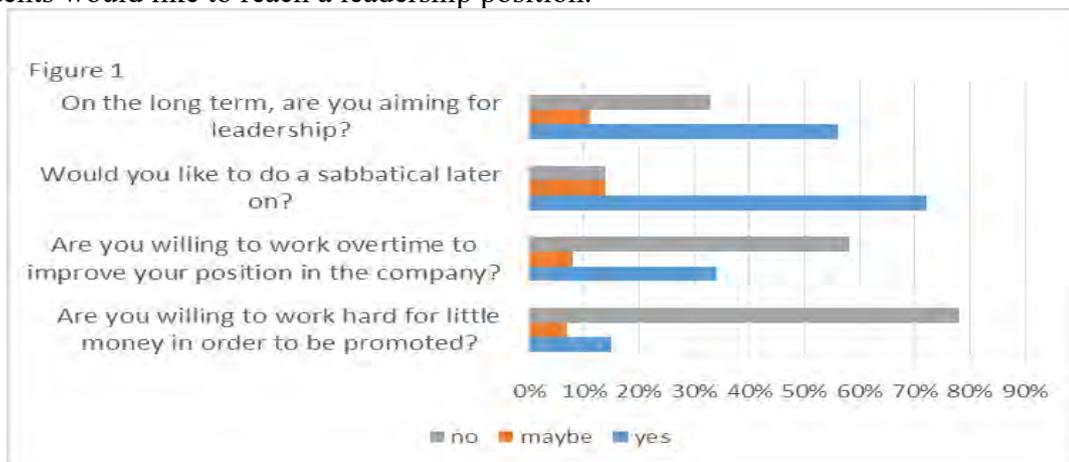
The questions were:

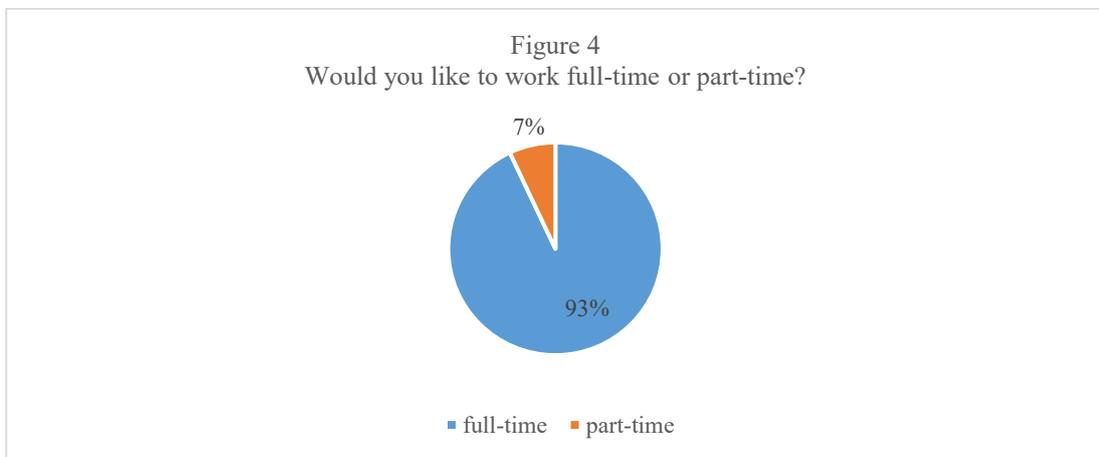
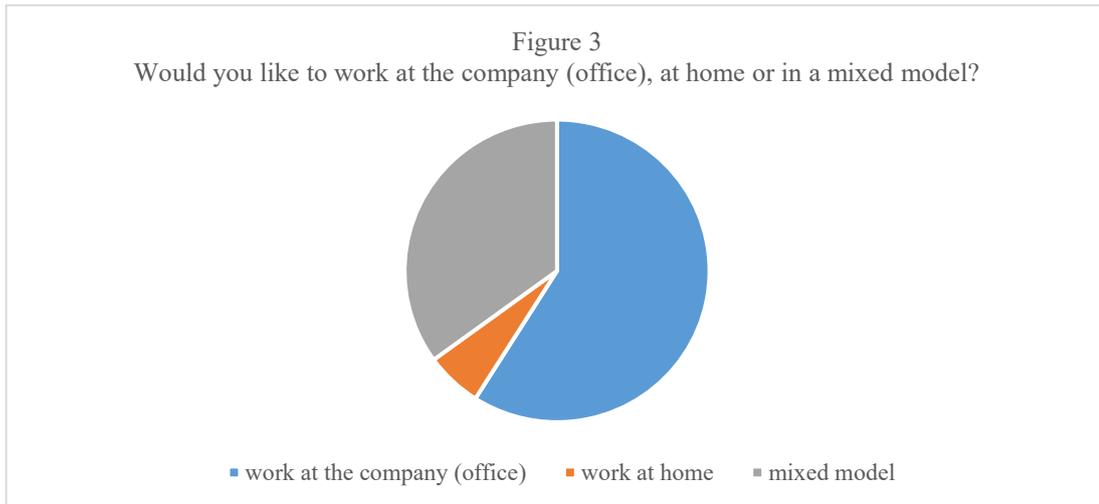
1. Are you willing to work hard for little money in order to be promoted?
2. Are you willing to work overtime to improve your position in the company?
3. Would you like to work at the company (office), at home or in a mixed model?
4. Would you like to work full-time or part-time?

5. How important is it for you to be able to choose part-time work later on during your career?
6. Would you like to do a sabbatical later on?
7. What are the most important factors when choosing a work place – tick 3 (flat hierarchies, remuneration, good relation with the manager, compatibility with family life, career opportunities, working hours)
8. Would you like to meet your colleagues after work and spent free time together?
9. On the long term, are you aiming for leadership?
10. Would you like clear instructions at the workplace or rather work with more individual responsibility?
11. How important is the image of the employing company – and in what regard?

#### 4. The findings

One of the most important findings was the strong self-confidence of the graduates: Working for little money in order to be promoted or to get a good start was not an option for 78%. Today's graduates know that most companies are urgently looking for new talents and expect a high salary and good working conditions without over-time: Only 34% were willing to work additional hours. While in the past graduates applied for jobs at a company, now it seems the other way round and the company is the applicant. Flat hierarchies, a good salary and the compatibility with family life are the most important factors when choosing a work place. No wonder, that leadership seems less attractive to this generation: 56% of the respondents would like to reach a leadership position.





**Figure 1-4 Survey (by Laurentiu Hauser) conducted during the job fair LZ Karrieretag in Frankfurt am Main at the Goethe University on 23.06.2018 (<https://en.xing-events.com/LVWCLUL.html>) and Triesdorf Connect 2018 in Triesdorf at the Weihenstephan-Triesdorf University, on 27.11.2018-28.11.2018.**

Also life no longer exclusively centers around work: While 93% of the respondents were looking for full time employment, more than 70% wanted the option to work part-time later on during the career, more than half was open for the idea of a sabbatical. Most importantly, they want the part-time option also for leadership positions. Obviously the generation Z also wishes a clean cut between work and leisure: Meeting colleagues after work on only appeals to 35% of the respondents.

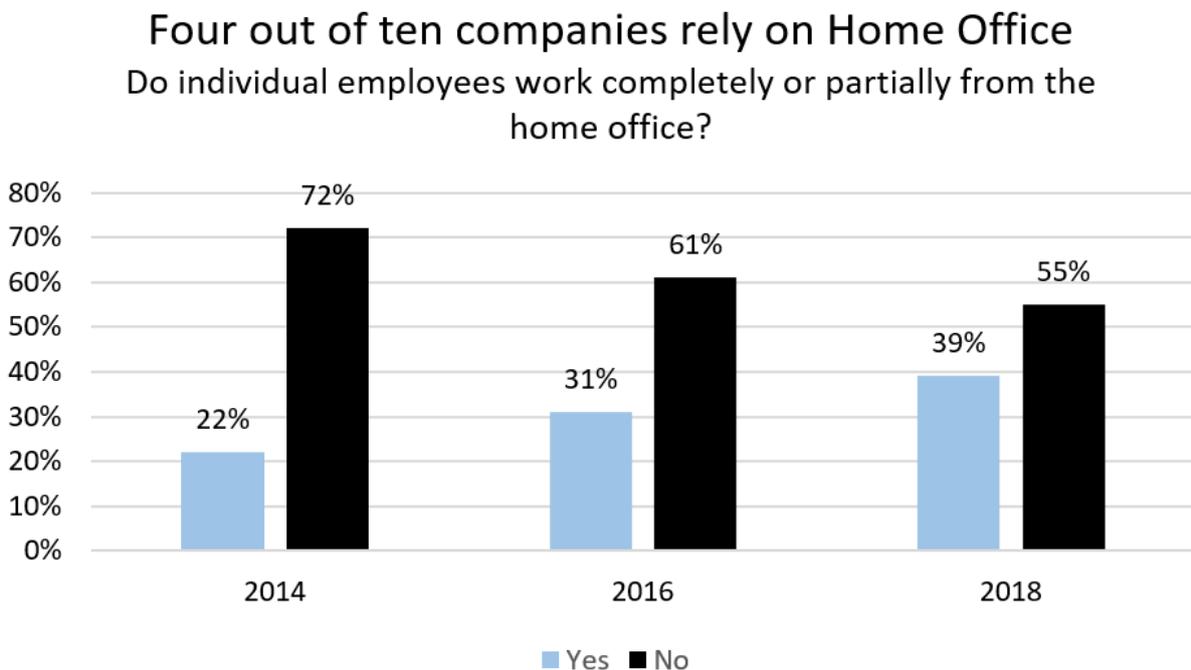
Most interesting were the remarks during the free interview at the end of the short survey: “Working is fine, but should be pleasant. I certainly don’t want any stress or over-time” says one 22-year old. “I don’t mind responsibility, as long as it does not affect the working hours” says another young woman. Both insist, that working is a necessity, but the “real” life happens in the family and with friends. There also does not seem to be a strong bond with the employer: “If I don’t agree with the company politics, I will look for a new job” states one graduate. More than 85% of the respondents were clearly looking for a company with a clean image as to sustainability and diversity.

### **5. What are the implications for traditional leadership?**

Obviously, the members of Generation Z have quite clear views on how the workplace should look like. With traditional leadership methods it will be difficult to reach the young generation. These are the most important implications:

### 5.1 Flexible work locations

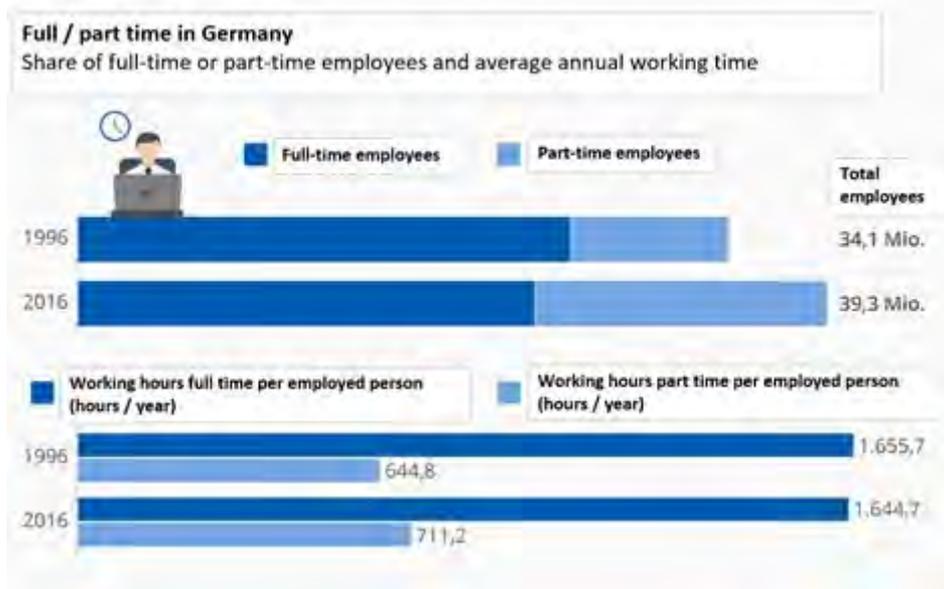
Thanks to digital clouds, broadband internet access and virtual conferences it is not only possible to work from everywhere in the world, the Generation Z also wants to use these possibilities. Currently about 40% percent of German employers offer a home office option. Due to practical reasons many follow a mixed model with one or two days at the home office and the rest of the week at the company. Usually this option is offered to proven employees after a few years of service. In 2018 11% of all employees work fully or partially from home. In a European context this number is relatively low: In Austria the percentage of home workers is 15%, in Denmark it reaches even 25% [FRANKFURTER ALLGEMEINE 26.02.2018 Homeoffice immer beliebter <https://www.faz.net/aktuell/beruf-chance/beruf/homeoffice-bereits-bei-40-der-unternehmen-praxis-15468784.html>]. Not only will the Generation Z expect to be offered home office models, but also the possibility to adapt these to changing life situations.



**Figure 5** *Four out of ten companies rely on home office* (Vier von zehn Unternehmen setzen auf Homeoffice) Source: BITCOM, 18.01.2019 <https://www.bitkom.org/Presse/Presseinformation/Vier-von-zehn-Unternehmen-setzen-auf-Homeoffice>

### 5.2 Flexible working hours

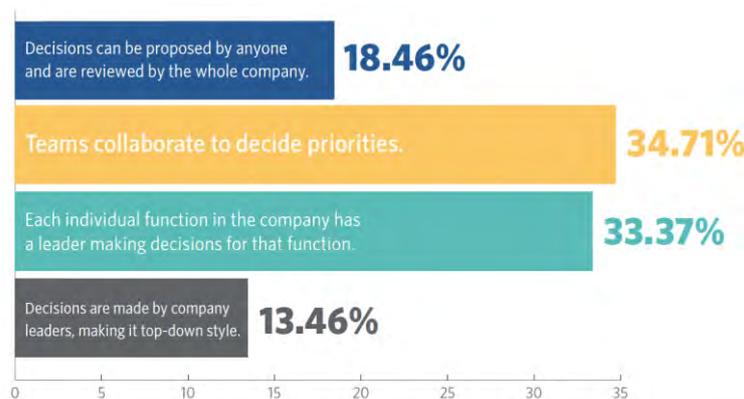
Theoretically flexible working hours are already part of the German workplace: According to the Federal Statistical Office 39% of all Germans work in part-time, which is a huge increase on the last decade (see table). Although this seems to be a large percentage, German employers will have to get even more flexible, especially concerning management positions: For many iGens a four-days-week is no reason to stay at the lower end of the corporate ladder. The same is true for management overtime: In 2018 33,6 % of the German employees worked 6 to 10 hours overtime per week, 10,7% worked up to 20 plus and more [KAISER, TOBIAS 09.04.2019 Warum die Deutschen so viele unbezahlte Überstunden machen <https://www.welt.de/wirtschaft/karriere/article191567559/Ueberstunden-Die-Deutschen-machen-mehr-Ueberstunden-als-andere-Europaeer.html>]. The new generation will be less willing to sacrifice leisure time for their company.



**Figure 6: Currently app. 61% of the German workforce work full time, 39 percent part time.**  
 Source: Dyfed Loesche, 19.07.2017 Voll- und Teilzeitarbeit in Deutschland, Source: Federal Statistical Office Institute for Employment Research

### 5.3 Flat hierarchies

“Gen Zers are used to collaborating and being involved in making decisions, and they clearly want this trend to continue in the workplace” [What Gen Z Gets Right About Organizational Hierarchy <https://blog.insideoutdev.com/what-gen-z-gets-right-about-organizational-hierarchy>] states a survey by InsideOut Development from the year 2019. Certainly, employers will not be able to expect the subservient behavior, that was characteristic of a work newbie a few decades ago. The members well educated members of the Generation Z are well aware, that it can be extremely difficult a replacement.



**Figure 7: How do you think organizational hierarchy should work?**  
 PIVOT POINT InsideOut Development 14.03.2019 *What Gen Z Gets Right About Organizational Hierarchy* <https://blog.insideoutdev.com/what-gen-z-gets-right-about-organizational-hierarchy>

### 5.4 Generous rewards

The pecuniary expectations of the generation Z are an area where the differences with the earlier generations are extremely big. The willingness, to work their way up and endure “hard times” in order to get a career going are, as the survey showed clearly, very low. Although the iGens don’t expect riches, they want an appropriate salary – and they want it now!

### 5.5. It's the image, that counts

Making profit and creating a stable work place with reasonable possibilities of advancement and good salaries: That used to be enough to be an attractive employer in the past. For the Generation Z though the image of the employer is a decision factor: Does the company stand for sustainability? Is it a diverse workplace? Does it engage in social projects? And even more, the iGens expect to be part of the decision process. “In other words, their work needs to fit into their holistic view of life and happiness and they have to identify with it. That is why they will not work for a company that does not represent the values that they believe in or businesses that do not walk the talk” [GLOBOKAR, LIDIJA 20.09.2018 The Two-Way Street Of Leadership <https://www.forbes.com/sites/lidijaglobokar/2018/09/20/the-two-way-street-of-leadership/#ddfe03b5b025>] says Lidija Globokar from the Forbes. Looks like the German employers are in for a big change!

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## Valences of Corporate Social Responsibility in Air Transport in Romania

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### Abstract

This concept is also being implemented in our country, with a predilection in recent years, especially following the growth rate in the field of air transport. Social equity refers to actions such as: promoting equal rights, diversity and non-discrimination; ensuring decent working conditions, ensuring health and safety conditions, fostering continuous learning for adaptability to the labor market, recognizing the performance of employees and practitioners, respecting private life and protecting personal data, stimulating the participatory culture, active citizenship and volunteering, respecting cultural values and promoting intercultural dialogue, respecting and promoting human rights. Over the next 20 years, annual passenger traffic is expected to increase further of 68% compared to the year 2000, which implies the development and growth of the number and capacities of operation of air terminals, first of all, modification of flight surveillance technologies and, of course, modernization of aircraft and increase of environmental protection requirements (limitation of noise levels, polluting emissions, etc.) With the evolution of this transport segment, elements such as social equity, transparency, ethical behavior, as well as economic efficiency, have become more important in the stages of designing marketing strategies, quality analyzes, and financial reporting. Through this article, we have tracked how passengers have come to notice the policies aimed at increasing the quality of the services offered, both in the pre- and post-flight stages, as well as during the actual journey. These changes were analyzed through a passenger satisfaction questionnaire, conducted at the country's most significant cross-border air point, Otopeni.

**Keywords:** CSR, aviation, air traffic, Romanian air transport.

**JEL classification:** M31

### 1. Introduction

The actions in the field of CSR were implemented in the air transport services because the expansion they achieved had a real impact on the environment, people, and social actions. Air transport has created a revolution in the transportation industry, involving huge people and resources.

## 2. The evolution of CSR in the chronological aspect

The most important principles underlying the concept of social equity are: promoting equal rights, diversity, and non-discrimination, offering satisfactory working conditions, developing health and safety conditions, encouraging continuous improvement in order to increase the performance in the labor market, recognizing the performance of employees and to practitioners, respecting and promoting human rights. At the global level, there is no unanimously accepted definition of this concept, and there are only several approaches and interpretations, meant to contribute to the sustainable development of the economic phenomenon.

Sliding under the aspect of the historical landmark the concept of "corporate social responsibility" becomes popular in the twentieth century, even though in the specialty literature the first references to the idea of corporate social responsibility were made from the years 1930 - 1940. After the second world conflagration, in the early 1950s, Howart Bowen wrote for the first time about the social responsibilities of businesspeople, claiming that "business people have an obligation to follow those policies, to make those decisions or to follow those lines of action that are to be desired regarding the goals and values of our society". This is considered the first reminder in which the concept of "social responsibility of businessmen" was defined. (Bowen, 1953).

Two decades later, in 1979, Archie B. Carroll, manages to formulate another definition of the concept, supporting the idea that the corporation is the element that underlies the economic system, and the entities have as main objective the profit from the sale of the goods. And services. He defines the concept as follows: "Corporate social responsibility includes all the economic, legal, ethical and discretionary-philanthropic expectations that the company has from the organization at one point" (Carroll, 1979, p. 500).

Following the establishment of common standards in all Member States, in the 2000s, the European Commission develops its conception of corporate social equity, condemning that this is represented by all the actions taken by the companies, except for the contractual and legislative obligations towards the whole society and to the environment. After 11 years, the concept is redefined in 2011, which simplifies the definition, reducing it to "the responsibility that companies have for the impact of their activity on society" (European Commission, 2011, p. 6). At the same time, this decision-making entity of the European Union believes that by creating legislative norms related to this phenomenon, all companies could win, thus forming a favorable environment for all those who carry out actions in the sphere of social responsibility.

At the global level, we notice an increase in the companies' investments in corporate social responsibility actions, investing annually amounts of billions of dollars. By redirecting increasing amounts to donations in money, marketing related to various causes, volunteering programs, entities acts on the premise that CSR is not the best solution, but also the most inspired (Lee et al. 2013).

Social responsibility is the method by which the principles of social development are applied, as well as good governance in managing the entity and in its sustainable development. The essential principles of social responsibility are social equity, economic efficiency, environmental balance, transparency, ethical behavior, stakeholder involvement.

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### **3. CRM presence in air transport services**

Following the establishment of common standards in all Member States, in the 2000s, the European Commission develops its conception of corporate social equity, condemning that this is represented by all the actions taken by the companies, except for the contractual and legislative obligations towards the whole society and to the environment. After 11 years, the concept is redefined in 2011, which simplifies the definition, reducing it to "the responsibility that companies have for the impact of their activity on society" (European Commission, 2011, p. 6). At the same time, this decision-making entity of the European Union believes that by creating legislative norms related to this phenomenon, all companies could win, thus forming a favorable environment for all those who carry out actions in the sphere of social responsibility.

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These actions will undoubtedly contribute to the formation of the general principle of sustainable development, managing to form new opinions on the situation at the global level, and raising the standard of living.

With several prominent representatives in the world history of aviation, Romania has not always been able to be in the top of the countries offering the highest quality modern air transport services. The evolution of this field has been slow, mainly due to low investments. For 45 years, between 1945-1990, in Romania, an own air system was used, used for domestic and international circuits. After the 1989 Revolution, due to financial-economic difficulties and political changes, no new airports were built and the existing ones did not benefit from extensive modernization work.

Romania currently has 16 international airports, ensuring optimum operating conditions for no less than 30 airlines. From the point of view of geographical positioning, they are located near the big cities of the country: Bucharest Otopeni (Henri Coandă), Băneasa (Traian Vuia), Cluj (Avram Iancu), Timișoara (Traian Vuia), Târgu Mureș (Transylvania), Constanța (Mihail Kogălniceanu), Iași, Oradea, Sibiu, Bacău, Arad, Craiova, Baia Mare, Satu Mare, Suceava, Tulcea.

Through the 16 airports in Romania, in 2018, 21.8 million passengers were transported, more than 7 percent more than in the previous year.

The country's most massive air gate is Henri Coanda International Airport, which facilitated the transport of over 13.8 million people in 2018. On the other positions in the top 3 are Avram Iancu International Airport from Cluj-Napoca and Traian Vuia International Airport from Timisoara with 2.7 million passengers and 1.5 million passengers respectively.

Henri Coandă Airport in Bucharest is one of the largest and most modern airports in Eastern Europe, is located 16.5 kilometers north of the center of the capital, and having a total area of 605 ha. It registered an increase in the total number of passengers by almost one million passengers, from 12.84 million in 2017 to 13.82 million in 2018. In this context, the country's most massive air gate has 68% of the total passenger flow in Romania passed.

To maintain operating standards and to cope with traffic, the airport has modernized its main landing-take-off runway, expanded platform no. 1 with 15,000 sqm, with four new parking positions being created for aircraft. The construction of a new terminal with 25 gates of loading gates as planned. The total value of this project is approximately 1 billion euros.

Analyzing from the point of view of the airlines present at the Otopeni Airport, at this moment there are over 30, from all corners of the world (<http://www.bucharestairports.ro/en/pasageri/companii-aiene>). One of the most important operators, and the only one with state capital among them is Tarom. This is the oldest airline in our country, its bases being set before the First World War.

CSR (Corporate Social Responsibility) is a concept that refers to the contribution that companies must make to the development process of modern society.

The air transport industry plays an essential role in the tourism industry. This has led to the acceleration of the implementation of actions and practices dictated by corporate social responsibility. The airline industry can cause direct environmental effects through its activities. Following the forecasts of the last years, we observe how the airlines design their policies following the ecological problems to the detriment of the economic and social implications (Cole et al. 2013).

To set up a unique evaluation system, the CSR issues specific to the airline industry have been evaluated using sustainable development indices or rating systems including FTSE KLD 400, Social index, FTSE4GOOD GLOBAL INDEX (Zhao et al. 2012). The most crucial index highlighting sustainability is DJSI, which, according to a Rate, the Raters survey showed the highest credibility of 16 qualifications (Chen et al. 2012). The DJSI questionnaire can be used in several areas of activity, but it is best suited to the airline industry, in which specific issues are addressed such as fleet management, reliability, efficiency, fuel and not least (SAM Sustainability Yearbook, 2019 ).

To ensure a fair representation of the entities that provide air transport services, in 1945 IATA, the global commercial association of airlines, was born. Currently, it represents 290 airlines, which means 82% of the total air traffic operators. IATA is the organization that supports aviation fields helping to design industry policies and solving critical aviation issues (Iata, 2019). IATA has iterated several matters of sustainability in aviation, reaching segments such as safety, environmental changes, aircraft noise, and air quality. Another major organization in the aviation industry is ICAO. It is part of the UN's specialized organizations and operates with 191 states that have acceded to the convention, as well as with industry and world aviation. It works with the 191 signatory states of the agreement, as well as with industry and world aviation. ICAO 2013 environmental report also mentioned aircraft noise, local and global air quality emissions

The current trends of the market have favored the increase of the level of exposure of customers to CSR. The prominent players in the civil air transport field appreciated this interaction, taking advantage of this opportunity to donate kilometers traveled in a certain period to a charity. Large US companies such as North West have developed a list of AirCare's partners from which a passenger can choose. US Airways is promoting the Make-a-Wish Foundation as its national charity for donating miles (miles) (usairways.com, 2005).

Another way passengers can donate is by adopting a particular local school where Hawaiian Air adds 10%. Or, the passenger can select a teacher, and he uses it miles to fly himself or with students (United Nation, 2018).

Social marketing is a CSR program whereby the company aims to change a behavior classified as unfavorable or to convince the public, or in the case of airline companies, the passengers, to adopt an action with the most positive influences. Such programs are based on tactics that aim to increase the degree of information or education, with a keen eye for changing behaviors. Most of the times, the practices that a transport service provider is following have serious problems. One of the most often noted aspects is that people's reluctance to change. In this case, to justify a social marketing campaign, the problem must have a high degree of stringency, and its implementation will eliminate several significant risks.

In the air transport services in Romania, but also at the global level, problems are encountered, such as:

- Threats that could endanger the life or safety of passengers (eg, flight safety, accident prevention, etc.)
- Health (eg, problems caused by the effect of radiation on the body)

- Environment (eg, use of highly polluting fuels in air pollution, in-kind discharges of household waste, etc.)
- Involvement in various civic actions (e.g., volunteering, participation in blood donation actions, etc.).

With a figure of almost 3 million passengers in 2018 (Tarom, 2019), the only company with state capital in Romania, since 2013 the implementation of policies in the field of corporate social responsibility has begun. The most crucial measure of this kind was to change the fuel used for the aircraft in its fleet. It promised that by 2020, it would achieve fuel efficiency of 1.5 - 2%, as well as making the carbon-neutral growth of 2020 (Tarom, 2013). At present, as a complementary measure in 2018, a series of new rules have been implemented aimed at waste management, the efficient use of natural resources, the involvement of employees in various awareness programs, as well as their involvement in measures aimed at protecting the environment.

The airline industry plays an essential role in the segment of transport and tourism, respectively, which by its actions can create adverse effects, such as air pollutants, contributing to climate change, noise, and others — Economic and social problems. The premises of the European Commission show that by 2020, the level of emissions will be 70% higher than the level recorded in 2005 (European Commission. 2019). At the same time, ICAO forecasts that by 2050, the growth may reach between 300-700% compared to the current one.

#### 4. Methodology Research

Within the article was conducted pilot research within a sample of 124 people. The purpose of the study was to identify the extent to which the CRM measures implemented by the airline companies in Romania are visible and have impacted on the users of air transport services.

In this questionnaire, a package of 20 questions was prepared, to which 124 people answered. The questionnaire was conducted in the form of a survey within the Otopeni International Airport in Romania. The respondents were selected from the people who were leaving or returning from Bucharest. The results obtained were centralized and transposed in the form of easy-to-interpret graphs.

1. At what level do you consider that the security actions carried out before boarding aircraft are located?

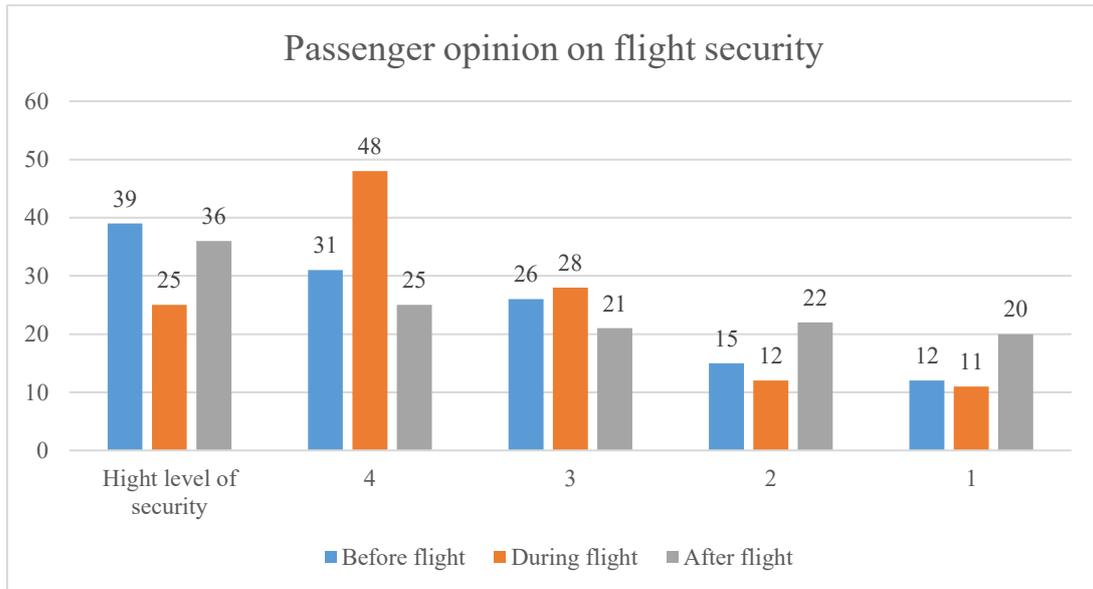
Very high level of security	High level of security	So and so	Low level of security	A deficient level of security
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2. At what level do you consider that the security actions carried out during the flight are located?

Very high level of security	High level of security	So and so	Low level of security	A deficient level of security
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3. At what level do you consider the security actions carried out after landing?

Very high level of security	High level of security	So and so	Low level of security	A deficient level of security
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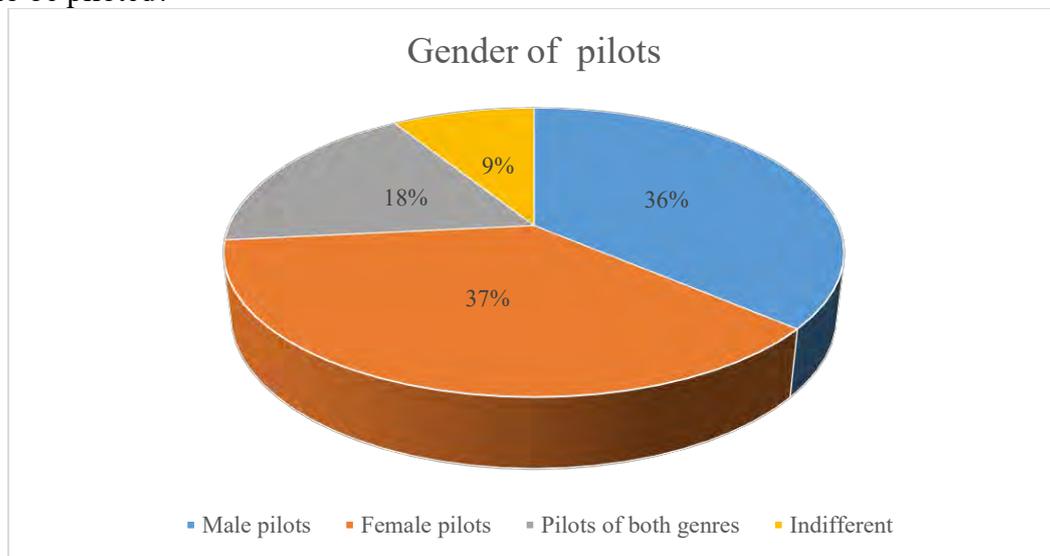


**Figure 1. Passenger opinion on flight security**

Source: Made by the author during the research

The passengers interviewed thought that the security measures taken before the flight are the most important. After-flight security checks were considered the least eloquent, obtaining a percentage of less than 10 percent.

Another question was, "Which formula do you prefer for the aircraft you are traveling with to be piloted?"

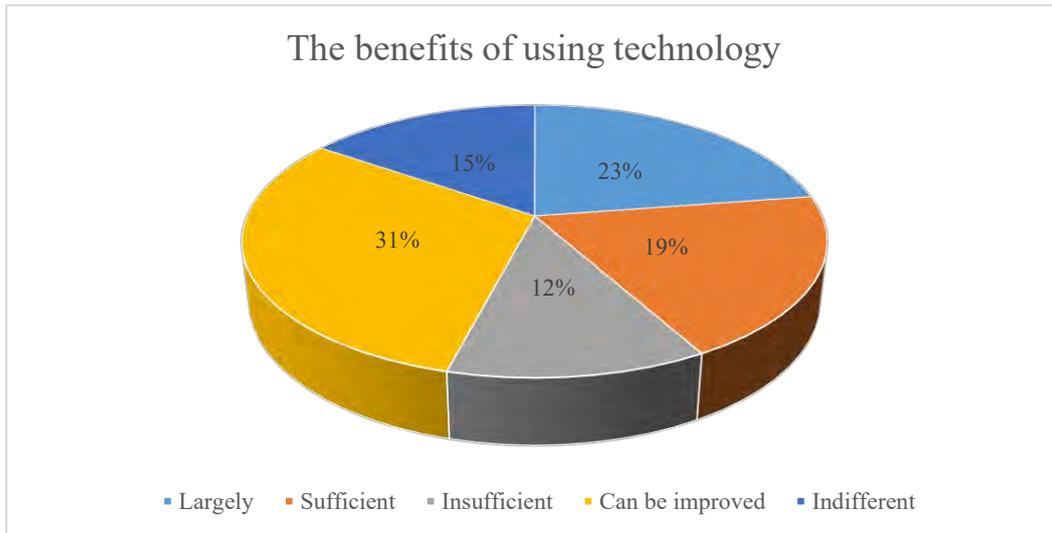


**Figure .2 Gender of pilots**

Source: Made by the author during the research

Issues related to gender inequities have been widely debated, including in this area. Due to the difference of only 1% of those who opted for the teams consisting of a pilot and a second pilot comprised of men and women respectively, a generally valid opinion cannot be drawn. The 9 percent of those who answered that the pilots' crew is indifferent is in the last place in the survey.

In the same order of ideas the following question, "To what extent do you think that the new technological opportunities have helped to improve air transport services (electronic tickets, online check-in, mobile applications)?"

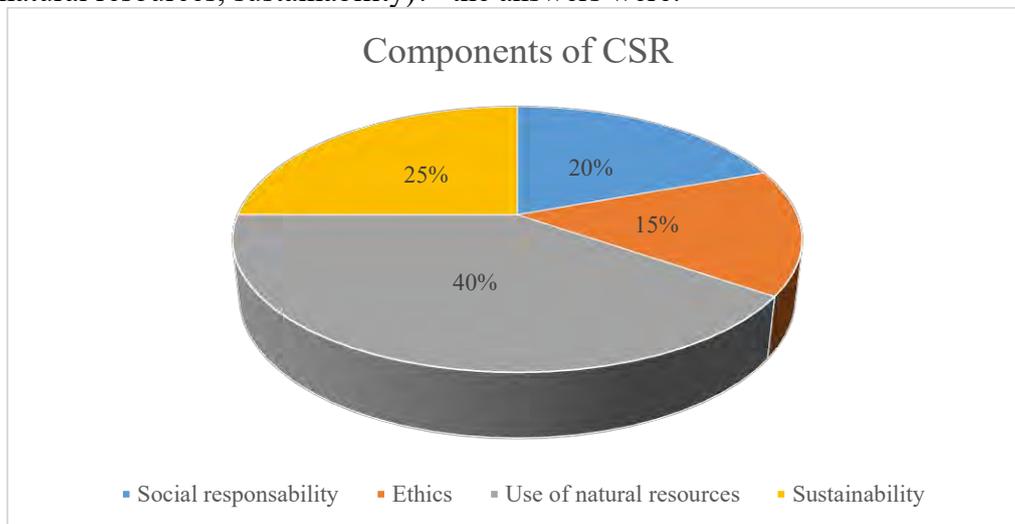


**Figure 3. The benefits of using technology**

Source: Made by the author during the research

Although all the entities in the field widely used the new rapid methods of boarding, the interviewed staff considered that these facilities could be the improvements (31%). With almost 15% fewer answers were found by those who felt that the usefulness of the new technologies does not help them, being them regardless.

On the question about “ To what extent do you consider the components within the field of CSR important, which the airline companies must implement (social responsibility, ethics, use of natural resources, sustainability)?” the answers were:

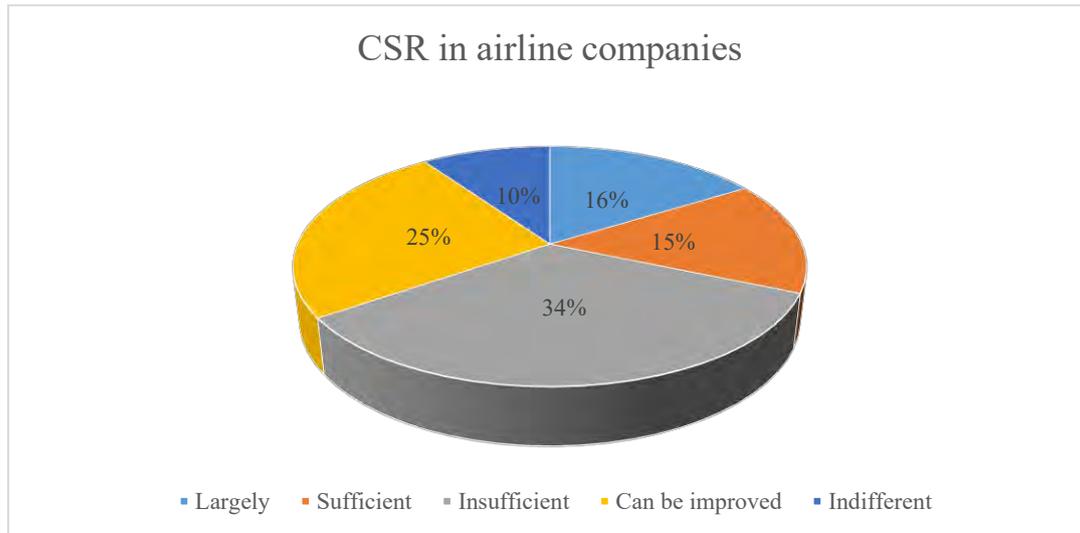


**Figure 4. Components of CSR**

Source: Made by the author during the research

The use of natural resources, with 40% of the answers, was considered an essential part of the vital components of CSR. The ethical issues in the actions of the airline companies were considered less critical, obtaining only 15%.

“To what extent do you consider that the CSR measures implemented by the airline companies in Romania are felt by the passengers (social responsibility, ethics, use of natural resources, sustainability)?”

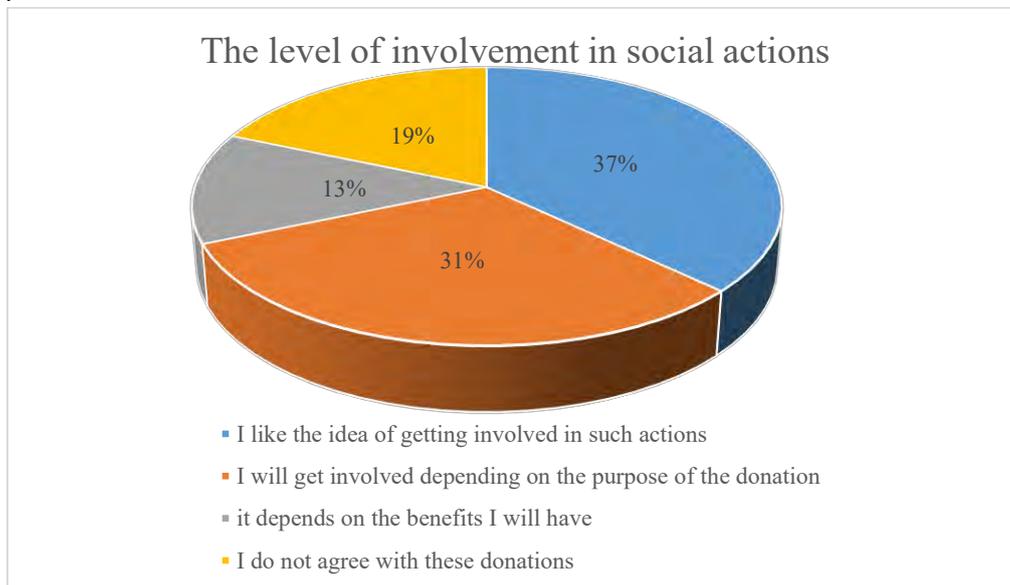


**Figure 5. CSR in companies**

Source: Made by the author during the research

Although in recent years, the actions regarding CSR actions have increased in Romania, 34% of the respondents were not aware of them, considering that there is a piece of small scale information. Only 10% of respondents said that such actions are indifferent to them and they did not notice them.

“Are you willing to donate the benefits of loyal client status to support humanitarian actions?”



**Figure 6. The level of involvement in social actions**

Source: Made by the author during the research

Following the question regarding the availability to get involved in social actions organized by the airlines, 37% of the respondents expressed their agreement to be involved in such events. This percentage is about two times higher than the people who disagreed with a type of deed.

### Conclusions

The airline industry plays an essential role in the segment of transport and tourism, respectively, which by its actions can create adverse effects, such as air pollutants, contributing to climate change, noise and others — economic and social problems. The premises of the European Commission show that by 2020, the level of emissions will be 70% higher than the level recorded in 2005 (European Commission. 2019). At the same time, ICAO forecasts that by 2050, the growth may reach between 300-700% compared to the current one.

This questionnaire aimed to highlight the opinion of passengers on the corporate social actions, their impact, as well as the changes that a current passenger from an airline has. Most of the interviewees did not report that they fully understand the new CSR policies of the transport companies, considering them, of course, in today's society. Actions on environmental protection, efficient use of natural resources and sustainable development have proven to be the essential benchmarks behind which clients guide their choices, as with other industries.

The interview of the passengers took place at the Otopeni International Airport, in Bucharest, and the interviewed persons left or returned to the country. They traveled with various airlines, both from the airlines and low-cost airlines.

### Acknowledgments

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## **The Effects of Viral Marketing as an Integral Part of Political, Social Marketing**

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### **Abstract**

In the context of the wide-ranging changes in post-communist societies, the crisis of conventional forms of political participation in advanced democratic systems, the understanding of globalization processes in recent decades that influence political institutions and operations around the world, an intense search for new conceptual schemes analysis of the political field. The (economic) market situation is a new direction in politics very actively developed today in political science. It provides the necessary element both for analyzing the realities at the macropolitical level and for describing the concrete social and political practices at the level of the individual and of the group. The application of marketing techniques in politics and politics is often treated as a triggering factor with a negative impact since the level of influence is very high. The marketization of politics tends to deviate processes from their natural course, and by this, it would constitute an external interference to achieve individual, often selfish, goals. All these criticisms have made marketing not always a good reputation, especially in this area, where elections have an impact for at least four years. Viral marketing has had several forms throughout time. If it was initially distributed as mere rumors, currently viewed from the perspective of the Internet, it manages to provide engaging content, sometimes in the form of flash or video clips, spread at high speed, even proving in the political environment, the winning loser ". This article will analyze the current situation in Romania in terms of political marketing, how it evolved, and how it will be able to influence the European Parliamentary elections in late 2019. This analysis will be done through a questionnaire designed to highlight first of all how viral marketing has changed their decision to go / not vote and how political marketing persuaded them to vote in one way or another.

**Keywords:** Viral marketing, political marketing, marketing communication.

**JEL classification:** M31

### **1. Introduction**

Web content and online marketing have become essential foundations for viral marketing, a phenomenon that involves the propagation of a message or content without effort

from the authors. When a material is considered useful or exciting, visitors tend to tell friends and acquaintances, usually by sending them a link or distributing the content.

One of the examples that clearly explain that viral marketing is the marketing explosion caused by a Mentos candy thrown in a bottle of Coca-Cola. The reaction generates an explosion that sprays the drink 10 meters or more. This phenomenon was popularized and distributed in the summer of 2006 through numerous videos with this experiment. Following their initial success, Grobe and Voltz made a video of an extreme demonstration to answer the following question: "What happens when you combine 200 liters of Diet Coke and over 500 Mentos Mints?" The web audience was fascinated by the result - it is crazy and has caused a classic viral phenomenon. In just three weeks, four million people watched the video, and hundreds of bloggers wrote about it. The excitement in the Mentos marketing bureaus was extreme when the videos took off online - millions of free Mento's exposures (for such an impact, traditional marketing costs could have amounted to tens, if not hundreds, of millions of dollars (Scott, 2007, p.82).

For marketing specialists, one of the prized things about the Web is that when an idea that takes off in the online environment can propel a brand or a company to fame in a surprising and freeway. Whether we're talking about - viral marketing, buzz or word-of-blog - the fact that other people tell your story determines the action. Many phenomena that go viral begin without the expectation of popularity. Someone creates content, a funny video, a cartoon, or a story - to entertain their friends. The phenomenon becomes viral when friends send it to other people, and these in turn to others and so on until the number of views increases considerably, while the creator could have expected to reach most tens of friends.

Nowadays, viral marketing has become a particular field of study of marketing becoming a technique in itself used in promoting its launch of goods and services. In addition to this, viral marketing techniques have also become used in areas such as social marketing and political marketing with the aim not to sell a service or product but to generate an action of the population.

## **2. The impact of political marketing in the online environment**

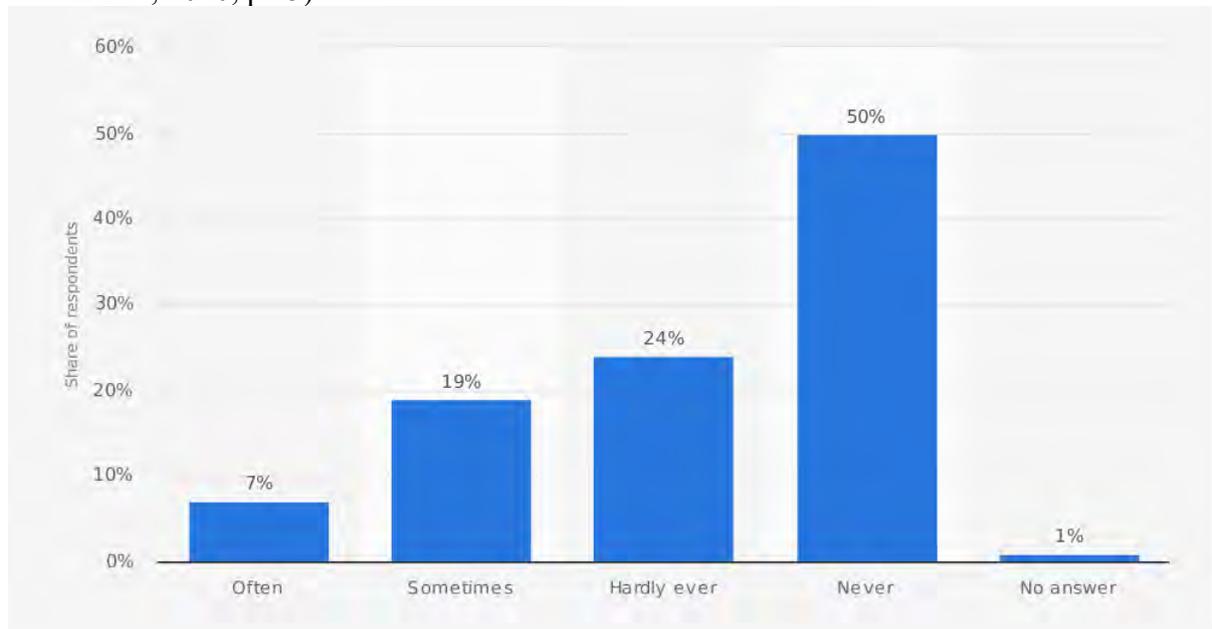
Political marketing can be defined as a set of techniques that have as objective the creation and promotion of the image of a man or a political institution, depending on the public from which it is desired to obtain the vote or public confidence (Teodorescu, 2001, p.3).

Over time the election campaigns are becoming more and more complex, they are professionalized, political marketing thus becoming an important topic both among the specialists and among the public. There are several studies on potential political marketing strategies used in election campaigns. These are, however, theoretical approaches in practice change depending on the specifications given by the purpose of the elections. The diversity is provided by the different political contexts, but especially by the local characteristics can influence the marketing techniques and strategies used. There are situations in which, even within the same centrally coordinated campaign, there are differences of approach at the local level, where the subsidiaries of parties that adapt to the local population act (Rotaru, 2015).

Political marketing consists of the use of commercial marketing techniques and concepts in politics. Political parties conduct market research (starting from the example of marketing research) obtaining information from polls or focus groups and using them to identify how the population will vote. The parties use marketing techniques both to promote their policies and to communicate and drive the public about the strategies adopted, the elected and elected leaders as well as to identify how to communicate most effectively with the target population. Besides, during the election campaign in political marketing, not only public relations strategies appear, but also the profiling of elections, segmentation, micro-targeting, and e-

marketing to inform citizens. Moreover, political marketing can respond to market information in the way it designs the political product it offers, becoming more market-oriented than sales based on marketing principles (Lees-Marshment, 2010, p.15).

While the professionalization and modernization of political marketing represented a widely studied process, there has never been a comparative scientific analysis of political marketing behavior in parallel with the approach of sales or market orientations in traditional marketing. Of course, politicians can use tools without being framed in a global market orientation, and precisely the variation, as well as the convergence in empirical behavior, lead to the particularities of political marketing. Indeed, the success of e-marketing or online marketing in the 2016 presidential election has led parties from other countries to approach a new initiative (As we can see in Figure 1). But behind the US innovation lies market-oriented thinking, in the sense that the Internet was used not only to sell to voters but to provide engagement mechanisms that were designed to meet the varied needs of volunteers and to allow them to participate in politics in the way that suits voters rather than the candidate (Lees-Marshment, 2010, p.15).



**Figure 1. Frequency of social media users in the Denmark commenting, posting, or discussing government and politics with others on social media as of November 2015**

Source: <https://www.statista.com/statistics/678294/frequency-of-discussing-politics-on-facebook-in-denmark-by-age-group/>

For example, a study conducted in Denmark in 2015 on the frequency of online policy discussions on different platforms indicated that seven percent of them often engaged in political discussions on social media, while 50 percent did not comment, post or discuss anything about government and politics. The study was conducted in Denmark in November 2015 on several 1593 respondents (Kienast, 2016).

The inclusion of marketing in the political sphere stimulated the debate of the many consequences led by voters or market-oriented. The principle of market orientation is used in business all over the world to reach and maintain market share and is the basis of capitalism; but in politics, responsibility is decisively transferred to the voter to decide what are the preferences of the policy and the suitability of the leaders, which raises fears of populism and the abandonment of the collectivist ideals informed by the ideological opinions of the world. The abandonment of the political direction of a country in the path of the electoral market has significant implications for the functioning of representative democracy (Lees-Marshment,

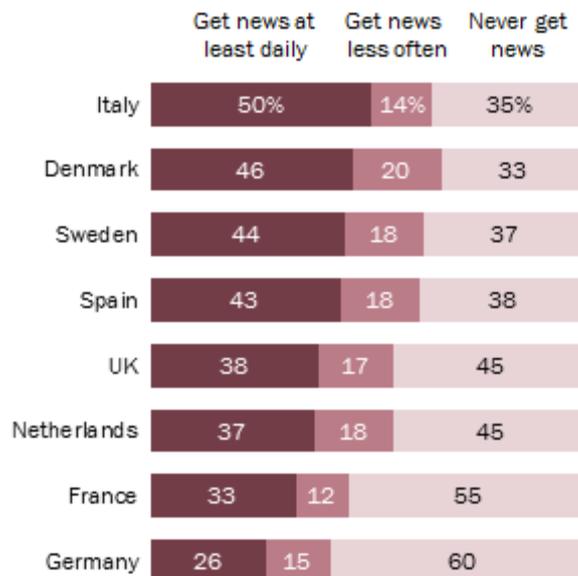
2010, p.15). Based on the American model, within the European Union, the population's involvement in politics through social media is also representative. For example, according to a study in the months leading up to the European elections that took place on May 23-26, 2019, spending on promotion and activity in the online environment has increased considerably, the country with the highest expenditure for political advertising targeted on Facebook in the European Union. (EU) being Germany (3.5 million euros), the second place was the United Kingdom (Great Britain), where the expenses totaled 3.3 million euros (Kienast, 2019).

According to Statista Research Department, who conducted numerous studies in 2018 on the socio-demographic characteristics of the population involved in discussions about politics in the online environment, they obtained as broken down by education level, during the survey period, it was found that television was used for national political news by the majority of Europeans from all education groups, the most significant by the people who finished their primary level of education (85 percent) and the people who completed their high school level (81 percent). The Internet (ie, websites and social networks) was used by 77 percent of Europeans still studying in 2017-2018.

In the studies carried out by age categories, it was found that 75% of the population aged between 40 and 54 years and 81% of the people over 55 years old, appreciated and used as a means of information the European political problems television. In contrast, the most popular medium among Europeans aged between 15 and 24 years old was the Internet (websites and online social networks) with a percentage of 65%.

A follow-up to another study on the influence of online social networks on the interest in political affairs in 28 EU countries in 2017-2018 found that, on average, 59% of EU citizens considered online social networking to be a source of information and debate. of political ideas and can produce changes in the election ideas of EU citizens

*% of adults in each country who \_\_\_ from social media*



Source: Survey of eight Western European countries conducted Oct. 30-Dec. 20, 2017.

"In Western Europe, Public Attitudes Toward News Media More Divided by Populist Views Than Left-Right Ideology"

PEW RESEARCH CENTER

**Figure 2. Majorities in most European countries get news from social media**

Source: <https://www.journalism.org/>

We can thus see that it is possible to discuss politics are increasingly common in the population of Europe, the studies also reflect the idea that through social networks designs can be created to promote, debate, discuss and influence certain factors so much. Political bodies to achieve desired results.

Based on these results and facts the communication and public relations specialists belonging to the political organisms became aware of the impact that social media can have on the population and developed new tactics and communication strategies designed in the online environment and through the networks socialization, even trying to produce a viral marketing phenomenon.

### **3. Viral marketing used in political marketing**

Viral marketing has become a method of promotion by which the material is transmitted from one person to another without the intervention of the creator or promoter. Viral marketing uses existing social connections (networks of friends, blogs) to distribute the viral message (Grosseck, 2007).

In political marketing, during the European Parliamentary elections, the attention of the voters is not directed to a candidate, but a group of candidates as representatives of the party. As a result, the promotion strategy is different, focusing on increasing the reputation of the candidates. The low interest in parties and euro parliamentary elections implies that, in this case, communication in the online environment is mainly a way of disseminating information to become acquainted with the candidates and less an instrument for mobilizing voters (Androniciuc, 2019).

It is well-known that the Internet can have a significant impact when we talk about politics, which is why specialists in the field of politics are focusing their attention on getting involved in the online environment. The creativity of the campaign managers became a challenge when the online environment became a source of influence and to obtain a considerable number of stamps on the ballot papers. The beauty of the internet lies precisely in the fact that it brings to the world transparency; all ideas and content can capture attention and go viral. In Romania, viral marketing is more by chance than forecast, and vloggers conduct viral marketing campaigns and not by campaign managers directly involved in the election process.

Relevant examples of viral marketing that propel the world to vote are few in Romania, but we can recall the mobilization that sent the population to the European Parliamentary elections. The social networks were filled with frames by which people said they vote (Voting is my superpower), who votes, whom they vote for and what their ideas and opinions are. Celebrities and simple anonymous, communication professionals and pure amateurs strove to highlight that the importance of voting attendance is vital for Romania's future and the fate of democracy. Moreover, since the favorite medium for communication and mobilization is online, some of the viral videos were made by professionals such as the "We Go to the vote" project, in which people from marketing and advertising were involved, and others were made by simple vloggers like "Grandma said this", but they had the same purpose of highlighting the right to choose and the involvement of the changing population.

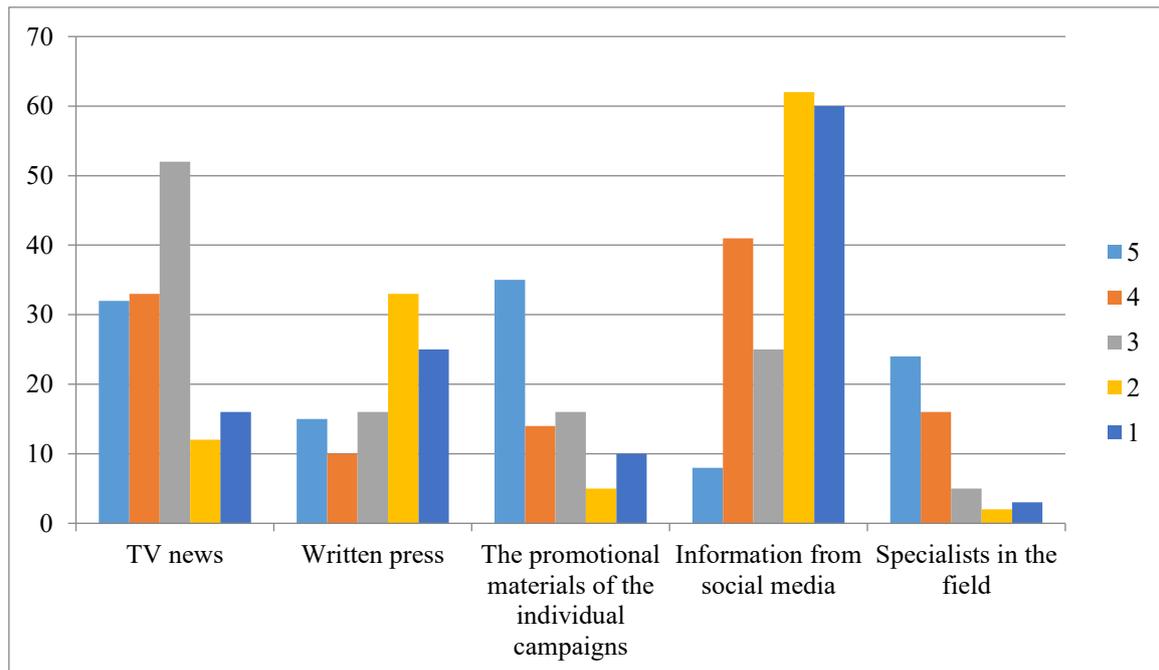
### **4. Research Methodology**

The article analyzed the current situation in Romania in terms of political marketing and what are the sources of influence that will cause citizens to participate in the vote. This analysis was done through a questionnaire designed to highlight firstly how viral marketing changed its decision to go / not vote and how political marketing convinced them to vote in one way or

another. The purpose of the research was to determine the impact of viral marketing on citizens' voting decisions.

The research was carried out among 114 respondents with voting rights and had as main objectives the identification of the most influential sources of information that determined the citizens to come to the vote, the identification of the communication medium used during the elections and which are the primary sources — Information on the electoral process.

Among the questions in the questionnaire to which the respondents had to answer are: "To what extent do you consider relevant the following sources of information used in the electoral process?"

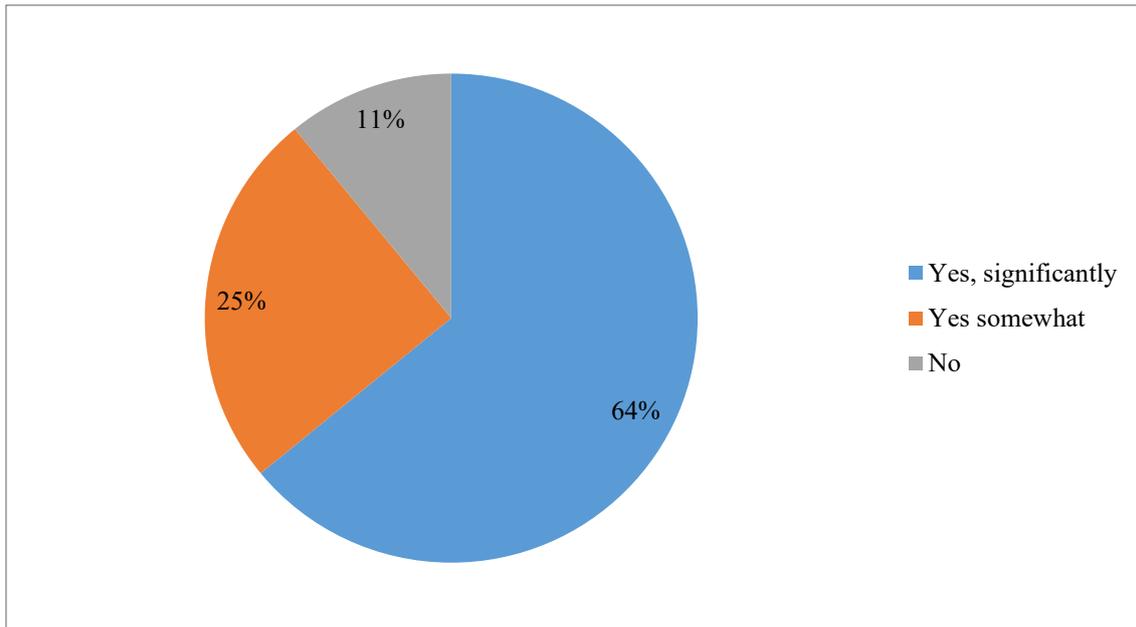


**Figure 3. Sources of information in the electoral process**

Source: made by the author in the research

Following the results, we can see that the most used source of information among the respondents is represented by social media networks, followed by TV news. Referring to the average age of the respondents, we can also observe that people between the ages of 18-35 have chosen mainly social networks as the source of information, arguing the presence of all political identities in the online environment and the possibility to debate various ideas. And thematic. At the opposite end, TV news and the Written Press were chosen by people over 45 years of age.

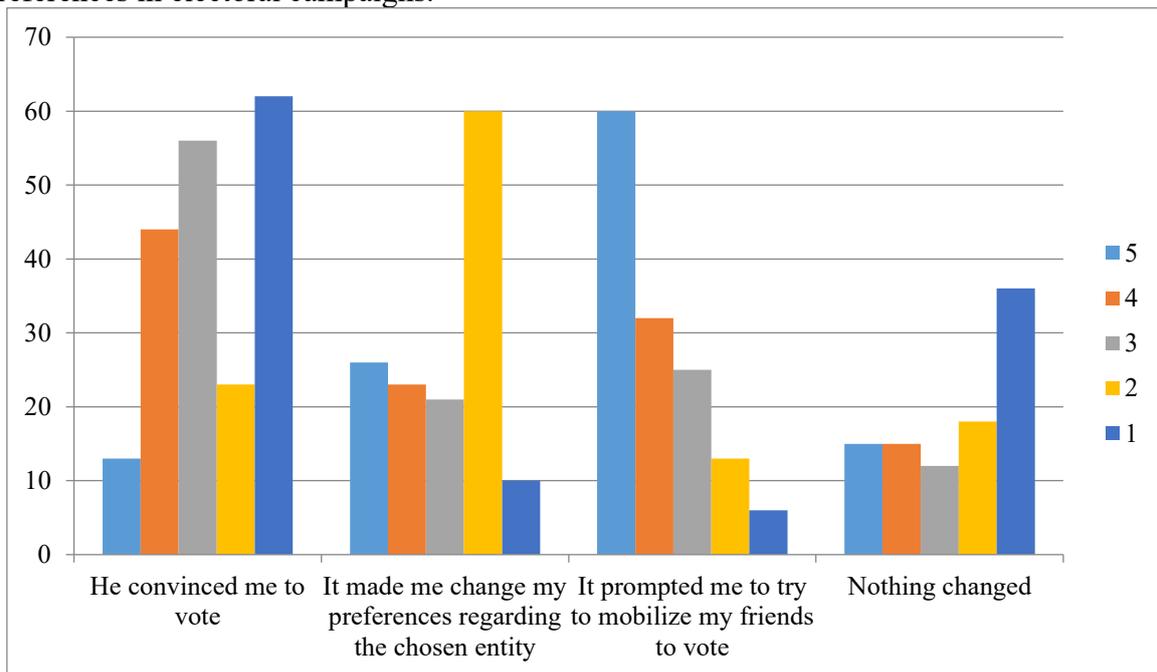
Another question in the questionnaire referred to the notoriety of the campaigns that went viral in the electoral process: "Do you consider that viral marketing campaigns contribute to increasing the presence of citizens at the vote?"



**Figure 4. Influence of viral marketing**

Source: made by the author in the research

The next question was structured on the structure of a semantic differential in which respondents were asked to what extent viral marketing influenced their decisions and preferences in electoral campaigns.



**Figure 5. Impact of viral marketing**

Source: made by the author in the research

Following the results, we noticed that most of the respondents were influenced by viral marketing campaigns both by changing the decision to participate in the vote and by distributing the content and trying to convince and mobilize other friends/acquaintances/netizens to participate in the ballot. Asked what they think is the reason why viral marketing has a significant influence in changing attitudes, they answered that the idea of transparency and the fact that it is not a forced message gives it credibility and impresses with emotion.

### Conclusions

We can conclude by saying that viral marketing becomes effective when it combines several features that bring it closer to the target audience. Situations similar to those of people, daily activities, or emotional situations turn an irrelevant material into a viral one in the online environment. In the electoral campaigns, the technique becomes more and more used both by the specialists in the field to attract the preferences of the citizens, as well as by the simple people who only want to mobilize their peers to participate in the vote.

Viral marketing from unofficial sources of electoral teams becomes all the more credible as it does not aim to manipulate the masses and change the attitude with proofs to candidates as well as motivating the citizens to exercise their right to vote. Following the research, we could see that significant differences are depending on the age of the sources of information, noting that young people are more active in the online environment. In this sense, viral marketing becomes an object of political marketing and beyond.

### Acknowledgments

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## City Placement and Set Jetting as Unconventional Marketing Communication Tools for Local Governments

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### Abstract

Local governments are forced to compete in an increasingly competitive environment. The competition takes place, among others, at the level of effective communication with various recipients. Not only the intensity of their conduct is important here, but also creativity, diversity and innovation. City placement and the associated jetting set is such a relatively non-standard communication tool. The main goal of the article is to present and explain the place of city placement in marketing communications of local governments and highlight the development of set jetting. City placement is primarily commercial access to the city, region or their elements for the implementation of artistic projects in their area in exchange for promoting these units by their dissemination to a wider audience. Set jetting is the organization of events and trips to film or TV series. Both of these forms have a high level of memory and benefit many parties. They are an effective alternative to traditional marketing communication tools because they engage recipients. One should also take into account the restrictions that they bring. The article also indicates the factors on which the results obtained by self-governments in the image dimension depend. The current recipient of city or region communication likes unconventional solutions that evoke emotions. It focuses on experiencing, experiencing, not just passive reception. He is tired of traditional forms of marketing communication and the information noise in various media has an impact on remembering a smaller amount of content by the recipient. It is important to switch from a one-sided message to dialogue and interaction. City placement and set jetting, however, cannot be a matter of chance but must be deliberate actions. The article uses literature, internet sources and case analysis as the research method.

**Keywords:** city placement, set jetting, marketing communication, local governments.

**JEL classification:** M30

### 1. Introduction

The current recipient of communication expects that the brands of the city/region that communicate with him, in addition to information, will provide something more that is unique and exceptional, certain experiences and emotions. The integrated approach to management proves the essence of city marketing. It reveals itself through the use of various marketing mix tools and in a multitude of entities that are recipients of activities and those using these tools. Managing the recipient's experience is not an easy task. It is often equated with 360-degree communication, i.e. planning communication activities at the level of various so-called contact points with the recipient. Cities or regions are spaces that allow you to experience in many different ways, they are also ready scenes for experiences. Their image is created through the prism of selected places and experiences. Concerning the place Ph. Kotler et al. (1993, p. 141) define the image as the sum of views, attitudes and impressions that a person or their group has developed in their mind. The human mind codes cities, like products, in the form of postcards placed in the head, which are summoned and brought before our eyes as needed. For example, thinking about Italian Pisa, the image of the Leaning Tower appears; London is the paintings of Big Ben or the famous Tower, Rome - images of walks on St. Mark's Square Peter's or Colosseum's paintings, Szczecin is Wały Chrobrego. A similar image is not necessarily the same attitude of the recipient. The image of a place is influenced by both internal (e.g. motivation, lifestyle, perception) and external (mainly economic and socio-cultural) factors (Markowski, 2002, p. 190). A city or region is much harder to promote than a product. For this

reason, the city authorities as to the brand manager and properly selected forms of communication are important. Locating a city, region, tourist attraction in a movie or series is one of the most effective, because of the least irritating and aggressive tools for promoting places. The phenomenon of set jetting is associated with city placement. The article deals with the issues of these forms of communication, indicating their role in better reaching local governments to different groups of recipients.

## **2. City placement and set – the essence and meaning in communication**

City placement is primarily commercial access to the city, region or elements for the implementation of artistic projects in their area in exchange for promoting these units by their dissemination to a wider audience. It is a promotion without persuasion, very often indirectly affecting the recipient's behavior. This is a more unconventional form of reaching recipients. However, it should be emphasized that it contains elements of most standard forms of promotion (advertising, sponsorship, public relations, publicity or complementary promotion), i.e. it is a kind of hybrid. The main carriers of city placement include, among others film, serial, advertising spots (a city in the background), repetitive television programs, theater plays, literary works, musical works, radio programs, reality shows, graphics, poems, guide programs. The wide range of these carriers allows increasing the interest of potential tourists or investors. The consequence of the form of marketing communication, which is city placement, is the location of places and regions in film (feature) productions and in popular series, both local and global. The following terms can be found (Szromnik, 2015):

- city in the movie,
- attractions of the city in the story and the picture,
- city in the background of audiovisual projects,
- presentation of the city through media production,
- city promotion through film, series,
- providing paid access to the city space for artistic ventures,
- the image of the city and its components preserved in art; the city as a place of action in literature.

It is important for local governments to decide whether to locate their city in studio niche initiatives - reaching a thematically targeted narrow audience (e.g. art lovers) - or choose broader media.

City placement is sometimes treated as a place to organize various events in which the city gives the background, and the event strengthens the image of the city (Szromnik, 2016). The "elements" of cities used in city placement include cultural heritage, science, history - both material and human objects, movable and immovable objects, natural environment; human behavior, e.g. in a group, families, organizations; unique traditional and regional products. This is an attractive form of communication that has a high level of memory. From the perspective of creating an experience in the mind of the recipient, the locality is very important, i.e. consistent care that the place has its own style and is permanent. By using city placement, you can strengthen the uniqueness of a given place by maximizing the elements that you can experience in it. Important are the components of experience that you can't take with you, e.g. the atmosphere of the place, culture, local community. When visiting a place or staying in it, the recipient wants to experience its uniqueness and not receive the same thing that is everywhere.

The phenomenon of "set jetting" is associated with city placement. It is estimated that the fashion for them was not created in the United States and it is assumed that for the first time this term was used by journalist G. Kelly New York Post in 2008 (Kelly, 2008). This concept is associated with visiting places where films, series, books were written etc. or were otherwise

associated with them (e.g. through exhibitions devoted to film) (Connell and Meyer, 2009, p. 194). The phenomenon of "set jetting" indicates how strongly the industry, among other cinematographic influences the awareness of recipients creating fashion for discovering new (mainly touristic) destinations. It's certainly related to jet-setting meaning something exclusive, luxurious and inaccessible to everyone. The set of jetting, however, is about taming the places shown in the film, series, book, which may become available, creating tourist products resulting in fact from the interest of recipients, creating fashion for tourist destinations. In this context, the so-called Veblen effect or sheep's shoot effect. Many entities (e.g. travel agencies) took advantage of this trend because their offers included numerous trips to places shown e.g. in films.

An important advantage of both discussed forms (especially from the point of view of their effectiveness of impact) is the concealment of the persuasive nature of the message, contributing to its more favorable reception by recipients and - thus - to increase the credibility of information that is perceived as neutral. They, therefore, allow you to go beyond the classic advertising block. The regularity of some used media (e.g. series, cyclical entertainment programs) allow local governments to profile their recipients. The longer the series is broadcast on the air, the greater the effectiveness of this type of communication. The plot, actors' play and scenery are to create a favorable environment for the presented place. To effectively use set jetting and city placement, one should consider (Hudson and Ritchie, 2006a, 2006b), among others target marketing (image) - planning activities not only during production, but also before and after it; the attributes of the destination (its distinguishing features), inherent factors of production resulting from the attractiveness of the actors, the predictable success of production, etc., the efforts made by the local government and producers to encourage joint actions. It is emphasized that TV series are one of the best ideas to popularize the city (Kaczmarczyk, 2018). The right movie, often based on a best-selling book, can breathe new life and meaning into given places, attract visitors to less known areas, provide original themes or change the image of a given place, encourage tourism (Mintel Report, 2012). Local governments can join the film set differently. Some of them pay the film producer and this one publishes, for example, the action of a given film in a given city. Some local governments become co-producers of the film, gaining additional funds. It should be emphasized that not only the very fact of "playing" a given city or region, e.g. in a movie, is important, but above all the ability to use this situation for promotional activities, changing the image, attracting tourists, increasing recognition, etc.

### **3. City placement and set jetting in local government practice**

In the world, city placement and set jetting are more popular than in Poland, it is often one of the branches of tourism. For example, the movie "The Lord of the Rings" contributed to the fact that the number of tourists in New Zealand increased by 40%, recording a record number of almost 2.5 million people. The Ngauruhoe volcano on the North Island and the Kahurangi National Park are particularly popular, where there are giant stone pillars known from the first part of the "Fellowship of the Ring" trilogy. Tourists can spend the night in hotels stylized as underground halfling houses from Hobbiton. On the occasion of the premiere of the film, New Zealand Post issued special postage stamps with silhouettes of the characters of the film and short signatures. Commemorative coins with the engraved figure of Bilbo Baggins worth one New Zealand dollar are also very popular and I wrote "New Zealand" in the Elvish language created by Tolkien (New ..., 2018). Tongariro National Park features everything a Lord Of The Rings fan could possibly want to see, including Mount Ngauruhoe, used as Mount Doom and Mangawhero Falls, where the Ithilien Camp scenes were filmed.

The famous agent of Her Majesty is associated with inherent gadgets, including a good watch, drink (Martini, Belvedere vodka) or with Aston Martin (Możdżyński, 2017).

Many European cities have benefited from the films of Woody Allen. With his films, the director began to promote European cities by placing the action in them and additionally including their names in the titles of his films, such as "Vicky Christina Barcelona". The promotion of this city as the movie was supported by the song Giulia y los Tellarini Barcelona. The city authorities supported the production with EUR 2 million. The films of this director were also seen in other cities, e.g. "Midnight in Paris" and "In Love with Rome". In Paris, despite the former premier of the film, they are still enjoying great success in the footsteps of the "Da Vinci Code". The hero of this film became for many tourists an inspiration to visit the Louvre Museum, the Bolognese Forest or the church of St. Sulpice.

Thanks to the films 'Tomb Raider' and 'Lara Croft', the Ta Phrom temple in Cambodia, which is part of a huge complex of Angkor temples near Siem Reap, gained great publicity. It is dated 1186 and as one of the few, it has survived in a state similar to that in which it was found. It is also the key location of the movie with Angelina Jolie. Each route from Siem Reap to Angkor discusses Ta Phrom's place in the movie.

To increase foreign inbound tourism of a given country, it is also worth considering foreign film productions shot in Poland. Such an example is the remains of the scenery in Szczecinek from the German film about Goethe. Another example is Hindu cinema productions, for which photos were taken, among others in Cracow. The first film "Aazaan", with a sensational plot, was shot in October 2010, including on the Main Square and Kazimierz, near the Barbican and Florian's Gate, and in Balice. Thanks to the film "Schindler's List" there was an increased influx of tourists (not only German) to places associated with the film. Created, among other tourist routes along the "Schindler's list trail".

A very similar spectacular success was the movie about Harry Potter, which gained the British Isles. After a series about a young wizard, Alnwick Castle (who statistics for Hogwarts) saw a 230% increase in traffic. The wonderful "Making of Harry Potter" tour is a must for every aspiring young wizard. You can also use Google Maps to find a complete view of the famous Diagon Alley. Great Britain also offers James Bond and Sherlock Holmes routes. For example, the organization "Visit Britain" offers dozens of themed tours in the footsteps of Agent 007. In addition to movies, city placement is also in the series. For example, Sandomierz popularized the series entitled "Father Matthew". This series is based on the Italian series "Don Matteo". Mateusz's father is watched by 7 to even 8 million viewers, and Sandomierz is pleased with the growing interest of tourists and the growing number of accommodation reservations. Another example could be, for example, the town of Jerusalem - a small town near Mińsk Mazowiecki known as Wilkowyje from the popular TVP series, as well as a cinema film entitled "Ranch". When it turned out that the series was watched by up to 7 million viewers, Jerusalem immediately appeared on the tourist map of the country.

Local governments achieve many benefits from placing their city or region in some production. For example, according to Press-Service Monitoring Media in the period July-December 2016 on Polish television the series "M jak miłość" proved to be unrivaled, shot in two places - Warsaw and Grabina (she took 11th place). As many as 1213 mentions in the media were made about it (944 in the press, 242 on the internet, 15 on television and 12 on the radio). According to Press Service Monitoring Media, the market value of such promotion reaches PLN 25 million. That much Warsaw would have to spend on publishing these materials if they were advertising. It should be emphasized that the notes about the capital in the context of this series during the examined period of six months were read, listened to or seen in the media by statistical Kowalski several times, i.e. the reach rate was 820 million. The second place in this ranking was the series "Klan", which was written and told 926 times (806 in the press, 100 on the Internet and 15 on TV and radio). The reach rate was 193 million, and the advertising equivalent - PLN 11.7 million (Which ..., 2017). In Poland, it is pointed out that

Warsaw is the leader thanks to, among others, the series "M jak miłość", "Clan", "On the common or" Colors of happiness ",

Examples show that the success of city placement is fostered by a longer adventure with a movie, TV series, etc. The benefits of the city's appearance in such production far outweigh the costs that local governments must incur. There is no fixed rate saying that for one episode of the series, which takes place in a specific city, the local government must pay so much. For example, Krakow did not pay for locating the city in Belle Epoque, a famous TV series made by TVN. The film commission operating in the city covered only the costs of providing things necessary for the production of photos, such as elements of set design or LED screens. She was also responsible for obtaining appropriate approvals and permits and overseeing a number of technical matters. It was different in the past, e.g. in the case of Łódź, which paid about PLN 1 million for the action of the TV series "Commissioner Alex" to take place on its streets (Kaczmarczyk, 2018).

City placement also applies to place places in books. Examples are Polish detective stories by Marek Krajewski. In his books, the author writes about Wrocław ("Death in Breslau", "The end of the world in Breslau", "Spectra in the city of Breslau"), and the places described by him are willingly visited not only by city residents but also tourists. Similarly with the books of Małgorzata Musierowicz and the famous 5 Roosvelta Street in Poznań (Gębarowski, 2012).

Therefore, you can determine the main benefits of using these forms of communication for residents and city authorities, which are, among others the opportunity to present the city in a natural setting, emphasizing its characteristic elements; increased interest in a given city, development of tourist products; non-intrusive accessible form of communication, often unconsciously perceived, perceived as entertainment; activation of the labor market; long period of impact due to multiple broadcasts of the audiovisual medium; relatively low costs; sense of identity; durability of the message and its repetition. Tourists, above all, gain travel to places promoted in the film or series in the footsteps of their favorite characters; visiting places in an active way; learning history, cities, acquiring knowledge in an unconventional way; the attractive form of entertainment. There are also some restrictions resulting from the use of set jetting and city placement, such as:

- difficulties arising from legal, administrative or organizational provisions,
- limited impact on the script, a plot of the movie or series; no direct control option,
- risk of a negative impact of the situation, the hero on the image of the city,
- sometimes fragmentation of the presentation,
- to a large extent, success depends on the popularity of the audiovisual product.

Despite these certain difficulties, city placement and the associated jet setting are more effective than, for example, broadcasting typical TV spots. Therefore, it is worth making the most of the city or region's presence in a given medium so that such actions serve to increase the awareness of the name of the place or also to make money. Awareness of the benefits of using city placement and jet setting meant that in 2011 the Polish Film Commission was established. Its task is to coordinate the activities of all regional funds and promote Polish locations abroad as well as the domestic film industry. Movies or TV shows have the amazing power to transport us to amazing places around the world, and even to distant galaxies. Although the screen drama can be fantastic, many of these amazing sets are places that you can visit in real life.

#### 4. Conclusion

It should be emphasized that for many local governments, city placement and set jetting allow them to step out of the shadows and gain interest. Contact with a given place, e.g. through series or movies, makes it easy to forget about itself, creates positive associations. Therefore,

these forms are becoming more and more popular. However, one should not forget about how and how one wants to show a given place through it, what is its distinguishing feature. You should not make ad hoc decisions because, for example, a director contacted the local government or a cheap offer appeared. It is important to promote the place in a natural and artificial way. It is worth combining city placement with set jetting, showing visitors interested in film routes, attracting events or creating a special tourist offer ("in the footsteps ..."). One should not forget to publicize such activities. The measures of the effectiveness of the city placement and set jetting strategies to include spontaneous and assisted knowledge of a given place (its recognition), positive opinions posted on social media, an increase in the number of tourists looking for elements of a given place. The experience of many cities and regions indicates the undoubted benefits of using these forms of marketing communication. These are fairly persistent and repetitive messages; by linking the place to a movie, series or book; his image falls more strongly into human consciousness, creating the desired image. You should also be aware of some of the disadvantages of these forms. A disadvantage is the fragmentation of the environment of the place, its significant attractions, which results, among others from the limited arrangement of the image of a city or region, e.g. in a movie.

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## **Entrepreneurial Challenges through Innovative Business Models – A Sigma Approach**

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### **Abstract**

Technologies, methods and people are the big challenges for companies. Technology trends are driving dynamic change in the digital future. In addition, the dominant IT-driven trends that are currently transforming the world are forcing companies to be agile with new innovative business models and changing business processes. These include, among others, mobility, cloud computing, collaboration, big data, networking of all things or agile business approaches and methodologies. With such big changes, entrepreneurs have always to adapt. Most challenges are in following areas: cash flow management, hiring employees, time management, delegating tasks, marketing strategy, capital or business growth. In order to continuous, innovate the business model all challenges have to be understood and adapted based on the business strategy and market demand. This being said, the paper will answer the following question: What are the best practices for entrepreneurs to innovate their business model, using a sigma approach? To reach the aims of the paper the authors use a descriptive research method, namely a case study and a qualitative research method, namely personal interviews. The case study was used to understand a company's process and actions when it comes to business and entrepreneurial challenges. The authors conducted 14 semi-structured interviews with key employees of companies from various industries. The results are used to understand which business model components are most affected by change, listing the challenges when it comes to innovating your own business model, and what are the 'best practices' for entrepreneurs.

**Keywords:** Entrepreneurship, Business Model Innovation, Six Sigma.

**JEL classification:** L26, M19, O31, O32.

### **1. Introduction**

Some of the “skills” that are needed to run a successful business are knowledge and experience. Someone cannot find the best candidates, create the most efficient processes or address complex problems without project management basics. There are plenty of digital tools to help organize data and progress, but those tools will not be much help unless there are “teammates” that are following smart principles when using them. (Entrepreneur Store, 2019)

If the business concept is new to the world, this has to ensure more flexible, robust, and efficient processes. More and more customers expect and even demand perfect quality, which can be a challenge, for every business or entrepreneur. For a business or startup to be successful, there are multitudes of tasks that need to be completed at the right time and in the right way. Opportunities for errors are high, and they increase as the number employees, skills, activities and processes are growing. In order to analyze the opportunities and to improve the present processes, Six Sigma Methodology will be described and adjusted in the first part of the paper.

Six Sigma is a set of management techniques that originated in manufacturing plants. It was initially created at Motorola to create highly predictable, customer-oriented processes that would reduce the defect rate of Motorola’s electronics to practically nothing. (Entrepreneur

Store, 2010). Today, Six Sigma has benefits that reach far beyond physical manufacturing plants. It provides a powerful framework for delivering better products and services and for being more efficient overall.

From existing case studies such as “LEAN SIX SIGMA STRATEGY: A CASE STUDY FROM SWEDEN” (Anderson, et al., 2014) or “CASE STUDY: SIX SIGMA FOR SMALL BUSINESS” (Six Sigma Daily, 2018), the use of Six Sigma improved the flexibility, robustness, cost-efficiency, and agility at the same time. Quality improvement was a key change, which led to increase of annual sales.

Further, in the second part of the paper, the results of an exploratory study will be presented. The aim of this study is to analyze the results after applying the adjusted Six Sigma methodology and to answer the following question: What are the best practices for entrepreneurs to innovate their business model?

## **2. Literature Review**

The term entrepreneurship, also founder scene or start-up culture, deals as economics sub-discipline with the start-up activities or the creation of new organizations in response to identified opportunities and as an expression of specific founder personalities who wear a personal capital risk (Ceausu, et al., 2018). Entrepreneurship is more than starting a business and using resources efficiently. It includes creative elements such as the systematic identification of market opportunities, the finding of new business ideas and their implementation in the form of new business models and is not necessarily associated with the ownership function. This will fuel the creation of new ventures with innovative business models and open up new opportunities for companies in particular to differentiate themselves from their competitors (Bucherer, et al., 2011).

Society is becoming more flexible, individual and mobile, always connected to the internet and used to receive desired information in the shortest possible time. Consumers are more and more "digital natives", people who either grew up with the new technologies or handle them as if they had grown up with them. They are curious about technological developments and are not afraid of digital purchases (Delgado, 2018). With such big changes, entrepreneurs have always to adapt. Most challenges are in following areas: cash flow management, hiring employees, time management, delegating tasks, marketing strategy, capital or business growth. In order to continuous, innovate the business model all challenges have to be understood and adapted based on the business strategy and market demand (Tohanean, et al., 2018a).

Six Sigma is a systematic approach to process improvement using analytical and statistical methods. The special feature of Six Sigma compared to other process improvement methods is the mathematical approach (MTS Consulting Partner, 2019). It is assumed that every business process can be described as a mathematical function. The Six Sigma components or phases are: Understand, Identify, Data, Solution, Control and Result. To those the following two are going to be added: Implement and Measure - this will bring up to a seven phases approach, not six as the initial design, a more detailed approach and task driven direction.

## **3. Research methodology**

The authors employed a descriptive research method, namely the case study and qualitative research method, face-to-face interviews.

The case study presents a complex analysis of a contemporary phenomenon. Yin (1994) as cited in Tellis (1997) noted three categories: descriptive, exploratory and explanatory. Yin's approach is closely aligned with a realist-positivist orientation, as he conceptualizes this

research method as a form of social science (Harrison, et al., 2017). The case study was employed to understand and learn more about the process and actions of a company when challenges or problems occur.

To achieve the objectives of the paper, the authors, also, conducted 14 semi-structured interviews with key employees of companies from the automotive and IT industry. Companies like: UiPath, Oursson, Continental Automotive Romania, Dell, BMW AG, SC Database for Commerce and Industry Romania SRL, DriveNow, IBM or SAP SE. The interviews were conducted over a timeframe of 8 months, from August 2018 to June 2019. Results are used to understand if the improved Six Sigma methodology can be applied on a larger scale and to understand what challenges entrepreneurs face on a daily bases and by solving them, how they can improve their business model.

In order to collect the needed information, the authors used also different sources such as magazines (e.g. Strategic Management Journal, Forbes, Fast Company, Money, TechCrunch, The Wall Street Journal's Entrepreneurship Section or The Washington Post's On Small Business Section), existing reports on the concept of Business Model Innovation and books from the areas of strategic management, entrepreneurship, knowledge economy, industry 4.0 and innovation. These sources have been found both in electronic databases (e.g. Springer, Wiley Online Library and Amazon) and in libraries (e.g. Central University Library "Carol I", British Council Romania).

#### **4. What does being an entrepreneur mean?**

Entrepreneur is the person who "undertakes" something. To his creative nature always belongs essence, initiative, daring and especially phantasy.

Being an entrepreneur always means being in a coordinating role. Once, this simply meant combining the productivity of the business and the profitability of the business most effectively. Today, humanity is added to profitability and productivity. The entrepreneur is today the person who must bring profitability, productivity and humanity to a fruitful combination. In this case, it should not be forgotten that this also means a coordination of private and public interest (Ries, 2011).

Such tasks require not only knowledge and experience, but above all character. Perhaps one may book it as the good and auspicious of our time, that today no property, no knowledge, no achievement can remain isolated, that everything must be inserted into the larger framework of universal human values. There is only the operation in the context and harmony of the general existence. But the entrepreneur is the person who has to establish this connection.

In short - an entrepreneur usually acts very goal-oriented, committed and does not shy away from uncertainty or risks. Also, the pursuit of improvement is a core feature of an entrepreneur - even in the event of setbacks and defeats.

#### **5. The Six Sigma methodology**

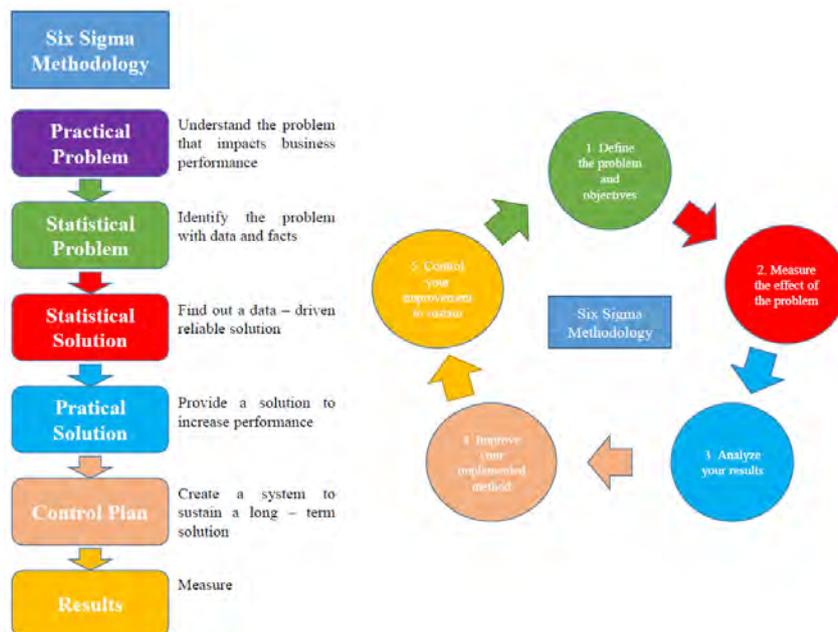
The beginnings of Six Sigma can be found in the 1980s at Motorola, where the method was developed and used for the first time and later led General Electric to success. In recent years, Six Sigma has evolved from a process control term governed by statistical methods to a proven and effective management concept.

The Greek letter Sigma mathematically represents the standard deviation of a population. Sigma is thus an indicator of the deviation from the average. Methodically, Six Sigma seeks to make the performance of processes measurable using metrics. If the scatter is too high and the process capability is poor, then Six Sigma determines the cause-and-effect relationship and identifies the causes of process problems. It should also be noted that Six Sigma is not

exclusively for quality improvement, but can be applied universally to all processes in the company (if necessary).

Today, Six Sigma, as a process improvement method, is often combined with lean management approaches - Six Sigma + Lean = Lean Six Sigma. It emphasizes that both concepts are about avoiding waste, eliminating errors, saving costs, and being quick. As part of a comprehensive customer focus, processes are designed and aligned to fully and economically meet customer expectations and requirements (George, et al., 2004). In the meantime, it is no longer only industrial companies that rely on Six Sigma - service organizations like banks, insurance companies or start-ups also make it the basis for their management and business model. The Six Sigma method applied in a 5-phase model can be seen in Figure 1 (called DMAIC cycle for short):

- *Define* - What exactly is the problem, how big is it and what is the goal?
- *Measure* - Which processes are responsible for this and what is the performance?
- *Analyze* - What are the (significant) root causes of the problem (causal chain)?
- *Improve* - How can the problem be solved?
- *Control* - How is sustainability ensured (anchored in the organization)? (Siemens, 2018)



**Figure 1. Six Sigma methodology applied in a 5-phase model**

Source: Author own creation.

This method is derived from the classic PDCA (Plan / Do / Check / Act) by W. Deming. Building on this method, there are numerous tools (e.g. 7 × 7 Toolbox) that help identify and document problems in existing processes, make processes measurable, and perform analysis.

### 5.1 Benefits of Six Sigma

Six Sigma generates sustainable success, significantly contributing to the growth and survival of a company in fast-moving markets. This can only be achieved through ongoing innovation and organizational change. Six Sigma lays the foundation for a new culture known as the "closed loop" (Tauseef, 2012).

Six Sigma sets or demands performance goals for everyone. Each department, each division and employee has different ideas and objectives. Six Sigma takes this as a basis and

provides among others the actual goals needed at each point within the organization (Zhou, 2019).

Six Sigma increases the value for customers. Only good or error-free products can no longer guarantee lasting success in today's world. Six Sigma helps identify what customers' expectations and expectations are, and then plan how they can be done efficiently and economically (Toyota Production System, 2010).

Six Sigma promotes perpetual learning. In the 1990s, the idea of the "learning organization" fell for the first time. A concept that many like, but difficult to implement. Six Sigma has an approach that can enhance the development and dissemination of knowledge within an organization (Knowledge Management Tools, 2013).

## 5.2 Enhanced Sigma methodology

The Enhanced Seven Sigma methodology applied in a 7-phase model can be seen in Figure 2 (called RDARICM cycle for short):

- *Recognize* – From an early stage identify the problem.
- *Define* - What exactly is the problem, how big is it and what is the goal?
- *Analyze* - What are the (significant) root causes of the problem (causal chain)?
- *Realize* – Realize a solution to increase performance. How can the problem be solved?
- *Implement / Improve* – Implement the solution. How can we improve the solution?
- *Control / Test* – Control and test the solution. Problem is not appearing again?
- *Measure* – Where the processes improved and has the performance been measured?

What is the new business impact?

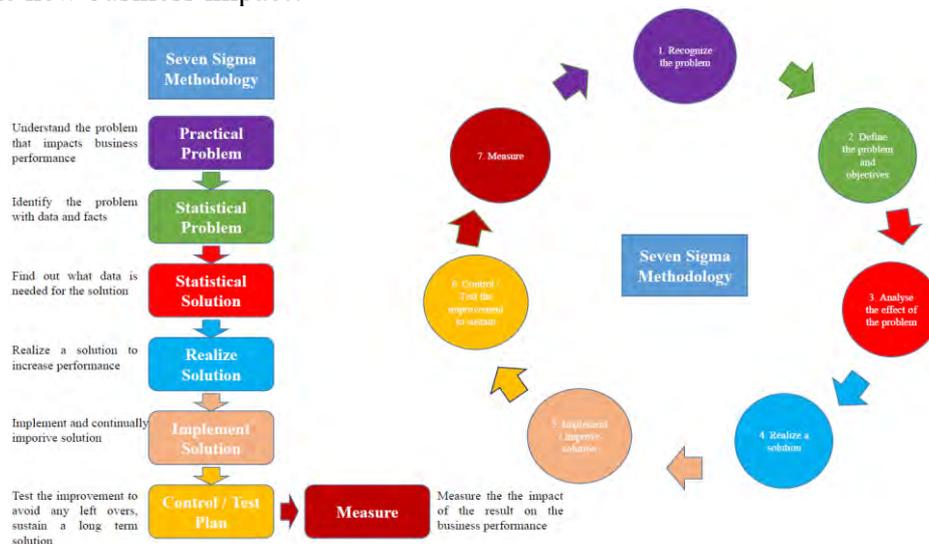


Figure 2. Enhanced Sigma methodology applied in a 7-phase model

Source: Author own creation.

The role of the Enhanced Seven Sigma methodology is to have the ability to understand the information and business challenges of a company and to prepare to respond to changing capacity demands and changing requirements very quickly and if possible in real-time. Problems to be discovered on an early stage, to be solved in a parallel and task driven approach. Main aspects: speed, adaptation, flexibility, dynamics, networking, trust and self-organization are being promoted in the foreground. To be implemented with small steps, on project level – to grow on organization and business unit level. Behavior oriented not process-oriented: individuals and interactions instead of processes and tools, working software instead of

comprehensive documentation, more cooperation with colleagues instead of online contact, reacting to changes rather than just following a plan.

## 6. Results - Entrepreneurial Challenges: How to innovate Business Models?

Self-employment is becoming more diversified and appreciated in Europe and covers an increasing number of activities. In Europe, opportunities related to self-employed status are diversifying and the freelance model has become more attractive for more and more professions. In contrast to traditional self-employed professions like doctors or lawyers, freelancers or entrepreneurs do not have a business background or license – but they have initiative, daring and especially phantasy (Guyot, 2018). They have experience and results based on fieldwork, with a learning by doing approach. In the past years, the self-employed or entrepreneur rate has been increasing from year to year, but there are still big differences from country to country (Table 1).

*Table 1. Self-employment rate EU 2018*

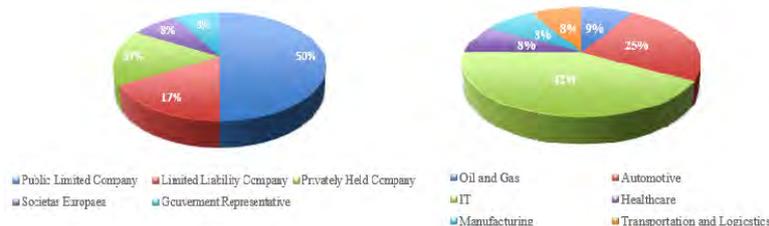
	Denmark	Germany	EU	Romania	Poland	Greece
Self-employment rate EU 2018	8,08%	9,09%	15,80%	17,20%	20,30%	33,03%

Source: Author's own creation, data from Organization for Economic Co-operation and Development 2018

This is a big plus for entrepreneurs that try not to go the traditional way and find in each corner from industries, new business ideas - developing to modern standards and investing in new growing stand-alone ideas. The most popular occupations among entrepreneurs are under the headings 'Professionals / IT' (22%), 'Service and sales' (16%) and 'Craft and related trades' (15%). These categories were followed by 'Agricultural, forestry and fishery' (14%), 'Technicians and associate professionals' as well as 'Managers' (both 12%) (Eurostat, 2019). Together these categories accounted for 90% of the total number of entrepreneurs, the rest of the 10% are divided in 'Transporting services' (Organization for Economic Co-operation and Development, 2018).

Having this as a starting point, we want to highlight what difficulties that most entrepreneurs have on business and international level, what solutions have been found so far and the benefits for business model innovation when applying the Enhanced Seven Sigma methodology.

To reach this goal 58% of the selected companies are located Eastern Europe, 30% are in Western Europe and 12% with activities all over the world. Different industries were taken into consideration - such as IT, automotive, transportation, logistics, healthcare or oil and gas (Figure 3):

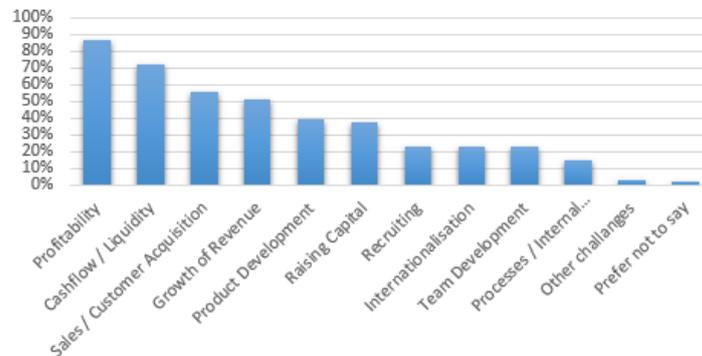


*Figure 3. Legal classification and industry of the interviewed companies*

Source: Author own creation.

Entrepreneurs face many challenges in today's competitive business world. Challenges with daily activities but also with international impact. Fortunately, contemporary times have also blessed entrepreneurs with more resources and possibilities for tackling those problems than ever before (Tohanean, et al., 2019).

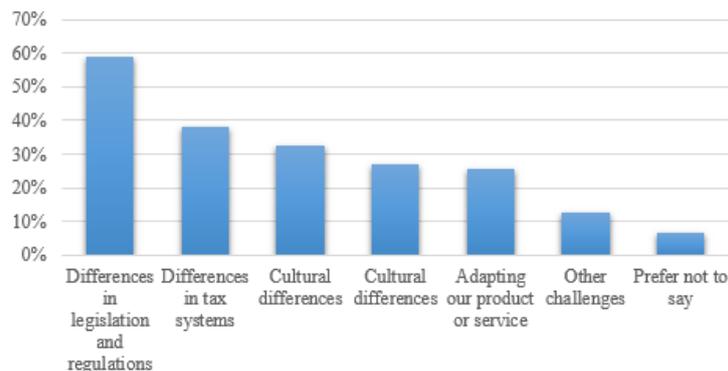
When it comes to daily activities most of the challenges are in finance area with focus on profitability (85%) and cash flow planning (72%). A detailed overview can be seen in Figure 4:



**Figure 4. Challenges for Entrepreneurs with daily activities**

Source: Author own creation.

When it comes to international activities most of the challenges are due differences in legislation (59%) and tax systems (38%). A detailed overview can be seen in Figure 5:



**Figure 5. Challenges for Entrepreneurs when it comes to international activities**

Source: Author own creation.

There are problems in everyday business activity over and over again. The important thing is to actively identify the weak points, develop solutions and then take action. As a high number of challenges, need to be talked – part of them have to be solved in parallel, the Enhanced Seven Sigma methodology has been applied in most of the questioned companies (83%). When applying the new methodology, the topic / problem has to be clearly formulated, so that everyone knows WHY should actually be considered. The problem is considered in the following aspects: RECOGNIZE, DEFINE, ANALYZE, REALIZE, IMPLEMENT / IMPROVE, CONTROL / TEST and MEASURE. Following positive aspects and solution came up after applying the new methodology on project or company level, over a timeframe of 8 months:

- **# 1 Security:** Nowadays, security must be maintained in a system that includes everything from phones, laptops to tablets. Improvement: latest privacy guidelines, secure system and up to date authorization strategy.

- **# 2 High Customer Expectations:** Focus on the topics that will make the business customers happy. Improvement: Better communication channels to customers and suppliers, positive impact on sales and marketing.

- **# 3 Application Operations:** Companies that have invested heavily in legacy software tend to delay upgrading to modern, hosted, or SaaS versions. Improvement: Developing own

mobile or standalone applications, reducing maintenance costs to existing systems, better user experience and increase of security - data flow .

- #4 *Distributed Data*: The more devices and applications are fragmented, the higher the data integration requirements. Improvement: outsource data management to service providers or creation of a common database and centralized data system (e.g. SAP).

- #5 *Permanent availability*: Highly available services are nowadays a matter of course (services also for internal and external activities - maintenance of all departments, few resources). Improvement: Outsourcing - more time for innovative IT strategies, more resources to improve the customer experience and greater awareness that the IT department is a profit center. Parallel project approach.

- #6 *Cash flow management*: Cash flow is essential to small business survival, yet many entrepreneurs struggle to pay the bills while they are waiting for checks to arrive. Improvement: digital strategy (invoice clients from mobile devices), reducing of payment time to 15 working days (half the typical invoice period).

- #7 *Time management*: This might be the biggest problem faced by entrepreneurs, to deliver on time all tasks that are pending or need a solution. Improvement: Creation of systemized and digital - goal and priority list, divided on day and week approach. Better planning and no waste of time.

After applying the Enhanced Seven Sigma methodology many of the companies brought up following findings on project and management level: stopped planning and started preparing, thinking about how to create more, deliver to create value, producing a minimally viable product - grow from a base, growth in small steps for a better control (implement a growth strategy) and continuous improvement (small step approach). The approach to RECOGNIZE, DEFINE, ANALYZE, REALIZE, IMPLEMENT / IMPROVE, CONTROL / TEST and MEASURE – brought a strategic plus to solve and measure the impact of the problems. The result brings up that the future of business models is a methodological approach of problem solving and a digitized approach for service creation and client communication (Tohanean, et al., 2018b)

## Conclusion

The social and economic development of modern business is increasingly characterized by a shift in production conditions characterized by industrialization towards a knowledge-intensive service, information and communication society. In this process of dematerialization of business activities and the associated rise of a knowledge, especially skilled and trained professionals, e.g. entrepreneurs, as well as enterprises founded by them, are becoming increasingly important. As the number of activities or services is growing more and more, with those also many problems appear on the road. Entrepreneurs try to tackle them, but in many times not in a structured or prioritized way.

Applying the Enhanced Seven Sigma methodology many of the companies improved on management and project level, all the activities can be handled in a detailed way, the performance of the organization is growing, better impact on products and communication with clients / suppliers and up to increasing value for products and services. Solving challenges for entrepreneurs, by applying the new methodology - improved and innovated the business model or the project.

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## **TV Audience Measurement in Europe: Do Advertisers Really Know What They are Paying for?**

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### **Abstract**

The paper aims at exploring the models of organization of TV audience measurement systems and applied methodologies with regard to transparency, reliability and overall usefulness in media planning. TV audience measurement has a long tradition in Europe. Broadcasters and advertisers (and advertising/media buying agencies) have always been interested in capturing viewership of TV programs. Both have been using the measured data in decision making, the former for the purpose of program scheduling and air-time sales and the latter for choosing the right media outlets and TV programs for their advertising campaigns. TV rating as a percentage of homes watching a particular TV program have been coined as generally accepted “currency” used in air-time sales. This measure has also been used to calculate GRPs (total rating points achieved in a defined period of time) while shaping media plans and evaluating the effects of advertising campaigns. While it seems that the underlying logic is quite sound and the measured data may be used for evidence-based decision making, one may still question its usefulness in regard to the applied methodologies as well as the overall transparency and reliability of the model of organization of an audience measurement system (AMS). Three models of organization of AMS have been applied in Europe, including own service (OS), media owned company (MOC) and joint industry committee (JIC). The paper discusses advantages and disadvantages of the named models, while focusing on the panel sizes, research methods and defined universe resulting from different models of organization of AMS. Based on two case study analyses (the Czech Republic and Serbia) we claim that JIC as a model of organization of AMS contributes to provision of measured data of higher quality judging by the reliability of data, transparency and equal access to all interested parties of the market.

**Keywords:** advertising, audience measurement, broadcast media.

**JEL classification:** M37

### **1. Introduction**

TV audience measurement has a long tradition in Europe. Broadcasters and advertisers (as well as their advertising/media buying agencies) have always been interested in capturing viewership of TV programs. Therefore, media audience measurement has been regarded vital for successful operations of both media space/airtime sellers (media outlets) and buyers (advertisers and their agencies). Media audience data collection in various forms has been performed for almost a century, dating back to the 1920-ties with the first readership surveys organized in the US. Soon after, broadcast surveys have been put into operations in the US as well as in Europe (UK), firstly with regard to radio audience measurement (as of the 1930-ties) and since 1949 also with TV audience (Estivals, 2000). Broadcast surveys have been of an utmost importance for owners of broadcast media for both program scheduling and airtime sales. As a specific measure, the term "rating" was coined along the first radio broadcast survey representing the audience of a particular medium/station/program as a percentage of the total audience in a given period of time. Even today this and other calculated measures (particularly

GRP) in developed media markets tend to be used as a "single audience currency" for airtime trading.

At the same time, in academic research, audience measurement systems, also referred to as "market information regimes" (Webster, Ksiazek, 2012), have been drawing attention of international academics for more than half a century (Chappell, Hooper, 1944, according to Napoli, 2008b). Specific issues cover methodological and technical aspects of audience measurement systems (e.g. Buzzard, 2002; Bourdon, Meadel, 2011), rating analysis and media audience behaviour including the impact of media audience fragmentation on measurement systems and the change of trading currency (e.g. Napoli, 2008b; Napoli, 2008a; Webster, Ksiazek, 2012; Taneja, Mamoria, 2012; Napoli, 2012). Authors have also paid attention to the monopolistic nature of media measurement (Taneja, 2013) as well as regulatory and self-regulatory issues deriving from the audience measurement system's effect on the diversity of content and sources, media ownership and concentration (Napoli, 2008b; Ginosar, 2014). While it has been acknowledged that audience measurement systems have been of equal importance for the programme planners (i.e. media outlets), advertisers (i.e. advertising and media buying agencies) and the socio-political and regulatory decisions affecting overall media pluralism and media freedoms, the glut of academic literature has mainly focused on the usefulness of the measured data for media planning and evaluation of advertising effects as well as for the sale of advertising time (Buzzard, 2002). Against such a backdrop, our paper also focuses on the usefulness of the measured data primarily for the advertisers, aiming to analyse the benefits and drawbacks of three different models of organization of AMS in Europe.

By mutual consent in academic research, the audience measurements system (AMS) is regarded a natural monopoly even when own service (OS) is the sole applied model of its organization, which is the case in the US. Authors also agree that ratings, as the applied currency, typically measure audience exposure and are mainly based on consumer demographics rather than consumer behaviour. Finally, it is also well accepted in literature that the quality of measured data is directly affected by the sampling procedures and panel size rather than applied data collection techniques and measurements. The above listed general conclusions have been derived mostly from the conducted case study analyses, many of which have discussed various methodological approaches and third-party measurement services provided in particular by advertising media markets (e.g. Buzzard, 2002; Bourdon, Meadel, 2011; Taneja, Mamoria, 2012; Taneja, 2013).

However, to the best of our knowledge, the academic analyses of the models of organization of AMS are rather scarce. Raising the question of whether the advertisers know what they have been paying for, this paper aims at closing the recognized gap in academic literature while performing the same research design based upon the case study analysis. Therefore, our specific goal was to analyse the effect of the acquired model of organization of AMS (i.e. Own Service, Media Owned Company and Joint Industry Committee) on the quality of measured data rather than the developed methodology per se. The rationale for it was found in the fact that TV ratings were mostly measured based upon similar methodology (peplemeters installed in panel households, and performed by one of the three leading media research companies - TAM: AGB Nielsen, TNS: Kantar and GfK Telecontrol). On the other hand, depending on the model of organization of AMS, interested users (i.e. media outlets, agencies and advertisers) may have higher or lower impact on the sampling procedure and panel size and thus on the overall reliability and transparency of measured data.

## **2. Model of organization of AMS in Europe**

The proliferation of media coupled with a strong audience fragmentation has further underlined the need for objective media audience data stemming from a transparent, unbiased,

verifiable audience measurement system (AMS) and assuring equal access to all users (i.e. media outlets, advertising and media buying agencies and advertisers). General principles related to the audience measurement tend to be universally accepted within the industry on the global level (Global Guidelines of Out-of-home Audience Measurement, 2009). Yet, across Europe and worldwide AMS is organized in accordance with one of the three models presented below: 1. Own service (OS) 2. Media owned company (MOC) and Tripartite Research Company Contract (TRCC) 3. Joint industry committee (JIC).

### **1.1. Own service as model of organization of AMS**

This model of organization of AMS is typical for the US, which is particularly due to the Anti-trust law, though, as previously noted, academics have vastly agreed that AMS tends to be a natural monopoly. OS model is also found in measuring TV ratings in a number of European countries such as for example in Bulgaria, Finland, Greece, Poland, Russia, Spain (EMRO Audience Survey Inventory, 2018). Serbia is yet another example of a European country in which this model of measuring TV audience has been applied. In accordance with OS model of AMS organization, the implementation, evaluation and quality control of audience measurements are conducted through privately owned research companies offering their research services on the free market and under equal conditions to all audience data users (media outlets, media buyers and advertisers). Therefore, the research agency runs the survey in accordance with the internally developed methodology and signs individual contracts with interested users (data purchasers).

As such, this model has some advantages and disadvantages in comparison with the other two - MOC and JIC (explained below). The main advantages are higher speed of transactions and no-needs for a long-term commitment to a single data supplier. On the other hand, there are also disadvantages, mostly related to pricing and overall costs of data purchase but also the quality of data (i.e. its reliability and transparency) which need to be taken into serious consideration. Namely, as AMS tends to be a natural monopoly, high prices may limit the access to audience data for a number of potential users without adequate economic power to purchase it. This is particularly the case for small local media, civil society media, non-profit media, thus remaining at the end of the long media tail (Anderson, 2006, according to Webster, Ksiazek, 2012). Equally the same limitation applies to smaller advertisers and advertising agencies, which may not be in the position to purchase the data and thus base their decisions on available evidence. However, economic inefficiency related to overall costs of data purchase of the OS model is also evident even in a theoretical case when there would be few competing data suppliers (i.e. duopoly competition). The latter may lead to a waste of financial and other resources due to a need for purchasing and analysing various data-sets supplied by individual research companies. Instead of purchasing few data sets it would certainly be more efficient to pay for one bigger data set developed to meet various analytical needs. Moreover, AMS organized through private commercial ventures (OS), though sometimes implying possibilities to exercise influence on the survey design and apply control mechanisms by established industry committees or other independent bodies (Syfret, Ruud, 2014), is typically seen as being of "variable quality" due to weak or even non-existent quality control and lack of transparency in research suppliers operations (WFA/EACA Guide, 2001).

### **1.2. Media owned company as a model of organization of AMS**

This model represents an intermediate between OS and JIC. Under this model AMS is organized by a research company owned by one or more media companies, signing individual contracts with as many clients as possible. Therefore, MOCs organize and run the surveys and own the data sets operating as private commercial ventures. They may sub-contract other media research agencies but only with regard to field work. This means that the development of

methodology and application of control mechanisms are the sole responsibility of these organizations.

In certain cases, shares of media research companies may also be held by advertisers and advertising agencies thus constituting the so called Tripartite Research Company Contracts (TRCCs) (Syfret, Ruud, 2014), and *User sector committees (ESOMAR, 2009)*. For its tripartite nature (representation of media, advertising agencies and advertisers), TRCC structure may seem particularly similar to the one in JIC yet it is important to notice that both MOCs and TRCCs are privately owned profit making companies, whereas JICs are typically non-profit organizations (Estibals, 2000).

Like the previous one, MOC model of organizing AMS also has a few advantages and disadvantages. Better cost structure and the fact that financing is guaranteed and shared among interested parties seem to be among the main advantages of this model. Since the contract has been set for a certain period of time it leaves enough space for market competition thus allowing new research companies to enter the market. On the other hand, slower procedures related to setting up the survey and making further changes and improvements than in the case of OS make for its potential drawbacks. Moreover, the risk of potential exclusion (i.e. discrimination) of non-participating market players (particularly those of smaller size) leading to unfair market competition as well as a relatively small influence of media agencies over technical procedures, reporting, data access and costs are certainly the main disadvantages of this model (The WFA/EACA Guide, 2001).

This model of organization of AMS for TV audience measurement has been applied in several European media markets, such as for example Austria and Norway (EMRO Audience Survey Inventory, 2018). In the case of TV AMS, a hybrid system has also been applied in France, where TAM named *Mediamat* has been run by Mediametrie, a research company owned by different media companies and advertising agencies (Estibals, 2000; Burden, Meadel, 2001). Since the majority of capital is held by broadcast media (35% TV stations, 27% Radio Stations), advertisers and media buyers (35%) (Syfret, Ruud, 2014), Mediametrie may be regarded as an example of a TRCC, selling its services to as many individual clients as possible. However, it is interesting to note that the establishment of Mediametrie has not resulted from industrial negotiations among competing companies as should be generally the case with MOC and JIC models of AMS. On the contrary, Mediametrie was established in the process of privatization of the research department of public broadcaster ORTF in 1985 and therefore the state and public broadcasters still remain among important shareholders of this tripartite company.

### **1.3. Joint industry committee as a model of organization of AMS**

Within the JIC model of organization of AMS, a legally established tripartite body (i.e. a committee represented by all the three interested parties - media companies, advertisers and/or their advertising agencies and media buying agencies) commissions a media research agency to perform media audience research in accordance with set specifications. One possible form assumes that JIC is responsible for specifying the terms of contract and organizes tender to select a media research agency who will become an official provider of measured data on media audience for a specified period of time (typically five to seven years). Accordingly, the survey structure, data collection procedures, reporting and control mechanism are set up and supervised by JIC. The committee owns the data sets and therefore may voluntarily decide upon its distribution (e.g. licensing primary users and charging the access to data among non-members) and dissemination (e.g. providing open access to selected sets of data in broader public interest). Another possible form of JIC assumes that this organization has been established for the purpose of verification of measured data (i.e. data auditing) and issuing certificates rather than survey organization in which case JICs are not owners of the data sets.

Whatever the form, the tripartite structure of the organization and its non-profit orientation remain the main characteristics of JICs. According to WFA/EACA Guide (2001) JICs commissioning media research agencies and thus becoming the owners of the data sets are preferable models of organization of AMS due to many advantages over OS and MOC models (Burden, Meadel, 2001). These mainly stem from the fact that the funding for running the survey is guaranteed and since being jointly collected within the industry the overall budget may be much greater than in the case of individual purchases. Therefore, particularly with regard to TV measurement it may allow more sophisticated measurement systems to be implemented (e.g. bigger panels, higher number of channels, including also those at the end of the long tail). As such, JIC is believed to provide a good value for money for its affiliated members and other users, while it also ensures the reliability of data as well as measurement improvements over time (mainly through its technical committees). It increases the chances for a broad acceptance of measured data which may then become *a joint industry currency* used for trading between the media companies and the advertisers/media buying agencies.

Most of JIC organizations have been established in Europe. They operate across various media classes in many European countries (mainly the members of the EU) including for example: Austria (Print and Online), Belgium (all measured media), the Czech Republic (TV, Print, Radio, Online), Denmark (Print), Finland (Print and Radio), Germany (all measured media), Greece (Radio), Portugal (TV), Romania (TV, Print, OOH, Online and Cross media), Spain (Print, Radio and Cross-media), Switzerland (TV, Print, Radio, Online and Cross media), the Netherlands (TV, Print, Radio, OOH and Cross media), Ukraine (TV and Radio), UK (TV, Print, Radio and OOH). The establishment of JIC has also been initiated within media industries of the Western Balkan countries, including BiH (TV) and North Macedonia (TV). With an exception of the US where this model of AMS organization is non-existent, JICs are globally present organizations as is confirmed by the cases of Morocco (Print and Radio) and Hong Kong (TV) (EMRO Audience Survey Inventory, 2018; Syfret, Ruud, 2014).

## 2. Case study analyses

As noted above, most of research studies used case study analyses for deriving conclusions related to the functioning of AMS in the U.S., India and Western European countries (e.g. Buzzard, 2002; Bourdon, Meadel, 2011; Taneja, Mamoria, 2012; Taneja, 2013). Thus we follow the similar research design, while analysing advantages of JIC model of organization of AMS in TV audience measurement over the OS model. With such an aim, in accordance with Yin (2009) we followed the developed case study protocol and set the criteria for selecting the cases focusing on the multiple case study design (i.e. two-case studies). The two cases have been selected based on the following criteria: 1) the countries share similar heritage with regard to media and advertising market development, 2) the countries are similar with regard to population size and 3) each country applies different model of organization of AMS (OS vs. JIC). Against such a backdrop, we have selected Serbia as a country that has gone through transition to market economy, with population size of about 7.022 mill (2017) where OS model of organization of AMS has been applied and the Czech Republic, yet another former transition country with the population of 10.58 mill (2017) where JIC model of organization of AMS with regard to TV audience measurement has been functioning for the last 20 years. Our goal was to analyse if JIC model of organization of AMS may positively affect the quality of measured data, if judged based upon transparency, reliability and equal access for all interested parties. The data collection technique was mainly based on secondary sources (mainly web-sites, press releases and published reports) yet a few personal interviews with relevant stakeholders in Serbia and the Czech republics were conducted as well.

### 2.1. Case study Serbia

The development of media and advertising industries in Serbia has accelerated substantially over the last two decades. The proliferation of commercial media along with the establishment of advertising agencies as well as the entrance of big international advertisers and their advertising agencies on the Serbian market fuelled further growth of advertising revenues, reaching 176 million EUR in 2017 (Nielsen, 2017, according to *Prava mera medija*, 2018).

Media measurement in Serbia has a long tradition, dating back to the 1920-ties when the first Radio audience survey was organized. Radio and TV audience measurements aligned with internationally recognized methodology started as of 1936 and 1952 respectively. According to Mr. Prvoslav Plavšić, public opinion and media audience researcher and general manager of the *RTV Centre for the research of public opinion, program and audience*, the AMS was set up in accordance with the highest international standards owing to the expert support received from the most influential international broadcasters like BBC and RAI. The Centre used various methodologies but the most reliable one proved to be *Day after recall* organized through face-to-face interviews with 1,200 respondents in a representative sample. The measured data were mainly used for program scheduling but also for commercial operations related to airtime sales. Marketing departments responsible for what was called EPP (advertising blocks inserted in TV program scheme) used the measured data to set advertising prices and provide viewership data to their clients. Since the end of nineties, over the period of transition to market economy the audience measurement methodology continued to develop as new marketing research agencies started to provide their services and big international advertisers entering the market. Strategic Marketing & Media Research Institute (SMMRI) offered radio, TV and print measurement in line with widely accepted international methodologies. First TV measurements used diaries, while people-meters were introduced by AGB Strategic Research by the beginning of 2000. Soon after, an international TV audience measurement company TNS Nielsen entered the market, bringing a new methodology.

While in 2003, there was an initiative to establish a TV JIC which failed to succeed, OS is the currently applied model of organization of AMS in TV measurement. The industry has unofficially accepted ratings provided by the only operating research company on the market (AGB Arianna, by AGB Nielsen) as the trading currency, while many smaller broadcast and cable TV providers still use seconds for these purposes.

Due to a relatively small panel size (i.e. 830 peplemeters, based on the sample of 2429 individuals out of 6,8 million TV watching population), as well as the lack of funds, many TV channels have not been reported on regular basis and are therefore remaining excluded from media plans created by big advertising agencies and media buyers. In addition to this fact, the quality of measured data should also be questioned as there is no official verification of the installed peplemetres and applied methodology nor has any legal obligation to publically announce measured data been applied. Hence, in accordance with the applied model of organization of AMS in Serbia transparency, reliability and equal access to data for all interested parties are limited, thus hindering their possibilities to make evidence based strategic decisions with regard to their business relations on the advertising market (i.e. trading advertising ratings as well as developing proper media plans while serving clients).

### 2.2. Case study the Czech Republic

Though currently an EU member state, the Czech Republic has been regarded comparable with Serbia due to its similar economic heritage resulting from the pre-transition period as well as the fact that it has undergone a transition process toward a market economy starting at the beginning of nineties. In that regard, in the sphere of media industry, the most

radical changes included the privatization of media and market liberalization, followed by the intensive growth of the advertising industry. Nowadays, according to the size of the consumer-side of the media market as measured by the size of population, the Czech Republic (overall population size around 10.6 million) is slightly bigger than Serbian (population of about 7 million). Yet, taking into consideration the advertisers-side of the market measured by the overall advertising spending, the Czech media market is about five times bigger than Serbian, reaching around 1 billion Eur advertising revenues in 2017 (Zenithmedia, 2017).

The Czech Republic was the first among the CEE countries to establish TV AMS organized through JIC (ATO) while TV audience measurement was practiced also in the earlier decades (e.g. the use of diaries in TV viewing measurement in the Czech Republic (or Czechoslovakia) dates back to the 1970s). According to Ms Vlasta Roškotova, ATO managing director, *the main reason for establishing ATO was necessity to get more precise TAM (Television Audience Measurement) data and a strong desire for having one common and official (single) TV currency*. Owing to a wide consensus among the big media players across the entire media market, the ATO project of TV audience measurement which started in June 1997 was carried out electronically in 660 households by Taylor Nelson Sofres Media based on the contract signed with the main users associated with the ATO (Czech Television, TV Nova and TV Prima). Initially, only four stations were measured, but over time the project grew in scope both in terms of the number of households covered and TV channels measures. Currently 1,899 households have been included in the panel, based on the sample of 4417 individuals and 9.8 mill TV population. As many as 100 TV channels have been measured and 53 reported by Nielsen Admosphere as the research agency contracted by ATO. Functioning as JIC, ATOs mission is to protect and implement the common interests of its members and organize an electronic television measurement commissioning and implementing research agency. ATO is the owner of measured TV data and therefore the only responsible body for its commercial use, publishing, certification, media analyses and negotiation of technical standardizing, legislative and related measures in the field of broadcasting operations. As of 2010 ATO has also been awarded a status of self-regulator from the Council for Radio and TV broadcasting (the main media regulation authority in the Czech Republic).

Unlike in the case of Serbia, measured data on TV audience are published regularly on ATO web site allowing public access and thus guaranteeing transparency. Data reliability is also supported through continual verification (i.e. auditing) and constant improvements of the applied methodology and the increase of sample and panel sizes. On the other hand, equal access for all interested parties stays hindered to a certain extent due to the lack of financial resources of smaller media outlets, yet the bigger size of the panel allows more channels to be reported than is the case in Serbia.

### **3. Conclusions and managerial implications**

Raising the question of whether the advertisers know what they have been paying for, this paper explores different models of organization of AMS (Audience Measurement System), present in European countries, as these highly affect the quality of measured data, when judged based on their transparency, reliability and equal access for all interested parties. The issue of models of organization of AMS has not been widely examined in the academic literature, compared to methodological and technical aspects. On the other hand, organizational aspects of audience measurement can have significant impact on the quality of the whole AMS, which affects business decisions of various players on the media market, with additional socio-political implications. Therefore, the specific goal of the study was to analyse the effect of the acquired model of organization of AMS on the quality of measured data rather than the developed methodology per se. The three organizational models are identified as mainly

applied in different countries in Europe: Own Service (OS), Media Owned Company (MOC) and Joint Industry Committee (JIC), and evaluated in terms of their main advantages and disadvantages with regard to the quality of data provided. Although the academic analyses of the models of organization of AMS are rather scarce, there is evidence of ascendancy of JIC model, which exhibits several advantages over the others: joint funding, which allows greater budget for the research and implementation of more sophisticated measurement systems, increased reliability of data due to the established audit mechanism, good value for money for affiliated members, regular improvement of methodology, as there is a technical committee operating as a group of experts. As JICs are established by the representatives of main industry players and professional associations, they often succeed in authorizing a joint industry currency, as a widely accepted audience measure on a national level. For deeper understanding of the effects of different organisational models, the multiple case study protocol was applied in the study. Examining the OS model implemented in Serbia, and JIC model in Czech Republic, for TV audience measurement, additional insights into the specifics of the models were provided. Based on around 20 years of the OS or JIC models of AMS practice, in two European countries, with similar socialist and transitional backgrounds, the study confirmed the identified advantages of JIC models, and revealed some others. Although the methodologies are similar, there are differences regarding the sample and panel size, which are larger in the case of JIC model in Czech Republic, providing better reliability of data, additionally increased by audit mechanism developed and implemented by the JIC. Audience data were transparent in the case of JIC model, available on the website of organizations. Due to joint funding, ATO – JIC manages to include a larger number of different media, even the smaller ones, into the sample, providing more relevant data for different industry players, which is one of the main problems of OS model. The case study analysis supported our assumption that JIC model of organization of AMS positively affects the quality of measured data, if judged based upon transparency, reliability and equal access for all interested parties.

As the academic analyses of models of organization of AMS are rather scarce, especially in the East and South-East Europe, the study provides a valuable contribution to understanding the main effects of different organizational models of AMS on the quality of data. Since the quality of data is evaluated primarily from the standpoint of advertisers, the main implications of the study can be proposed from the same perspective. JIC model has a high positive influence on data transparency, reliability and equal access providing advertisers and their professional organizations possibilities to rely on JIC model of organization of AMS. In the absence of such an organization, they should therefore encourage its establishment and proactively initiate it, with other relevant interested parties. Apart from the implications on the side of advertisers and their agencies, the organization of AMS is a relevant issue for regulatory bodies, due to various social and political implications of audience measurement. JIC model of organization of AMS can increase media pluralism, by enhancing the market position of small, local media which are often excluded from the measurement in other organizational models.

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## Subjective Well-being and Social Media Use in Emerging Adulthood: Findings from two UK University Millennial Cohorts

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### Abstract

The notion that engagement with social media platform reduces adolescents' and young adults' well-being has become a recurring feature in public and scientific discourses. The actual level of psychological and behavioural evidence, however, is in stark contrast with the certainty voiced by many commentators. There is little clear-cut evidence that social media engagement reduces adolescents' & young adults' wellbeing, and most conclusions are drawn from exploratory studies mainly focusing on the Facebook microblogging usage, a 15 years' old functionality that British adolescents and young adults (18-25 years' old) have, to date, abandoned en masse. The present research independently collected two nationally large-scale data sets from the British Isles (total N = 600 after data exclusions) and included detailed self-reports of social media use on numerous platforms. We used measures of subjective wellbeing and life satisfaction drawn from OECD surveys and assessed social cognitive dimensions (e.g., social comparison). The research makes use of both data mining tools and confirmatory designs to bring analytical improvements to a growing research area. We found robust evidence for several negative associations between social media engagement and adolescents' and young adults' well-being. Those findings on the behavioural consequences of social media usage raise further issues relevant to many actors in the community: for the academic researchers, for the technology industry, and also for the community organizers as any society has to understand how it is shaped by technological change. The present results are particularly relevant for making the most effective use of citizens' engagement in future e-government systems.

**Keywords:** Well-being, Life satisfaction, Social media.

**JEL classification:** M30, I31.

### 1. Introduction

Throughout human history, the introduction of new communication technologies has had a repeated radical effect on human behaviour, and has triggered numerous adaptations. For instance, in Plato's *Phaedrus*, Socrates sounded the alarm at the impending societal crash that would be caused by a literate society whose memory would be weakened by the ability to read, write, and always on the pursuit of information. Two millennia later, similar fear was also present in inquisition defenders' belief that the printing press was a threat to culture, social order and morality. Nowadays, such concerns may still influence current deliberation on the

effects of social media engagement on human behavior, but also substantiate the present research efforts.

Currently, we are still in a relatively early stage of a continuous digital transformation of society hence the impacts of such innovation are difficult to grasp. Since the turn of the century, social media platforms have become the primary vector of communication for adolescent and young adults in the UK and elsewhere (Anderson & Jiang, 2018). Undoubtedly, the usage of social media can lead to positive outcomes in terms of social support or access to knowledge, and has created a radical new way for young people to meet, share information, and entertain themselves. However, a mounting body of evidence suggests an association between social media use and poor mental health among young people (Verduyn *et al.*, 2017; Kelly *et al.*, 2018), as well as a gender imbalance in these adverse outcomes, with girls being more affected than boys (Booker *et al.*, 2018). What could be the potential roots of this association? Here, we propose an interaction of multiple pathways at the individual, interpersonal and cultural levels.

At the *individual level*, a brain imaging study by Sherman *et al.* (2016) has revealed that the number of “likes” an Instagram post has gathered automatically changes its attractiveness to adolescent viewers. This effect relies on a mechanism deeply rooted in the brain. Functional MRI showed that when participants saw a highly rated image, neural reward circuitries (the *nucleus accumbens* in the Basal Ganglia) were more active, which would suggest that the picture was associated with being better irrespectively of the content. Here, brain research suggests that a simple constraint on neurocognitive processing can explain why teenagers react so strongly to what they consider “endorsement” of content.

At the *interpersonal level*, Sherlock & Wagstaff (2018) showed that excessive Instagram use might lead to adverse psychological outcomes and poor appearance-related self-perception; these effects would be mediated by an idiosyncratic propensity to engage in social comparison. In other words, over-usage of Instagram would lead to self-perception issues because it would increase one’s tendency to compare themselves with others. It is difficult to imagine how the founders of Instagram, Snapchat or Facebook could have predicted that their creation would hedge on cognitive and socio-cognitive processes that can facilitate the development of poor subjective well-being at a critical age when emerging adults are particularly vulnerable (McLaughlin & King, 2015). However, developmentally speaking, it wouldn’t be hard to guess why teenage and young adult users of such platforms would be more at risk for adverse effects than others. Moreover, the fact that depressed young people tend to carry this fragility with a higher risk of developing mental health problems throughout their lives (de Girolamo *et al.* 2007) poses a global challenge to population wellbeing and calls for robust scientific investigations.

Finally, at a *cultural/societal level*, there is a need to understand the potential intervening pathways that relate young people’s wellbeing to social media usage to plan for remedial or educational interventions, to inform policy-making with evidence-based data, and to shape the way marketers can sustainably and ethically use these media in order to promote products and services. Two thousand five hundred years ago, Aristotle argued that the ultimate goal of democracy is to maximize people’s wellbeing. In contemporary times, the scientific measurement of one’s wellbeing is considered a useful metric to assess society’s response to social, economic & technological changes. This information can be used by policymakers and economists to appraise the effects of interventions and stimuli (Dolan & Metcalfe, 2012), and by innovators or marketers when forecasting new products. In order to make our measurement of well-being domain-independent and more relevant to the study of the psychological impact of social media usage, we concentrate on an original dimension of well-being: Eudaimonia, the worthwhileness of things in life (Dolan & Metcalfe, 2012). Eudaimonic theories understand humans as having complex, high-level psychological needs (control, meaning, autonomy, need

for connection) that contribute to well-being independently of the pleasure they can bring (Ryff, 1989; Ryff & Keyes, 1995).

We collected data from two cohorts of emerging adults (age 18-24), students in the UK, to assess whether social media and online engagements are associated with decreased subjective wellbeing (in its experiential, evaluatory and eudaimonic aspects). Additionally, we explored the potential explanatory pathways for the observed association, such as self-esteem, online harassment, sleep quality, and social comparison.

## 2. Methods

Data from two samples of 300 emerging adults (59% female, age 18-24, students, resident in the British Isles) were collected. Independent data collections allowed assessing results' robustness through internal replication, a routine methodological procedure in biomedical research for correlational design (Boy *et al.*, 2010a, Boy *et al.*, 2010b, Boy *et al.*, 2011). Participants were selected from Prolific Academic (PA) crowdsourcing participant pool. Unlike alternative providers, PA applies *higher* and more stringent standards when vetting potential subjects that reduce the likelihood of Bots-generated responses (Bradley, 2018). The present dataset was collected between 29/05/2019 and 10/06/2019. We analyzed data from 600 participants answering 58 questions described in Table 1.



**Figure 1. Respondents' IP address approximate geolocation.** These geolocations are generally considered accurate at the city level. The present datasets were collected between 29/05/2019 and 10/06/2019

**Table 1. Measures used in analysis**

Measure	Questionnaire items	Analysis variable
Subjective Well-being (SWB)	<b>Evaluation measures:</b> 9 questions about general life satisfaction plus domain satisfaction (e.g., personal relationships, physical health, mental WB, work situation, financial situation, are, free time, finances) <b>Experience measures:</b> Affect over a short period "Overall, how happy did you feel yesterday?"; "Overall, how worried did you feel yesterday?" <b>Eudaimonic measures:</b> Worthwhileness of thing in life "Overall, how worthwhile are the things you do in life?" (All measures adapted from Dolan & Metcalfe, 2012)	* 1-10 Likert scales slider (Strongly Agree/Strongly Disagree)
Social Media & General Online Engagements	<b>Respondents were asked (example questions):</b> "On a normal weekday during term time, how many hours do you spend on social networking apps online, such as Facebook, Twitter, Whatsapp?"**. "On a typical day/week, list all the social networking apps where you post pictures, photos or messages on?"***; "How many hours do you spend online on a typical week/weekend day" **;	* 1-10 Likert scales slider (Strongly Ag./Strongly Dis.) ** Numeric, open-ended *** Transformed into the number of social app used
Social comparison Orientation	Social comparison SC is defined as the extent to which individuals pay attention to and base their behaviour on the way others behave. The present research used the Social Comparison Orientation scale (Gibbons & Buunk, 1999)	* 1-5 Likert scales slider (Strongly Agree/Strongly Disagree)
Online harassment	<b>As Receptor:</b> "How often have you received unwanted or nasty e-mails, text, pictures or messages?" (Adapted from Kelly <i>et al.</i> , 2018) <b>As Perpetrator:</b> "How often have you sent/posted unwanted or nasty e-mails, text, pictures or messages?" (Adapted from Fahy <i>et al.</i> , 2016)	Two 5-category variables were created: all/most of the time; often; a little of the time; and none of the time.
Self-esteem	We calculated a Self-esteem index through the summation (signed) of the scores at the items of the Rosenberg scale: "On the whole, I am satisfied with myself."	* 1-5 Likert scales slider (Very much so/Not at all)
Sleep Quality	A sleep quality index was constructed from answers to question pertaining to sleep duration, sleep latency, number of sleep interruptions over the last week (Adapted from Kelly <i>et al.</i> , 2018)	* 1-5 Likert scales slider (Most of the time/None of the time)

To examine how much markers of social comparison, online harassment, sleep quality, body image and self-esteem explain the strength of association between social media engagement and subjective well-being we ran a correlation analysis and modelling of the intervening pathways with a structural equation. Analyses were carried out in R and SPSS/AMOS.

### 3. Results

#### 3.1. Is social media engagement robustly associated with lower wellbeing in emerging adulthood?

The negative association between social media engagement during weekdays (WD) or at weekends (WE) and the eudemonic dimension of well-being (worthwhileness of life) was strong ( $r_{WD-EU} = -.32, t_{598} = 5.84, p < 1.76e^{-8}$ ;  $r_{WE-EU} = -.29, t_{598} = 5.15, p < 5.66e^{-7}$ ). We assessed the robustness of those relationships by computing them separately for each of the two independent cohorts ( $r_{S1:EU-WD} = -.30, r_{S2:EU-WD} = -.33$ ). Interestingly, decreases in sleep quality (SLQ) and self-esteem (SEI) indexes were also associated with higher social media engagement (WD & WE; all  $r_s > .14$ , all  $p_s < .05$ ). Rather surprisingly, no negative associations were found between online engagement measures and a global satisfaction with mental well-being ( $r_{MW-WD} = .02, p = NS$ ;  $r_{MW-WE} = .04, p = NS$ ).

**Table 2. Intercorrelation table between the primary variables of interest (for readability only the Eudaimonic dimension (EU) of wellbeing is presented, other measures will be included in forthcoming PCA and Structural Equation Modelling analyses. Significant correlations ( $|r|_{(598)} = .1040, p < .05$ , 2-tailed & Bonferroni corrected) are highlighted in red and blue.** EU: Eudaimonia; SC: Confidence in using social media; WD: Weekdays social media engagement; WE: Weekend social media engagement; SLQ: Sleep Quality Index; BWS: Body weigh satisfaction; AGS: Age at which participants started going online; AGD: Age at which participants owned their first internet-capable device; SLQ: Sleep quality index; SEI: Self-esteem index; SCI: Social comparison Index; EXIN: Experience with the internet (in years); EXDE: Experience with connected devices (in years); SEI: Index of self-esteem (from Rosemberg scale); SCI Index of social comparison; HER: Frequency of online harassment (as perpetrator); HER: Frequency of online harassment (as victim); EXAM: number of SM platform used to post content over the course of a day

	MW	SC	WD	WE	EXA	PPW	EXI	EXD	AG	GEN	BWS	SLQ	SEI	SCI	HED	HER
EU	.01	.07	<b>-.32</b>	<b>.29</b>	.08	-.02	<b>-.11</b>	-.02	.03	.05	<b>.12</b>	<b>-.26</b>	<b>.45</b>	<b>.40</b>	-.09	-.05
MW		.02	.02	.04	-.04	-.05	.04	.05	.02	.00	.07	.00	.04	.08	-.02	-.05
SC			.08	<b>.06</b>	.10	.07	.07	.07	.00	.02	-.01	-.07	.10	.09	.05	.05
WD				<b>.70</b>	-.03	-.02	.10	.07	<b>.03</b>	<b>-.16</b>	-.03	<b>.14</b>	<b>.15</b>	.10	.02	.02
WE					-.08	.04	.08	.03	<b>.10</b>	<b>-.15</b>	-.03	<b>.16</b>	<b>.19</b>	.10	.04	.04
EXA						-.06	<b>.17</b>	.09	<b>.17</b>	.03	.05	-.07	.08	.02	-.04	-.01
PPW							<b>-.15</b>	<b>-.14</b>	<b>.24</b>	<b>.11</b>	<b>-.12</b>	.05	.04	.01	.09	.03
EXI								<b>.62</b>	<b>.63</b>	-.04	.04	.03	.03	<b>.18</b>	-.06	-.02
EXD									<b>.65</b>	.03	<b>.13</b>	-.07	.05	.04	-.03	.00
AG										.03	<b>.12</b>	-.04	.06	<b>.26</b>	-.10	-.09
GEN											<b>.17</b>	-.06	.01	.02	-.04	-.07
BWS												.02	.01	<b>.49</b>	.02	-.05
SLQ													<b>.28</b>	<b>.33</b>	.08	.00
SEI														<b>.73</b>	<b>.16</b>	.02
SCI															<b>.17</b>	.01
HED																<b>.36</b>

### 3.2 Are markers of social comparison, sleep quality, body image and self-esteem actors in the pathways from social media engagement to well-being?

A multiple regression was run to predict Eudaimonic well-being from social media engagement, the number of social media used, the age at which the participant started to use social media, and the number of image posted per week. These variables, except for the number of pictures posted per week, significantly predicted well-being,  $F(4, 595) = 21.818, p < .001, R^2 = .128$ . All variables added statistically significantly to the prediction,  $p < .05$ .

The matrices of covariance from sample 1 and sample 2 were separately modelled in a structural equation (SEM); Fig. 2 gives a graphical indication of the overall strength of the pathways (Dataset 1:  $N = 300, RMSEA = .074$ , Dataset 2:  $N = 300, RMSEA = .085$ ). Both path models obtain acceptable standardized root mean square residual (sRMR) indices: Sample 1:  $sRMR = .076$ , Sample 2:  $sRMR = .081$  (Hu and Bentler, 1999). Even though those measures of fit are not exceptionally good, the reasonable general path structure of the SEM found for sample 1 is replicated in that modelled for sample 2.

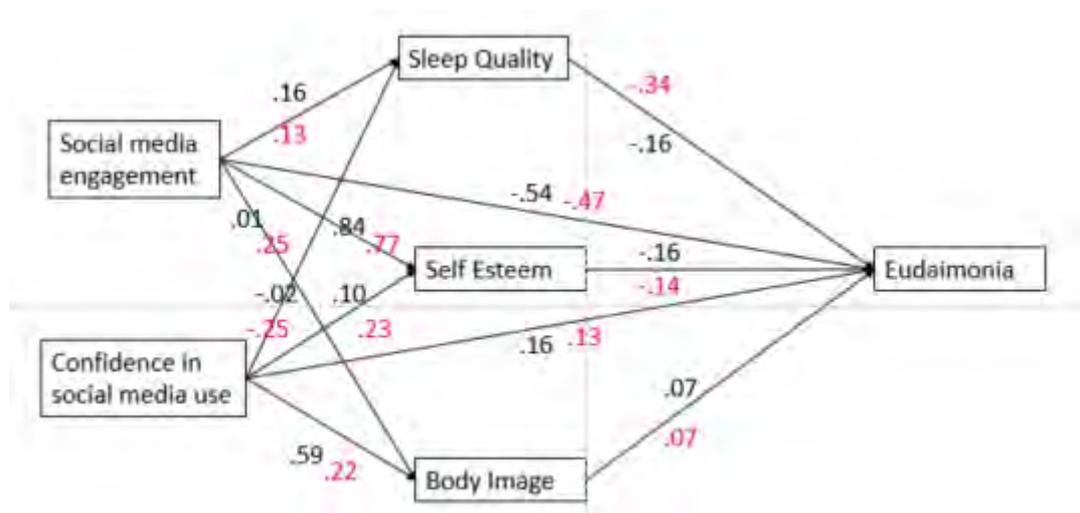


Figure 2. Social media engagement and confidence and Eudaimonic well-being – summary of path analyses and internal replication (coefficients of correlation, black: sample 1, red: sample 2, black).

## 4. Discussion

Among a cohort of 18-24-year old living in the United Kingdom, we found a negative association between social media engagement and the Eudaimonic aspect of wellbeing, a judgement of the worthwhileness of things in life. Data from two samples/cohorts showed that the higher their social media engagement, the lower their judgment that, overall, things they do in life were worthwhile. What implications does this result have on one's engagement with day-to-day life, planning for the future, and motivation to achieve the plans made? The present findings are relevant to two contemporary and timely issues: the discussion on the profound adverse effects of social media engagement on psychological wellbeing, and a more general debate around the sustainable development of digital technology and its societal effects.

Digital technology is transforming our lives at an accelerating pace. This feels at the same time both wildly liberating and terrifying, as cyberspace is disorienting and can trigger changes in the way humans process and interpret sociocognitive signals. The associations between social media use and life satisfaction, mental health or well-being are more complex and nuanced than initially thought: they are inconsistent, possibly dependent on gender and the methodology employed to study them. The conclusion might also be affected by underpowered

research designs and publication bias. Where the best research practices are respected, most effects size are small and are not significant in more than half of papers (Orben et al., 2019). That understood, some effects are worthy of further investigations.

We have found a robust relation between social media engagement and eudaimonic well-being, and that pleads for further work. We are currently addressing this issue while looking at individual differences in gender and personality. Of particular interest is the mediating effect of social comparison on the relationship between Instagram usage and a range of indicators related to mental well-being (Sherlock & Wagstaff, 2018). This effect is not a novelty, and the detrimental effects of Facebook-induced social comparison on mental health had already been documented at a relatively early stage in the development of social media (Kramer, Guillory & Ophof, 2014). More recently, Nesi & Prinstein (2015) found that such Facebook and Instagram-induced social comparison had a carry-over effect on the intensity of depressive symptoms observed one year later. The mechanism by which Instagram “likes” are interpreted as rewarding/reinforcing stimuli by the brain (Sherman *et al.*, 2016) is potentially a driver of effects observed at the social and individual levels.

Routinely, the social media industry claims that it is taking these issues on-board, but it is difficult to gauge their seriousness and their actual understanding of the pervasive effects on mental well-being. Recently interrogated about a highly-publicized case of an adolescent girl suicide, where distressing material about depression and self-harm was found in her Instagram feed, Facebook’s vice-president of global affairs assured that a technical solution physically blurring such content was now implemented (BBC.co.uk, 2019). However, this reassuring declaration was somewhat tarnished, rapidly moving on to accusation of a rampant “tech-phobia” in society and an appeal to individual responsibility when handling social media platforms. It is apparent that the industry has more work to do before being trusted.

## Conclusion

As knowledge accumulates, the effects of social media are better characterised, but there are still many unknowns, and the fast development cycle of social apps and technology make it challenging to define the problems and strategically tackle them. When facing this complexity, it is critical that independent academics, policymakers, and industry scientists collaborate more closely. It is solely with the researchers’ circumspection, methodology and transparency that the global community can provide social media companies, marketers and policymakers with the reliable insights they need on a matter most often characterized by media hysteria. As suggested by Bell *et al.* (2015), the field needs less shock and more substance. The fair scientific appraisal of the evidence will only be possible if social media companies and large commercial organizations using them, come to support independent, large-scale, open science by allowing access to users’ data. Only then will we be able to understand the forces shaping the young generation in the digital age, and therefore become a source of evidence for improving the internet and its (self-) regulation.

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## **Customer Satisfaction and the Factors of Influence: Quantitative Marketing Research undertaken at the Main Banks in The Central Region of Romania**

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### **Abstract**

This article contributes to research on the satisfaction of consumers of banking services based in the Central Region of Romania. This article seeks to measure the general level of satisfaction through quantitative marketing research using a survey poll. The data is collected online from adults who live in this part of the country by using the Computer Assisted Web Interviewing (CAWI) methodology. Research focuses on five topics: the employees skills and how they contribute to the level of quality perceived by clients; how a banks' image influences the level of the quality; how satisfied clients are with the way that their complaints have been solved; the influence of the prices; and the influence of digitalization on quality as perceived by customers. The results seek to identify the attributes with the most important role in customers' satisfaction. The employees' skills which received the highest scores are the following: paying attention to the customers; good knowledge of products and services; and professional competences. In addition, customers appreciate factors affecting a banks' image such as being a secure bank, being accessible, having financial strength and adopting a friendly approach. By applying the Pearson's methodology to determine the most significant correlations, it is highlighted that: prices; Contact Center services; and the level of satisfaction with the way complaints have been solved are strongly correlated with the level of quality services as perceived by clients. However, the most remarkable finding from the research is that customers place a particular emphasis on working with flexible and modern banks, but simultaneously these two attributes recorded the lowest quotes among clients' perceptions of their actual main bank. This is challenging the banks to set it as priority axis for improvements, in order to deliver better quality services.

**Keywords:** customer satisfaction, quantitative marketing research, survey, banking, quality services.

**JEL classification:** M31, G21.

### **1. Introduction**

In the last years there have been drastic changes in the local and international banking market and population perceive banks as the cause of many negative events and yet, without banks economy cannot function. Therefore, after the banks' image have been deteriorated, banks focus now on regaining the lost customer confidence. In addition, customers have become more demanding and want to get from personalized offer and simple solutions, easy to understand and apply. The demands of the customers not only reflect in the banks' offers for products and services, that they want to be as complete and clear as possible, but also in the way they interact with the bank staff. Expectations are growing and clients want to work with institutions that are directly concerned about their personal projects and goals, want to have a friendly, even empathetic dialogue.

Given the fact that banks operate in a mature market in Romania, where the continuous development of the business cannot be achieved only by attracting new clients, but rather by relying on the current clientele, it becomes a necessity to design and apply banking service quality programs. In this sense, the objective of the research is to identify the degree of satisfaction of the consumers of banking services in the Central Region as well as the factors of influence, in order to highlight the improvement axis required to be immediately implemented in the banks in order to deliver better services.

## 2. Literature review

Parasuraman, Zeithaml and Berry, through numerous researches, have defined a general model of service quality assessment, and Fornell (1994) and Reicheld (1998) have outlined two international benchmarks for the quality of banking services: Net Promoter Score (NPS) and American Customer Satisfaction Index (ACSI)

In Kaufman's opinion (2013), considered to be a global authority in the field of superior service quality, the value of shareholders tends to grow in line with reputation in services. Thus, the positioning of superior services in the organizational culture of companies in general and of banks in particular facilitates the growth of prices and profits.

Conceptually and theoretically, the quality of services is determined by the gap between "perceptions" and "expectations", as Parasuraman, Zeithaml and Berry have shown. In order to determine the general level of satisfaction, the present research analyzes both the customers' expectations and their perceptions of the services received.

Success for banks today is a mixture of attractive financial offers and a culture of superior services, as it's the only way make notable differentiation in the market.

Transforming every employee in a person who is constantly asking "*what I have to gain*" in one who thinks "*what can I do for you to receive more value*" are the basic principles of organisational culture based on Services of Excellence (Ron Kaufman, 2013).

According to a study conducted by GfK in October 2013, ING, Raiffeisen, Transilvania Bank and BRD Société Générale are the best-reputation banks in Romania. The results of the study show that more than 60% of the urban banking customers work with one of these banks.

The study was performed using the GfK Reputation Management Model – RepMan®. In the opinion of those who participated in the study (urban, bancarized population), the characteristics of a reputable banking institution are as follows:

- ❖ Customer orientation in a win-win approach, so that the interests of the parties are properly managed;
- ❖ The client is centrally positioned, and actions and processes are geared towards satisfying the needs in a better manner;
- ❖ Trade relations are built on trust and thus tend to last on long-term
- ❖ Management is based on values such as: honesty, transparency, ethics and accountability.

Another study, conducted in 2012 by VBS Client Research & Consulting, observes through a qualitative mystery shopping analysis that Romanian banking standards involve superficiality, lack of professionalism and serious mistakes of behavior. (Meseșan Cosmina Voichița, 2014).

The study was conducted at the main banks in the system, through interview operators, also known as "mysterious customers", which followed a scenario to obtain information on financing solutions to acquire a Real estate, through the "First House" program, or other financing solutions offered by the banks.

Serious behavioral deficiencies have been noted through all the processes. The polite formulas were missing and the basic rules of networking have not been applied, in most cases. Only 37.5% of bank consultants offered business cards to the customer.

The skills of the banking staff have been modest on identifying the needs of the clients and providing appropriate solutions to their needs. Just a third of the consultants have performed a custom simulation to the customer, the rest did not give interest in generating some repayment graphs and handing them to the customer's deepening.

The findings of the study indicate that during the time elapsed from the financial-banking crisis of 2008 to 2012, the focus of banks was not on customers, but on maintaining profitability

through the adoption of efficiencies and preadaptation to the market context, so many banks have closed branches and agencies, and the quality of services has suffered.

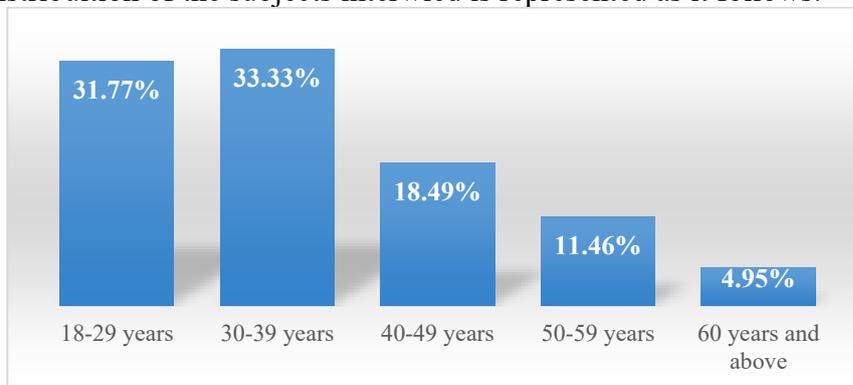
It can be concluded that banks didn't provide specialized consultancy for customers in the aforementioned period and is the main reason for which disappointing results have been accounted for on both sides. (Meseşan Voichița Cosmina, 2014).

### 3. Methodology and Framework

The quantitative research uses the survey methodology as a data collection tool for the questionnaire. Data collection and analysis took place over a period of 4 months during 2018. The questionnaire on which the data was collected includes 35 questions related to the behavior, expectations and perceptions of consumers of banking services in the Central Region of Romania. Eight of them were questions to characterize the surveyed population.

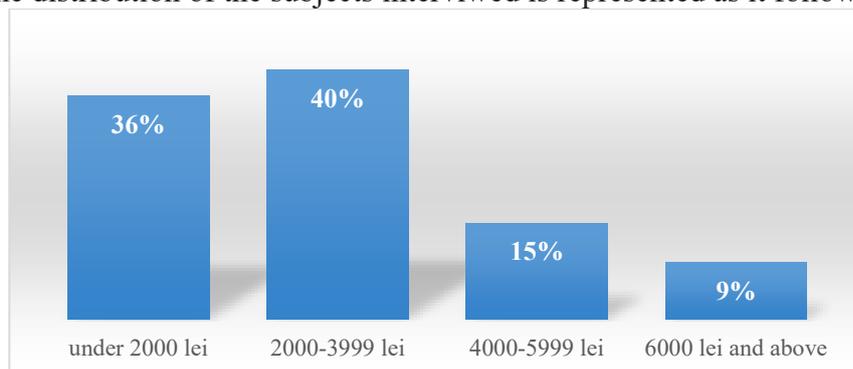
Subjects of both sexes were interviewed taken from the six counties of the region: Braşov, Covasna, Harghita, Mureş, Sibiu and Alba. 384 questionnaires were collected in the online environment.

The age distribution of the subjects interviewed is represented as it follows:



*Figure 1. The age distribution of the subjects interviewed*

The income distribution of the subjects interviewed is represented as it follows:



*Figure 2. The income distribution of the subjects interviewed*

The collected data was processed through the Statistical Package for Social Sciences SPSS (Statistical Package for Social Sciences), which analyzed aspects related to the behavior and satisfaction of the consumers of banking services in the Central Region of Romania.

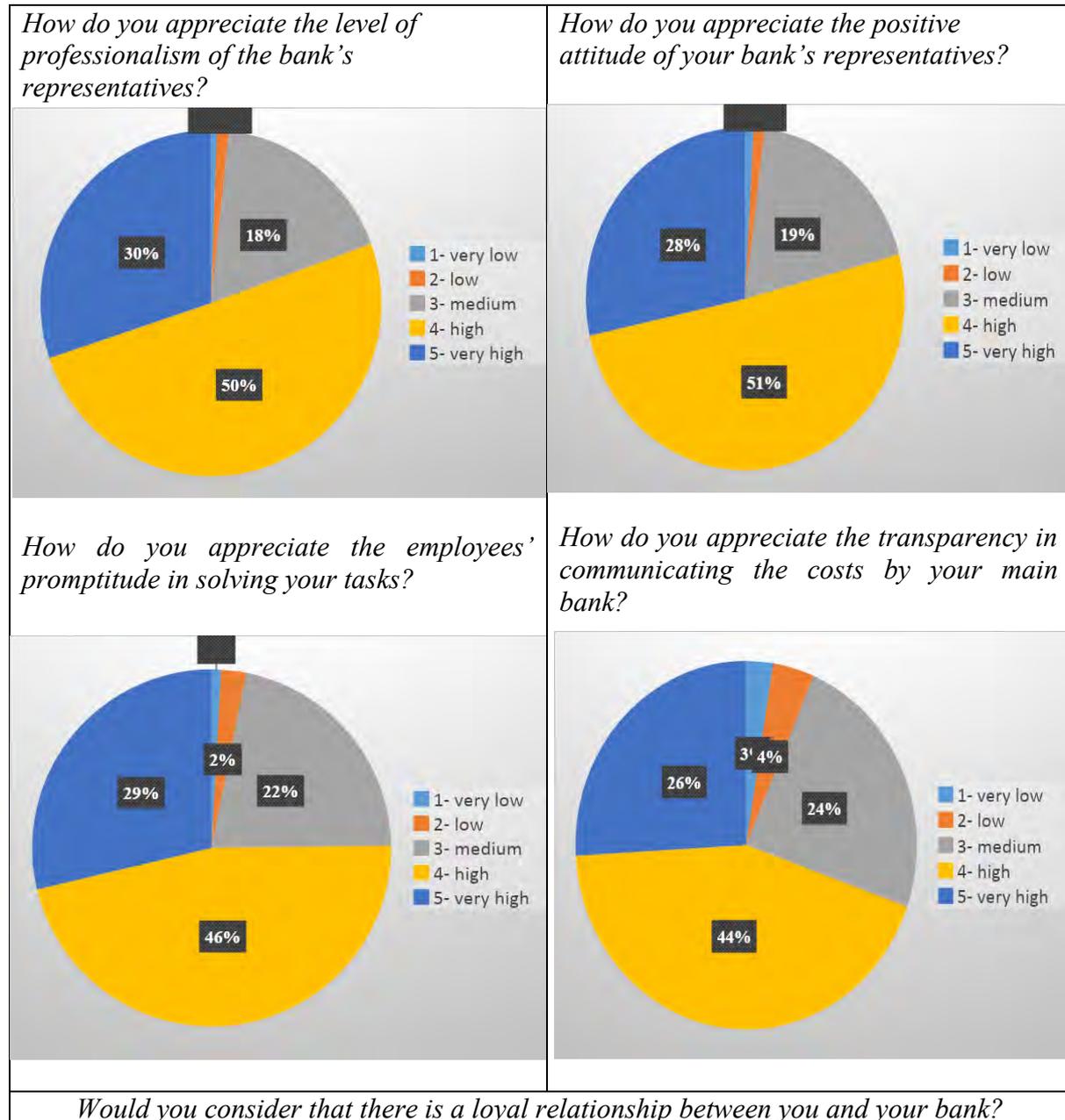
### 4. The Results of the Quantitative Marketing Research

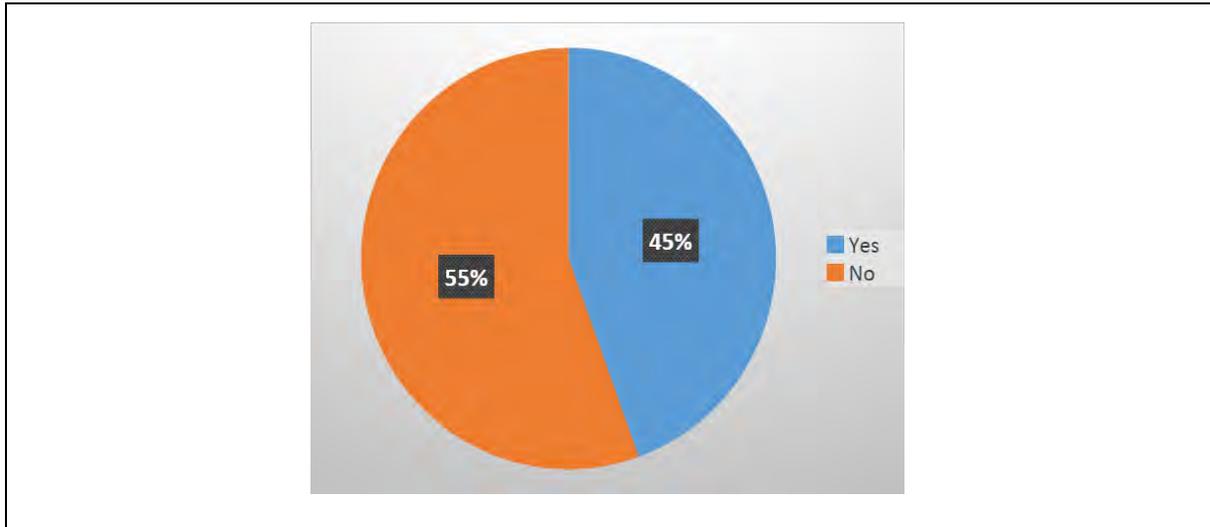
The following chapter presents the customers' feelings, opinions and perceptions of the level of satisfaction they get when consuming banking products and services.

#### 4.1 Analysis on the Employees Skills as perceived by the clients

The study reveals customers' perceptions of employees' interactions and the factors which are most important in setting a high quality banking service.

The subjects interviewed gave answers to 5 questions on the way they appreciate the skills of the employees and the results are presented below:





*Figure 3. The customers' perception on the bank employees skills*

Most of the customers consider that bank's employees have "high" level of professionalism and positive attitude, while the promptness of bank's employees and the transparency has lower incidence.

More than 50% of customers believe they don't get special treatment from employees, while 45% think the opposite. This indicates that employees do not continuously try to empathize with clients.

The interviewed subjects were asked which employees' skills they considered most important in influencing the quality of services.

The results show that 76% consider that paying attention to clients' needs and understanding the products and services are the most important, followed by professionalism (73%), discretion (70%) and promptness in solving their tasks (68%).

65% consider that positive attitude and availability are important attributes, too.

Less than half find that *sociability, smile, and the way employees promote products* are very important skills for bank's employees, while only 21% believe that *physical appearance* is very important.

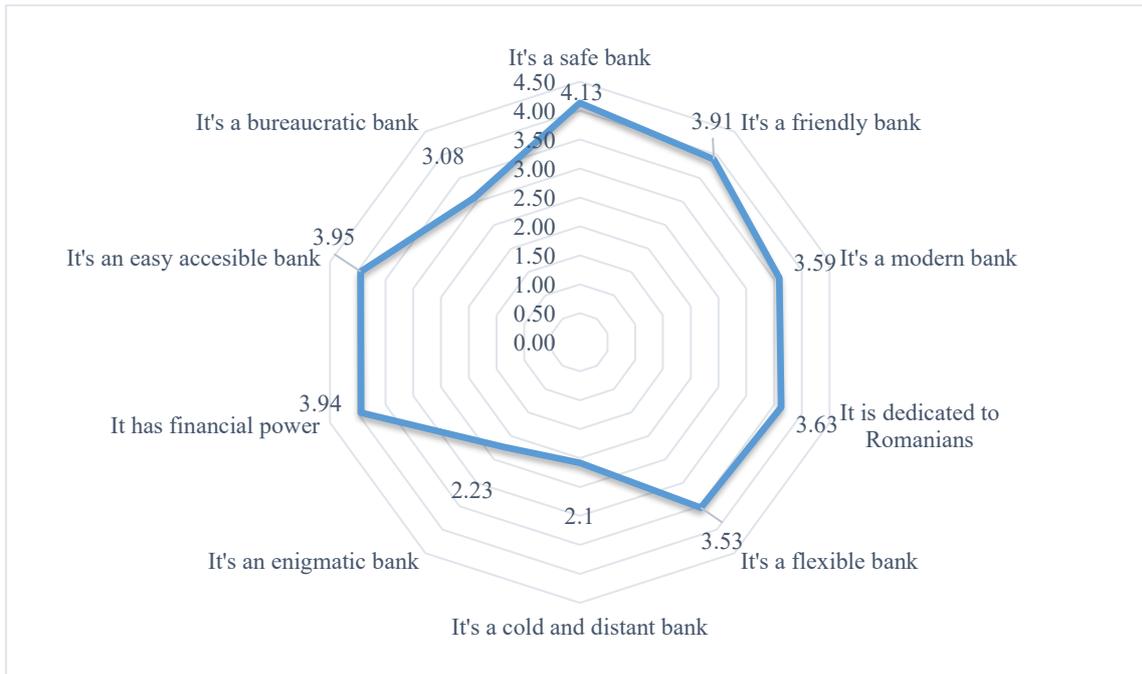
#### **4.2 Correlations between Bank's Image and the Level of Quality as perceived by Clients**

Customers' perceptions of their main bank are presented in the figure no. 6, below.

On a scale from 1 (total disagreement) to 5 (total agreement), they perceive their bank to be secure bank (4.13), accessible (3.95), with financial strength (3.94) and friendly (3.91).

Medium-low values have been recorded for addressability issues to Romanians (3.63), modernity (3.59) and flexibility (3.53). These are benchmarks where banks should insist on improving them in future communication and promotion campaigns002E

Positive aspects are noted in terms of client disagreement with perceiving their bank as being cold and distant (2.1), respectively, enigmatic bank (2.23).



**Figure 4. The image of the main bank**

Based on this it is possible to determine the correlations between the variables which define a bank's image and the customer perception of the quality of banking services based on Pearson coefficients.

The quality of banking services has been determined as average between positive attitude, promptness, transparency and professionalism.

**Table 1. The Pearson's correlation coefficients**

The variable researched	The Pearson ® correlation coefficients
<i>It's a safe bank</i>	.219**
<i>It's a friendly bank</i>	.401**
<i>It's a modern bank</i>	.379**
<i>It's dedicated to Romanians</i>	.260**
<i>It's a flexible bank</i>	.473**
<i>It's a cold and distant bank</i>	-.301**
<i>It's an enigmatic</i>	-.150**
<i>It has financial power</i>	.190**
<i>It's an easy accesible bank</i>	.313**
<i>It's a bureaucratic bank</i>	-.214**

From the table, above, showing Person's indices, average intensity correlations with the quality of banking services are recorded in relation to the issues related to the flexibility of banks (.473), followed by being a friendly bank (.401) and being a modern bank (.379).

Corroborating the previously commented results, respondents place a particular emphasis on appreciating the quality of banking services based on it being a friendly, flexible and modern bank.

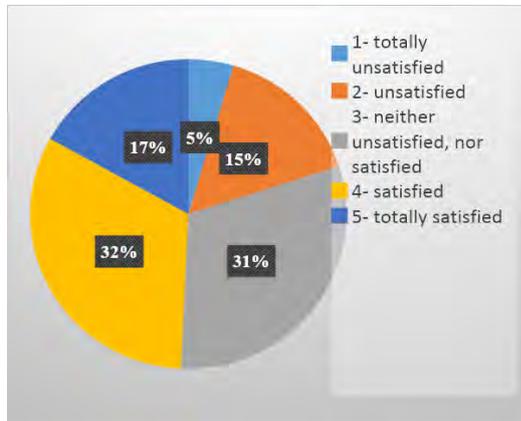
However, the attributes of flexibility and modernity have recorded low quotes among clients' perceptions of their main bank, thus these issues should be set as priority areas for banks when considering improvements to service quality.

Correlations are negative, as is normal, between being a cold and distant bank (-.301 \*\*), as well for being a bureaucratic bank, (-.214 \*\*) and enigmatic bank (-.150 \*\*) and the quality of the services delivered.

### 4.3 Analysis of the Level of Satisfaction of Clients with Complaints handling

When asked whether they have ever addressed a complaint to the bank, only 65 out of 384, answered yes, showing the trend that people are not so willing to highlight what is not working as it should.

The research looked at *how satisfied people are by the way complaints were solved?*



A quarter of respondents declared a low level of satisfaction with the way their complaints were handled. Only 16.92% were totally satisfied by the way their complaints were handled, followed by 32.31% of people whose complaints were handled at the level of expectation.

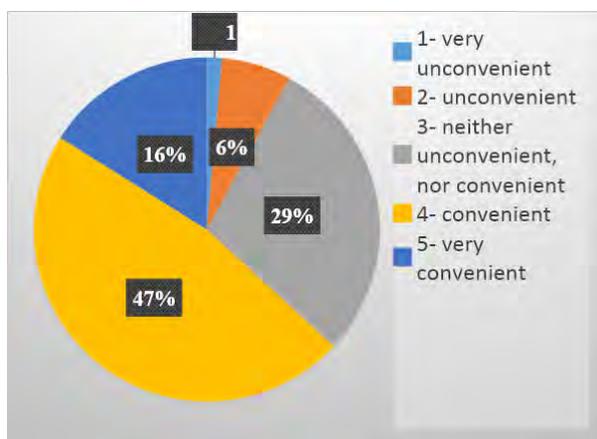
Almost a third (30.77%) were neither unsatisfied, nor satisfied in terms of their complaints being solved.

Figure 5. The level of satisfaction of clients with the way their complaints were solved

The research indicates that the main reasons for customer dissatisfaction with complaints handling are:

- Low competence of employees
- Lack of seriousness
- Lack of professionalism and flexibility
- Greater attention is required for optimal time transmission of bank statements
- Contactless cards are missing from the bank's offer
- More involvement is required for formulating a response to a complaint
- Lack of adequate responses submitted.
- Poor cost communication and inadequate counseling in the product proposal
- Not considering customer needs.
- Bureaucratic, unavailable bank
- Long time response to complaints.

### 4.4 The Influence of Prices on the Quality perceived by the Clients



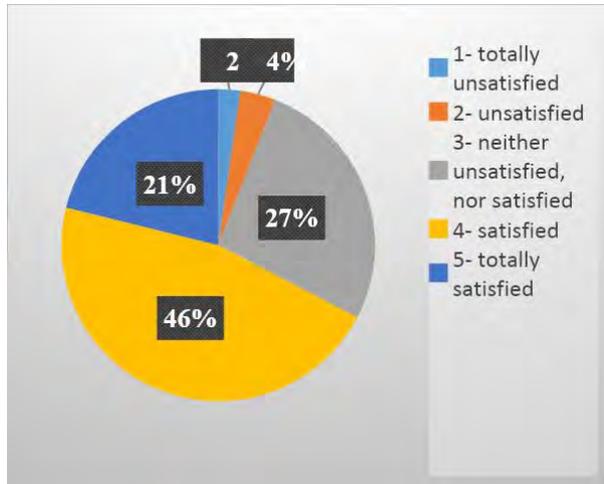
Question analyzed: *How do you find the ratio between the bank's rates and the quality of the services offered by your main bank?*

Most respondents consider that the ratio between the rates charged and the quality of services offered by their main bank to be convenient (47.04%), while only 16.06% find it very convenient. 29.01% think the report is average, while 6.48% and 1.41% find it unconventional and extremely convenient.

Figure 6. The influence of prices on the quality perceived by the Clients

#### 4.5 The Influence of Digitalization on the Level of Satisfaction perceived by Clients

##### 4.5.1 Level of Satisfaction with Contact Center Services

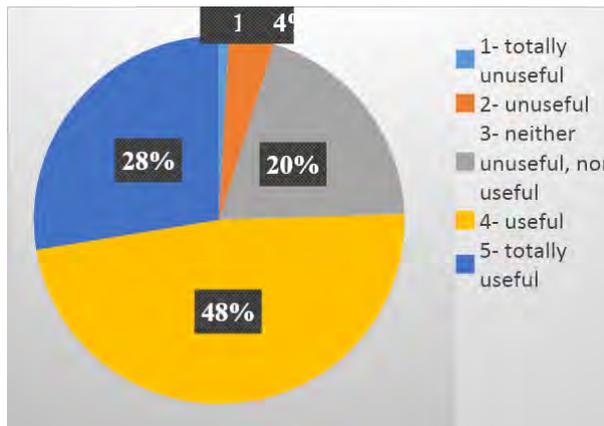


Question analyzed: *How satisfied are you with the Contact Center services provided by your main bank?*

More than 65% of respondents answered that they are content with the Contact Center services provided by their main bank, while 46.20% checked the "thankful" level. 21.13% of them are "very satisfied" while 26.76% are neither satisfied nor dissatisfied. Only 3.66% and 2.25% respectively are less satisfied or not at all satisfied with the contact center service.

Figure 7. Level of satisfaction with Contact Center Services

##### 4.5.2 Usefulness of the Web Page



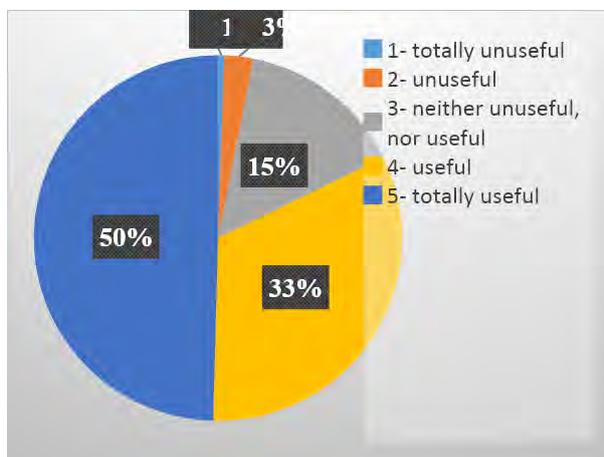
Question analyzed:

*How do you find the webpage offered by your main bank?*

For most respondents (47.89% and 27.61% respectively), the main bank's website is useful and very useful, while 19.72% were indifferent. Only 3.94% and 0.85%, respectively, consider it to be of little use.

Figure 8. The usefulness of the web page

##### 4.5.3 Usefulness of Digitalization through specific Inputs (Internet Banking, Mobile Banking, SMS Banking and Self Banking- 24 hours)



Question analyzed: *How do you appreciate the digital services made available by your main bank via specific paths (internet banking, mobile banking, text banking) and NON STOP self-banking operations?*

Most of the respondents (82.26%) find digitalization (internet banking, mobile banking, sms banking) of self-banking operations open NON STOP) as useful and very useful 14.65% were indifferent and 3.10% stated that digitalization is not useful.

Figure 9. Usefulness of Digitalization

Correlation between the variables which define communication and customer relationship and customer perception of the quality of banking services

**Table 2. The Pearson's correlation coefficients**

The variable researched	The Pearson (r) correlation coefficients
<i>The rates charged by the Bank for products and services</i>	.580**
<i>The level of satisfaction for the way complaints have been handled</i>	.463**
<i>The level of satisfaction with Contact Center services</i>	.497**
<i>The usefulness of the Web page</i>	.395**
<i>The usefulness of digitalization</i>	.380**

At the level of the Pearson correlation indicators presented in the Table above, there are correlations which are statistically significant. The closest link is between the rates charged and the service quality index (.580), followed by the degree of satisfaction with the Contact Center services (.497) and the degree of satisfaction with the way in which complaints were resolved (.463). Positive but weak to moderate correlations are found for the usefulness of the web page (.395) and the digitization made available by the bank (.380).

## 5. Conclusions and discussions

### 5.1 General Levels of Satisfaction

For customer-centric banks, customer satisfaction is both an objective and a marketing tool. Banks must be particularly concerned about the level of customer satisfaction today, as digitalization allows consumers to quickly spread their experiences with the bank, across social and online environments, and thus, much more quickly promote both favorable opinions and negative feelings.

The general satisfaction score for the banks was determined based on the answers provided to the question “*How satisfied are you with your main bank?*”. The scale used is from 1 to 10 and the score is the average score of the respondents, where each mark was given 10 points as follows: for note 1, 10 points were allocated, and for note 10, 10 x 10, that is, 100 points.

The average earnings are 83 points and the first positions are held by the niche banks: Piraeus Bank, Patria Bank, CEC and ING, followed by Banca Transilvania and BCR, on the top of the ranking, followed then immediately below the average by BRD Groupe Société Général and Raiffeisen. The last place is occupied by Bancpost, which has the lowest customer satisfaction.

### 5.2 Axis for Improvements in the Banking System in order to deliver better Services

Respondents place a special emphasis on working with a flexible bank, but conversely the attributes of flexibility and modernity have recorded low quotes among clients' perceptions of their main bank. Therefore, these could be set as priority axis for banks in order to improve their services.

The majority of clients also considered the “willingness” of bank advisers to be the most important attribute in determining the quality of the services offered.

Once a bank notification is received, no matter what channel, immediate contact with the customer is required. Even if the complaint was formulated in writing and/or online, it is imperative to immediately contact the client and the employee who knows his / her history to

understand his / her dissatisfaction and to discuss the proposed solutions. Most of the time, responses are formulated in writing without discussion with the client, which completely opposes the way the customer wishes to reach a resolution.

The study also showed that only a small percentage of clients have ever expressed their dissatisfaction with the bank, and collecting customer feedback after interactions is gaining more input in marketing departments.

Therefore, when collecting negative feedback from clients, I consider it advisable to send email notifications to the client manager who manages the relationship with the client and to contact him / her to try to resolve the grievance.

The research showed that there are statistically significant positive correlations between the degree of satisfaction with Contact Center services and the service quality index of banking based on customer perceptions. For this reason, it is strategically important for banks to include Contact Center services in a priority axis to deliver high-quality services.

It has been seen in the study that customers found the weak services of Contact Centers, a reason for dissatisfaction with how their complaints are being solved. The long wait for phone operators to take over, or their weak expertise fail to deliver the right solutions.

In view of the above, it is necessary to correct the dimensions of the Contact Centers, which have been affected in recent years by significant staff cuts in attempting to optimize banks costs. On the other hand, it is necessary to provide specialized teleconsultants in Call Centers, which are at present largely staffed by simple telephone operators and not bankers.

The role of the staff in the marketing mix is decisive in the customer's perception of the quality of banking services. In the view of banking customers from the Central Region, "professionalism" and "positive attitude" are perceived as "high" by the majority of the population surveyed, while "promptitude" and "transparent communication" should be improved.

The final conclusion which can be taken from the research is that consumers from the Center Region want more attention from the staff and a good knowledge of the banking products. Therefore, banks must attach great importance to the recruitment and training process of human resources employees, to ensure that they have kindness, willingness to help, professional skills or empathy in their relationships with consumers.

### **5.3 Research limits and future researches**

The research was conducted in the online environment, which requires access to computer or mobile devices and internet. Under these circumstances, the number of respondents was limited.

The answers were recorded in the Google Docs platform which sends the info in the database only after the questionnaire has been fully completed. This means it was not possible to record incomplete questionnaires. There was no interviewer to provide help if needed.

As for future researches, this one could be extended to the entire country. Also there can be researched the consumers' behavior, the consumers' satisfaction on products and services or the reasons for quitting the relationship with the main bank.

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## **Word of Mouth Marketing and the Impact on Banks' Portfolio of Clients: Research at the Main Banks in the Central Region of Romania**

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### **Abstract**

This paper's purpose is to illustrate the impact of word of mouth advertising on a Banks' portfolio of clients and ultimately how that impacts the banks' portfolio. This research was based upon a quantitative marketing survey carried out in the Central Region of Romania using online questionnaires. The research has three objectives. Firstly, to assess how likely an individual is to recommend their main bank to acquaintances or friends (Net Promoter Score) and the reasons why they don't recommend their main bank. Secondly, to determine how likely it is that a client would consider using the services and products of their main bank in the future (Future Intention). Thirdly to determine how satisfied clients are with their main bank generally (General Satisfaction). Although there are many international researches on the quality of services, none of them highlights the methodology of Net Promoter Score on the local banking sector and how loyalty can be built. This study also offers a hierarchy of the banks from Central Region based on NPS score. The findings of the research show that only 48% of clients are loyal to their main bank. They are direct promoters of the brands in the market and spread their great experiences on daily dialogs. Jeff Bezos, founder of Amazon.com, said: "If you do build a great experience, customers tell each other about that. Word of mouth is very powerful".

**Keywords:** word of mouth marketing, advertising, quantitative marketing research, survey, banking.

**JEL classification:** M31, G21.

### **1. Introduction**

Consumers tend to recall both positive and negative experiences, but in no case the common, day-to-day experiences. This is true not just within the banking financial services sector but across the general consumables market. This promotes the idea of giving clients a memorable experience when they encounter the bank, as they share their impressions, on average, to another three people.

According to Nielson, in 2012 consumers around the world said they trust recommendations from friends and acquaintances above all other forms of advertising.

Consumers are more emotionally bonded to a bank, when they feel the company listens to them. That is why banks have sales representatives discuss their products and services with consumers personally or through a feedback phone or email line. (Kenton, 2019)

Taking into account the current context, the banks operate in a mature market where loyal customers closely relate development opportunities to the degree of recommendation in the market.

### **2. Literature review**

When speaking of word to mouth marketing, we speak about satisfaction and loyalty. Customer satisfaction and customer loyalty are vital for modern day business. Firstly, customers are scarce resource. Secondly, customer satisfaction and customer loyalty have positive effect on the profitability of the companies in general and on the banking sector in particular. (Rosenberg and Czepiel 2017.) Customer satisfaction is also a barometer to predict the future customer behavior (Hill et all, 2007.)

As the level of satisfaction is influenced by customer's emotional perceptions (Zeithal and Bitner, 2009), high level of customer satisfaction can provide benefits like customer loyalty, extended life cycle of customer and increased customers positive word of mouth communication.

When the customers are satisfied with the banking products or services they buy more and recommend the bank (the products or the services) to other potential customers. (Tao, 2014.)

Thomas and Tobe (2013) emphasize that "loyalty is more profitable". The expenses to gain a new customer are higher than the ones to retaining the existing ones. Loyal customers encourage others to buy and think more than twice before changing their main bank. Customer loyalty is not gained accidentally, but is constructed through the sourcing and designing decisions. Designing for customer loyalty requires customer-centered approaches. Therefore, banks who want to know a customer's full value include a measure of the client's ability to bring in new customers. The common way for this estimation is to determine the customer's willingness to make referrals. At a macro level, as Reichheld points out, it *is* positively correlated with a company's profit growth. (Kumar, 2007)

As Fred Reichheld reminds us in his December 2003 Harvard Business Review article, "The One Number You Need to Grow," the value of every customer does not reside only in what he/she buys but in what he/she is prepared to tell others about the company. (Kumar, 2007).

### 3. Methodology and framework

The research lasted three months and was performed in the first quarter of 2018 on mature population from Center Romania. It consists in two stages: data collection through online interviews using Computer Assisted Web Interviewing (CAWI) method and data analyze using Statistical Package for Social Sciences (SPSS). The interviews were carried out in the sixth counties: Brasov, Covasna, Harghita, Sibiu, Mures and Alba.

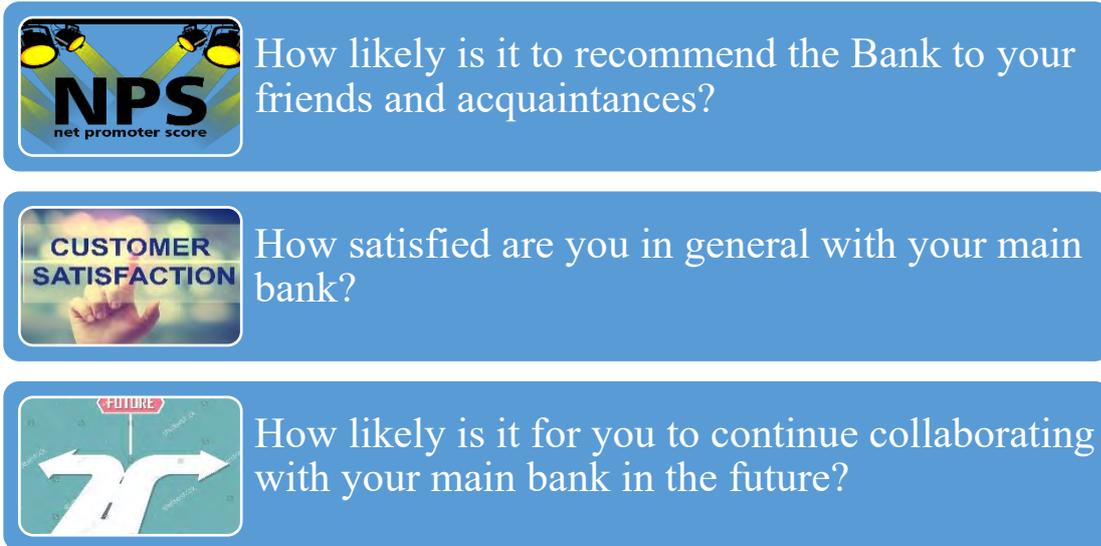
The minimum age was a criteria to the research due to the specificity of the subject analyzed. Thus the youngers below 18 years old were considered inadequate for the reasearch since they don't have a good understanding of the banking sector and how it operates.

The questionnaires have been distributed both in the urban and rural spaces through email, groups and social sites. The most important platform used was Facebook, since it covers over 9.600.000 accounts with 44.44% rate of penetration, according to their official site statistics.

There were collected 384 questionnaires. The population interviewed is compound by 45% male and 55% female, out of them 49.2% are married while 50.8% are unmarried. Most of the respondents are between 30 and 39 years old (33%) earn between 2000 and 3999 RON (39.8%), have a university degree (36.7%), work as employees (63.3%) and live in the urban space (82%).

In order to measure the "word of mouth" consumers were asked about their willingness to recommend their bank to their friends and acquaintances using Fred Reichheld's Net Promoter Score (NPS). The analysis followed multiple research axes to determine how likely it is that a client would consider using the services and products of their main bank in the future.

These studies use the same appreciation scale from 1 to 10, where marks from 1 to 6 define *unsatisfied* customers, 7 mark define *neither satisfied, nor unsatisfied custmners*, 8 mark define *satisfied* customers, 9 mark define *very satisfied* customers and 10 mark define *extremely satisfied* customers.



**Figure 1. NPS studies**

Source: Adaptation on Fred Reicheld “Ultimate Question For Driving Good Profits and True Growth”, 2006

Clients who ranked 9 and/or 10 for all three areas investigated (Net Promoter Score, Future Intention and General Satisfaction) are defined as the Secured Clients Index. Thus, customers are classified as follows: (Adapted from Heskett et al.2011, 71.)

- LOYAL-Customers with the high rate of satisfaction and high loyalty. They are the most profitable and stable customers on the long run.
- AMBIVALENT-Customers with the above average satisfaction rate, but with the rate of loyalty below average. They do not feel the attachment to the brand and are receptive to competition offerings.
- CAPTIVE-Customers with a low rate of satisfaction, but with an above-average level of loyalty. They are involved with the bank through long-term products (e.g. credits), but actively seek alternatives in the market. The retention rate is not favorable for a long time.
- MIGRANTS – The most dissatisfied customers, with the lowest loyalty. They are most likely to accept competition offers and to propagate negative communication towards the brand in the market.

#### **4.1. The promotion of banking services and products by word of mouth in the Central Region of Romania**

For a bank, the Net Promoter Score (NPS) value is an extremely relevant indicator of the customer's loyalty level.

Respondents are thus divided into three categories: fans (promoters), neutral (passive) and critics (detractors), depending on the answer given to the question; "*How likely are you to recommend the bank to your circle of knowledge/friends?*"

The Net Promoter score (NPS) is calculated as the difference between the percentage of promoters (fans: those who award grades 9 and 10) and that of detractors (critics: those who award grades from 1 to 6). The neutral respondents (who award grades 7 and 8) are not counted. (Kotler and Lane, 2016).

Since the introduction of the Net Promoter concept there has been a vivid and ongoing debate among academics and practitioners about the performance of the Net Promoter Score (NPS) in comparison to other customer metrics, such as customer satisfaction. (Doorn et al, 2013)

By applying the *Crosstabulation function* from SPSS regarding the level of recommendation in the market and the customers' main bank, it results that customers mainly give "10" points for their main bank, followed by "8".

**Table 1. The level of recommendation for banks in the Central Region of Romania in Q1 2018**

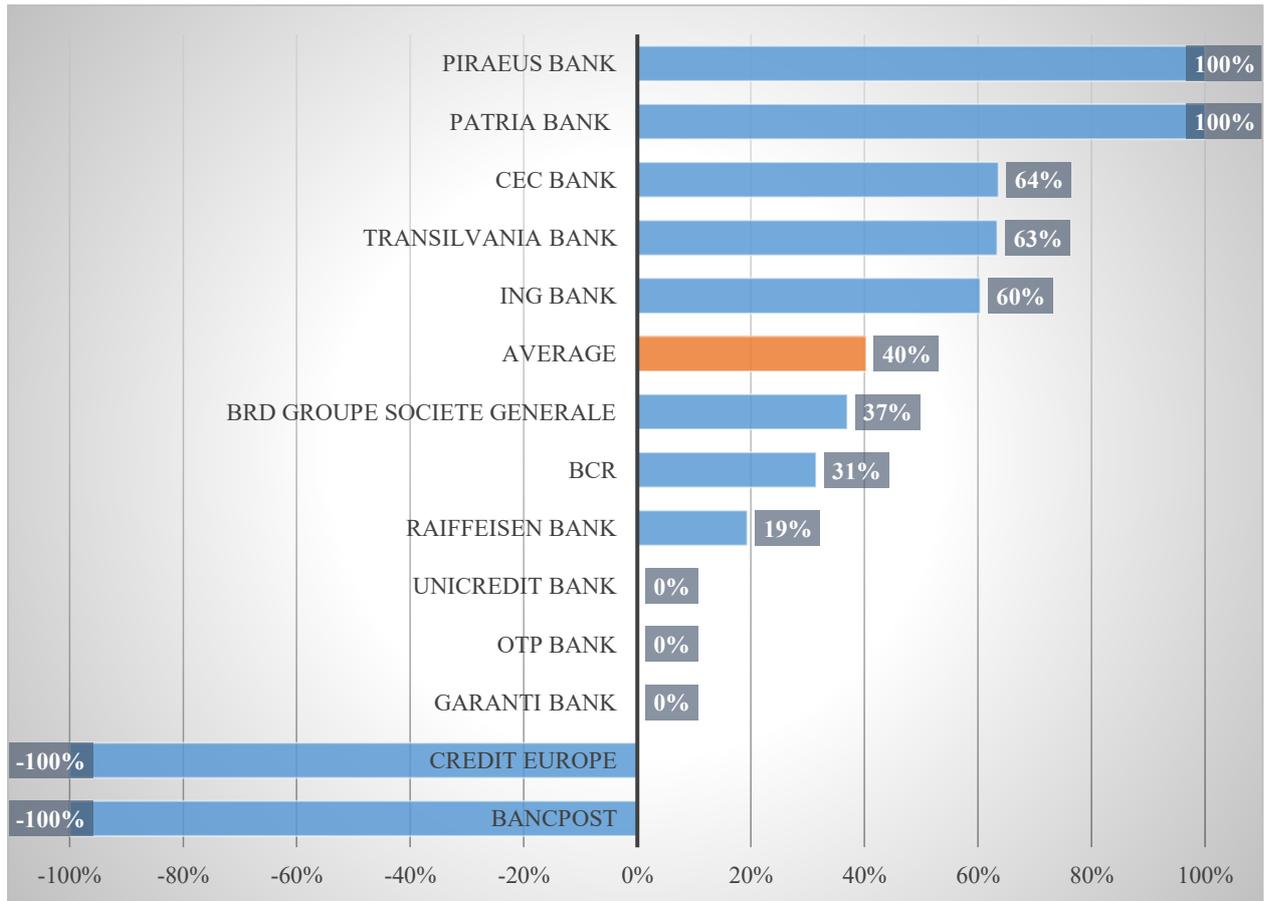
	1 Definetly NOT	2	3	4	5	6	7	8	9	10 Definetly YES
Banc Post	1	0	1	0	1	1	0	0	0	0
Transilvania Bank	0	0	0	2	0	0	1	10	11	17
BCR	0	0	1	0	4	4	6	13	7	19
BRD Groupe Société Général	3	0	1	0	5	3	21	30	20	36
CEC Bank	0	0	0	0	0	0	2	10	7	14
Credit Europe	0	0	0	0	0	1	0	0	0	0
Garanti Bank	0	0	0	0	0	0	1	1	0	0
ING Bank	0	0	0	1	3	1	4	7	13	24
OTP Bank	0	0	0	0	1	0	0	1	1	0
Patria Bank	0	0	0	0	0	0	0	0	1	0
Piraeus Bank	0	0	0	0	0	0	0	0	1	1
Raiffeisen Bank	0	0	1	0	1	2	6	11	1	9
UniCredit Bank	0	1	0	1	1	0	3	1	0	3
Total	4	1	4	4	16	13	44	84	62	123

The average NPS score is 40%. The highest rates of 100% were obtained by the niche Banks: Piraeus Banks and Patria Bank. At the opposite end of the spectrum, with -100%, were Credit Europe and Bancpost.

Of the main banks, those who obtained a higher average score are Transilvania Bank (63%) and ING Bank (60%), while BRD Groupe Société Général (37%), BCR (31%) and Raiffeisen (19%) obtained scores below the NPS average.

As evidenced by the statistics:

6 positive recommendations → +1 new customer  
 1 negative recommendation → - 5 positive recommendations  
 1 negative recommendation → - 0,83 of new customer  
 1 critic → 4-6 negative recommendations  
 1 critic → - 4,15 of new customers



**Figure 3. The NPS Score for Banks in The Central Region in Q1 2018**

Source: Author's elaboration based on survey

The research also looks at the main reasons given for not recommending a bank. These are; high commissions, indifference of banks' representatives, lack of transparency, low level of flexibility, lack of promptness, poor communication (e.g. customers having to insist in order to receive the desired information), technical problems with home banking services, and old informatics systems.

#### **4.2 The future intention of customers in continuing the collaboration with their main bank**

Next, the research looks at how likely it is that a customer would consider using the services and products of their main bank in the future. Customers were asked the following question: "How likely are you to continue collaborating with your main bank?"

It is noted that the responses of "10" are prevalent, with a frequency of occurrence of 136, followed by responses of "8", with a frequency of occurrence of 82 and then by "9", with a frequency of 76.

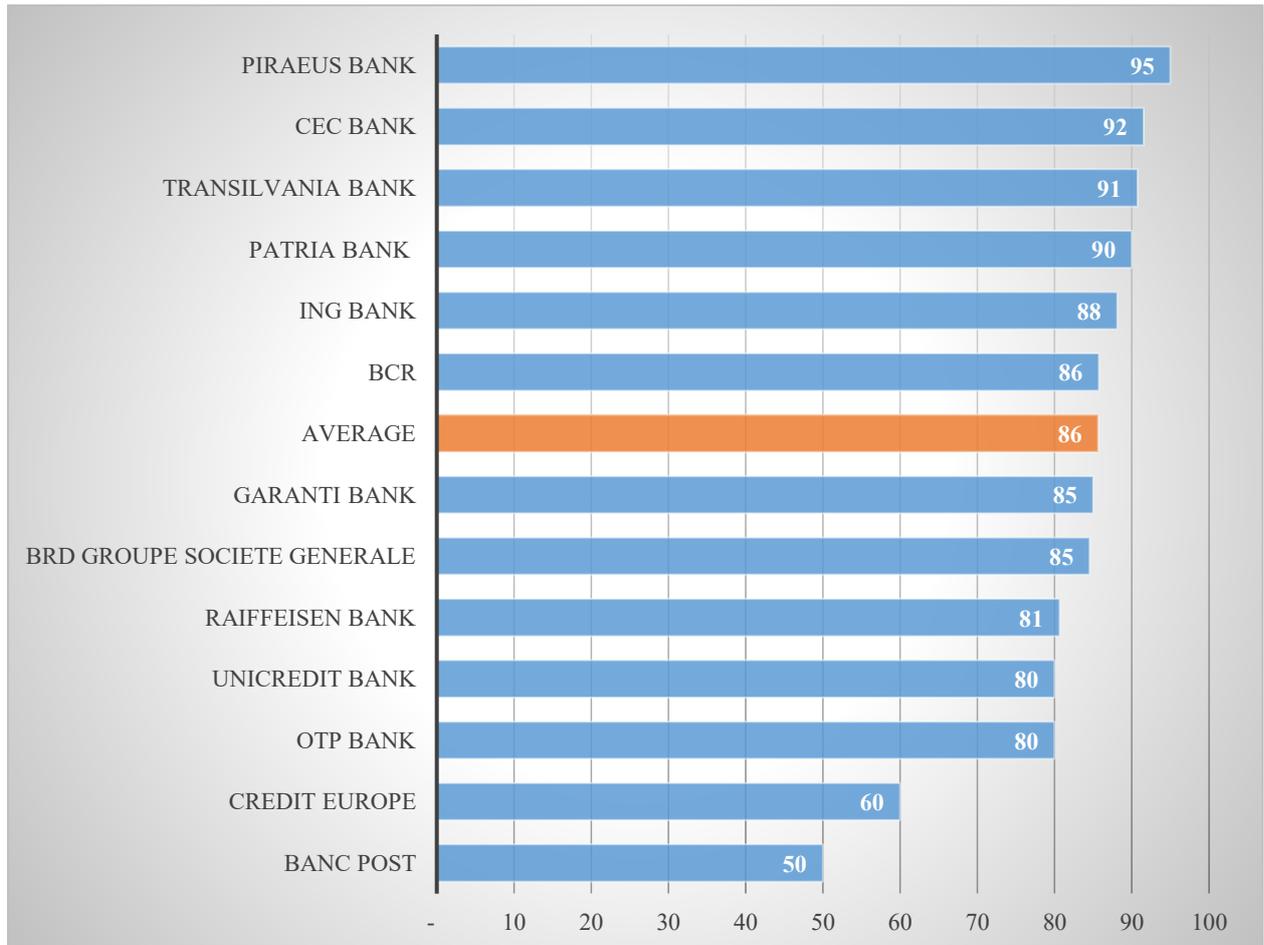
By applying the *Crosstabulation function* from SPSS, regarding the future intention on continuing the collaboration with the bank and the actual main bank it results the following distribution:

**Table 2. The future intention of customers from Central Romania to continue their relationship with their main bank in Q1 2018**

	1 Not likely at all	2	3	4	5	6	7	8	9	10 Highly likely
Banc Post	1	1	0	0	0	1	0	1	0	0
Transilvania Bank	0	0	1	0	1	0	1	5	13	20
BCR	0	0	0	1	2	3	4	11	15	18
BRD Groupe Société Général	0	2	1	1	8	3	6	33	19	46
CEC Bank	0	0	0	0	0	0	1	9	7	16
Credit Europe	0	0	0	0	0	1	0	0	0	0
Garanti Bank	0	0	0	0	0	0	0	1	1	0
ING Bank	1	0	0	0	1	2	4	9	11	25
OTP Bank	0	0	0	0	1	0	0	0	1	1
Patria Bank	0	0	0	0	0	0	0	0	1	0
Piraeus Bank	0	0	0	0	0	0	0	0	1	1
Raiffeisen Bank	0	0	0	1	2	1	4	11	6	6
UniCredit Bank	0	0	0	0	0	2	3	1	1	3
Total	2	3	2	3	15	13	23	82	76	136

Based on customers answers from 0 to 10, it was determined a score for each bank. Every mark received different points, such as 0 received 0 points, 1 received 10 points, 2 received 20 points, 3 received 30 points and so on so forth, till 10 received 100 points. The score was determined as weighted mean, with values between 0 and 100.

The following banks obtained the highest scores: Piraeus Bank (95); CEC Bank (92 points); Transilvania Bank (91 points); Patria Bank (90); ING Bank (88); and BCR (86). These six banks all scored above the regional average of 86 points. Below average are Garanti Bank and BRD Groupe Société Général with 85 points, followed by Raiffeisen and Unicredit. Banc Post occupies the last position (score 50 points).



**Figure 4. Future intention of customers from Center Region to continuing the collaboration with their main bank in Q1 2018**

Source: Author's elaboration based on the survey

#### 4.3 General Satisfaction of bank customers from the Central Region

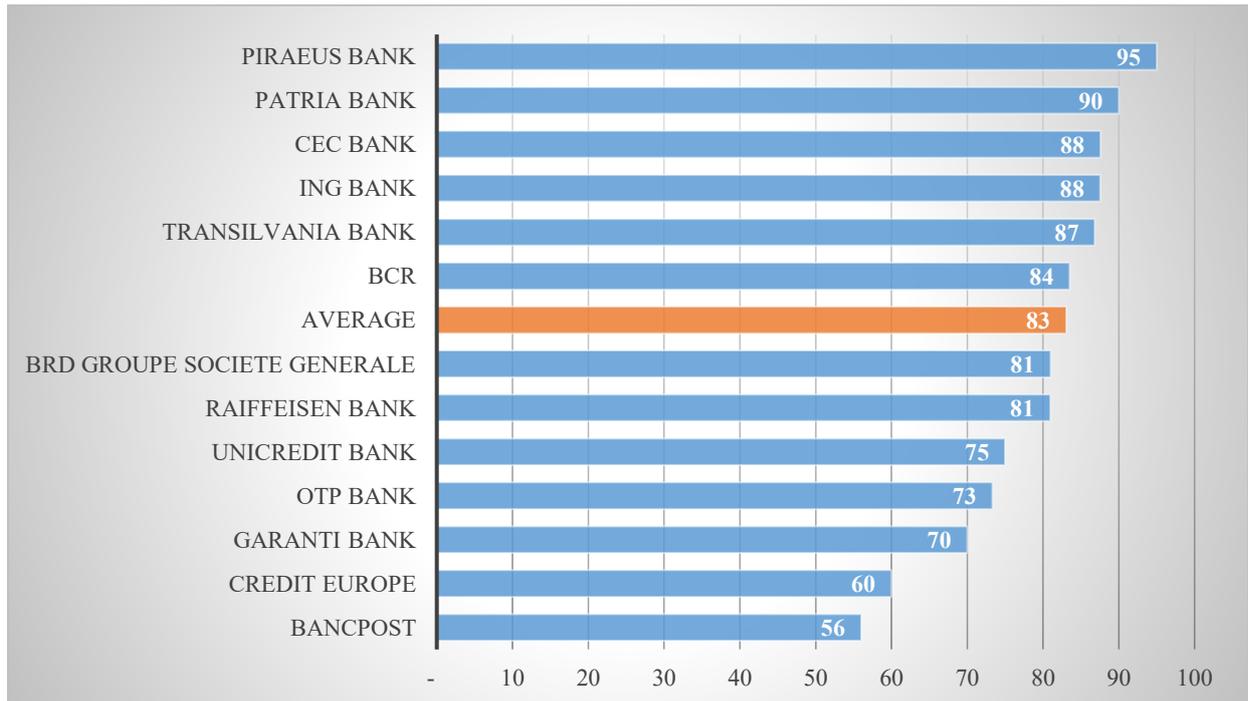
Customers were also asked about how satisfied they are with their main bank.

Using the same methodology as described above for future intention, every mark received different points, such as 0 received 0 points, 1 received 10 points, 2 received 20 points, 3 received 30 points and so on so forth, till 10 received 100 points. The overall satisfaction score was determined as weighted mean.

The average score was 83 points and the top scores were allocated to niche banks, such as Piraeus Bank (95) and Patria Bank (90).

CEC Bank, ING Bank, Transilvania Bank and BCR follow them, with scores above average. Immediately below the average are BRD Groupe Societe Generale and Raiffeisen. Bancpost takes the last place.

The rankings are presented in the following figure.

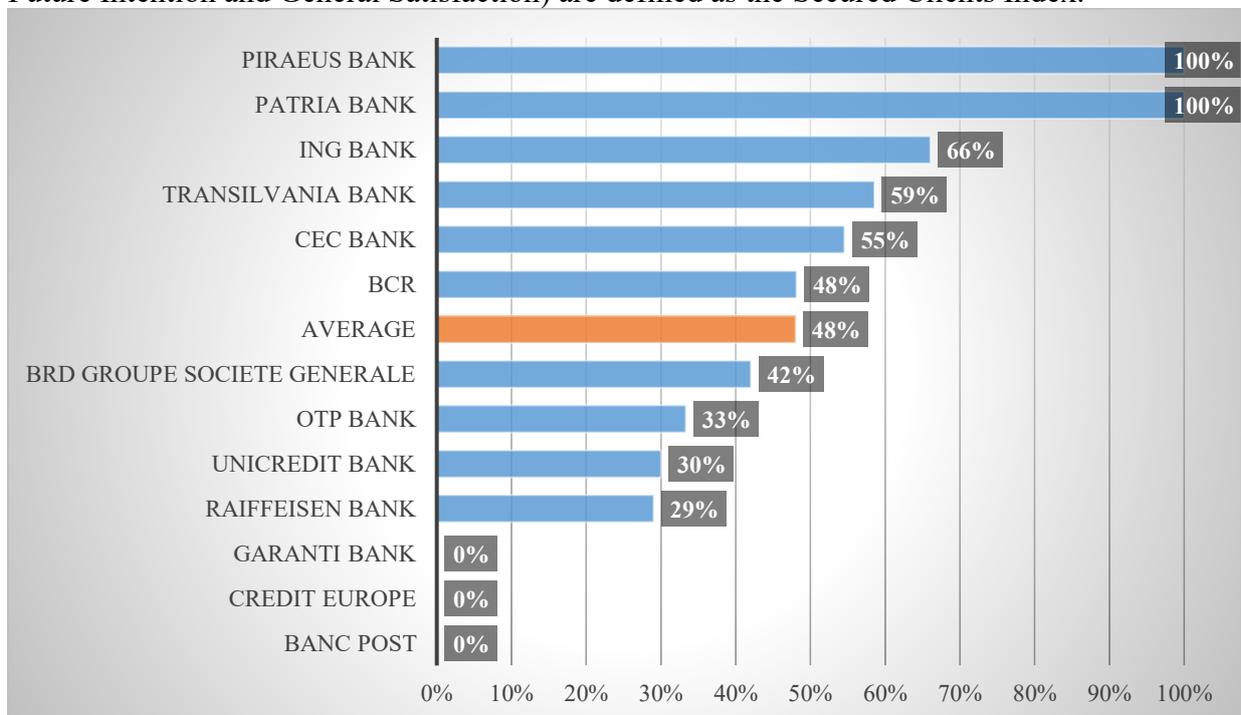


**Figure 5. General satisfaction of customers from the Central Region in Q1 2018**

Source: Author's elaboration based on survey

#### 4.4 The Customer Security Index

Clients who ranked 9 and/or 10 for all three areas investigated (Net Promoter Score, Future Intention and General Satisfaction) are defined as the Secured Clients Index.



**Figure 6. The Customer Security Index in the Central Region in Q1 2018**

Source: Author's elaboration based on survey

Among the main banks, the best ranked is ING Bank (66%), followed by Banca Transilvania (59%) and then BCR (48%). Below average are: BRD Groupe Société Général (42%), Unicredit (30%) and Raiffeisen (29%).

## 5. Conclusions

Using the NPS methodology to determine the impact of word of mouth to the bank portfolio of clients, the research indicates that 48% of customers are secure clients. These are customers that banks can rely on to continue their relationship with and who are direct market promoters of the banks' brand.

The remaining 52% belong to one of three categories, they are either: very receptive to competition; dissatisfied; or actively seeking to refinance elsewhere.

Moreover, this research has been helpful in explaining why customers do not promote their main bank in the market. Customers reasons are linked either to high cost, or to negative experiences that they had with the bank's staff, either because of perceived lack of professionalism, lack of efficiency, lack of promptness and/or faulty communication.

Overall, customers' satisfaction with the main banks from the Central Region can be indicated as follows: the highest rankings are represented by ING (88), Banca Transilvania (87) and BCR (84), while below average are BRD, Société Général and Raiffeisen, with a score of 81.

As for NPS, Banca Transilvania recorded the highest score amongst the main banks (63%) followed by ING Bank (60%). Conversely, BRD Groupe Société Général (37%), BCR (31%) and Raiffeisen (19%) scored lower rates than the NPS average.

By applying the same scoring methodology (as used to rate overall satisfaction), it can be noted that Banca Transilvania (91), ING Bank (88) and BCR (86) scored the highest scores on the future acquisition intention. These banks have been situated in the first half of the ranking, while BRD Groupe Société Général and Raiffeisen with 85 points were in the second half of the ranking.

The Romanian banking market has reached a certain degree of maturity, and the future expansion techniques of banking institutions can no longer be based on extensive approaches, but rather on the intensive ones. The quality of services has become a distinguishing factor between players in the field.

## 6. Research boundaries

There are a number of limitations to this research, namely:

- There was no interviewer to provide explanations if needed. This means that it was not possible to record incomplete questionnaires (Google Docs sends the questionnaire to the database only after it has been fully completed).
- Online research requires access to a computer and internet. This certainly limited the number of responses. That said, the use of online research has meant that answers could be obtained from across the entire region surveyed.
- The survey used only simple scales with the majority of questions allowing only for closed answers. This structure was chosen knowing that in modern life everyone's time is increasingly limited.
- The inability to determine: the number of individuals who refused to complete the survey; the size of the population surveyed; and the demographic characteristics of the respondents.

However, the research is a very good starting point in measuring the impact of word of mouth communications on Banks, since there are no public results on the NPS scores, General Satisfaction, Future Intention, Customer Secure Index or other research on this issue in the

Central Region of Romania. The conclusions reached in this study may be extended usefully to other regions and may be applied when developing future marketing policies and strategies.

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## The Expectations of Stakeholders in Socially Responsible Enterprises

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### Abstract

The aim of the article is to determine what needs and expectations of stakeholders are indicated by socially responsible enterprises listed on the Warsaw Stock Exchange with the RESPECT Index (XII edition). The RESPECT Index is an income index addressing companies listed on the Warsaw Stock Exchange (hereinafter GPW), excluding the NewConnect market, foreign and dual-listed companies. The study population included 31 listed companies representing various sectors. Computer software, supporting the NVivo quality data analysis (version 12), was used to analyze documents as well as the content of reports and statements of the companies studied. The research conducted yielded results in the form of answers to the following questions that were posed: 1) Expectations of which stakeholders are identified in the enterprises surveyed? 2) What dimensions of CSR do the enterprises surveyed identify the expectations of stakeholders? 3) What tools were used to meet the expectations of stakeholders in the enterprises surveyed?

**Keywords:** CSR, stakeholders, expectations, tools.

**JEL classification:** M14, M19.

### 1. Introduction

Corporate Social Responsibility (CSR) is one of the most important concepts of activities within the framework of sustainable development, the aim of which is to take into account the social and environmental aspects of business activity as well as the interests of various social groups identified as stakeholders (EC, 2011). It is assumed that CSR activities should be based not only on identifying the stakeholders themselves, but also their expectations and ways of communicating with them, in order to help implement and improve the adopted CSR strategy, assuming that the development of each organization is determined by taking into account the expectations of stakeholders (Freeman, 2010). The idea of corporate activity based on social responsibility is to increase one's own value by creating values for individual stakeholders, and within that framework, maintaining good relations with stakeholders that are included in the company's intangible assets (Wachowiak, 2013). On the other hand, taking into account the rapid changes taking place in the environment, enterprises are looking for sources of competitive advantage by reaching for concepts that ensure balance in creating economic, social, market and ecological values for various stakeholder groups (Bielski, 2002). By adopting this point of view, it is important to seek answers to questions about the expectations of stakeholders from the organization.

### 2. Theory of stakeholders and CSR

According to the theory of stakeholders presented in scientific literature, a stakeholder is any entity that influences the organization and one that is influenced by its activity (Freeman, 1984, Stoner, Freeman and Gilbert 1999, Mitchell et al., 1997). Laszlo (2005) defines them as

a number of groups that the company can influence, for which it should take responsibility at the same time. This concept applies to people or groups that benefit from the company's operation, and the main stakeholders include not only shareholders, employees, investors and customers, suppliers but also local communities, government, business partners, media, and national and international organizations. The concept was recognized as a breakthrough due to a new demand for generating both financial and non-financial benefits not only for shareholders, but also for other groups that are not formally associated with the organization. The literature on the subject divides interest groups into stakeholders: 1) first degree: in a broad sense, the social sector including formal agreements and contracts; 2) second degree: influencing and influenced by the organization, without transactions (Freeman, 1984); 3) internal: located within the organization, e.g. employees, shareholders; 4) external: involved in forming business strategy, e.g. customers, suppliers (Rybak, 2004).

The concept of stakeholders assumes that each organization, depending on the industry or the adopted business model, has its own unique stakeholders or their group (Jones, 1995), which share a common risk, while at the same time, getting the opportunity to benefit from the activities of the organization (Susnienė and Vanagas 2007) whilst enterprises form a link in a complex stakeholder network and manage relationships with specific stakeholder groups (Jamali, 2008). In this context, the organization itself should strive not only to generate profit, but also to care for relations with the environment and stakeholders that it is dependent on (Galant, 2017).

The following basic assumptions of the stakeholder theory are accepted (Jones and Wicks, 1999): 1) the enterprise has connections with various groups, called stakeholders of the organization; 2) relationships are considered from the point of view of benefits that they can bring to the organization as well as its stakeholders; 3) each of the stakeholders represents specific expectations, trying to make their expectations prevail over the expectations of the others.

According to some authors, the stakeholder theory has now taken on a new meaning and is becoming the theory of organizational management and ethics (Freeman and Phillips, 2002, Phillips, 2003, Parmar et al., 2010). In this context, CSR activities are becoming more and more meaningful, according to which the organization is not only responsible for economic but also moral responsibility towards all its stakeholders. The CSR concept is a response to incessant changes in the business environment and results from the need for enterprises to contribute towards their responsibility in social and environmental dimensions, and hence the need for sustainable development meant for all stakeholder groups (EC, 2011).

CSR definitions result from various observations with regard to the issue of corporate responsibility and business responsibilities, which in turn are the result of a wider debate on the role of organizations in society (Maignan and Ferrell, 2003). The concept has evolved over the years, starting with a very narrow definition that was only concerned with the increase of the wealth of stakeholders (Friedman, 1962), through legal, ethical and discretionary matters (Carroll, 1979). The concept of categories charted by Carroll (1979) should rely on providing return on investment to owners and shareholders, creating jobs and decent wages for employees, and discovering new resources or promoting technological progress, innovation and the creation of new products and services. However, CSR concept is not only focused on the traditional stakeholders mentioned above - its area of interest is broadened by silent groups such as local communities (Simmons, 2004), and CSR's mission is increasingly the building of reputation and exerting impact on stakeholder behavior (Neville et al. 2005). The CSR definition presented by the Commission of the European Communities (2002, p. 3) describes it as "a concept according to which companies integrate social and environmental problems in their business activities and their interactions with stakeholders".

The theory of stakeholders and CSR function as separate concepts that overlap in some aspects, and the main similarity between them is the fact that both the stakeholder theory and CSR emphasize the importance of including social interests in business operations. There is a significant difference between these concepts in terms of range and scope of activity - while CSR focuses on one-way responsibility (between companies and stakeholders) and the ethical aspects of activities centered around employees, customers and suppliers or environmental protection, the concept of stakeholders focuses on multi-directional responsibility as a whole, comprising both the company's responsibilities towards stakeholders as well as stakeholders' responsibilities towards the organization (Freeman and Dmytriyev, 2017).

The basis of CSR is the identification of stakeholders and their participation in the management process, and getting to know the opinions and expectations of stakeholders, regarding the organization as well as regarding each other, is a valuable source of information for managers, e.g. in the search for new solutions. Enterprises have a wide range of tools that can be used to identify these expectations, such as visits, interviews, surveys, documentation, plenary and dialogue sessions, workplace observation, workshops, consultations and meetings (O'Donovan, 2014; Svendsen, 1998 ). The element that is indispensable when it comes to the expectations of stakeholders is their balancing, and only then making a decision about the manner and scope of cooperation with individual groups (Reynolds, Schultz and Hekman, 2006).

According to Freeman's concept (1984), stakeholders are a group that has the right to intervene in the interests of the organization, as reflected by their expectations with regard to the company. At the same time, it proves that considering their preferences and expectations leads to improvement in the company's ability to create value. The same author claims that the development of the company relies on taking into account the expectations of stakeholders (Freeman 2010), and the expectations of stakeholders with regard to the company may result from the fact that it co-exists in the local community together with other members (Galant, 2017).

Focusing on stakeholders and caring for their interests helps the company to create a multi-dimensional value, or contributes to improving its performance (Donaldson and Preston, 1995; Freeman, Harrison and Wicks, 2007; Harrison, Bosse and Phillips, 2010; Jones, 1995; Jones and Wicks, 1999), and the estimation of the extent to which stakeholders' expectations are met helps to assess the effectiveness of CSR activities (Gangone and Gănescu, 2014).

### 3. Methodology

The aim of the empirical research was to identify the expectations of stakeholders in socially responsible enterprises, listed on the Warsaw Stock Exchange, qualified for the RESPECT Index project, XII edition, published on December 12, 2018. The list comprises 31 companies (*Nowy skład RESPECT Index*), operating in accordance with the principles of sustainable development, differentiated on the basis of an assessment of selected social, employee and economic factors (*Opis projektu*). The research covered the documentation of the aforementioned companies, which are reports and statements prepared in accordance with the requirements of the Act of 29 September 1994 on accounting (Journal of Laws of 2019 item 55, as amended).

The research sought to answer the following questions: 1) Expectations of which stakeholders are identified in the enterprises surveyed? 2) What dimensions of CSR do the enterprises surveyed identify the expectations of stakeholders? 3) What tools were used to meet the expectations of stakeholders in the enterprises surveyed?

The research process was divided into four stages:

**Stage 1: Selection of companies for research and obtaining documents for further analysis.**

The company documentation was collected in the form of reports and statements of all 31 companies surveyed, which were then analyzed. The analysis of documents used in the research process is a systematic procedure for the review of electronic or printed materials, and its main purpose is to synthesize and interpret data in order to acquire and develop empirical knowledge (Corbin and Strauss, 2008). Content analysis used in the research (Czernek, 2016; Jemielniak, 2012) is used to explore virtually all qualitative data (materials) that are created by people (Hsieh and Shannon, 2005; Rapley, 2010; Silverman, 2009). As K. Krippendorff (2004) points out, content analysis makes it possible to draw the correct inference from the content of different origins, providing new information and enabling us to understand the occurring phenomena. F. Moretti et al. (2011) describes it as a method of classification of materials that can be classified into categories with similar meanings, as we are dealing with here. The qualitative content analysis used during the research is considered as a method of subjective interpretation of the content of textual data through the process of coding and identifying topics (Hsieh and Shannon, 2005).

**Stage 2: Identification of stakeholders contributing to the social responsibility of the enterprises surveyed.**

The identification of stakeholders who contributed to the creation of the social responsibility of companies listed on the Warsaw Stock Exchange with the RESPECT Index (XII edition) was carried out. After reviewing the documentation of all 31 companies, 17 of them were qualified for further research (Agora SA, AmRest Holdings SE, Apator SA, Budimex SA, CITI Bank Handlowy w Warszawie SA, Elektrobudowa SA, Energa SA, Fabryka Mebli "FORTE" SA, Inter Cars SA, Grupa LOTOS SA, Lubelski Węgiel Bogdanka SA, mBank SA, Bank Millennium SA, Orange Polska SA, PZU SA, Santander Bank Polska SA, TRAKCJA PRKił SA). The criterion of this selection was the detailed information on key stakeholders contained in the reports, most often defined in the form of stakeholder maps.

**Stage 3: Formulating answers to the research questions posed.**

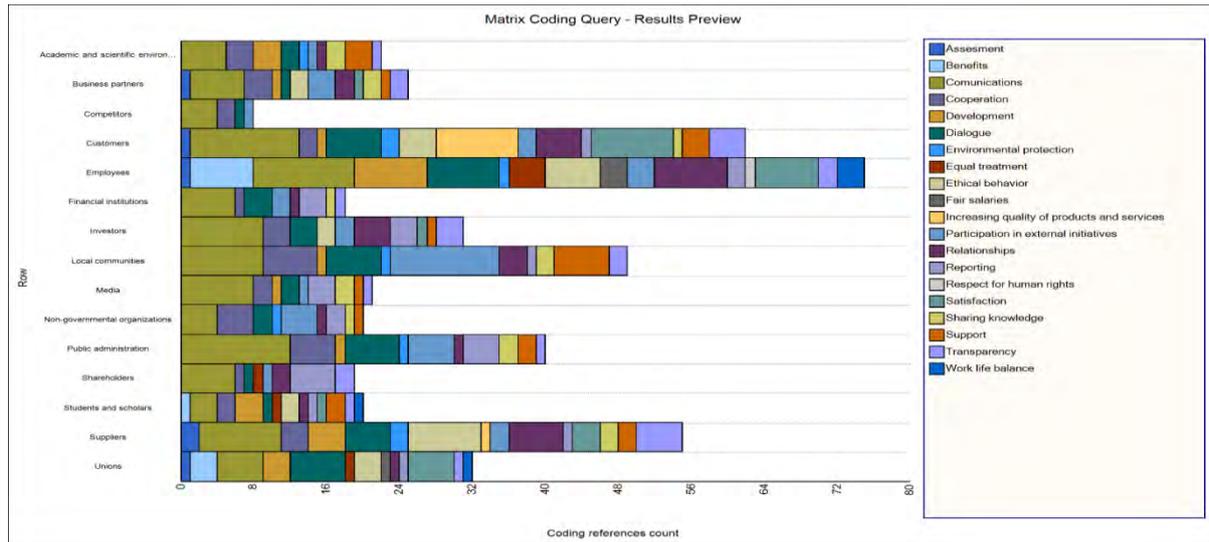
At this stage, answers were sought to the research questions posed using the NVivo tool, which is a computer program operating in the Windows environment, used to conduct research using qualitative methods (*Typical users of NVivo*). The use of computer programs for qualitative content analysis allows for systematic and controlled content analysis and enables a consistent information coding system, thereby leading to the preparation of a graphical presentation of results (Mayring, 2014). The coding itself consists of generating codes from the text (individual words, phrases or paragraphs) contained in the studied area, and then ascribing properties to them and, as a result, combining them in order to search for a connection between them (Babbie, 2008; Kvale, 2004). It takes place before the process of interpretation and leads to putting the data in order (Boyatzis, 1998).

**Stage 4: Indicating general trends and directions of further research in the field of stakeholders' expectations in socially responsible enterprises.**

The methodical inductive model used during exploration allows, on the basis of empirical research, for generalizations in form of conclusions, hypotheses, concepts or proposals (Eisenhardt, 1998), which allowed us to indicate general tendencies and directions of further research in the field of stakeholders' expectations in socially responsible enterprises.

**4. Findings**

Figure 1 presents the results of research on identified groups of stakeholders and the expectations they have formulated.



**Figure 1. Expectations of stakeholders in the enterprises surveyed**

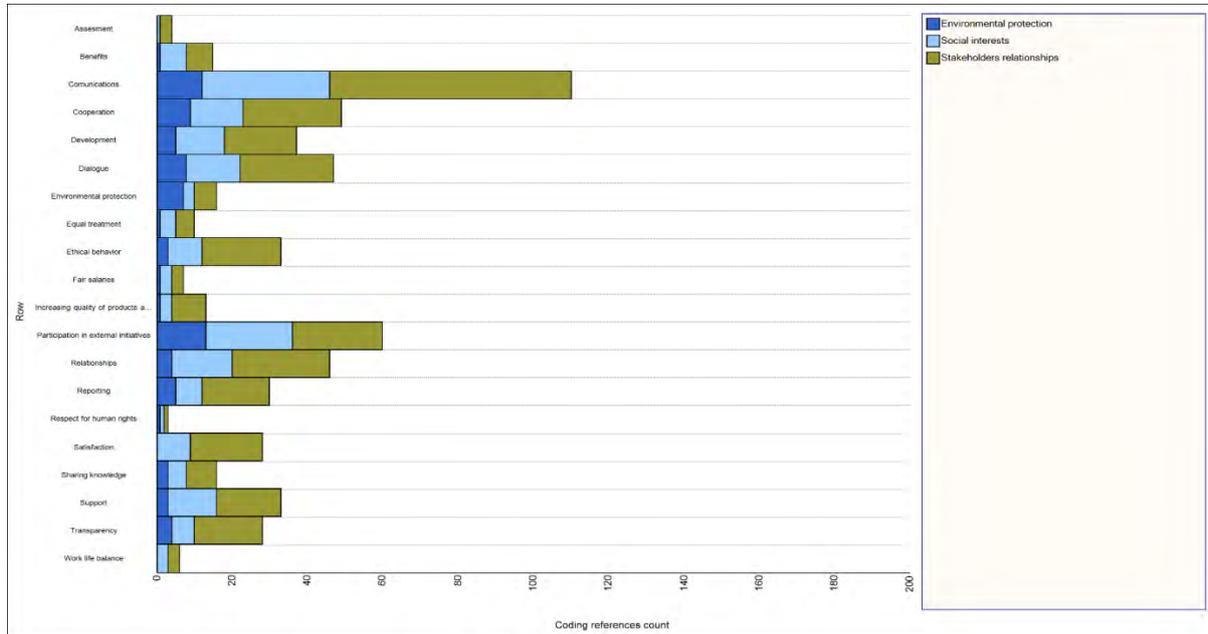
Source: own study based on company reports.

On the basis of the research, 15 groups of stakeholders were identified, each of which expresses expectations in relation to the enterprises surveyed. 20 different types of expectations were identified. Most often, stakeholders expect communication and dialogue - these expectations were expressed by all groups. The expectations expressed by the vast majority of stakeholders (13) include: cooperation (groups that did not expect it were employees and trade unions); transparency (competitors and non-governmental organizations did not expect it); participation in external initiatives (it was not expected by students and interns, and trade unions) and relations (not expected by competitors and media). Another expectation cited by the majority of stakeholders (12) was: reporting (it was not expected by the scientific and academic community, business partners, competitors). Subsequently, the majority of stakeholder groups (10) also expected support (competitors, employees, financial institutions, shareholders and trade unions did not express this expectation). Another expectation cited by a significant group of stakeholders (9) was development (these expectations were not expressed by financial institutions, competitors, investors, non-governmental organizations and shareholders) and knowledge sharing (competitors, employees, investors, shareholders, students and interns, and trade unions did not expect it). A relatively large group of stakeholders (7) expected the involvement of the companies surveyed, in activities for the protection of the environment (scientific and academic community, clients, employees, local communities, non-governmental organizations, public administration, suppliers) and satisfaction (business partners, clients, employees, investors, students and interns, suppliers and trade unions). A slightly smaller group of stakeholders (6) expected ethical behavior (business partners, clients, employees, investors, students and interns, trade unions). A minority of stakeholder groups (4) expected benefits (employees, trade unions, students and interns), expectations expressed by a small group of stakeholders (3) was work-life balance (employees, students and interns, trade unions) and equal treatment (employees, shareholders, students and interns expected it). Expectations expressed by only a few stakeholders (2) were the rising quality of products or services (clients and suppliers expected it) and fair remuneration (expected by employees and trade unions). Only one group of identified stakeholders (employees) expected fair remuneration.

The group of stakeholders that expressed the most expectations (16) were employees, followed by suppliers and clients (15) as well as students and interns along with trade unions (13). A relatively large number of expectations were expressed by business partners (12); local

communities and public administration (11); scientific and academic communities as well as investors (10). Media and non-governmental organizations (9) as well as financial institutions and shareholders (8) expressed a smaller number of expectations. The group of stakeholders that expressed the fewest expectations (4) were competitors.

Figure 2 presents CSR dimensions in which the expectations of stakeholders in the companies surveyed were identified.



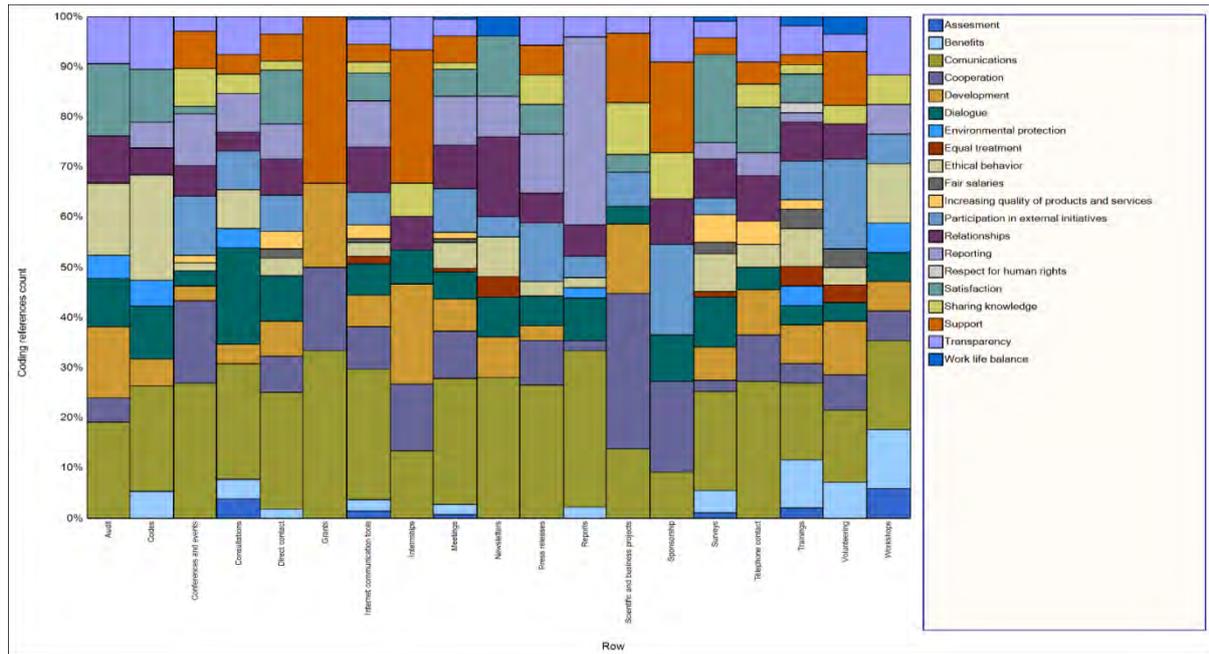
**Figure 2. CSR dimensions in which the expectations of stakeholders in the enterprises surveyed were identified**

Source: own study based on company reports.

Three dimensions of corporate social responsibility, in which the expectations of stakeholders were identified, were taken up. These are relations with stakeholders, social interests and environmental protection. All identified expectations (20) refer to the dimension of shaping relations with stakeholders and taking into account social interests. Most expectations (17) refer to the dimension of environmental protection (expectations that are not reflected in this dimension are assessment, satisfaction and work-life balance).

Figure 3 presents the tools used by the enterprises surveyed to meet stakeholders' expectations.

19 tools have been identified that the enterprises surveyed use to meet stakeholders' expectations. Trainings were found to be the most universal tool for satisfying all the expectations of stakeholders that were identified. Yet another tool, demonstrating a high degree of universality of application to meet the expectations of stakeholders turns out to be internet communication tools (such as social networks, website, industry portals, e-mail) and various types of meetings (included in satisfying all needs apart from environmental protection and respecting human rights). Surveys are a tool that the enterprises surveyed use to satisfy the expectations of the majority of stakeholders, other than satisfying the expectations of the companies' commitment to environmental protection, respecting human rights and the expectation of knowledge sharing.



**Figure 3. Tools used to meet the expectations of stakeholders in the enterprises surveyed**

Source: own study based on company reports.

Direct contact is used as a tool to meet 15 of the 20 identified expectations. Conferences and events are a tool for satisfying 13 expectations. Consultations and workshops are another tool that demonstrates a similar universality in satisfying expectations (13).

Reports, newsletters and codes (including codes of ethics) are a tool to satisfy 10 expectations. Audits as well as academic and business projects serve to meet the same number of expectations (9), scholarships and internships, and sponsoring are used satisfy 8 expectations, while the tool that enterprises use the least (4 expectations) are grants.

## 5. Discussion and conclusions

The text presents, first of all, considerations regarding the interrelationship between the CSR concept and the stakeholder theory. The literature review shows that although both function as separate concepts, there is a similarity between them regarding the inclusion of social interests in the organization's goals. The main difference is in range and area of activity - the CSR concept focuses on a one-way corporate responsibility towards stakeholders, while the concept of stakeholders includes multidirectional responsibility, encompassing the company's obligations towards stakeholders and stakeholders' obligations towards the organization.

Empirical research was carried out in a deliberately selected group of companies listed on the Warsaw Stock Exchange and forming the so-called RESPECT Index. These studies resulted in getting to know: expectations of identified groups of stakeholders in the enterprises surveyed; CSR dimensions in which the enterprises surveyed identify the expectations of stakeholders; tools used to meet the expectations of stakeholders in the enterprises surveyed.

Generally, different types of expectations have been identified, which are characterized by a significant degree of convergence, which probably results from the companies surveyed being in the same group, determined by the fact that they met uniform CSR requirements. Expectations that were identified most often, such as communication, cooperation or relations, directly concern the aspect of maintaining relations with stakeholders raised in both concepts - CSR and stakeholders. They concur to a large extent with expectations signaled in the literature on the subject (Ciepiela, 2014, p. 25, Gangone AD and Gănescu MC, 2014, p. 546,

Papasolomou-Doukakis, Krambia-Kapardi and Katsioloudes, 2005, p. 268; Waheed and Yang, 2019, p. 564).

All identified expectations relate to two of the three selected dimensions of CSR - relations with stakeholders and social interests. Only some of them refer to the dimension of environmental protection. It indicates the primacy of the first two dimensions in the CSR concepts of the enterprises surveyed.

The tools identified to meet the expectations of stakeholders in the enterprises surveyed are of diverse nature, also taking into account new trends, such as the phenomenon of digitization. For example, internet communication tools have become a common solution for ensuring communication and cooperation with stakeholders, which is the future, inspiring direction of research. It is also interesting that simultaneously with the development of technology, traditional forms of contact, such as meetings, conferences and various types of events play a similarly important role, which indicates the importance of direct contact in creating and maintaining relations with stakeholders and confirms the importance of solutions recognized as traditional.

It is worth emphasizing that the research results discussed above have both theoretical and utilitarian values. In the first case, the identification and analysis of convergence and divergence between the CSR concepts and stakeholders as well as the expectations of stakeholders and the tools used to satisfy them were made. The results of the empirical research, in turn, show the expectations of stakeholders identified in the surveyed enterprises, the dimensions of the CSR concept in which these expectations are placed and the tools provided for meeting these expectations. The applied research approach may be adapted in the future to study the problem of stakeholder expectations also in other enterprises as well as conducting comparative analyzes. It can also be extended by introducing additional methods, such as in-depth interviews or surveys, which may result in the revelation of new scientific knowledge in the subject of this research.

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## **Objectives of Risk Management in the Financial Services Sector - The Perspective of Polish Enterprises Listed on the Warsaw Stock Exchange**

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### **Abstract**

Risk management is now an important domain of management, often determining the probability of survival and development of enterprises. The main purpose of this article is to identify and categorize the risk management objectives adopted in the Polish enterprises representing the financial services sector, that were studied. Empirical research was carried out on a sample of 33 companies listed on the Warsaw Stock Exchange, adopting the mixed methods research approach, using the inductive logic inherent in the empirical approach. The aim of the empirical research was realized through the use of triangulation of research methods and techniques. The main method used in the research procedure was analyzing the content of source documents of the group of enterprises studied, mainly: annual reports (financial statements, chairman's reports), capital adequacy reports and other information subject to disclosure by entities listed on the WSE. The logic classification method, and the comparative analysis method along with quantitative tools were also used. The main research findings indicate that: 1) the primary objective of shaping risk management processes in the enterprises studied is, in most cases, ensuring compliance with the applicable external and internal requirements, 2) specific objectives (components of the primary objective) are determined mainly by the specificity of the financial services sector. The research results obtained refer to both the theory and the practice of risk management among enterprises in the financial services sector, and may serve as a source of knowledge for stakeholders of stock exchange entities (eg investors, contractors, business partners), which adds value to this work.

**Keywords:** objectives, risk, risk management, financial services sector, enterprise.

**JEL classification:** G2, D81.

### **1. Introduction**

Risk management (RM), like other management disciplines, has undergone significant transformations, adapting its conceptual, semantic and instrumental dimensions to the changing conditions of business operations and stakeholder expectations. The basic directions of changes include: the achievement of strategic importance by RM in relation to its undisputed influence on gaining competitive advantage, creating value for stakeholders, or potential effectiveness in conditions of increasing complexity (Calandro, 2015; DeLoach, 2004; Elahi, 2013). The development of RM takes place on the one hand in the so-called basic trend expressed by relatively formalized concepts and management standards, in particular Enterprise Risk Management (ERM) (Jankensgard, 2019), and on the other hand within numerous other management domains, such as project management (Kutsch, 2008), innovations (Bowers, Khorakian, 2014), contract management (Schuhmann, Eichhorn, 2017). As a consequence, RM is developing dynamically and multidimensionally, which makes it difficult to "inventorize" various approaches. The objectives of RM are particularly noteworthy - these reflect the role that management assigns to this enterprise, as well as internal and external conditions that influence these goals. The purpose of the literature review carried out was to identify the goals

that can be attributed to RM in light of the research. On the other hand, empirical studies conducted on a sample of 33 Polish enterprises listed on the Warsaw Stock Exchange (WSE), representing the financial services sector, reveal the image of RM objectives set by the management of these enterprises. The research results, through the identification and categorization of the aforementioned objectives, thus show the dominant orientation of RM in the enterprises studied. A comparison of the results of the empirical research with those of the literature review reveals the tendencies that dominate in determining the objectives of RM in the enterprises studied.

## 2. Literature review

Deliberation on the objectives that can be realized with the help of RM in enterprises, should start from the analysis of some selected definitions of this discipline, the scope of which, often allows us to identify such goals. Following this lead, the following goals of RM can be identified.: to mitigate developing ambiguous threats before they manifest themselves and to help leaders identify and track their weak signals (Calandro, 2015), to assure corporate governance compliance and the success of projects within organizations including key sources of future shareholder value (Kendrick, 2004), to increase the adaptive capacity of organizational complex systems and to give methods and tools for managing various types of risk (Beauchamp-Akatova, Curran, 2013), to identify the specific attributes of organization generated specific risks (Rubino, Vitolla, 2014), to support making strategic decisions that contribute to the achievement of an organization's overall corporate objectives (Sanchez et al., 2009). As can be seen, the default RM objectives included in its definitions have limited independence and are subjugated to various tendencies in management, mostly performing a protective function while also carrying out other management dimensions.

More detailed approaches to setting RM targets can be seen in three perspectives: with regard to strategic management, with regard to risks and with regard to the sectors in which enterprises operate.

In the context of strategic management, the RM objectives may concern, *inter alia*, decision-making and providing decision makers with a systematic approach to coping risk and uncertainty (Williams et. al, 2006), giving useful information through risk aggregation and optimizing risk-return profile (Jankensgard, 2019). The strategic goal of RM is also to implement approaches which can create long term competitive advantage (Elahi, 2013). Objectives may also relate to the formulation of a management approach and the creation of systems or mechanisms within the organization so that adverse risks can be anticipated and managed for the purpose of increasing firm value and continuously creating added value in every organizational activity (Iswajuni et al, 2018) or to build a risk-based approach to executing strategies by focusing on the opportunities outlined in the firm's strategic plans and at the same time minimizing the potential impact of threats (Sheehan, 2010). An extension of the above are the objectives that are instrumental in character, relating to testing and improving different methods of strategic analysis like TOWS (Dandage et al, 2018). Other RM objectives, discussed in the literature, concern, for example: appropriating personnel so that everyone understands his or her respective role from the highest level of the organization down (DeLoach, 2004), adopting RM as a compliance issue and the same time developing approaches which reflect their own business culture and stakeholders base (Loosemore, 2010), knowing business risk exposures and assuring growth potentials (Stan-Maduka, 2010), protecting organizational resources exposed to risk (Tchankova, 2002), examining the main codes of corporate governance in several different countries and analyzing the main regulatory provisions (Rubino, Vitolla, 2014). The above objectives, although very diverse, are focused around the role supporting the differently interpreted development of enterprises.

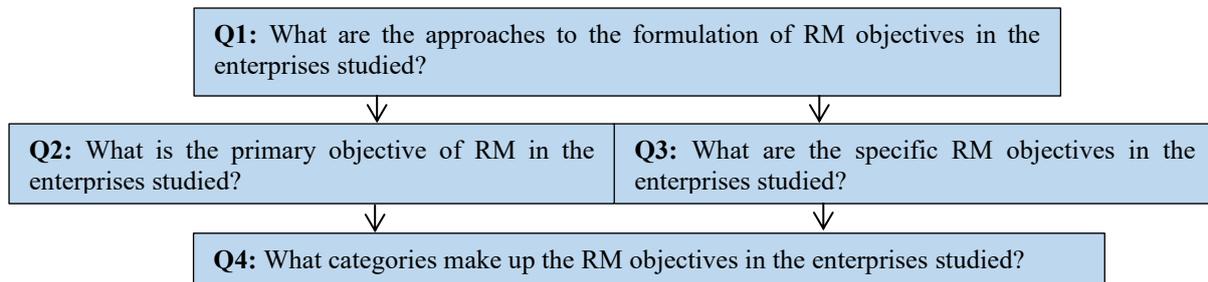
The RM objectives are defined in a slightly different way when it concerns its specific types. For example, Kendrick (2004) lists key business risks of strategic importance: business risk, financial risk, project and operational risk, reputation risk, compliance risk. Kendrick treats reputation risk as a particularly important type of risk, and perceives specific management goals in creating non-probabilistic methods of its analysis. De Moura Maciel et al. (2019) analyze RM's social goals. As it has a highly aggregated form, including many factors from the external and internal environment, the key goal of managing this risk can be indicated by the formal establishment of communication mechanisms and relationships with stakeholders and simultaneously to define the role and responsibilities of employees in joint RM activities with stakeholders. Schuhmann and Eichhorn (2017), reviewed the views of other authors on the management of legal risk and contract risk. It was noticed that although these risks have a high number of referrals (eg changes in law, product liability, intellectual property, changes in tax code, fines, approval risk, etc.), the RM targets apply either to the whole company, in which case, one can speak about the impact of obtaining positive business outcomes or they apply to individual transactions, in which case one should minimize particular losses and maximize particular benefits. Bowers and Khorakian (2014) analyze RM in innovative projects. In this case, the primary purpose of RM is to identify unacceptable risk as early as possible. Andersen (2009) notes that, as far as innovation is concerned, traditionally proven management tools fail, and therefore, RM must be focused on developing company-specific dynamic capabilities. Jurisch et al. (2016) conduct their reflections in relation to projects of different kinds, but all with features of variation. In such projects, the risk is of an emergent nature, and the objectives of RM focus on overcoming problems concerning, firstly, ensuring organizational support for the project, and secondly introducing mechanisms of flexible response to permanent variability. Besner and Hobbs (2012) set a goal that would have a clear impact on success as well as obtain the status of a key success factor before RM in projects. Sanchez et al. (2009) believe that the RM objectives in projects cannot be autonomous, but are subjugated to the objectives of the project. Kutsch (2008) adds that the objectives of RM in projects are derived from intervening conditions related to the perception of uncertainty on the part of managers. In turn, Wong (2014) deals with non-financial RM. In his opinion, the primary objective of managing this risk may be perceived as providing enterprises with the mechanism to achieve corporate sustainability and their business goal. It is therefore a perspective that does not avoid the business aspect of the activity but, at the same time, raises awareness of social issues. The RM objectives for records management are more operational in nature pertaining to, inter alia, adjusting the approach to the development of technologies and standards (Lemieux, 2010).

The dissimilarities in RM objectives may also result from the conditions of the sector in which the enterprise operates. For instance, Chockalingam et al. (2018), examining the example of banks, note that these organizations are related to numerous types of risk, which are in part typical (market risk, strategic or business risk), and in part specific (credit risk). The slightly different objectives of RM in banks result, among other things, from the fact that the components of seemingly typical types of risks mentioned above, are different than in other organizations and are related to even high susceptibility to financial crises. Rafi-Ul-Shan et al. (2018) analyze the risk in fashion supply chain. In case of this and other supply chains, the specificity of RM objectives refers to the need to integrate the applied practices in all parts of the chain. This is confirmed by the studies of Prakash et al. (2017) pertaining to the food supply chain.

### **3. Methodology**

Mixed methods research (Flick, 2008, 2018) was applied to carry out the empirical research using inductive logic, inherent in the empirical approach. The aim of the research was

to identify and categorize the objectives of the RM adopted in Polish enterprises listed on the WSE, representing the financial services sector. During the study, research questions (Q1, Q2, Q3, Q4) were formulated, thus creating a conceptual research model (Figure 1).



*Figure 1. Conceptual model of the research*

Source: own study.

The aim of the empirical research was accomplished through the use of triangulation (Flick, 2018) as a framework for combining a qualitative and quantitative approach, based on mutual control of results (Hammersley, 1996). The empirical research was divided into four main stages.

### **Stage 1. Selection of companies for research and obtaining source documents**

Enterprises for the research were qualified in two phases through targeted selection. In the first phase, all Polish enterprises representing the financial services sector that are listed on the Stock Exchange were classified for research (as at 25/06/2019) - 36 enterprises listed on the main WSE market. This included: the main market - 29 and the parallel market - 7. In the second phase, due to the need for a representative and objective selection, the number of enterprises was reduced, excluding those in a state of bankruptcy or winding up, restructuring or featuring on the WSE Alert List. As a result of this reduction, 3 companies were eliminated (RM objectives in these enterprises should be analyzed separately, but this action was not taken due to their low number in the sector), and 33 were qualified for the basic research. The companies that qualified for the research were designated anonymized names by the key: abbreviation of the FSS sector (Financial Services Sector) and serial number from 1 to 33. The subsectors shown in Table 1 are included in the financial services sector.

*Table 1. Breakdown of the enterprises studied according into subsectors of the financial services sector*

Subsector	Number of enterprises	Designated names of enterprises
Banks	13	FSS 1, FSS 2, FSS 3, FSS 4, FSS 5, FSS 6, FSS 7, FSS 8, FSS 9, FSS 10, FSS 11, FSS 12, FSS 13.
Leasing and factoring	3	FSS 14, FSS 15, FSS 16.
Financial intermediaries	2	FSS 17, FSS 18.
Capital market	7	FSS 19, FSS 20, FSS 21, FSS 22, FSS 23, FSS 24, FSS 25.
Insurance	3	FSS 26, FSS 27, FSS 28.
Liabilities	5	FSS 29, FSS 30, FSS 31, FSS 32, FSS 33.

Source: own study.

The data was obtained from source documents made public on official websites of the enterprises studied.

### **Stage 2. Identification of RM objectives and approaches to their formulation in the enterprises studied**

The main method used at this stage was the analysis of source documents (document analysis method) (Bowen, 2009) of the group of the companies studied. This included: annual

reports (financial statements, chairman's reports), capital adequacy reports and other information subject to disclosure by entities listed on the WSE.

### Stage 3. Categorization of RM objectives identified in the enterprises studied

At this stage, the logic classification method was used in order to categorize the RM objectives identified. It was one-dimensional, based on a two-stage division, satisfying the exhaustive and mutually exclusive criteria in the selection of categories (Bailey, 1994; Saran, 2014).

### Stage 4. Demonstrating general sectoral trends and drawing conclusions

At this stage, the comparative analysis method was used (Esser and Vliegthart, 2017), in the form of closed comparison, where the units selected for comparison are selected *a priori* before the study (Konecki, 2000), to illustrate sectoral trends. Quantitative tools were also used as the number of enterprises included in the sector analyzed made it necessary to have quantitative confirmation of the results which were based on qualitative research.

## 4. Findings

### 4.1. Approaches to formulating RM objectives in the enterprises studied

The research revealed three types of approaches to formulating RM objectives in the enterprises studied (Table 2): specifying only one RM objective, defining several equivalent RM objectives, defining several RM objectives in a hierarchical system, where one objective is treated as primary and the others as specific objectives being components of the primary objective.

Table 2. Approaches to formulating RM objectives in the enterprises studied

Only one objective	Several equivalent objectives	Several objectives in a hierarchical system
FSS 14, FSS 19, FSS 22, FSS 29.	FSS 15, FSS 21, FSS 24, FSS 26, FSS 27, FSS 31, FSS 32, FSS 33.	FSS 1, FSS 2, FSS 3, FSS 4, FSS 5, FSS 6, FSS 7, FSS 8, FSS 9, FSS 10, FSS 11, FSS 12, FSS 13, FSS 16, FSS 17, FSS 18, FSS 20, FSS 23, FSS 25, FSS 28, FSS 30.

Source: own study.

As is clear from the data presented in Table 2, the most commonly used approach to formulating RM objectives in the enterprises studied is to construct in a hierarchical system (which means that it adopts one primary objective and several specific objectives coherent with the primary objective, which are its components). However, this is not the only approach. The other two approaches have also been used in some enterprises, which indicates the relative diversity in the practices of the enterprises studied.

### 4.2. The RM objectives in the enterprises studied and their categories

The categorization of identified RM objectives was made in the manner described below, based on a two-step classification.

The **objectives of compliance** are those that ensure compliance with legal requirements (external regulations) and internal procedures and policies (internal regulations) in the scope of RM. These objectives were divided into three sub-categories: 1) **process**, under which objectives related to meeting the requirements of the individual stages of the RM process, as well as implementation of the RM strategy were grouped, 2) **safety**, which enlisted objectives related to meeting the safety requirements for conducting business and ensuring business continuity, 3) **organizational**, to which objectives related to meeting the requirements related to incorporation of RM into the overall enterprise strategy, employee responsibility and supporting other functional areas were assigned.

**Sectoral objectives** were objectives related to sectoral risk, characteristic of the specific nature of enterprises in the financial services sector. These objectives were divided into three subcategories: 1) **profitability**, which includes objectives related to the possibility of

generating profits, maintaining financial stability, protection of shareholder value, 2) **credibility**, which includes the objectives related to creditworthiness, protection of clients' deposits, shaping clients' trust, 3) **business**, which includes objectives related to achieving business goals and their integration with RM.

Therefore, two main categories of RM objectives were identified among the enterprises studied: compliance objectives and sectoral objectives. The following objectives were formulated as part of the compliance objectives in the enterprises examined: 1) process (including: ensuring early recognition and adequate management of all significant risks related to business operations, effective risk control and its maintenance as part of the adopted risk appetite, proper identification, risk measurement and aggregation as well as setting limits, ensuring that all risks are managed, monitored and inspected in accordance with the risk profile adopted (risk tolerance), 2) safety (including: ensuring the company's operational security, compliance with procedures specifying principles of determining acceptable levels of particular types of risk, not disturbing the safety of the entity, securing potential losses through appropriate control mechanisms, a system of limits and an adequate level of reserves) and 3) organizational (including: supporting the implementation of the strategy and, taking a balanced risk while maintaining the principles of shared responsibility, increasing awareness and responsibility among employees for appropriate RM at each level of the organizational structure, supporting the implementation of strategic objectives).

On the other hand, within the framework of the sectoral objectives, the following objectives were formulated in the enterprises studied: 1) profitability (including: ensuring an adequate level of profitability, optimizing the risk and profitability ratios, optimizing the balance sheet structure and off-balance sheet items to maintain the established income to risk ratio, stabilizing long-term results and maintaining the pre-determined parameters of asset quality in order to achieve the assumed income to risk ratio), 2) credibility (including: maintaining a high level of security of entrusted deposits, protection and ensuring the safety of customer deposits, implementing a policy for securing claims) and 3) business (including: making business decisions in such a way so as to take into account (offset) risk, achieve set business goals, support business in implementing the RM framework, including risk and capital aspects when making all business decisions within the limits of the risk appetite).

A detailed breakdown of the RM objectives of all enterprises, selected for testing according to the adopted classification criteria, is presented in Table 3.

*Table 3. Categorization of RM objectives identified in the enterprises studied*

OBJECTIVES ENTERPRISES	COMPLIANCE OBJECTIVES			SECTORAL OBJECTIVES		
	PROCESS	SAFETY	ORGANIZATIONAL	PROFITABILITY	CREDIBILITY	BUSINESS
FSS 1	x (P)	x	x	x		
FSS 2	x		x (P)	x		x
FSS 3	x (P)	x		x		x
FSS 4	x	x (P)	x			
FSS 5	x	x	x	x		x (P)
FSS 6	x		x (P)			x
FSS 7	x		x	x (P)		
FSS 8			x (P)	x	x	
FSS 9	x (P)		x	x		x
FSS 10	x (P)	x	x	x		
FSS 11	x (P)			x		x
FSS 12	x (P)			x	x	
FSS 13	x (P)			x	x	
FSS 14	x					
FSS 15		x		x		
FSS 16	x (P)			x	x	
FSS 17	x	x (P)				x

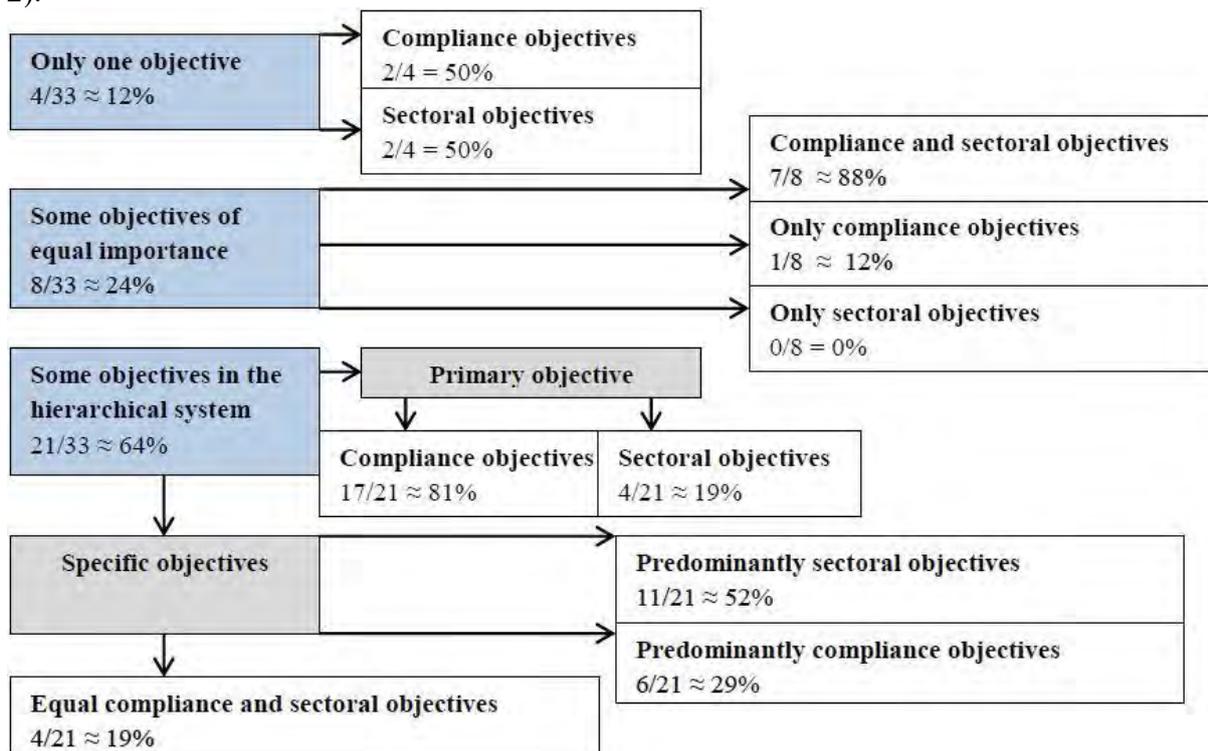
FSS 18	x			x		x (P)
FSS 19						x
FSS 20	x	x	x (P)	x		
FSS 21	x					x
FSS 22				x		
FSS 23				x		x (P)
FSS 24	x			x		x
FSS 25	x (P)	x	x	x		x
FSS 26	x					x
FSS 27	x	x				x
FSS 28	x (P)			x		x
FSS 29	x					
FSS 30		x (P)		x		
FSS 31	x					x
FSS 32	x		x			
FSS 33		x		x		

**Explanation:**

**(P)** - primary objectives (for enterprises formulating objectives in a hierarchical order)

Source: own study.

In order to establish the trends in the determination of RM objectives taking place in the enterprises studied, based on the data included in Table 3, a quantitative analysis of the distribution of these objectives was made, taking into account the selected categories (Figure 2).



**Figure 2. Trends in the financial services sector with regard to RM objectives - quantitative analysis**

Source: own study.

The research results shown in Figure 2 confirm that the RM objectives in the enterprises studied are most often formulated in the hierarchical system (64%), and among enterprises that represent this approach, the primary objectives are generally the objectives of compliance (81%), while among specific objectives, those from the sectoral category are slightly higher (52%).

## 5. Discussion and conclusions

Defining objectives is one of the key elements of RM in enterprises, as important as the formulation of strategies in this area. Literature studies showed a variety of possibilities to formulate RM objectives, taking into account a number of conditions (eg the relationship with strategic management, dependence on the type of risk or the sector of activity). Empirical studies have made it possible to establish that in Polish enterprises in the financial services sector listed on the WSE, RM objectives are most often formulated in a hierarchical system. This way of building RM objectives makes it possible to take into account a wide range of problems as well as to adjust the structure of objectives to the organizational structure and levels of business management. The hierarchical approach to setting RM targets is most often followed by banks, which may be a result of legislative restrictions (Allen, Gu, 2018) and sensitivity to the occurrence of financial crises (Apăvăchioae, 2014), forcing specific actions against risk.

The research conducted also allowed us to make a synthetic categorization of the RM objectives in the enterprises studied and thus to show the trends characterizing this group of enterprises. It has been shown that the primary objective of RM in the majority of enterprises studied, which formulate objectives in a hierarchical system, is to ensure compliance with applicable external and internal requirements. External requirements should be understood as legal regulations, regulating RM in the sector studied in a dual manner: 1) through national and international normative acts, 2) through the regulations of the WSE. On the other hand, internal requirements are internal policies and procedures related to RM that are adopted in enterprises. The selected compliance objectives based on substantive categorization of the second degree can be divided into the following objectives: process, safety and organizational. Such a clear dominance of compliance objectives can be critically assessed and treated as an expression of limited aspirations of the management in the area of RM and a lack of maturity of applied practices (Elahi, 2013) or it can be explained by the special status of the enterprises studied due to their presence in the WSE and the resulting obligations to numerous stakeholders (Iswajuni et al., 2018).

Analyses carried out also made it possible to determine that specific objectives (being components of primary objectives) identified in the enterprises studied are most often determined by the specificity of the financial services sector and can be divided into the sub-categories of objectives: profitability, credibility and business.

The research findings obtained may be useful both for the theory and the practice of RM among enterprises in the financial services sector and as a compendium of knowledge for various stakeholder groups of listed enterprises (e.g. investors, contractors, business partners) for whom information on risk approaches, including formulating objectives may be important in making business and investment decisions (Satti et al., 2013). These arguments constitute the added value of this study. Comparing the results of empirical research with the results of the literature review indicates that in the enterprises studied, RM objectives are formulated in a relatively narrow and simplified manner in relation to the potential opportunities. This observation may have partly resulted from the research methods adopted by the authors of this study, in particular the method of analyzing the content of documents made public on official websites of the enterprises studied, which has certain limitations. The continuation of this study, taking additional research methods into consideration, including, e.g., interviews with representatives of the enterprises studied or review of internal documents and procedures adopted in these enterprises may increase the value of research findings and broaden knowledge on the determination of RM objectives in the enterprises studied. The inclusion of companies representing other sectors in future studies may be a source of valuable knowledge about the similarities and distinctiveness of RM practices in various sectors.

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## Gender Differences in Tourism Marketing Product Perceptions

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### Abstract

This study explores package holiday travelers' perceptions of tourism product attributes from the gender perspective. The research results reveal that significant differences exist in perceived levels of tourism product attributes between men and women. The perceptions of females were higher than those of males for all the statistically significant features in each of two categories of tourism product attributes. Tour package features such as hotels, price/quality relationship, and standard of the bus as well as selected experience attributes, including tourist attractions, nature/countryside, shopping opportunities, safety, cleanliness, tourist information, and possibility to communicate in English were evaluated significantly higher by females. Several managerial implications for both tourism marketing strategists and tourism marketing product providers are discussed in this study.

**Keywords:** tourism, perceptions, gender.

**JEL classification:** L83, M31.

### 1. Introduction

The travel and tourism industry is one of the largest and fastest growing sectors of the world economy, currently supporting 319 million jobs worldwide and generating 10.4% of world GDP. In 2018, the travel and tourism industry experienced 3.9% growth outperforming the global economy (World Travel & Tourism Council). For many countries in Europe and elsewhere, tourism is one of the most important sources of revenue playing a leading role in providing jobs. Thus it is really important to focus heavily on marketing effectively to tourists.

The total contribution of travel and tourism to the GDP of the economy of Poland was 4.5%, whereas the direct contribution was 1.9% of total GDP in 2018. Travel and tourism supported 332,000 jobs directly (2% of total employment). The combined total of direct and indirect tourism jobs was some 736,800 or 4.5% of total employment. International visitor impact accounted for 4.6% of total exports. (World Travel & Tourism Council)

Due to the impact of tourism on the socio-economic development of the country and its positive prospects, as well as favorable forecasts predicting a faster pace of tourism growth in Poland than in the EU and in the world, in the perspective of 2018-2028, a profound research of tourists' perceptions of Poland as a tourist destination is required. It is also important to note that Poland is not perceived as a typical tourist destination; however, due to its cultural and natural heritage as well as investment in tourism infrastructure, the country has a lot of tourism potential (Johann, 2014).

The detailed information regarding tourists' needs and preferences is crucial for tourism marketing strategists and tourism marketing product providers to develop well suited packages and services for tourists as well as to design effective marketing communication. Thus, the characteristics of foreign visitors as well as their travel behavior need to be taken into

consideration in research studies in order to better understand travelers' preferences. A number of studies have been performed in order to examine travelers' cultural and socio-psychological differences in tourism product perceptions; however, few have concentrated on gender specifics, especially in a Polish context.

The tourism literature has examined gender differences in travel and consumer behavior from varied perspectives. For example, Frew and Shaw (1999) investigated the differences between men and women in the context of personality and tourist behavior. Uysal, McGehee and Loker-Murphy (1996) focused on associations between gender and tourism motivations. Yet, not much attention has been paid to the issue of gender differences in tourism product perceptions from the perspective of package holiday travelers.

Hence, the current study attempts to compare males' and females' perceptions of Poland as a tourist destination. We focus on two categories of tourism product attributes in our research. One is closely related to actual tour package features and the other is more related to different experiences that tourists had during their tourist visit. We highlight the marketing implications of our data analysis.

## 2. Literature Review

Gender differences can be observed in numerous different domains and have been documented in many empirical studies. The study of personality is particularly important for understanding how men and women differ in the ways in which they think, feel, and behave (Weisberg, DeYoung and Hirsh, 2011) since this might influence their consumption patterns.

Maccoby and Jacklin (1974) conducted the first extensive review of research on gender differences with respect to personality. They found that men were more assertive and less anxious than women; however, no differences were noticed with regard to locus of control and self-esteem. Further studies have thrown new light on sex-related differences in cognition, temperament, and social behavior. Feingold (1994) revealed that women were higher than men on trust, anxiety, gregariousness, and tendermindedness and lower on assertiveness. Costa, Terracciano and McCrae (2001) found that women perceived themselves to be more agreeable, neurotic, warm and open to feelings whereas men reported themselves to be more assertive and open to ideas. Moreover, they suggest that gender differences vary across cultures and are more significant in European and American cultures.

A broader context of association between personality and sustainable consumer behavior was emphasized by Luchs and Mooradian (2011). They stated that more open and more agreeable consumers are more likely to be concerned with social and environmental issues. The results of other studies show that women attach more importance than men to social concerns (Eagly, Diekmann, Johannesen-Schmidt, and Koenig, 2004) and environmental concerns (Zelezny, Chua, and Aldrich, 2000). Thus, a sustainable tourism concept seems to be more persuasive for women. Frew and Shaw (1999) have addressed the issue of personality and tourist behavior. They found that there were significant associations between the respondents' personality types, their gender, and their willingness to visit specific tourist attractions. In other studies researchers investigated also tourists' motivations from the gender perspective.

Travel motivations are generally explained by the theory of push and pull motivations. While push factors give tourists a reason to travel, pull factors explain their choice of destination (Dann, 1977, 1981). Crompton (1979) distinguished seven socio-psychological motives (push factors) not linked to destination features and two cultural motives (pull factors) related to the qualities of a destination. Uysal and Jurowski (1994) stated that push factors correspond to the needs and preferences of travelers, such as desire to escape from routine, relaxation, need to experience adventure, expectation of social interaction, whereas pull factors

are the characteristics pertaining to the destination, such as image, natural beauty, tourist attractions, recreation facilities. Moreover, they examined the nature and extent of the reciprocal relationship between push and pull factors. This correlation was found to be associated with IsoAhola's (1980) escape-seeking theory. In another research Uysal, McGehee and Loker-Murphy (1996) investigated gender differences in tourism motivations of Australian leisure travelers. Their findings revealed that women placed different importance on some push and pull factors than men. According to research results, women attach more importance to such push factors as cultural experience, family and kinship, and prestige while men rated sports and adventure as a more significant factor. Several pull factors including budgetary environment, comfort and relaxation, and heritage and culture were ranked highly for both men and women, yet, they were more significant for women.

Meng and Uysal (2008) gave more insight into the effects of sex-related differences on perceptions of destination attributes. They explored gender differences in perceived importance of destination attributes, travel motivations, and travel values with regard to nature-based tourism. They revealed that most destination attributes were more important for women than for men. Women ranked high the importance of natural scenery and various recreational activities, whereas men tended to seek action and adventure in their travel experience. Although no significant difference between men and women was observed in the importance of motivation, it was noted that women were more motivated by relaxation and restfulness while men were more triggered by physical activities and having fun. Moreover, their findings demonstrated many similarities with results of previous studies on gender differences (McCleary, Weaver and Lan, 1994; Freysinger, 1995; Uysal, McGehee and Loker-Murphy, 1996).

Customer satisfaction has been also a dominant theme of research due to its role as a key driver of enterprise growth and profitability (Anderson, Fornell and Lehmann, 1994; Hallowell, 1996). In the tourism context, the research results show that there is a relationship between experience quality, perceived value, satisfaction, and tourists' behavioral intentions (Chen and Chen, 2010). Moreover, tourist satisfaction with a destination is correlated with the destination image (Chon, 1992; Chen and Tsai, 2007). Thus, detailed information regarding tourists' perceptions is crucial for tourism marketing strategists and tourism product providers in order to design effective marketing strategy.

It is evident that demographic, socio-economic and cultural factors affect tourist perceptions. Therefore, we assume that there are likely to be some differences between men's and women's perceptions of their holiday experience. In the present study we examine effects of gender differences on perceptions of different kinds of tourism product attributes, including experience factors and tour package features.

### **3. Research Methodology**

#### **3.1 Data collection and sample design**

The questionnaire was developed based on the literature, interviews, discussions with experts, and the results from previous studies. The first section of the questionnaire contained questions regarding socio-demographic aspects of individual respondents, such as age, gender, place of residence, as well as questions concerning travel motives and patterns. The second part of the questionnaire included questions related to customers' perceptions of tour package features and different experiences that visitors had during their tourist visit, overall satisfaction, and willingness to recommend the tour. Moreover, the questionnaire contained open-ended questions where tourists could express their opinions regarding their holidays. The qualitative research was conducted by the questionnaire survey. Survey respondents rated tourism product attributes on seven point rating scales.

The data were gathered from travelers who were on coach holidays in Poland in 2014-15. The tours were sold by tour operators and travel agents in the USA, Canada, Australia, Spain, Portugal, Brazil and Mexico. The tours were guided either in English or in Spanish and Portuguese. The tour program included visits to important places and tourist attractions in Poland. The subjects were selected by adopting a convenience sampling method. Pencil-and-paper questionnaires were distributed among tour participants after each tour. A total of 463 valid questionnaires were collected. The profile of survey respondents is presented in Table 1.

*Table 1. Profile of survey respondents*

Description			Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Valid	Female	297	64.1	64.1	64.1
		Male	166	35.9	35.9	100.0
		Total	463	100.0	100.0	
	Missing Total	System	0	0.0		
		Total	463	100.0		
Age	Valid	under 20	11	2.4	2.6	2.6
		21–30	18	3.9	4.3	6.9
		31–40	20	4.3	4.8	11.7
		41–50	35	7.6	8.4	20.1
		51–60	88	19.0	21.0	41.1
		61–70	169	36.5	40.3	81.4
		over 70	78	16.8	18.6	100.0
		Total	419	90.5	100.0	
		Missing Total	System	44	9.5	
	Total		463	100.0		
Country of residence	Valid	United States	260	56.1	57.1	57.1
		Spain	61	13.2	13.4	70.5
		Australia	48	10.4	10.6	81.1
		Canada	36	7.8	7.9	89.0
		Brazil	17	3.7	3.7	92.7
		Portugal	9	1.9	2.0	94.7
		Argentina	4	0.9	0.9	95.6
		Other countries	20	4.3	4.4	100.0
		Total	455	98.3	100.0	
		Missing Total	System	8	1.7	
	Total		463	100.0		

### 3.2 Variables

In the present research, we wanted to understand how the important demographic variable of gender might drive customer perceptions. A large number of both males and females come to Poland as tourists. Like tourists anywhere, they are interested in sightseeing of different kinds. Tourism companies try to facilitate their travel experiences by offering them different types of tourism packages. We want to study consumer perceptions of such different aspects of tourism attributes, and understand if gender was a driving force in difference in such consumer perceptions.

Drawing from the above discussion, we focused on two categories of attributes in our research. One was related to the actual tour package features and the other was related to the different experiences that tourists had during their tourist visit.

Once we understand how consumer perceptions varied across females and males, it would be possible for tour companies to tailor their offerings so that they could improve customer perceptions of their tourism experience.

### 3.3 Data analysis

We wanted to determine if there were any statistically significant differences in the attribute perceptions of males and females. We therefore estimated the following general model:

$$Y_{ij} = \mu + \tau_i + \epsilon_{ij} \quad (1)$$

where  $Y_{ij}$  represents the  $j$ -th observation ( $j = 1, 2, \dots, n_i$ ) on the  $i$ -th treatment ( $i = 1, 2$  in our case). So  $Y_{i14}$  would represent the fourth observation using level 1 of the factor.  $\mu$  is the common effect for the whole study,  $\tau_i$  is the  $i$ -th treatment effect and  $\epsilon_{ij}$  captures the random error occurring in the  $j$ -th observation on the  $i$ -th factor. This is the model representation of analysis of variance.

## 4. Results

From Table 2 we can observe that consumer perceptions of three out of the seven actual tour package features are statistically significantly affected by the gender of the tourists. The variables are significant at  $p < .005$ ,  $p \leq .05$  and  $p < .06$ . These features are hotels, price/quality relationship, and standard of the bus. The impact of gender on hotels perception was the most strongly significant. The perceptions of females were significantly larger than that of males for each of these three features. There were no significant gender differences in perceptions for the other four features.

**Table 2. Statistical relationships between gender and actual tour package features for tourists in their visit to Poland**

Independent Variable (Gender)	Dependent Variable (Attribute Perceptions)	Sum of Squares	df	Mean Square	F	Sig.
Attractiveness of the program	Between Groups	.557	1	.557	.849	.357
	Within Groups	302.359	461	.656		
	Total	302.916	462			
Organization	Between Groups	1.111	1	1.111	1.885	.170
	Within Groups	271.654	461	.589		
	Total	272.765	462			
Hotels	Between Groups	7.382	1	7.382	8.996	.003
	Within Groups	378.268	461	.821		
	Total	385.650	462			
Restaurants and meals	Between Groups	.866	1	.866	.793	.374
	Within Groups	503.890	461	1.093		
	Total	504.756	462			
Standard of the bus	Between Groups	2.956	1	2.956	3.615	.058
	Within Groups	376.897	461	.818		
	Total	379.853	462			
Tour escort	Between Groups	.053	1	.053	.147	.701
	Within Groups	165.161	461	.358		
	Total	165.214	462			
Price/quality relationship	Between Groups	2.422	1	2.422	3.863	.050
	Within Groups	289.085	461	.627		
	Total	291.508	462			

Table 3 indicates that perceptions of seven out of the thirteen experience aspects of the tourists' visit to Poland were statistically significantly affected by the gender of the tourists. These attributes were tourist attractions, nature/countryside, shopping opportunities, safety,

cleanliness, tourist information, and possibility to communicate in English. The impact of gender on cleanliness perception was the most strongly significant. For each of these cases of statistical significance, the mean perception levels of females were greater than those of males.

**Table 3. Statistical relationships between gender and experience aspects of the tourists' visit to Poland**

Independent Variable (Gender)						
Dependent Variable (Attribute Perceptions)		Sum of Squares	df	Mean Square	F	Sig.
Climate, atmosphere of your stay	Between Groups	1.957	1	1.957	2.118	.146
	Within Groups	426.026	461	.924		
	Total	427.983	462			
Tourist attractions	Between Groups	4.033	1	4.033	6.761	.010
	Within Groups	274.982	461	.596		
	Total	279.015	462			
Nature, countryside	Between Groups	3.324	1	3.324	4.081	.044
	Within Groups	375.479	461	.814		
	Total	378.803	462			
Shopping opportunities	Between Groups	8.321	1	8.321	7.174	.008
	Within Groups	534.720	461	1.160		
	Total	543.041	462			
Safety	Between Groups	4.620	1	4.620	8.981	.003
	Within Groups	237.130	461	.514		
	Total	241.749	462			
Opportunity to meet new people	Between Groups	3.263	1	3.263	2.547	.111
	Within Groups	590.439	461	1.281		
	Total	593.702	462			
Entertainment	Between Groups	1.054	1	1.054	.849	.357
	Within Groups	572.609	461	1.242		
	Total	573.663	462			
Weather	Between Groups	1.223	1	1.223	.824	.364
	Within Groups	683.715	461	1.483		
	Total	684.937	462			
Cleanliness	Between Groups	6.278	1	6.278	11.477	.001
	Within Groups	252.163	461	.547		
	Total	258.441	462			
Reasonable prices	Between Groups	1.768	1	1.768	2.655	.104
	Within Groups	307.040	461	.666		
	Total	308.808	462			
Tourist information	Between Groups	4.713	1	4.713	7.520	.006
	Within Groups	288.924	461	.627		
	Total	293.637	462			
Kindness to foreigners	Between Groups	2.045	1	2.045	2.203	.138
	Within Groups	428.076	461	.929		
	Total	430.121	462			
Possibility to communicate in English	Between Groups	4.491	1	4.491	3.769	.053
	Within Groups	549.371	461	1.192		
	Total	553.862	462			

## 5. Discussions and Marketing Implications

Tourism is an important revenue earner in Poland and its growth prospects are also substantial. Thus there is a need to study how tourists perceive different attributes of their stay in the country so that companies can best market their packages for future visitors to Poland. We have focused on the market segments of females and males to see how they perceive various kinds of tourism attributes.

Our research shows that significant gender differences exist in the perception of numerous tourism product attributes. The perception ratings of females were higher than those of males for all the statistically significant features in each of the two categories of tourism product attributes. Perceptions of tour package features such as hotels, price/quality relationship, and standard of the bus as well as a number of experience aspects of the visit, including tourist attractions, nature/countryside, shopping opportunities, safety, cleanliness, tourist information, and possibility to communicate in English, were significantly higher for females than for males.

The research results suggest a number of gender-based implications for tourism marketing strategists and tourism product providers. The main conclusion of the study is that it is important to develop well-suited packages adjusted to the males and females needs and preferences. Due to lower males' evaluations of several tourism product attributes, it is important to identify how best tour marketers can improve the perceptions of the male segment especially for those attributes. Future research could focus on doing in-depth interviews with both males and females to understand what the reasons are for males' perceptions for so many different attributes to be significantly lower than those of females. Once the reasons are known, actions can be taken to modify the nature of specifically those attributes in an appropriate way.

Future research could study what kinds of additional features might cause males to find tourism packages in Poland to be considered more attractive than they are at present to them. Tour operators need to develop tourism products more appealing and attractive to men. The tour itinerary could for example, include more challenging and exciting activities (e.g., sports, events, games, shows), adventurous activities (e.g., rafting, cable car ride), attractions involving tourists' active participation, regional food and alcoholic drinks tasting. On a cautionary note, tourism marketers need to ensure that their product offerings continue to be appealing to the female segment. For instance, marketers may consider providing shopping situations where not only men get chances to buy sports accessories, video games, fishing equipment, and alcoholic products, but also women get a chance to buy clothes, cosmetics and souvenirs and so on. These specific suggestions are only examples drawn partly from the literature review in our paper, which indicated that men liked sports and adventure, physical activities and fun and other similar things. Future research would have to identify a set of such attributes more precisely.

A fundamental finding of our study is that there are both similarities and differences in the perceptions of the female and male segments of visitors to Poland. For many attributes, perception levels are similar, while for many other specific attributes the differences are clearly statistically significant. We identify these two clusters of attributes from the ones considered in this study. This is the first step towards helping tour marketers in Poland to better design their product offerings. In the shorter run, marketers could modify these attributes appropriately. In the longer run, they could also add new attributes in their packages; of course the potential impact of these new attributes should be pretested in test markets by utilizing research endeavors like ours.

## **6. Limitations and Future Research**

Conclusions of this study are limited to groups of tourists similar in overall nature to our sample, and can be only applicable in the Polish tourism market. Thus, future research on this topic could be carried out in other countries in Europe and elsewhere in the world, for us to have a broader perspective on gender differences with regard to tourism marketing and consumers' perceptions in this domain. Moreover, the study explores travelers' perceptions of tourism product attributes only from a gender perspective. In the future, gender differences could be analyzed along with geographic, psychographic, and demographic characteristics of

tourists. Because convenience sampling decreases the generalizability of the results, in further studies, it is also possible to use other sampling techniques to improve the sampling reliability. Despite above limitations, our study supports previous findings, gives a new insight into gender differences in a context of package holiday tourism and provides numerous important implications for tourism practitioners and for researchers of tourist behavior.

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## Willingness to Use Online Channel in Various Stages of the Services Buying Process

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### Abstract

The change of the marketing channel in the purchase process is already widely described in the literature. However, the consumers' tendency to use remote channels at subsequent stages of purchase process is relatively rarely described. The aim of the article is to analyze the consumers' tendency to use the online channel in the service buying process - at the pre-purchase, purchase, post-purchase and resignation stage. Quantitative research on a group of 1103 adult consumers was carried out at the end of 2015. Respondents were asked about the intention to use three channels (off-line, phone and online) for the services most often used by households (financial, telecommunications and personal transport services) at various stages of purchase. In this article, the author aimed to answer four research questions: RQ1. What is the frequency of use of the online channels of services distribution at each stage of the purchasing process? RQ2. What is the relative frequency of use online channels in the declarations of respondents? RQ3. What is the intention of use the online channel at particular stages of the purchasing process? RQ4. In which stages of the purchase occurs the greatest differences between declaration the use and declaration of intention to use online channel? The obtained results indicate that, apart from the information seeking phase (pre-purchase), consumers would most preferably use the on-line channel in the post-purchase service stage. The willingness to use the online channel at different stages also differentiates the characteristics of the respondents. Implementation of on-line channels outside the search phase should apply to the post-purchase phase.

**Keywords:** multichannel distribution, services buying process, customer behavior.

**JEL classification:** M31, L81.

### 1. Introduction

There are many different effects occurring between online and offline sales. Both channels affect each other in different ways. As Avery et al pointed out that store opening has a positive impact on internet channel sales and did not suffer cannibalization neither in a short or long time (Avery, Steenburgh, Deighton, Caravella 2012, p. 104). The use of online channels of the seller at the stage of seeking information, however, leads to a reduction in the number of visits to stationary stores and amount of spending money (Nierop, Leeflang, Teerling, Huizingh 2011, p. 162). In fact, the aspect of the impact of online information sources on the offline performance critically depends on the type of product and the consumer segment (Pauwels, Leeflang, Teerling, Elko Huizingh 2011, p. 14.). Offer available online and offline usually differs in terms of the prices. Online sellers offer price advantage because customer has to wait for the product, and offline sellers provide immediate delivery (Grewal et al, p. 149). Multichannel seller's offering products online and offline should, however, be in the range of price differentiation more cautious. In both types of sales, you can see the positive relationship between the perceived quality of services, attitudes, intention of purchase and purchase behavior (Shwu-Ing, Hsiu-Ju 2011, p. 54). The strategic choice, however, is the integration of offline and online channels, which allows to make more profits from synergies between channels (click&collect) (Chatterjee 2010, p. 22). This integration means integrating access to and knowledge about an offline channel into an online channel by (Herhausen et al., 2015, p. 310). Perceived purchase convenience brick-and-mortar channel cause customer significant positive attitude toward purchasing in physical channel (Wang, Lin, Tai, Fan 2016, p. 404).

Perceived information availability for online and offline channel has a positive effect on search attitudes for both channels, but perceived search effort of using physical channel has a negative effect on customer attitude toward search in this channel. This explains why online channels are most often used by consumers at the stage of seeking information and offline at the purchase stage. Herhausen et al. claim that channel integration increases perceived services quality of the Internet store and perceived services quality of the Internet store, increase overall and Internet outcome but not negatively affect physical store (Herhausen et al., 2015, p. 319). Research conducted by Li et al. confirms that channel integration has a positive impact on customer retention by reducing the uncertainty of the retailer, increasing the attractiveness of the retailer's identity and increasing switching cost (Li et al., 2018, p. 56).

## **2. The multichannel customer behaviour theories**

The use of different channels in the purchase process is explained by various theories. Yang et al. (2013, p. 864) suggest that offline channel experience influences the intention to use online channels in two ways. First perceived services quality offline channel influence the perception service quality corresponding online channel (brand extension mechanism), and confirmation or not the performance offline channel influence perception of the relative benefit of online channel (expectation-confirmation mechanism). These theories confirm earlier studies conducted by Verhagen and van Dolen (2009, p. 81) that reveals a significant influence of offline on on-line store image. Transaction cost economics theory describes critical dimension for transactions: uncertainty, the frequency of transactions and specific investments required to realize supply (Williamson, 1981, p. 555). The theory concerns the management of organizations in various dimensions, including distribution channels or buyer transaction costs (Seggie, 2012, p. 65). From the customer point of view during a purchasing process customer prefer the channel of distribution with lower transaction cost (Teo, Yu 2005, p. 455). Teo and Yu (2005, p. 460) define three dimensions (uncertainty, trust and buying frequency) that influence customers' buying behaviour on the internet. They find out that higher perceived transaction cost (time and effort) have a negative impact on customer's willingness to buy online. Devaraj, Fan and Kohli (2006, p. 1098) support hypothesis that consumer channel satisfaction drive customer online channel preference. Satisfaction is influenced by time responsiveness, personalization and, to the greatest extend, security and reliability. Purchases made in online stores allow customers to eliminate travel and transport costs, on the other hand, delivery costs are a common reason not to buy online (Chintaguant et al., 2012, p. 108). Wu at al. (2014, p. 2774) analyzed e-shopping value and the repurchase intention. They find out that cost of searching information online influence negatively on e-shopping value while it is a positive antecedent repurchase intention.

## **3. The possibilities of implementing online channels at every stage of the purchase process**

The rate of growing e-commerce is so impressive that has even outpaced traditional channels of retailing (Izogo and Jayawardhena, 2018, p. 193). It was predicted that in 2019 the number of people purchasing goods and services online is expected to increase to over two billion (Wong and Wei, 2018, p. 406) Researchers pay attention to the important role of experience in the online customer journey (de Haan et al., 2018, p. 16; Lipowski and Bondos, 2018, p. 22; Frambach et al., 2007, p. 33). According to Melis et al. (2015, p. 285), along with the improvement of customers' online shopping environment and their level of self-confidence in online shopping, consumers choose only from online suppliers instead of both online and offline channel. The key issue for a better understanding of the online purchase process is the awareness of its complexity and differences in preferences for the online / offline channel at individual stages. Each stage in buying process has its own specific and due to this requires

separate research attention. Nowadays customers demand putting equal seller's emphasis on both pre-purchase and post-purchase stages (Kumar and Anjaly, 2017, p. 1280). Modern consumers have lost the features of inexperienced buyers from the early days of Internet (Kim and Koo, 2016, p. 1025). Due to the specificity of the individual stages in the purchase process, not all of stages can be fully implemented in the online environment. Another important factor is the form of the product itself – physical product or digital one. For instance, the product return seems to be the area of purchase process that must be realized in, at least, omnichannel environment (Bernon et al., 2016, p. 586). The whole purchase process can be divided into several stages, four phases are quite obvious: pre-purchase, purchase, post-purchase and resignation (optional). Despite the fact that purchase stage seems to be perceived as the most important, this stage is not the only one. Frambach et al. (2007, p. 33) note that the offline channel is generally preferred over the online channel across all the stages in purchase process. In order to improve the consumers' tendency to use the online channel, it is crucial to reduce the perceived risk before, during, and after the products / service delivery (Grewal et al., 2007, p. 250). According to Park et al. (2012, p. 422), during satisfaction evaluation online consumers distinguish two stages (pre and post-purchase). According to the researchers, the maximum value of the purchased product can be obtained by the consumer, if after-sales services are available; these are service such as: installation, user training, documentation, maintenance and repair, online support, warranty and upgrades (Szwejczeniowski et al., 2015, p. 5335). The goal of post-purchase stage is to reinforce or justify the buying decision made a the previous stage in buying process (Park et al., 2015, p. 1113). In order to encourage customers to online channel at as many as possible stages in buying process it is crucial to realize the major concern of business that is to understand, build and maintain quality (Pakdil et al., 2012, p. 1397). In case of pre-purchase stage (seeking for information) one of the most important factor affecting intention to use online channel is cost of searching. Cost literature suggests three types of search costs: the cost of locating an appropriate seller, the cost of obtaining price information, and the cost of obtaining product information (Su, 2008, p. 110). Researchers agree that more and more consumers decide to search for information and make transactions in the online environment (Maity et al., 2012, p. 50). As it is stated in Maity et al. (2012, p. 50), comparing offline and online shopping the role of information search is greater in the context of online shopping. Due to easy access to information online channel has become an important resource for consumers (Bodur et al., 2015, p. 125).

#### 4. Study design and research question

Quantitative research on the respondents was carried out at the end of 2015. In total, 1103 respondents were surveyed among adult Poles. The sample was chosen in a random and purposeful manner. Random in order to include in the sample features of the studied population due to the place of residence (city and village), province and others. Purposeful to provide similar numbers in the sample of generations Y, X generation and Baby Boomers. A standardized questionnaire was used to collect the data. The research method was a computer assistant personal interview (CAPI). The starting points were drawn from the address database to select people to be tested (random route method). The characteristics of respondents are presented in Table 1.

*Table 3. Characteristics of the study sample*

Characteristics		Number of respondents	Percentage of sample
<b>Gender</b>	Female	565	51.2
	Male	538	48.8
<b>Generation</b>	Baby boomers (1946-1964)	357	32.4
	X (1965-1980)	390	35.4
	Y (1981-1996)	356	32.3

<b>Employment status</b>	Full-time employed	608	55.1
	Part-time employed	82	7.4
	Self-employed	74	6.7
	Unemployed	123	11.2
	Retired	185	16.8
	Other	51	2.8
<b>Number of people in the household</b>	1	108	9.8
	2	329	29.8
	3	323	29.3
	4	245	22.2
	5 or more	98	8.8

Source: Own study.

The respondents were asked about the habits in the use of distribution channels in relation to the most frequently used services in households. These services include communication services (TV, telephone, internet), personal transport (taxi, bus, train, plane), financial services (banking, investments, insurance). Most of the measurements were made using the Likert scale. In this article, the author would like to answer the following research questions:

RQ1. What is the frequency of use of the online channels of services distribution at each stage of the purchasing process?

RQ2. What is the relative frequency of using online channels in the declarations of respondents?

RQ3. What is the intention of using the online channel at particular stages of the purchasing process?

RQ4. In which stage of the purchase occurs the greatest differences between declaration the use and declaration of intention to use online channel?

## 5. Research results

Respondents were asked about the frequency of using the three analyzed marketing channels at particular stages of the purchase process. In addition to the online channel, a stationary channel and a telephone channel were also included. The purchase process includes pre-purchase, purchase, post-purchase stages, as well as resignations. Because some of the services analyzed is in the form of a subscription. The average number of contacts in specific channels at the indicated stages of purchase is shown in Figure 1.

*Table 1. Number of contacts during a year*

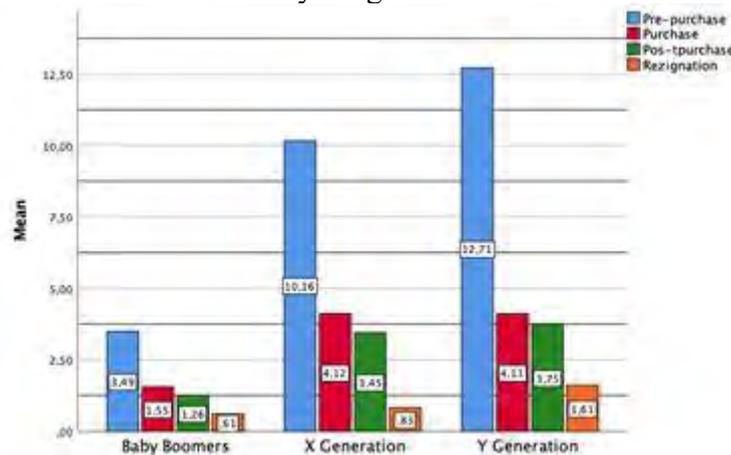
<b>Indicators</b>	<b>Mean</b>	<b>Indicators</b>	<b>Mean</b>
<b>Pre-Purchase stationery</b>	6,38	<b>Post-Purchase stationery</b>	3,16
<b>Pre-Purchase phone</b>	6,20	<b>Post-Purchase phone</b>	2,68
<b>Pre-Purchase on-line</b>	8,83	<b>Post-Purchase on-line</b>	2,84
<b>Purchase stationery</b>	4,04	<b>Resignation stationery</b>	1,47
<b>Purchase phone</b>	2,83	<b>Resignation phone</b>	1,05
<b>Purchase on-line</b>	3,28	<b>Resignation on-line</b>	1,01

Source: own calculation.

The average number of contacts in the analyzed distribution channels in relation to the surveyed services at the stage of seeking information is over 21 contacts. Most of them - over 40% - are carried out in the Internet channel. A very similar number of contacts in order to search for information at the pre-purchase stage takes place in the stationary channel and telephone channel. The customers usually buy the surveyed services in the stationary channel. The second choice is the internet channel preferred for 32% of the total purchase decisions. A similar situation occurs in the case of post-purchase service, consumers prefer for this purpose

a stationary channel and the second place of choice - in the case of nearly 33% of contacts - is an online channel. Consumers resign from services most often through a offline channel and this occurs around once a year. The percentage of people who do not use the online channel in the purchase process grows clearly with each subsequent stage. At the pre-purchase phase, 28.4% of respondents were not used Internet, 37.9% in the purchase phase, 41.0% of respondents in the post-purchase phase, and almost half of surveyed people in the phase of resignation - 49.7%. If you add up the indicated number of contacts in the analyzed channels at all stages of the purchase, it turns out that already the majority of contacts - over 36% - take place in the online channel.

Figure 1 shows the frequency of contact in the online channel at various stages of purchasing representatives of the analyzed generations.



**Figure 1. The frequency of online channel usage at the various stages of the purchase process different generations**

Source: own calculations.

Y generation uses an online channel to search for information more often than older generations. In the case of the purchase phase and the post-purchase stage, however, the frequency of contact via the Internet of generations X and generation Y is similar. In the resignation phase, Generation Y again uses the online channel more often than other generations. Generation Y and generation X are more likely to use the Internet channel to search for information as an offline channel. The youngest generation most often uses the online channel also at the post-purchase service stage.

In the further part of the study, the intention to use the online channel was analyzed through three questions. The same questions were repeated for each stage of the purchasing process. The questions were coded on the Likert scale. Respondents' answers are presented in Figure 2. There are no statistically significant differences between the intention of using the online channel at the purchase stage and post-purchase stage of buying process. In the case of other comparisons, the average differences confirm the largest intention to use the online channel at the stage of seeking information and the smallest in the case of the resignation phase. The actual use of the online channel significantly decreases with the successive stages of the buying process, while the intention to use online channel is not significantly different for the purchase and post-purchase stage. In the post-purchase service stage, consumers are probably not always able to use the on-line channel due to the lack of such a possibility offered by the supplier.

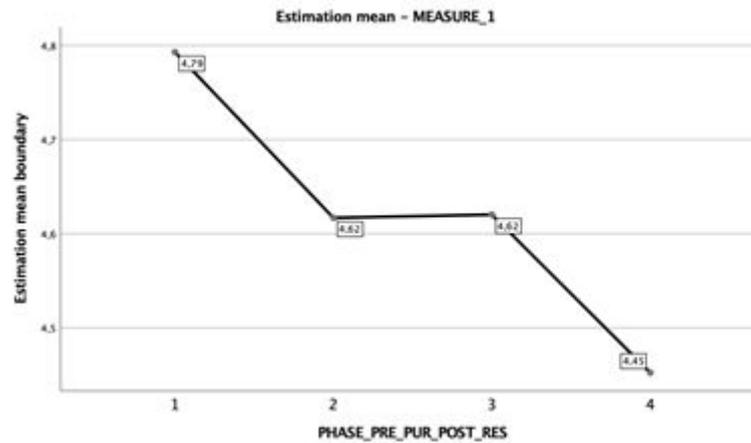


Figure 2. Estimates of intentions to use online channel - repeated measure Manova

## 6. Conclusions

The presented results gave answers to the defined research questions.

The generation to which consumers belong (Baby boomers, X, Y) significantly defines their willingness to use remote channels in the whole service buying process. The youngest respondents (Generation Y) show relatively the greatest interest in remote channels, but it is still not the same for each stage of the service purchase process. The pre-purchase phase is characterized by the highest intention to use the online channel in the future. The biggest challenge in terms of consumer incentives to use remote channels is at the stage of resignation from the service. However it can be connected not only with consumers' characteristic but also with specific legal regulations. Presented results can be explained by the theories presented in the article on the consumer behavior. Such elements of the purchase process as the service price or non-monetary costs (perceived time, effort) are extremely important for the actual selection of the marketing channel made by the consumer. It also affects his / her behavioral intention. Another extremely important element in this context is the perceived risk of using particular marketing channel at a particular stage of the service purchase process. At the moment, it seems almost impossible to imagine the situation that all consumers realize the entire service purchase process via the online channel. Each marketing channel is characterized by specific attributes that can create a specific advantage over the other channels. At the same time, each marketing channel generates certain inconveniences for its user. The specific attributes of marketing channels are perceived individually by each consumer. As a result, the key importance for willingness to use online channel is this channel perception made by service buyers.

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## **Analysis of Influence of Trade Fair Exhibitors' Experiences on Their Decision to Re-Enter the Fair – Research Project**

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### **Abstract**

Trade fairs are a very popular form of companies' communication with a market and a source of valuable information. However, a growing number of organized trade fairs makes choosing a location presentation more and more difficult. At the same time, technological progress and the development of marketing industry cause that during participation in the trade fairs, companies have more opportunities to impact on their stakeholders. Wider choice is a very beneficial phenomenon, but trade fairs policy decisions become more complex and riskier. That's why entrepreneurs need tools to support them in the decision-making process in this area. Very profitable would be to determine what parameters describing the participation of enterprises in fairs affect a review of the event and future decisions to participate in subsequent editions of the event. The article describes the results of the research (from 2018-2019) of participants of the fairs organised by Targi w Krakowie (TwK) about their trade fairs activities and the future decisions in the area of their trade fairs policy. Described research is a pilot study. It will be the starting point for the creation of a model of exhibitors decision making about participating in fairs on the Polish market (with the models presented in the cited papers) . This model would take into account the specificity of the Polish fairs and companies participating in them. The analysis of the collected results will extract the factors with the most significant importance for exhibitors during the process of making decision about participation in fairs. The results of these studies will also be an indication for the fairs organisers and operators how to develop existing events.

**Keywords:** trade fairs, trade shows, trade shows' objectives e decisions, exhibitors.

**JEL classification:** L82, M30, M39.

### **1. Introduction**

Trade fairs are a very popular method of modern company's communication with the environment and a source of industry information (Bettis-Outland, Johnston, & Wilson, 2012; Luo & Zhong, 2016; Zhong & Luo, 2018). Nowadays an increasing number of trade fairs makes choosing the place of exhibition more difficult. At the same time, thanks to technological advances and the development of the marketing industry, companies are getting more and more opportunities to influence their stakeholders during the fair. A greater choice is a very beneficial phenomenon, but decisions regarding trade fair policy are becoming more complex and involve greater risks (Kirchgeorg, Springer, & Kästner, 2009). Therefore, exhibitors [Of course, the visitor is also an interesting research area, but this is not the subject of this article] need tools that support them in the decision-making process in this scope. The analysis of the exhibitors' behaviours and their relations with the organizers (Jin, Weber, & Bauer, 2012) in comparison with opinions about the event itself and their later decisions on participation in subsequent editions of the event constitutes an interesting research area.

The aim of the article is to analyse the selected parameters describing the participation of exhibitors in a given fair event and their impact on the readiness to re-enter the fair. The article describes the results of the questionnaire conducted among trade fair participants organized by a Targi in Krakow (TwK) regarding their activity during trade fairs and later decisions concerning the trade fair policy of the exhibitors. The research is of a pilot nature and will ultimately form the basis for the construction of a model of market behaviours of exhibitors participating in trade fairs on the Polish market. The analysis of the results obtained will allow for identifying the most important factors for exhibitors when making

decisions to participate in the fair. Achieved results will help trade fair organizers and operators develop the existing events also predict and moderate the decisions of trade fair exhibitors.

## **2. Evolution of the fair activity of exhibitors**

In its traditional formula, the fair was a place where sales-related elements were dominant (Herbig, O'Hara, & Palumbo, 1998; Rosson & Seringhaus, 1995). (Extensive) shopping was an integral element of trade fairs in the past. Purchases were made both on the account of enterprises and individual recipients. The next stage in the development of trade fairs was the separation of sales and non-sales trade fair goals. Today, the sales-related trade fair function has been marginalized (Ahola, 2012). Contemporary trade fair participants use their participation to improve relations with other market players on different levels (Kalafsky & Gress, 2013; Santos & Mendonça, 2014): exhibitor - visitor, visitor - visitor, and exhibitor - exhibitor. Thanks to the development of communication techniques, in the era of marketing 4.0 (Kotler, Kartayaja, & Setiawan, 2017), this process extends to the post trade fair period and, during the event, to other indirect communication channels (Sarmiento & Farhangmehr, 2016). Direct trade fair contact is immediately verified thanks to other communication channels (internet, telephone and direct contact) and wide sources of information, both those possessed by the enterprise and those that can be obtained in a relatively short time from other sources. Thanks to the development of technology, exhibitors maintain contacts and can constantly develop selected relations both before and after the event (Huang, 2016). It is only important to do it in a very professional way. Today's customer is aware of the existence of automatic marketing and does not want to be treated as a number on a long mailing list, expects an individual approach and a customized offer (Jha, Balaji, Ranjan, & Sharma, 2019).

The necessity of making continuous choices both within the scope of the recipients of activities and the implementation of the process itself is a characteristic feature of the process of shaping trade fair relations (Brown, Mohan, & Boyd, 2017). That is why, the management of the trade fair information, the ability to acquire it and its practically instant verification become more and more important (Bettis-Outland, Cromartie, Johnston, & Borders, 2010). In this area today's exhibitors expect more and more support from organizers, in the hardware, spatial and organizational dimension (Gilliam, 2015). The exhibitor needs additional space outside their stand to present the unique nature of their offer (shows, seminars, press conferences and special events), but also to be able to comfortably talk with the event participants (individual presentation of the offer for key customers, selected stages of trade negotiations) (Rodríguez, Reina, & Rufin, 2015). It not only relates to the space rented from the organizer and on the trade fair venue, but also outside the exhibition centre and as part of the base owned by other entities (Proszowska, 2015a). In addition to the possibility of renting space, the exhibitor will also expect additional services to help them achieve their goals (apart from standard accommodation or cleaning service it will also include the processing of printed materials, photo service, or organization of additional events) and wide service (technical staff, translators, etc. ).

Another area of the exhibitors' activity is the search for information about the directions of the industry development (Measson & Campbell-Hunt, 2015) and the possibilities of implementing observed trends in their own activities (Luo & Zhong, 2016; Muskat & Deery, 2017). The information about the technology itself, which is the basis for the activity of a given enterprise, becomes especially valuable. But other success factors, resulting even from different organization of supply of materials, employment structures or directions of searching for business partners, will be equally important. All these areas of functioning of a given industry can be compared during trade fairs (Leszczyński & Zieliński, 2011; Zhong & Luo, 2018). This is even more so because sometimes the informal atmosphere of meetings makes it possible to learn more about them than during everyday business contacts (Bathelt, Golfetto, & Rinaldo, 2014; Rinaldo, Bathelt, & Golfetto, 2016).

### 3. The process of making decisions about participation in the fair

In the past, exhibitors decided to participate in the fair based on the habits of the company and as part of being present in a given industry. It was also connected with the reluctance to define clear trade goals. Most trade fair presentations were a usual continuation of activities from previous years, carried out in a standard manner, in accordance with the adopted schemes (Proszowska, 2015b). And, for example, within the framework of at least partially closed Polish market, this system was considered to be quite efficient and not requiring improvement.

An increase in the number of trade fairs and the increased mobility of enterprises around the world as a result of technological and communication development made the decision to participate in the fair more complex and requiring a deeper analysis (Hansen, 1999; Hansen, 2004; Seringhaus & Rosson, 2004). The development in the area of marketing communication (Kitchen & Proctor, 2015; Matovic, Knezevic, & Papić Brankov, 2015; Turner, 2017) - the increase in the number of communication tools and channels - also contributed to the fact that entrepreneurs began to think about the alternative to the participation in the fair (Sarmiento & Simões, 2018). Hence, there is more and more emphasis on defining trade fair goals, attempts to assess their implementation and a more thoughtful selection of exhibition venues (Gottlieb, Brown, & Ferrier, 2014).

These changes are obviously the evidence of market development, but they have also brought many difficulties related to the creation of procedures for the implementation of these activities and the identification of independent criteria that make them possible in the first place and then allow for their optimization (Yi, Fu, Jin, & Okumus, 2018).

One of the natural factors determining any market choice are certainly the costs associated with them. It was the same in the case with the decision to participate in the fair. There appeared various indicators of trade fair performance evaluation, such as the cost of a single contact, general exhibition costs [The costs incurred in connection with the participation in the fair measured in relation to the total turnout at the fair as a whole], indirect exhibition costs [The costs incurred for the organization of the fair divided by the number of people visiting the stand], or direct exhibition costs [The costs measured in relation to the number of acquired, qualified, new customers] (Drab, 1995). However, as the importance of non-sales trade-fair goals increased, the evaluation indicators based on fair costs became insufficient and began to require additional data. The evaluation of the implementation of goals related to forming a relationship or seeking market information is, however, impossible to implement in a short time frame. For example, the relationships formed (after trade fairs contacts) or data gained become valuable for the company only if it can discount them as part of its operations, which is difficult to assess at the time of making the decision to participate in the event, which takes place annually, and whose preparation process lasts at least a couple of months (Proszowska, 2018). The results of participation in the fair will also depend on the position of the company on the market and changes taking place in a given industry or in the economy (Brown et al., 2017).

Therefore, it was noticed that exhibitors are looking for evaluation criteria other than the level of implementation of their fair goals. Clear, unambiguous and relatively easy to generate criteria were needed so that the decision to participate in the fair can seem objective [The necessity to demonstrate the rationality of the decision taken before supervisors who do not participate in the fair and do not know their specifics and, at the same time, are the final decision makers in the area of marketing expenditures] and be taken relatively quickly after the event (Sridhar, Voorhees, & Gopalakrishna, 2015).

For this reason, exhibitors increasingly began to assess the quality of the event itself, using parameters, such as the number of exhibitors, the number of visitors, the exhibition space available, the size of the exhibition stands, the number of accompanying events, the number of guests from abroad. This allows for clear comparisons and making unambiguous decisions.

The second area that is an important element of the assessment is the quality of cooperation with organizers. It was observed that the satisfaction of exhibitors in cooperation with the organizer/market

operator increases the readiness to re-attend a given fair event (Lin, Kerstetter, & Hickerson, 2015). Of course, the contacts during the event itself are important in this respect, but what seems equally important is their quality as part of the preparation for the fair and after the event (Lin, Kerstetter, D., & Hickerson, 2016). Exhibitors pay attention to the quality of the information received and the efficiency of obtaining it. In this case, the multi-channel nature (internet, telephone and printed materials) and the speed of the information transfer are important. At the same time, they also expect support in the implementation of individual trade fair activities in the field of contacts with visitors and organizational activities related to the construction and/or liquidation of the stand.

#### **4. Selected factors that increase the level of satisfaction of exhibitors with participation in fairs**

The study of the level of satisfaction with the trade fair is quite often analysed by researchers (Smith, Hama, & Smith, 2003). However, they most often focus on the overall level of satisfaction of exhibitors and its assessment boils down to measuring this satisfaction in the previously assumed intensity scale (Gopalakrishna, Lilien, Williams, & Sequeira, 1995; Sridhar et al., 2015) and expressing with a single parameter. However, such an overall assessment is quite difficult to interpret and as the averaging of a series of trade fair impressions it does not show the real opinion about specific areas of market activity, and thus is not helpful in the process of creating detailed strategic implications for the organizers of trade fairs. Finally, the company's trade fairs pursue different objectives and therefore they have different expectations for the event, its organizers and other participants. It is not possible to describe these experiences with a single indicator.

Authors more involved in analysing the satisfaction of exhibitors from participation in fairs distinguish three main areas of the assessment (Lin et al., 2016): the exhibitors' own results achieved during (or under the influence of) the fair, the quality of fair visitors [Of course, the number of visitors is the most important here but one should also pay attention to their level of decision-making in the area of taking new decisions on cooperation and readiness to make purchases or establish cooperation] and cooperation with organizers. In the area of self-performance of exhibitors, the following categories of satisfaction assessment were distinguished: sales, information gathering, relationship building, image building and motivation. The assessment of cooperation with the organizer is carried out in the following categories: interaction, environment and outcome. However, the assessment of the relationship with trade fair guests comes down to their evaluation in the following categories: job level, job function, purchasing authority and communication. The listed elements are the components of the overall satisfaction of the exhibitor (Lin, Kerstetter, & Hickerson, 2015). Only such a form of activities, serving to examine the satisfaction of exhibitors from participation in fairs, gives the opportunity to distinguish individual areas of activity, within which there is the opportunity to improve the results of trade fairs, and thus the final level of satisfaction of exhibitors.

#### **5. The research method and characteristics of the sample studied**

Described pilot research was carried out in cooperation with company Targi w Krakowie sp. z o. o. in December 2018. An e-mail with a link to the research questionnaire was sent to all exhibitors participating in the fairs organized by the company in 2018. The request to fill out the questionnaire reached a large group of potential respondents. However, only 68 representatives of these enterprises completed the questionnaire. A very small return of completed questionnaires hindered the statistical analysis of the results obtained and made it impossible at this point to show the relationship between the parameters describing the participation of exhibitors at a given fair event and their impact on the willingness to re-enter the fair. In addition, analytical difficulties were deepened even further by the use of the Likert scale in collecting answers. This made the answers even more divided in individual categories. It was also noticed that the impact on the subsequent analysis and interpretation of results was due to the fact that some data had a very uneven distribution - for example, there were no explicitly negative opinions about both the event itself and the market activity of the exhibitors [Very good

information from the organizer's point of view, but making it impossible to analyse certain relationships as part of the conducted research]. The distribution of results was oblique, the mean and median values clearly shifted towards higher values (more positive opinions).

The proper research project will include modifications to the original version so as to minimize the mentioned difficulties (transfers will be made as part of the categorisation of the response, methods to encourage the filling the questionnaire will be used and the survey will be extended to other organisers). This is also why the distribution of questionnaires will be more direct (e.g. during trade fairs) and with the use of the paper version of this tool so as to increase the level of returns of a given questionnaire. The form itself will contain fewer answers within individual closed questions, and their intensity and emotional attitude will not be symmetrically distributed (there will be a different number of positive and negative answers) to make the exhibitors more evenly divided from the point of view of their attitude towards the relation with the trade fair organizer and operator and the course of the trade fair event itself.

The exhibitors who participated in the survey are mainly small and micro enterprises, representing broadly understood industries, since this is also the profile of trade fair events (the vast majority) organized as part of EXPO Krakow (only the autumn Book Fair, whose participants were not subjects under this research project, is of a consumer nature; the remaining events are B2B fairs). And the legal form dominating among the exhibitors is a limited liability company.

## 6. Trade-fair experiences of exhibitors and decisions about their re-participation in the fair - analysis of pilot studies results, conclusions and research assumptions for future studies

The study conducted was of a pilot nature - a group of 68 companies that participated in the study does not allow for drawing unambiguous conclusions, but enables more precise planning of proper research, within which it will be possible to determine which of the separated variables will be the most important for exhibitors participating in the fair when making decisions about re-participation in the fair.

The starting point for defining the behaviours of the exhibitors examined is the description of the trade fair goals that they set for themselves as part of this event.

*Table 1. Trade fair goals of responders*

Trade fair goal	Declarations of respondents (percentage of indications)		
	<u>one of the main trade fair goals</u>	<u>one of the supplementary trade fair goals</u>	<u>this is not our trade fair goal</u>
presentation of the company's offer	87.5	12.5	0.0
improving the company's image on the market after the fair	30.8	30.8	38.5
increase in sales during or after the fair	68.8	25.0	6.3
improving relations with market participants	48.3	34.5	17.2
collecting information about customers' expectations	40.6	53.1	6.3
seeking intermediaries and gathering information about the possibilities of cooperation	13.8	51.7	34.5
collecting information about the current market/industry situation	17.2	69.0	13.8
improving brand awareness after the fair	66.7	26.7	6.7

Source: own research.

The respondents declared (tab. 1) that their main goal is to present the offer and increase sales during or after the fair and improve brand awareness after the fair. Interestingly, exhibitors consider gathering information about the market, customer expectations or new cooperation opportunities to be less important trade fair goals. This would indicate a fairly reactive approach to the functioning on the market and a lack of plans for own activity in the area of searching for new customers and modifying

own offer. This is probably the result of less intensive marketing communication activities in the B2B sector and the assumption that the customer is to place an order and the process of shaping the relationship with them begins only after this happens. Taking into account the costs and organizational aspect of participation in the fair, it should be assumed that enterprises cannot limit themselves only to the presentation of the offer. It is also necessary to think about the possibility of implementing additional goals during the fair. In times of information society and knowledge-based economy, searching for up-to-date information about own industry should be a priority. And the trade fair seems to be the perfect meeting place for its most significant representatives.

**Table 2. Assessment of achievement of trade fair goals**

Trade fair goal	Declared level of achievement of trade fair goals (percentage of responses)				
	The goal has not been achieved	The goal has been minimally achieved	Average level of goal achievement	The goal has been achieved in a significant level	The goal has been fully achieved
comprehensive assessment of the level of the implementation of a given goal	15.4	11.5	30.8	38.5	3.8
presentation of the company's offer	0.0	16.1	12.9	<u>51.6</u>	<u>19.4</u>
improving the company's image on the market after the fair	3.7	11.1	<u>44.4</u>	37.0	3.7
increase in sales during or after the fair	19.4	22.6	32.3	22.6	3.2
improving relations with market participants	0.0	7.1	<u>57.1</u>	25.0	10.7
collecting information about customers' expectations	0.0	13.8	31.0	<u>41.4</u>	<u>13.8</u>
seeking intermediaries and gathering information about the possibilities of cooperation	17.9	<u>42.9</u>	28.6	10.7	0.0
collecting information about the current market/industry situation	6.9	13.8	34.5	34.5	10.3
improving brand awareness after the fair	0.0	23.3	23.3	<u>40.0</u>	<u>13.3</u>

Source: own research.

The surveyed exhibitors also declared (tab. 2) the level of achievement of the assumed fair goals. One can notice that they only partly succeed in achieving what they planned as part of their participation in the fair. One can assume that many are satisfied with the presentation of the company's offer. However, they have less spectacular achievements in the area of increasing the level of sales during or after the fair. Over half of the respondents also observe an average level of the improvement of the relationship with market participants.

**Table 3. Assessment of cooperation with the trade fair organizer**

Areas of assessment of the cooperation of respondents and the trade fair organizer	Declared assessments of cooperation with the trade fair organizer (percentage of indications)				
	1 (entirely bad)	2	3	4	5 (very good)
quality of information about the organized event (website and other sources)	0.0	0.0	6.3	28.1	65.6
quality of fair infrastructure (fixed base)	0.0	3.1	18.8	31.3	46.9
quality of the trade fair service and organization of the event itself	0.0	6.3	9.4	21.9	62.5
communication during the reservation of the stand and preparations for the fair	0.0	3.1	0.0	25.0	71.9
possibility of promotion at the fair	0.0	6.7	6.7	43.3	43.3
promotion of trade fairs in the media (carried out by the organizer)	6.5	3.2	6.5	58.1	25.8

Source: own research.

While the assessment of the achievement of trade fair goals by exhibitors (tab. 2) is not too high, they very highly assess the cooperation with the trade fair organizer (tab. 3). Both cooperation during the preparation for the trade fair and during the event itself is assessed highly. The fair promotion (at the event and outside the trade fair venue) got a little bit lower but still very high assessments. This would indicate a very high level of trust in the organizer, which is the result of intense, long-term cooperation with them or the lack of market experience of exhibitors [Of course, the assumption can be verified only after a detailed analysis of the policy of individual exhibitors, which is not possible at the moment]. A high level of assessment of this cooperation is certainly a source of joy for organizers, but, at the same time, the awareness of the remaining results determines the need to create programs that help either increase the level of the implementation of the goals set by exhibitors, or make them aware of the opportunities offered by the fair and what trade fair assumptions they should have so that they can be achieved during the event.

**Table 4. Assessment of the selected parameters of the trade fairs in which respondents participated**

Category of assessment of the trade fair experiences	Declared assessment of experiences and trade fair parameters (percentage of indications)				
	1 (completely unsatisfactory)	2 (meeting minimum expectations)	3 (on an average level)	4 (satisfactory)	5 (fully satisfactory)
number of other exhibitors	6.7	10.0	36.7	<u>40.0</u>	6.7
number of visitors	9.7	12.9	12.9	<u>54.8</u>	9.7
readiness of visitors to establish contact at the stand	3.2	9.7	<u>32.3</u>	<u>41.9</u>	12.9
readiness of visitors to establish cooperation/make purchases in the future	6.9	13.8	<u>41.4</u>	<u>37.9</u>	0.0
level of visitor decision-making	6.9	16.1	<u>48.4</u>	<u>29.0</u>	0.0
promotion of event organizers in the media	3.2	9.7	<u>35.5</u>	<u>35.5</u>	16.1
preparation of own exhibition staff	0.0	6.5	3.2	<u>48.4</u>	<u>41.9</u>
work of own exhibition staff at the stand	0.0	3.3	6.7	<u>43.3</u>	<u>46.7</u>
shape and preparation of your own trade fair stand	0.0	3.3	0.0	<u>60.0</u>	<u>36.7</u>

Source: own research.

It is difficult to clearly interpret the results contained in table 4, because they relate to the participation in various trade fairs. You can certainly notice that when assessing the reality of the fair according to the proposed indicators the exhibitors are most satisfied with their work (the last three rows of tab. 4). The number of participants (with an indication of visitors) and their readiness to establish contacts looks quite good. The readiness of visitors to cooperate and their level of decision-making get the lowest assessments. As you can imagine, market visitors want to find information and establish relationships rather than carry out a specific transaction [This is quite typical of today's investment goods trade fairs, so perhaps what is surprising is again the lack of information and too high expectations from the exhibitors and, consequently, the need for educational activities on the part of organizers]

**Table 5. Assessment of the results of participation in the last edition of the fair organized by TwK**

Assessment of the results of participation in the fair (percentage of indications)				
1 (completely did not meet expectations)	2	3	4	5 (we are fully satisfied with participation in the fair)
3.1	0.0	28.1	46.9	21.9

Source: own research.

A fairly large group of exhibitors (tab. 5) highly evaluates the overall participation in the last fair event, although it does not give it the highest scores. At this point, it is certainly important for the organizers that the percentage of unambiguously negative scores is only a few percent.

**Table 6. Readiness to recommend participation in the last edition of the fair organized by TwK**

Readers' willingness to recommend participation in the fair (percentage of indications)				
no	probably not	perhaps	rather yes	definitely yes
0.0	3.1	15.6	43.8	37.5

Source: own research.

The results of the assessment of the exhibitors' readiness to (tab. 6.) recommend the participation in the fair to other potential participants, especially in comparison with the results contained in table 5, look interesting. It may be noted that, even though slightly, the readiness to recommend the fair in which the company took part is higher than the assessment of the participation in it (tab.6.).

**Table 7. Readiness of respondents to participate in the fair in the future**

Declaration of participation in the fair (percentage of indications)				
probably not	perhaps sporadically	rather yes, but at a lower level than now	definitely yes, at the same level as at present	definitely yes, with more involvement than at present
0.0	6.2	18.8	56.2	18.8

Source: own research.

The surveyed exhibitors predominantly declare their readiness to participate in fairs in the future, with the same or greater involvement than at present, which allows us to suppose that this form of enterprise activity will grow. It can be noticed that current shortcomings in the trade fair activities of exhibitors and, for example, difficulties in achieving the assumed trade fair goals do not adversely affect the recommendation of exhibition events to other market participants and further plans with participation in such events.

## 7. Summary

The results obtained indicate that modern trade fairs have a very positive image among their participants. Exhibitors feel a strong intuitive need to participate in fairs, but they use their presence in a very traditional and reactive way. They assume that the participation in the fair is connected primarily with the presentation of the company's offer and they do not necessarily find time to look for information or form relations with other participants of the event. In order to change the approach to the way trade fairs are used in the marketing policy of the company, the role of the organizer and various industry associations, which should not only coordinate the organization of such events, but also help the exhibitors prepare and evaluate the results later, will become extremely valuable.

When analysing publications on the trade fair market, one can see that, on one hand, exhibitors declare the need for ever more rational decision-making about participation in fairs. At the same time, decisions about recommending the event and re-participating in it take place despite the failure to fully implement the goals set. On the other hand, organizers of trade fairs, being aware of the intense competition in this sector, are ready to take action to improve the functioning of events organized by them. Observation and simultaneous education of exhibitors should help them better rationalize preparation, plan and evaluate participation. In the process of assessing the level of satisfaction with participation in trade fairs, exhibitors will certainly prefer simple methods and indicators that can be applied relatively quickly after the event [In particular, those that can help make LATER trade fair decisions].

When deciding to re-enter the fair, exhibitors attach great importance to the quality of cooperation with the event organizer. This is very important information for the organizers who are often convinced that the product itself is the priority, that is, the trade fair event, and the exhibitors' relations with them

are of lesser importance. A deeper commitment to improving the exhibitor-organizer relationship is needed, which will increase the exhibitor's confidence in the organizer's competences and thus ultimately improve the assessment of the event by the exhibitor.

Due to the small size of the research sample, presented applications require verification in a broader market research. The framework of the relevant studies was presented together with an analysis of the pilot studies carried out. At the same time, the results already described are valuable information for both trade fair organisers and exhibitors shaping their fair policy.

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## Eye Tracking as a Research Method. Selected Cases

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### Abstract

The aim of this article was to describe the eye tracking method, its variants and selected research methodologies with its application. The measurement of dispersion of visual attention helps, among others, to determine so called scan paths and heat maps. Keeping track on movements of the eyeballs using a device called the eye-tracker depicts changes of width of the apple of the eye, direction, order of gazes, number and time of their duration; indicates what the tested person records using its eyesight, how long he keeps a gaze on a subject and how often looks at it. Eye tracking is often connected with electromyography, which allows quite precisely to indicate what kind of emotions is evoked by particular elements of a tested material. In a way, the methods or a bunch of research methods under consideration enable to reach human subconsciousness and are particularly helpful in a process of optimization various marketing tools (products placement on shop shelves, advertising and packaging tests, design of the website). Keeping track on movements of the eyeballs provides with valuable information on each level of management of marketing undertaking i.e. starting from concept testing, through implementing experiments, ending on proof tests, which is to stimulate broadening scientific research sector using literature research, to analyse available research results and to run selected case studies. In this article, the author pointed out usefulness of the discussed methods and also she described selected examples of their applications e.g. for the following brands: IKEA, Unilever, Mercedes, Toyota, Coca cola, Mercedes Benz, Volkswagen, Warka, Gazeta.pl and Aflofarm.

**Keywords:** eye tracking, research methodologies connected with eye tracking, eye tracking applications in marketing activities, case studies.

**JEL classification:** M31, M14, Q01.

### Introduction

Researchers' achievements in the area of neurology and psychology (cf.: Szymusiak 2012, Davidson, Begley, 2013, Bulska, 2014, Bridger, 2015) concerning the processes taking place in the human brain and the significance of its subconscious reactions contributed to the development of research tools, methods, and procedures enabling diagnosis of physiological responses to stimuli for the purpose of making marketing decisions. Humans are emotional, not rational beings. They perceive the world with the senses first (among which eyesight plays a special role), then feel emotions, and only later try to rationalise their decisions and behaviours. Hence the area of interest in the study is eye tracking research enabling measurement of gaze distribution on marketing stimuli.

The aim of the study was to present the eye tracking method and examples of its application in economic practice along with the resulting functionalities.

The research methodology involved literature studies, analysis of the available online information resources (including related content, publications, reports, studies, expert opinions, websites of agencies offering eye tracking research), examples of applications, and a case study.

The article is a review and research paper, epistemological in nature. Eye tracking was presented according to the following model: what it is, what equipment it requires, for what purpose it can be used, what the previous studies on the subject are, who uses it and in what areas of activity, what examples of its application can be found in the Polish market, what

results can be expected, and whether a case study and what kind of case study can illustrate its functionality.

The description of the results of the work carried out may inspire theoreticians and practitioners interested in the methodological application of eye tracking research in business management, including in particular for the purpose of various marketing activities and decisions.

### **Eye tracking – primary characteristics**

Generally speaking, the eye tracking method consists in following eyeball movements with the use of an eye tracker and appropriate recording software enabling data analysis. This method of research is used to check which specific elements are noticed first thanks to a camera recording the slightest movements of the respondent's eyeballs (Burch, et al., 2017, Jerzyk, 2017, Conklin, et al., 2018, Strzelecki, 2019, Was, et al., 2017). Importantly, this takes place in awareness processes, both open and latent.

Stationary eye trackers can be built into the computer and/or constitute a kind of accessory connected to the computer in order to carry out the tests. Mobile eye trackers in turn are usually put on the head for the purpose of conducting the tests (Leube, Rifai and Wahl, 2017). A mobile eye tracker makes it possible to collect data in the customer's natural environment, e.g. in a store, so the tests are more reliable. The researcher may see what drew the respondent's attention and what their response was. Test results can be used to optimise the layout of informational and promotional elements. The challenge is to transfer the data to a computer equipped with software for its analysis. Pupil movements of a person taking part in the tests are recorded by the device. Next, thanks to the use of radio communication between the device and the workstation, the data is sent to the latter, where it undergoes digital processing, and then the collected information material is analysed and interpreted (Wasikowska, 2015, Burch, et al., 2017).

Research helps verify the manner in which people perceive the object in front of them, e.g. a website, product packaging or an advertisement. This way, we find out where our potential customer is looking, on which elements they focus and which ones they skip completely. The aim is to check whether when looking at a specific graphic design, the recipient sees the elements we want them to see, whether an Internet user browsing through an online store selling dresses focuses on the products or rather on the models presenting them. A question comes to mind about how the product should be visualised so as to satisfy the customer and motivate them to choose and purchase it.

Thanks to eye tracking research, detailed information may be obtained about which elements are visible, how they are perceived, and what to change in order to highlight the key elements. Research results can be obtained in different forms (Wasikowska, 2015, Burch, et al., 2017, Leube, Rifai and Wahl, 2017, Conclin, et al., 2018):

- fixation maps (maps of the elements which draw the most attention) along with the movement trajectory across consecutive areas;
- proportion maps for the analysis of the visual exploration patterns in specific points of interest, e.g. special offers, prices or pre-defined menus;
- extensive reports with conclusions from eye tracking research and suggestions for the improvement of visibility of key modules or elements.

Eye tracking involves both quantitative and qualitative research. Due to the fact that we obtain a measuring and physiological result, we receive hard data, which is, in principle, indisputable. Eye tracking research constitutes usability research which makes it possible for us to reach the user with specific information and thus eliminate or modify the elements they skip completely (Bergstrom and Schall, 2014, Mościchowska and Rogoś-Turek, 2016). This

results in increasing the effectiveness of the marketing message and enhancing the level of customer satisfaction. The benefits of using this type of research are much greater, however. We obtain better accessibility of our offer, easier-to-use applications, and lower rate of “escapes” from the website. And most importantly, we save not only our customers’, but also our employees’ time.

### **Potential applications and usefulness of eye tracking research to marketers**

Eye tracking research is finding increasingly broader application in obtaining information about the perception of various objects for the purpose of effective marketing activities (Bradley, 2013, Feinberg, Kinnear and Taylor, 2013, Wąsikowska, 2015, Strzelecki, 2019), for instance related to the product and its packaging or ad testing at different stages of preparation. It is also used for the optimisation of commercial units, their arrangement and decor, the development of merchandising strategies, and finally proper product exposure and product range management.

Researchers state, in turn, that eye tracking makes it possible to identify the following problems: What draws the customer’s attention and what remains unnoticed? Is the information included in the materials under study visible? Are the most important elements of press adverts and television commercials noticed? Are the logo and brand name put in the best possible places? Are websites, user manuals, forms, etc. constructed and formulated in a correct and comprehensible manner? Does the material under study contain distracting elements? Is the product displayed properly at the point of sale? They present eye tracking as a marketing research method in a comprehensive and intelligible way illustrated with simple examples.

Iga Mościchowska and Barbara Rogoś-Turek (2015) and Adam Strzelecki (2019) describe the applications of eye tracking in website usability tests and product variant selection tests. They present example research scenarios, formulate guidelines and tips for potential researchers concerning the sample size, provide examples of research problems, the course of research, good practices in the analysed projects, personal and tool-related limitations, as well as technical and analytical problems. They list the advantages and disadvantages of eye tracking.

In the era of development of digital technologies and ever new functions available online, eye tracking research plays a special role in the optimisation of websites aimed at streamlining selected online marketing activities. For instance, it is used to test the effectiveness of product presentation, reception of communicated content, photographs, video productions, infographics or other forms of marketing in social media and other network profiles, channels, and web resources in general.

It should be emphasised that research is also carried out in order to increase customer satisfaction, e.g. due to better website readability, usability, intuitiveness, and functionality (Bergstrom and Schall, 2014, Booth and Freeman, 2014). The benefits are manifold and difficult to estimate precisely, but a satisfied customer – thanks to proper arrangement of materials in the traditional and virtual setting possible owing to response testing, including eye tracking – definitely means a lot.

### **Methodology and research results**

The primary aim of the study was to obtain information about the eye tracking method and the possibilities of its application for the purpose of making marketing decisions. Emphasis was placed on the usefulness of this kind of research in management-related activities. The following research hypotheses were formulated: H1. An excess of stimuli and information chaos encourage research of gaze distribution in humans in order to optimise various marketing activities. H2. Marketers appreciate and use the eye tracking method to an increasing extent in

order to optimise management-related decisions. The object of the study was industry experts and scientists, as well as agencies supporting their clients' marketing activities in particular in terms of tailoring them to the buyers' expectations. The subject of the study was eye tracking application projects for different brands. Research was carried out over a few months, although the examples obtained come from the last several years.

Research on the applications of eye tracking consisted in the diagnosis and analysis of the available online information resources, i.e. reports, studies, and examples of executed projects on agency websites, which was compiled in Table 1.

**Table 1. The applications of eye tracking and methodologies with its use and research project functionality**

Analysed cases	For what kind of marketing activities?	What purpose they serve (functionality)
<b>IKEA</b>	proper display of products in the store and merchandising strategy	determination of the customer's path, taking into account the elements they notice, on which they focus for a longer time, what they buy
<b>Unilever</b>	proper display of products on the store shelves and development of merchandising concepts	product visibility tests and ensuring visibility among other products
<b>Mercedes</b>	testing television commercials	decision on the selection of the optimal commercial from the point of view of its potential neural effect, taking into account: emotional valence, attention, engagement, skin temperature, respiration rate, heart rate
<b>Toyota</b>	advertisement testing, taking into account overall engagement, emotional valance	decision on the selection of the optimal advertisement from the point of view of its potential effect
<b>Coca-Cola</b>	advertisement testing, TVC neuromarketing research with EEG + eye tracking + biometrics	decision on the selection of the optimal advertisement from the point of view of its potential effect, taking into account emotive affectivity and engagement / boredom; emotive affectivity and excitement; shimmer sensor (test) and heart rate (BPM); galvanic skin response (GSR) peak and peak detected
<b>Mercedes-Benz</b>	advertisement testing involving eye tracking and EEG	decision on the selection of the optimal advertisement from the point of view of its potential effect through respondent live face camera analysis and fully integrated and synchronized emotive EEG EPOC affective metrics through Attention Tool's interface
<b>Volkswagen</b>	advertisement testing	which parts attract attention and what emotions they stir up
<b>Warka</b>	advertisement testing from the point of view of their effect on women and men	optimisation of stimuli in the advertisement taking into account the recipients' gender
<b>Gazeta.pl</b>	website testing	decision on the optimal website content

Source: author's own elaboration based on the analysis of secondary sources of information with the use of the following online resources: <https://www.youtube.com/watch?v=VCf3L4pUpOg>, <https://www.youtube.com/watch?v=QEUTmhIMCTY>, <https://www.youtube.com/watch?v=619TzVbGC1c>, <https://www.youtube.com/watch?v=-IUM-vZaWhc>, <https://www.youtube.com/watch?v=rkE2s6UTsVs>, <https://www.youtube.com/watch?v=Nhm7jldyjVg>, <https://poradnikprzedsiebiorcy.pl/-eyetracking-czyli-na-co-zwracamy-uwage>, <http://www.neuro-innovations.pl/>, <https://www.youtube.com/watch?v=JMDKz9ICTLs&index=3&list=PLzfUx30ER9I0WrEmJUQTDcIJ5Ly6VyWd6>, [https://www.youtube.com/watch?v=\\_ubHwQmToiA&list=PLzfUx30ER9I0WrEmJUQTDcIJ5Ly6VyWd6&index=4](https://www.youtube.com/watch?v=_ubHwQmToiA&list=PLzfUx30ER9I0WrEmJUQTDcIJ5Ly6VyWd6&index=4).

Moreover, the author searched for answers to the research questions, which were compiled in Table 2. along with the most important results.

**Table 2. Description of research results including the formulated problems**

<b>Research questions</b>	<b>Description of the results</b>
<b>Who offers research with the use of eye tracking and what type of research is it?</b>	Such research is offered and carried out on a growing scale on account of its functionality and increasing availability. In Poland, there are a number of agencies specialising in eye tracking research, but also neuroresearch, as well as full-service agencies providing such services, among others. There are also quite a lot of scientific and research institutions interested in the use of eye tracking research. In general, it should be noted that in each individual case, the research is adjusted to the situation.
<b>Who uses eye tracking research in the management of market projects?</b>	The presented cases of the application of eye tracking or research methodologies with the use of eye tracking give reason to claim that both marketers and research (or scientific and research) institutions use eye tracking tests in the management of various market, commercial, and scientific projects.
<b>For the purpose of what kind of marketing activities?</b>	Eye tracking research is useful in many marketing decisions, for instance concerning improvements to the implemented solutions, e.g. product packaging, website, advertisement, shelf display or interior design. It may also help check the customers' response to the solutions used in order to adjust them to their expectations. It enables identification of the actual influence of content arrangement or layout on product selection and purchase. It can be used for the purpose of more in-depth testing of respondents' reactions to marketing stimuli. It might help verify whether the test participants – as potential customers – saw the key elements of the object under study, such as the logo, photographs or content, how they scanned the resource, what they focused on, etc. Finally, it can be used to determine the optimal content arrangement or layout in various media.
<b>What research projects with the use of eye tracking were analysed?</b>	Projects for the IKEA, Unilever, Toyota, Coca-Cola, Mercedes-Benz, Volkswagen, Warka, Gazeta.pl, and Aflofarm brands involving usability tests of packaging, advertisements, stocking up of commercial units, shelf display, and websites.
<b>How useful is this type of research in stakeholder-oriented company / brand marketing management ?</b>	The degree of usefulness of eye tracking research is high (which can be concluded from the discussion and research included in the study, as well as the sources mentioned herein), although it is neither cheap nor simple. Benefits can be derived by marketers, scientists and researchers, buyers, sales personnel, Internet users, and other stakeholders, depending on the project and undertaking.
<b>What kind of eye tracking research project can give a picture of the functionality of the analysed method? Who can benefit from eye tracking research?</b>	The case study (for which company, in what area of marketing activities, how were the results obtained, what were they used for and to what effect) carried out (for the Aflofarm company and its Esseliv duo and Linea detox products, and selected forms of marketing communications related to their promotion, primarily with the use of heat maps, which may help make marketing decisions in order to optimise activities such as packaging selection, advertisements, etc. to increase customer satisfaction and improve sales results), as well as the available research study reports and the described examples of different applications of eye tracking research or the triangulation of methods with its use.

Source: own study using the sources indicated in the references and the author's own experience.

Presented in Table 2. information based on the research carried out clearly confirms that eye tracking enjoys increasing popularity as a research method in Poland and is valued by both commercial and non-commercial project managers. The projects from the analysed area match the current market conditions very well. Research confirms that marketers and scientists can and should conduct eye tracking research on account of the high degree of usefulness both for market-related purposes, including making marketing decisions, and for science-related purposes, including studies of buyers' behaviours and their subliminal responses.

The Eyetracker agency carried out eye tracking research for the Aflofarm company. It involved tests of the Esseliv duo and Linea detox product packaging and of selected forms of marketing communications related to the promotion of the products. In order to present the

functionality of the described research method, some detailed results will be presented. The product packaging usability test report includes the obtained heat maps, which were presented in Table 3.

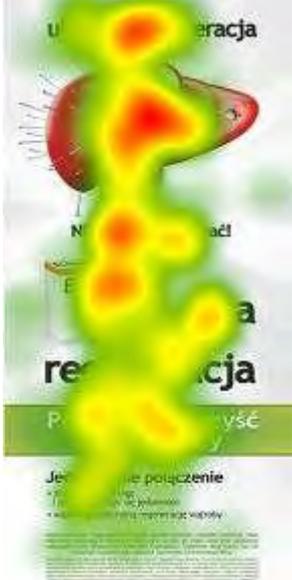
*Table 3. Tested Esseliv duo and Linea detox packaging and test results*

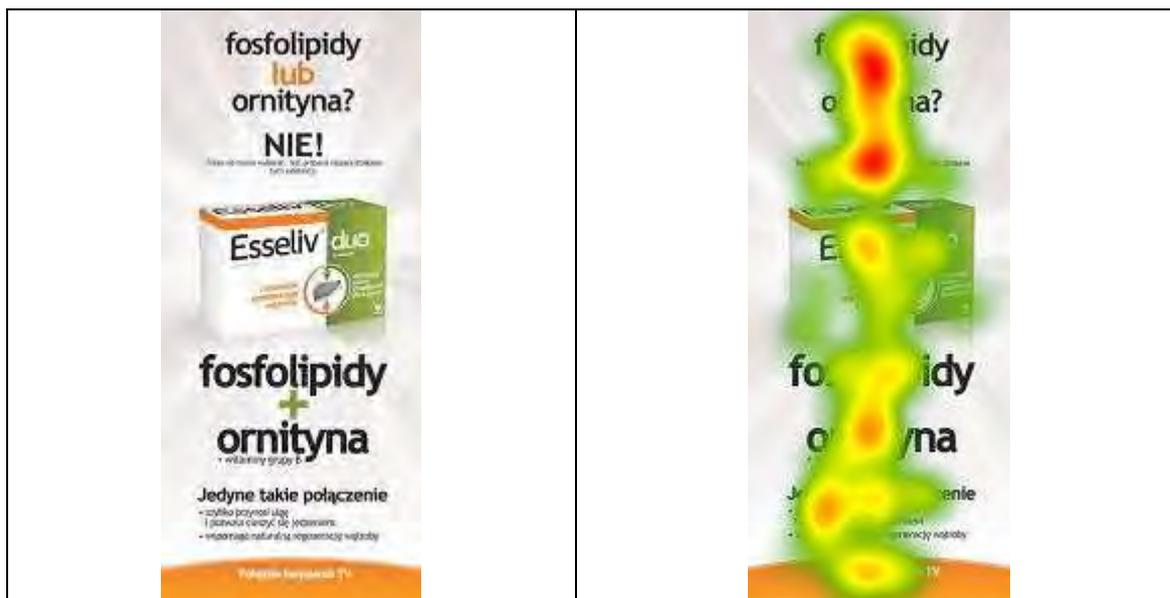
Tested packaging	Heat maps obtained based on the eye tracking tests carried out
	
	

Source: <http://www.aflofarm.com.pl/pl/produkty/suplementy-diety/esseliv-duo/>, <https://www.flickr.com/photos/84007375@N04/8089724928/in/photostream/>, <http://www.aflofarm.com.pl/pl/produkty/suplementy-diety/linea-detox/>, <https://www.flickr.com/photos/84007375@N04/8089724956/in/photostream/>.

In the research project described, the eye tracking method was also used to test online advertisements, including the generation of heat maps, which was presented in Table 4.

*Table 4. Tested online advertisements of the products and test results*

Tested advertisements	Heat maps obtained based on the eye tracking tests carried out
	



Source: with the use of <https://www.flickr.com/photos/84007375@N04/8089725006/in/photostream/> and <http://www.eyetracker.pl/uncategorized/aflofarm-wyniki-badania-eyetrackingowego/>.

The application of the eye tracking method is also useful on account of the possibility to identify differences in the perception of the objects by women and men, which can be used to generate gender-relevant stimuli. An example from the analysed project was presented in Table 5.

Table 5. Linea detox advertisement tested with the use of eye tracking and selected test results

Selected information about the tests	Tested objects and heat maps taking different respondents into account
Tested advertisement	
Women	

Men	
Averaged result	

Source: with the use of <https://www.flickr.com/photos/84007375@N04/8089723405/> and <http://www.eyetracker.pl/uncategorized/aflofarm-wyniki-badania-eyetrackingowego/>.

Yet another element of the research for the Aflofarm company was the use of eye tracking in order to test three packaging variants in terms of how they attract the customer's attention when displayed on the shelf. The results were compiled in Table 6.

**Table 6. The use of eye tracking to test different packaging variants on the shelf and selected test results**

Tested packaging	Photographs included in the report
Packaging no. 1 	



Source: with the use of <http://www.eyetracker.pl/uncategorized/aflofarm-wyniki-badania-eyetrackingowego/>, <http://www.aflofarm.com.pl/pl/produkty/suplementy-diety/esseliv-duo/>, <http://www.eyetracker.pl/wp-content/uploads/2013/01/polka1.jpg>, <http://www.eyetracker.pl/wp-content/uploads/2013/01/esel-opakowanie-2.jpg>, <http://www.eyetracker.pl/wp-content/uploads/2013/01/polka2.png>, <http://www.eyetracker.pl/wp-content/uploads/2013/01/esel-opakowanie-3.jpg> <http://www.eyetracker.pl/wp-content/uploads/2013/01/polka3.jpg>.

The heat maps presented in Tables 3-6 are the overall results of the tests checking how respondents focus their gaze on the tested objects. They make it possible to determine which elements of the product packaging, advertisement or shelf display attract the most attention. They also indicate which elements were skipped by the respondents and which ones were noticeable, but not necessarily comprehensible to them. In light of the conducted research of the visibility of product packaging on a store shelf, packaging no. 2 came out the least visible, while packaging no. 1 the most, yet with little advantage over no. 3.

## Conclusions

One of the greatest benefits of eye tracking research is the physiological instead of declarative nature of the measurements, which leads to a higher degree of objectivity of the data obtained. The hypotheses were verified and confirmed.

In light of the meta-analysis of the available sources of information, eye tracking is used in qualitative research, although it is possible to use it in quantitative research involving statistical analysis of the results. Unfortunately, if a proper level of accuracy is to be maintained, eye tracking research is both time-consuming and cost-intensive. It requires the use of appropriate tools, primarily an eye tracker and a computer with special software, but also a suitable place to carry out the tests, as well as specialist data analysis and reporting skills. However, it enjoys increasing popularity.

The eye tracking services market is developing, also in the area of neuroresearch. The examples, product descriptions, and reports found indicate that demand for this type of research is growing and its functionality in marketing projects is highly valued.

It should be stressed, however, that research projects with the use of eye tracking very often involve the triangulation of methods and/or agencies claim that they have unique methodologies, e.g. with the use of the described method combined with others.

In light of the research carried out, it is reasonable to say that eye tracking enables the researcher to discover: which packaging prototype captures and holds attention most effectively; whether key brand attributes are effectively communicated; how products perform against competitors' products; whether the Point of Purchase (POP) material attracts the shoppers' attention.

Summing up, eye tracking provides valuable insights at all stages of the packaging development process, from strategy and concept testing to design validation and campaign effect research. These insights contribute to refining designs, increasing impact, findability levels, foreseeing the effects of product line extensions, etc.

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- <http://www.eyetracker.pl/wp-content/uploads/2013/01/polka1.jpg>.
- <http://www.eyetracker.pl/wp-content/uploads/2013/01/polka2.png>.
- <http://www.eyetracker.pl/wp-content/uploads/2013/01/polka3.jpg>.
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## Empathetic Leadership – Key Element for Inspiring Strategic Management and a Visionary Effective Corporate Governance

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### Abstract

The strategic management principles may provide a rich and flexible framework for the analysis of the key elements that underlie an effective corporate governance within companies. However, little focus is put on the analysis of deeper aspects of leadership – such as the empathetic leadership. In this context, this paper seeks to advance an alternative approach by examining the most commonly functional definitions and other features of empathetic leadership, along with its accompanying strategic managerial leadership abilities with the purpose of achieving a visionary, yet effective corporate governance. Soft skills (cognitive capacities and personality traits) – in general, and empathy – in particular provide a prototype of how leader understanding and support improves follower behaviours and, ultimately, creates the premises of an effective corporate governance in companies. Empathy is a construct, a critical skill that is vital to leadership, many leadership theories considering the capability to possess and exhibit empathy a key feature of leadership, especially for authentic, transformational leaders. We explored the connection between empathetic leadership, follower performance and the key components of a visionary effective corporate governance. Therefore, we aim to present a model able to explain the synchronization of a strategic managements and an effective corporate governance under the impact of empathetic leadership. The paper adopted a descriptive methodology in outlining the influence of empathetic leadership for an effective corporate governance. Precisely, we tested the causal processes by which empathetic language and behaviour influences follower attitude (these processes including follower job satisfaction and innovation). Moreover, this paper is concentrated not only on presenting the effects of empathetic leadership on the corporate governance principles, but also on providing a qualitative investigation on the current advances in the international management framework. Our findings point the fact that empathetic leadership entails that for effective corporate governance, companies have to grow emotional capital to handle issues of low morale, organizational stress, high staff turnover and lack of work/life balance. Supplementary, we find that the daily practice of putting the well-being of others first has a reciprocal effect in business relationships, in the way employees, clients, colleagues and partners are treated. We reached the conclusion that empathy enables the leader to discern whether the people he’s trying to reach are actually reached, allowing him to foretell the effect of his actions will have on core audiences (and strategize accordingly!). The paper propose that further research efforts could empirically assess the extent to which empathetic leadership can influence managerial competence in diverse cultures.

**Keywords:** empathy, transformational leadership, strategic management, corporate governance.

**JEL classification:** L26, G34.

### 1. Introduction

*Leadership* has become quite a catchword lately, encompassing a grander scope of influence and guidance, requiring less detail orientation and more vision, while *management* focuses more on day-to-day implementations of pre-formulated guidelines. Conversely, often misunderstood, or underrated as a “soft skill”, *empathy* can be the decisive feature between adequate and exceptional leadership.

Research has shown that the difference between outstanding and average leaders lies in the emotional determinants, and not intellectual shrewdness. Even so, there’s still very little value (and investment!) placed on developing these skills, most often bucketed as emotional intelligence. “Soft skills” are invaluable within leadership, and may only become fundamental in years to come. Emotional intelligence (in general) and empathy (in particular) can uplift the

management within a company (and, implicitly, the company's performance) from good to outstanding, also conducting to an effective corporate governance.

This paper emphasis on *empathy in leadership* and outlines the findings in literature reviews on the concept of transformational leadership and current perception on the influence of empathy on corporate leadership and corporate governance.

When someone is perceived as a leader, it is because not only the *capability to accomplish complex tasks* is easily observed (Humphrey, 1985; Humphrey & Berthiaume, 1993; Humphrey et al., 2000), but also his/her *mental abilities* and *soft skills* (Atwater et al.; Atwater & Yammario, 1993; Lord et al., 1986). However, empirical research in management and leadership has fundamentally overlooked the role of emotions. Yet, it is certain that the leader's *emotional abilities* also count and, indeed, recent writings (George, 2000) suggest that *emotional intelligence* is, undeniably, "a key determinant of effective leadership".

Research shows that emotional abilities, such as *empathy*, "contribute to positive interpersonal relationships and successful outcomes" (Goldstein & Michaels, 1985). Considering the emphasis on leader–follower relationships in current conceptualizations of leadership (Gerstner & Day, 1997; Graen & Uhl-Bien, 1998; House & Aditya, 1997; Klein & House, 1995), it is reasonable to investigate whether or not emotional abilities – such as empathy – benefit leadership and, subsequently, organizational culture and corporate governance in the workplace.

This is why, in our opinion, it's extremely beneficial for managers to understand how they rank and what skills are needed to improve their chances of success, since one of those skills, perhaps unexpectedly, is, indeed, *empathy*.

We believe corporate governance and leadership can find opportunity in the challenges they face (coping with volatility, compliance and an over-emphasis on quarterly results).

Corporate codes of governance have continuously developed, most of them in the wake of various corporate scandals of the 90s. With over 100 international codes and regulations that often focus on issues of shareholder rights, financial transparency, accuracy of disclosure, and accountability of the board, their interpretation varies from one country to another. With the assertion that businesses have to make profit in order to create wealth, the way in which businesses are governed and the relationships within a company (between management, the board, shareholders and outside stakeholders) impact on many of the challenges faced by society as a whole. The biggest test of corporate governance in any culture has been when things go wrong – such as bankruptcy or takeovers and the subsequent conflicts of interest between the board, management, creditors and shareholders. *So how can businesses limit those conflicts of interest?* Our suggestion is that governance should pursue an integrative approach, demonstrating empathy, encouraging people to work more closely together (managers discussing with employees, shareholders collaborating with the board) to take into consideration all points of view, not only financial ones.

Therefore, we strongly believe that a good, effective and visionary governance is not about rules, but about people. In this light, effective empathetic leadership must anchor its conduct in standards (of integrity, transparency and accountability) that set example and provide stability in times of crisis.

This conceptual paper comments on the various concepts and dimensions of empathy in leadership, strategic management and corporate governance that have been proposed in the specialty literature by providing an alternative conceptualisation that seems better suited to corporate governance and how leaders should perform.

## 2. Research methodology

Most of this paper is dedicated to *fundamental research*, comprising numerous debates about *empathy* as a fundamental concept, respectively *its impact on leadership theories and practices* and *its contributions to an effective visionary corporate governance*, and also standpoints about the *ongoing dispute on the effects of leaders lacking emotional intelligence on company performance*.

By its nature, this paper is part of the *positivist research trend* with extensive *interpretative approaches* (regarding *current perception on empathy in corporate leadership*) and with a number of *critical elements* and many *personal opinions*, which intertwine harmoniously and give the article a touch of originality and professionalism. In terms of generated information, this research focuses on a *qualitative research* (most investigated items being of qualitative nature).

The research follows a *transverse direction* through the used *observation, comparison* and *conceptual analysis* techniques. Thus, the qualitative research valued specialist literature by processing it with various *methods specific to socio-human sciences*, such as *document analysis, non-participating observation* and *comparison*. The non-participating approach is due to the research field and the current state of knowledge in the field of interest, although comparisons made and opinions and conclusions expressed show certain participating aspects of the research, respectively the relevance of transmitted information.

A future research will be reserved for the *applied research*, where we will intend to put face to face the perceptions of the two groups: leaders and followers in respect to the 21<sup>st</sup> century leadership trends.

In our opinion, the dynamics of analysing scientific literature is extremely relevant in the analysis of management trends and leadership evolution, and consequently for increasing complexity of tasks and responsibilities attached to those charged with governance within a company, the more that we talk about periods of socio-economic or financial crises. The sources used are mostly research papers published in scientific journals in the field of corporate governance, management and psychology.

## 3. Emotional intelligence = Empathy = Empathetic transformational leadership?

The concept of *emotional intelligence* was first presented by **Salovey & Mayer (1990)**, who were influenced by previous theories of *social and multiple intelligence* (**Thorndike, 1920; Gardner, 1983**). In this context, we must draw attention to a book that became a bestseller, igniting public and academic interest (**Goleman, 1995**). Emotional intelligence is labelled as dissimilar from general intelligence (**Mayer et al., 2000a, 2000b; McCrae, 2000**), recent research suggesting that emotional intelligence's determinants may relate abstemiously (but not redundantly) to verbal intelligence, openness to experience, agreeableness, and emotional stability (**Mayer et al., 2000a; Schutte et al., 1998**).

**Salovey & Mayer (1990)** suggest that *empathy* may be "a central characteristic of emotionally intelligent behaviour". In this context, they delineate empathy as "the ability to comprehend another's feelings and to re-experience them oneself". **Plutchik (1987)** writes that "empathy is not a separate emotion by itself, but a kind of induction process by which emotions, both positive and negative, are shared, and which increase the chance of similar behaviour in the participants" [Plutchik, R. (1987). Evolutionary Bases of Empathy. (in N. Eisenberg, & J. Strayer (Eds.), *Empathy and its Development* (pp. 38–46). New York: Cambridge Univ. Press), pp. 43]. As follows, we believe that he wished to emphasize the fact that empathy serves to bond people together. **Rogers (1951)** also highlights the importance of empathy in a certain context – and that is creating an "ideal relationship" between a psychotherapist and a client. Years after, **Rogers (1975)**, alternatively, also follow-ups research proof that "points strongly

to the conclusion that a high degree of empathy in a relationship is possibly the most potent and certainly one of the most potent factors in bringing about change and learning” [Rogers, C. R. (1975). *Empathic: An Unappreciated Way of Being*. *The Counseling Psychologist*, 5(2), pp. 3]. Without a doubt, empathy has a long-lasting history as an important feature, especially (but not exclusively) for counselling and psychotherapy. **Katz (1963)** states: “when we experience empathy, we feel as if we were experiencing someone else’s feelings as our own. We see, we feel, we respond, and we understand as if we were, in fact, the other person” [Katz, R. L. (1963). *Empathy: Its Nature and Uses*. London: Free Press of Glencoe, pp. 3]. He also clarifies that “it is not required for the empathizer to experience physical sensations”. Nevertheless, empathy is more than an intellectual exercise, since it comprises personal connection, involvement and imagination.

We agree to the fact that an employee who is fortunate enough to encounter an empathic superior feels reassured, recognized and accepted. An empathetic reaction is “triggered by cues in the conversation or by impressions we receive of the state of mind or feeling of the other person. We assimilate this information without being aware of doing so. We pick up the signals through a kind of inner radar and certain changes in our own emotional states make themselves felt. We mimic the other person and in the excitement of our spontaneous response our attention is almost completely absorbed” [Ibidem, pp. 5]. **Katz (1963)** sustains that individuals vary in empathic skill. He defines the active empathizer as someone who thrives in aiding people to change and who is “capable to balance involvement with appropriate detachment, walking a narrow ridge between excessive empathy and myopic objectivity” [Ibidem, pp. 161].

Even though empathy has frolicked a significant role for decades in many spheres of psychology, its measurement still remains a trial to researchers. **Batson (1987)** notes that “self-reported measures of empathy are deficient because respondents are either unaware of or are unwilling to relate their empathic experiences”. Potential alternative approaches include ability measures such as the Multifactor Emotional Intelligence Scale (**Mayer et al., 2000b**) or ratings by external observers (**Mayer & Geher, 1996**). **Yukl (1998)**. Without a doubt, empathic abilities may underlie relations-oriented leader behaviour – such as showing consideration, which is a friendly, supportive, and concerned approach towards employees, as **Stogdill (1965)** notices.

**Transformational leadership** was initially introduced by **Burns (1978)** and developed further by **Bass & Avolio (1994)** and had been very influential over the years, it is built upon some ideas of leadership and supposed to respond to the fast-paced high-change environment where there is a need for a set of different styles of leadership.

**Burns (1978)** considers that transformational leadership has 4 primary elements:

- **Idealised Influence – the leader has a “walk the talk” approach**, employees within a company idealising him as a role model and following him blindly;

- **Inspirational Motivation** – that leader has an astute ability to inspire and motivate his/her team through charisma;

- **Individualized Consideration (Empathy)** – the leader is genuinely concerned about team members’ feelings, working with each one of them in order to comprehend their personal prerequisites;

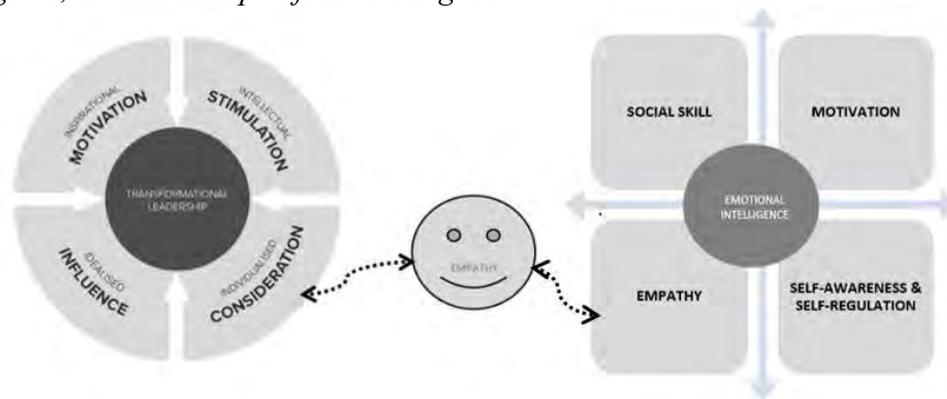
- **Intellectual Stimulation** – the leader uses his/her instinctive emotional intelligence to inspire his/her team to innovate and create so that change becomes visible and actionable.

Latest theorizing regarding emotions and transformational leadership (**Bass & Avolio, 1990; Ashkanasy & Tse, 2000**) advocates that the capability of apprehending others’ emotions facilitates a leader to empathize and conducts to effectiveness. According to **Goleman (1998a)**, empathy is “particularly important today as a component of leadership for at least three reasons: the increasing use of teams, the rapid pace of globalization, and the growing need to retain

talent” [Goleman, D. (1998a, November–December). What Makes a Leader? Harvard Business Review, pp. 100]. It means “thoughtfully considering employees’ feelings – along with other factors – in the process of making intelligent decisions”.

*In our opinion, transformational leadership is observed when leaders and followers make each other progress to a higher level of morality and motivation.*

*Through the strength of their vision and personality, transformational leaders are able to inspire followers to change expectations, perceptions, and motivations in order to work towards common goals, as we can depict from the Figure below:*



**Figure 1. The elements of transformational leadership in conjunction with the dimensions of emotional intelligence**

Source: own projection, after Burns (1978) and Kumar (2014)

Therefore, we believe that *emotional intelligence attributes* (of empathy, social skill, motivation, self-awareness and self-regulation) have a direct correlation to *transformational leadership traits* (of intellectual stimulation, individualized consideration, individual influence and inspirational motivation). Basically, leaders who have tried to upsurge their emotional intelligence are more capable to impact their followers, motivate them, and offer individualized consideration – and all these through *empathy*.

Scientists (McCrae & Costa, 1997; Yukl, 1998) have explored empathy’s dissimilarity from other constructs, personality traits and relations-oriented leadership behaviour, starting from the idea that empathy is an ability that conglomerates thinking and feeling.

Most researchers (Cooper & Sawaf, 1997; Goleman, 1998b; Yukl, 1998) agree in organizations empathy is interrelated abstractly to effective leadership behaviour. For instance, in their analysis on leadership effectiveness, House & Podsakoff (1994) detected that excellent leaders, unlike less effective leaders, have a higher attention and thoughtfulness to the prerequisites of their followers. Likewise, Cooper & Sawaf (1997) highlight that leadership is, indeed, a relationship and “emotional relationships are the lifeblood of any business”. In this context, it is obvious that people like and care about their leaders for the reason that they make them feel in a certain way.

Therefore, we highlight the fact that the capability to spread empathy is, truly, the most protuberant difference between successful and unsuccessful leaders, the importance of leading with empathy being undeniable:

*“Empathy and compassion connect us with others through the shared language of feelings and experience, one heart to the next, beneath the words, behind the posturing and gestures. Through feelings of empathy and compassion we help ourselves learn and grow, and we also enable others to begin to feel safe enough to talk about what is really going on in their lives—to tell their stories—without fear of being judged, criticized, or abandoned. It is then that we begin to empathize with them, and extend compassion and support to them, rather than remaining distant or unaffected, or sympathizing about them. And, more often than not, such empathy and compassion are, sooner or later, returned to us in kind” [Cooper, R. K., Sawaf, A. (1997). Executive EQ: Emotional Intelligence in Leadership and Organizations. New York: Grosset/Putman, pp. 48].*

In conclusion, **Cooper & Sawaf (1997)** indicate that “nationwide surveys indicate that people are made to feel more worthy and valued as a result of interactions with leaders they admire and respect” [Ibidem, pp. 50]. **Dansereau et al. (1995)**, in their well-known theory of individualized leadership, maintain that “support for feelings of self-worth reasons a being to be viewed as a leader, advocating that leaders may deliver sustenance for an employee’s sense of self-worth in exchange for adequate performance”. Consequently, emotions that are shared through empathy might have a balancing outcome on perceptions of status dissimilarities and diminish relationship barriers – and this is because “high quality relationships stemming from empathy are likely to enhance perceptions of a leader’s integrity, or credibility, and engender cooperation and trust” (**George, 2000; Lewis, 2000**).

Henceforth, “the knowledge and understanding that leaders assemble from their sense of empathy with followers may enable leaders to influence followers’ emotions and attitudes in support of corporate goals and objectives including feelings of excitement, enthusiasm, and optimism” (**George, 2000; Lewis, 2000**).

#### 4. Empathy – The Most Critical Trait in Conducting an Inspiring Strategic Management

After this thorough literature review, we can sum up and say that *empathy* is the capability to experience, relate and share the views, beliefs, emotions and experience of other individuals. We believe that empathy (being able to put himself/herself into someone’s shoes) is *more than simple sympathy* (being able to understand from his/her own perspective and sustain others with sympathy, kindness and compassion).

Empathy is, indeed, a construct that is vital to leadership, numerous theories and models advising the capacity to possess and exhibit empathy is a significant segment of leadership. We, therefore, extract the three dimensions of empathy:

- **Cognitive empathy** – when the leader *senses* how the other person *thinks* about the world, this meaning he/she can put what he/she has to say in terms the follower will understand (*the ability to understand another person’s perspective, on a conceptual level ⇔ becoming better communicators, conveying information in a way that bonds with the person*);

- **Emotional empathy** – when the leader instantly *resonates* with how the person *feels* (*the ability to feel what another person feels, sharing and connecting with the feelings of another on an emotional level ⇔ building and nurturing emotional connections*);

- **Compassionate empathy (empathic concern)** – when the leader expresses the ways he/she *cares* about the person by helping with what he/she senses they *need* (*the ability to sense what another person needs, sharing another’s experience ⇔ taking action and helping*).

For several years, researchers (**Bass, 1985; Salovey & Mayer, 1990; Goleman, 1995; Bar-On & Parker, 2000; George, 2000; Walumbwa et al., 2008**) have emphasized that empathy is, indeed, a key part of emotional intelligence that is vital to being an *authentic, effective transformational leader*, for him/her to be able to recognize the value of others and in order to display the care he/she has for their followers’ prerequisites and accomplishment.

Research has also revealed that the nature of leadership is ever-changing, assigning a grander importance on constructing and preserving interactions, since leaders nowadays must be more person-focused and need to lead people, collaborate with others, be able to cross organizational and cultural boundaries – with the purpose of creating shared direction, alignment and commitment between social groups with very different backgrounds, views, beliefs, values and cultures.

But we must draw attention to the fact that, in our opinion, *having empathy* (possessing and acquiring **transformational leadership skills**) is not the same thing as *demonstrating empathy* (proving and implementing an **inspiring strategic management**).

In this context, carrying empathic emotion is described as the ability of managers to comprehend what employees are feeling (Duan, 2000; Duan & Hill, 1996; Goleman, 2006), the ability to keenly share emotions with them and experiencing their feelings (Kellett et al., 2006) in order to be effective.

Since empathy is clearly related to job performance, we believe managers who show more empathy are viewed as better performers in their job by their superiors. In order to increase their effectiveness, leaders may need to develop the ability to exhibit empathy, since empathy is not a fixed trait, and, therefore it can be developed, educated and enhanced (Shapiro, 2002) by means of coaching or training. Hence, companies should embolden a more empathetic workplace and assist managers to boost their empathy skills in order to enhance a *visionary strategic management* within a corporation, the capability to be empathetic being particularly significant for managers working in multinationals, across cultural boundaries (Alon & Higgins, 2005; Harris & Moran, 1987; Jokinen, 2005; Mendez-Russell, 2001).

This leads to the conclusion that empathy creates attentiveness and appreciation for others, opening the way to more fruitful working relationships. When managers upsurge their awareness and apprehension of empathy (particularly in their cultural context), they can recognise behaviours they can improve and identify circumstances where displaying their empathy could have made a difference. As managers improve their empathy skills through listening, consideration and compassion, they are honing their leadership effectiveness and, subsequently, they increase the chances of success in the job.

Initial theories depict that strategic management has five fundamental stages: “defining the business, establishing objectives, formulating the strategy, strategy implementation and execution, and evaluating performance” (Nedelfa & Paun, 2009). However, recent progresses, emerging trends, changing behaviours, new complex rules of competition and the multifaceted patterns of nowadays business environment ought to be taking into consideration to classic management systems – especially the strategic management process, since new-fangled elements, such as innovation, should be added.

Accordingly, we believe that a strategic management process should comprise five mandatory steps – *leadership, formulation, execution, integration and innovation* – as illustrated below. We consider that strategic management begins with a visionary leadership, but only outstanding companies, with empathetic leaders, are truly innovative. And that is why viable innovation obliges effective planning, implementation and measurement of results, but also empathy.

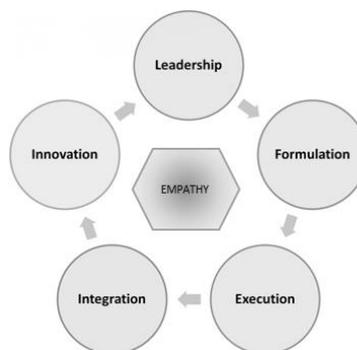


Figure 2. Determinants of an inspiring strategic management process

Source: own projection

Therefore, we believe that empathy is a determinant of an inspiring strategic management on its own, mainly because any strategy development practice must be relied on noticeable commitment from the executive team. Leaders deliver the vision, establish the long-term goals

and create unique standards and values that distinguish the business and generate sustainable progress.

This leads us to the idea that strategic leadership begins with a comprehensive and holistic approach, since leaders who have a clear vision, but are also charismatic and empathetic, and possess resilient managerial skills, can provide the glue to bring people together and foster effective teamwork for common goals.

Understandably, strategic management cannot thrive without prevailing empathetic leadership and bursting sustenance of top management.

In conclusion, in relation to conducting an inspiring strategic management, we believe that, principally, empathy is a unbiased data gathering tool that enables managers to understand the human environment within they are operating in business and, consequently, make better predictions, craft better tactics, communicate clearly and inspire loyalty.

## 5. Empathy & its Influence on Achieving a Visionary Effective Corporate Governance

Increasing attention has been paid in recent years to the issue of *corporate governance* in emerging economies. The global corporate governance failures of organizations have kept governance issues on the front burner of academics, economists, boards and the policy makers.

Corporate governance, according to the **Organisation for Economic Co-operation and Development (OECD)** is “a set of relations between a company’s management, its board, its shareholders and other stakeholders, providing the structure through which the objectives of a company are set and the means of attaining those objectives and monitoring performance are determined” [<http://www.oecd.org/corporate/>].

The cardinal objective of corporate governance is to promote the efficient and equitable use of resources, as well as share accountability for the stewardship of resources in a manner that aligns the interests of individuals, the company and society at large. However, only good leadership can make these happen.

*Empathy* may be the missing puzzle piece in an organization, in order to achieve an *effective corporate governance*, since it surges trust, motivates employees and delivers profit-making results.

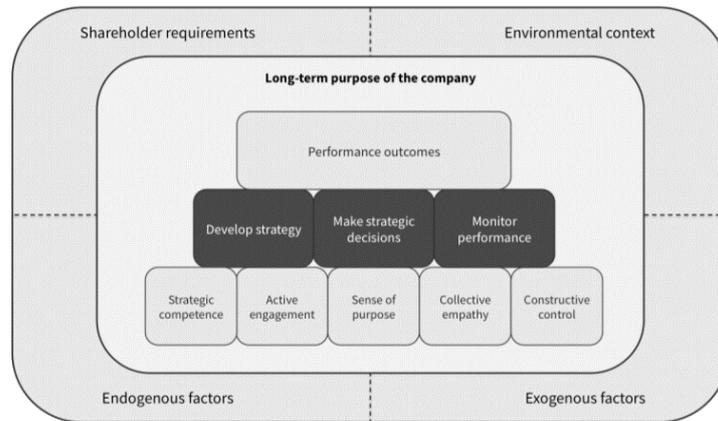
We consider that empathy cannot be underrated as a leadership and business tool. If a manager can delegate, communicate and accomplish against a long-term strategy, then he’s got what it takes to be a good leader, but If he can do all this and truly understand the idiosyncratic needs of his team members, this leads not only to an inspiring strategic management, but also to achieving a visionary effective corporate governance.

Underlying social mechanisms appear to be the crucial interactions that occur between directors when they work together in order to perform these tasks effectively and thus activate the organisational level mechanism. If directors do not possess the suggested qualities or they do not express them and, by omission, the social mechanisms are not activated, then the important strategic management tasks identified here are unlikely to be completed effectively. Consequently, the company-level mechanism will not be activated and the board’s influence over business performance will be minimal.

This proposal suggests that corporate governance is neither a structure, a process nor a set of policies. Rather, it may be more effectively conceptualised as a company-level mechanism—to be activated by boards and from which to better pursue business performance outcomes. The primary components of the corporate governance mechanism are suggested to be strategic management tasks, lower-order social mechanisms and underlying qualities possessed by directors (as shown below). The hierarchical expression of these components suggests that corporate governance is, in effect, a multi-faceted and multi-functional

mechanism that can be activated by boards to develop strategy, make strategic decisions, monitor strategy implementation and, verify business performance, all in the context of both the stated long-term purpose of the company and the wider operating context.

Thus, the figure below describes not only the fact that corporate governance is, indeed, a stratified company-level mechanism, but also depicts the link between empathy, leadership, strategic management and corporate governance:



**Figure 3. Corporate governance: A stratified company-level mechanism**

Source: own projection

This reconceptualization of corporate governance, as a stratified company-level mechanism, appears to provide a seemingly adequate explanation of the observed board–business performance relationship, and of how boards influence the achievement of business performance outcomes under specific conditions. It offers an alternative view to empiricist conceptualisations of corporate governance (a structure, or process or policy framework) that have been depicted in the literature and are frequently applied in practice.

The board's active involvement in the strategic management process appears to be crucial if the board is to exert any meaningful influence. More specifically, when directors possess strategic competence and collective empathy and express those qualities as they work together, and they activate the identified social mechanisms (active engagement, sense of purpose and constructive control) and perform strategic management tasks together in the boardroom, changes in business performance can follow.

While a theoretical explanation has been provided in this paper, the explanation itself should not be interpreted to be a grand theory applicable to all boards and board situations. Neither should it be interpreted to be a predictive theory. Rather, the mechanism-based conceptualisation of corporate governance presented here seeks to provide guidance towards a contextual understanding of the underlying qualities of directors (like empathy!) and social mechanisms that, when activated by directors in board meetings, appear to be necessary if boards are to exert an influence on business performance.

The actual business performance achieved by companies ultimately remains dependent on managers to implement the decisions made by the board; the board's effective monitoring of managers and management activity; and, numerous other internal and external factors. A variety of patterns of human agency can and do influence both decisions made in boardrooms and subsequent business performance outcomes. Many directors cannot predict their own performance, let alone that of the board they sit on or the company.

Consequently, the conceptual contribution emerging from this research is, and should remain, tentative.

The members of the board of directors make up the top leadership of any organization and it is their responsibility to make decisions that create value for the organization and also

manage risk. They should therefore foster good corporate governance as a way of life in their organization rather than a code. Research has proven that the personality of corporate leaders plays significant roles in the determination of an organisation success or failures, (**Judge et al., 1999**), the personality of CEOs being highly correlated with an organisation's long term success or failure.

Leadership is now almost universally viewed as a change process with the leader as the primary catalyst for change that at least sets out to be transformational and inspiring, thus exciting followers to higher or extraordinary levels of performance through shared vision, in contrast to effectiveness inspired by reward and punishment as the mechanisms employed to motivate subordinate efforts.

## Conclusions

This study's main objective was examining the role empathy plays in effective leadership. We ascertained that the ability to understand what others are feeling is a skill that evidently contributes to effective, outstanding and visionary leadership.

The reasons behind the strong correlation of empathy and effectiveness were not evaluated in this study; we presume, however, that empathetic leaders are "assets" because they are capable to effectually build and nurture relationships – a critical part of leading organizations anywhere in the world.

Outstanding leaders should be proficient in proper management skills, while outstanding managers should be able to lead when expected to. When it comes to the defining qualities of leaders nowadays, while there is general consensus about qualities such as intelligence, charisma, responsibility, vision, and passion, there are some "softer", more emotion-driven skills, such as compassion, and *empathy*, that, still, have not been widely accepted as befitting leadership execution.

Thus, this paper focused on the trait of *empathy* in organizational leadership. The debate on ethics and leadership without empathy has been very vivid in the past decade or two. The multiple dimensions in leadership qualities as presented in the specialty literature form a fertile foundation to review a critical leadership quality that has thus far encountered resistance in being accepted in business performance: *empathy*.

There is a need for more empirical work to determine the degree of association between emotional abilities and mental abilities since emotional abilities, such as empathy, involve feelings, while mental abilities involve verbal fluency, logic, analytical problem-solving, memory, and abstract thinking.

Nevertheless, empathy is a key variable, and is consistent with a small but growing body of conceptual work linking emotional abilities with effective leadership. Indeed, perceiving others' feelings and empathizing with them is likely to establish an affective bond or relationship that offers benefits for leadership.

The findings indicate the need for a paradigm shift in corporations in regards to leaders' required skills, and suggest a proactive approach from business entrepreneurs in the process of strategic management in order to change the current paradigm.

Also, in relation to *corporate governance* – *it is not just about playing "watchdog" "over management*, it is more about augmenting corporate strategic selections, acknowledging and responding to the interests and concerns of stakeholders, developing and boosting managerial competencies and skills, and, ultimately guarding and maximizing shareholder wealth; *it is about leadership.*"

The proposal that emerged from this research challenges the conception that corporate governance is a structure (that is, the board) or a process (that is, a sequences of activities), or policy framework (of rules and regulations), or some combination of the three. Rather, the

contention of the proposal is that corporate governance is a company-level mechanism that is activated by competent, engaged, empathetic boards in the pursuit of business performance outcomes, via strategic management.

Commitment to integrity, honesty, fairness and transparency should be for leaders who want to create value and succeed in running organizations that are highly rated in corporate governance. Boards must take responsibility for the integrity of their organizations and directors must see their organization's integrity as an extension of their own integrity. There should be a great pledge of company leadership to having policies, procedures, rules and regulations that are well specified and strictly adhered to by all employees.

Leadership and corporate governance, indeed, go hand in hand and neither exists in a vacuum:

*“Leaders today care about corporate governance because it aims to secure not just what the company does, but also how it acts.”* (Werner Brandt)

The above literature-based reflections have presented a clear message: empathy is an essential aspect of 21st century leadership and can no longer be ignored if we want to prevent continuation of ethical disasters in the business world.

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## Marketing Activities of Cities in Urban Mobility Management

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### Abstract

Dynamic urban development and lifestyle changes, as well as increased awareness of the negative impact of transport on the environment, result in continuous growth and changing transport needs. Changes in transport behaviour are closely related to congestion, traffic accidents, emissions of exhaust fumes and noise, which in turn affects the quality of life. Therefore, a sustainable approach to urban mobility and transport planning is becoming more and more common in all EU countries. The concept of sustainable urban mobility assumes the modelling of the urban transport system according to the principles of sustainable development. The recommendations for urban mobility, as set out in the European Union documents, require many actions, including those related to the promotion of the desired transport behaviour of urban residents. Promotional activities are an indispensable tool for building social acceptance of the introduced changes and encouraging inhabitants to co-create urban transport system compliant with the concept of sustainable mobility. The aim of the article was to analyze selected marketing activities in the context of urban mobility. The author made a critical analysis of the literature on sustainable urban mobility, and also created her own definition of it, showing the way to its creation. In the next part of the article, she reviewed selected marketing activities aimed at balancing urban mobility, showing the progress made over the years. The conclusion of the analysis is that city dwellers are increasingly aware of the negative impact of transport on the environment and their quality of life and are therefore willing to use sustainable urban mobility tools through appropriate marketing measures. An overview of sustainable urban mobility with the marketing activities selected by the author and their analysis has been not carried out until now, which gives added value to the work.

**Keywords:** marketing activities, sustainable urban mobility, sustainable development.

**JEL classification:** M38

### Introduction

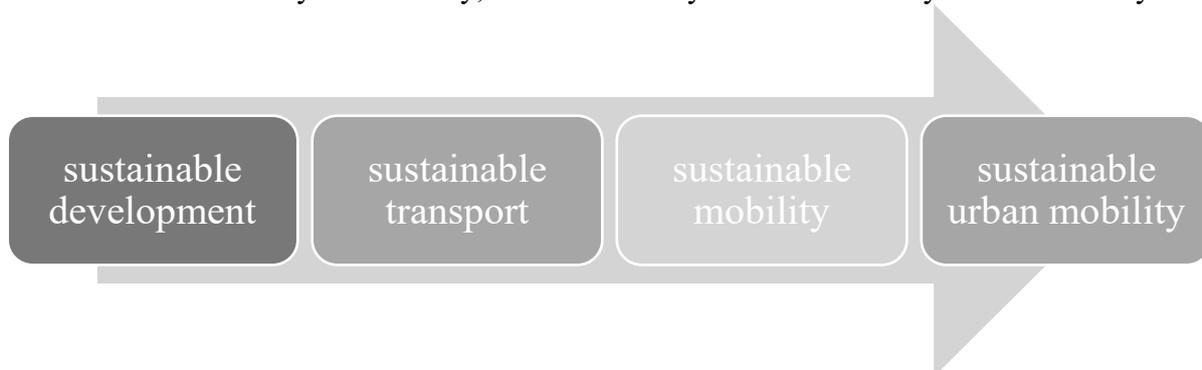
Dynamic urban development and lifestyle changes, as well as increased awareness of the negative impact of transport on the environment, result in continuous growth and changing transport needs. Changes in transport behaviour are closely related to congestion, traffic accidents, emissions of exhaust fumes and noise, which in turn affects the quality of life. Therefore, a sustainable approach to urban mobility and transport planning is becoming more and more common in all EU countries. The concept of sustainable urban mobility assumes the modelling of the urban transport system according to the principles of sustainable development. Recommendations on urban mobility, which are based on European Union documents, require many actions, including those related to the promotion of the desired transport behaviour of urban residents. Promotional activities are an indispensable tool for building social acceptance of the introduced changes and involving and encouraging inhabitants to co-create urban transport system compliant with the concept of sustainable mobility.

### The essence of sustainable urban mobility

Continuous urban development generates an increase in demand for efficient, fast and safe transport, taking into account the specific requirements of stakeholders as well as legal and organisational conditions. Increased road traffic in urban areas brings a continuous increase in pollution in the form of solid, liquid and gaseous substances, which are harmful to human health, the environment and spatial structures. In 2016, transport accounted for a quarter of

total greenhouse gas emissions in the EU. According to data, the share of passenger car in transport sector emissions was 44%, while truck and bus emissions were 18% (EU Publications Office, 2016). Therefore, numerous initiatives are being taken at international and national level to reduce the negative impact on the environment. The United Nations Conference in Rio de Janeiro in 1992 played an important role in the introduction of the concept of sustainable development. At that time, the so-called "Rio Declaration" was signed. It contains 27 principles of sustainable development and clean production. At the same time the Global Action Programme "Agenda 21" was approved, which includes a joint declaration of 178 countries on the conduct of national policy in such a way as to encourage the solution of global social, economic and ecological problems. The broad approach to sustainable development is reflected in the difficulty of measuring it. Sustainability indicators can be based on a comprehensive view of economic, social and environmental processes in a measurable and comparable way (Joumard and Gudmundsson, 2010). Balancing economic processes ("economic sustainability") should therefore be complemented in balancing social sustainability and environmental sustainability. In the context of the demands for improved living conditions and sustainable urban development, sustainable urban mobility is considered to be an element conducive to this concept.

In the traditional transport economics, mobility was understood as the mobility of individuals and households (Profilidis, 2006), although already in the 1970s, the complexity of the issue was perceived as a socio-technical system whose essential element, apart from infrastructure and transport technology, is people and their behaviour (De Greene, 1973; Margherita, Elia and Secundo, 2012). The multiplicity of the concept of "mobility" has been highlighted by K. Zuziak (2010, pp. 79), who stated that "it concerns migration phenomena, is an attribute of resources and location-based behaviours; it refers to capital flow, as well as communication behaviours, i.e. various manifestations of spatial mobility that is of interest to traffic engineering, transport policy and urban planning". The concept of sustainable mobility is therefore an attempt to adapt the characteristics of any system that can be considered sustainable to existing and planned functional and spatial forms, such as regions, cities and metropolitan areas (Volk, 2014, pp. 289-398). The definition provided by the World Business Council for Sustainable Development (2004) provides a fairly broad outline of the concept of sustainable mobility, in terms of ensuring that society is able to move, access, communicate, trade and interact freely in a socially, environmentally and economically sustainable way.

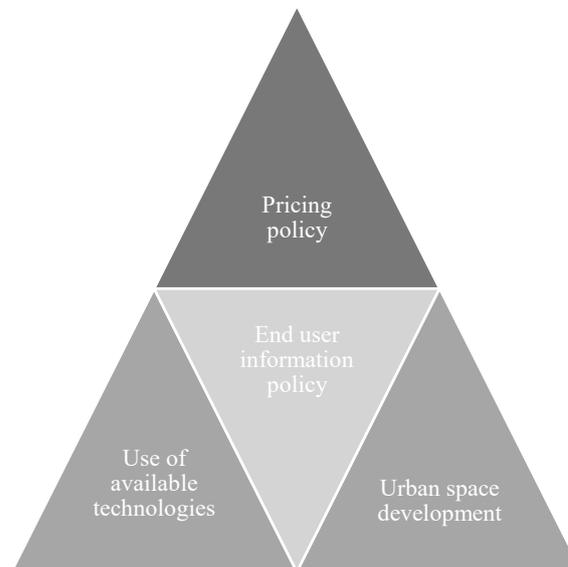


**Figure 4. Sustainable development and sustainable urban mobility**

Source: own study based on: Wołek, 2014, pp. 393.

Therefore, the concept of sustainable urban mobility adapts the concept of sustainable mobility to urban areas, including the complexity of urban systems and the strong relationship between land-use and transport (World Business Council for Sustainable Development, 2004). In conclusion, the concept of sustainable urban mobility includes the social, economic, environmental and spatial context in relation to the city or urban area, thus assigning

significance to public and individual transport, shaping their mutual relations, as well as the quality of life of the inhabitants and the condition of the environment, by reducing the external costs of transport.



**Figure 5. Key elements of the sustainable urban mobility paradigm**

Source: own study based on: Bannister, 2018, pp. 78-79.

Bannister (2008) defines four main thematic areas which are the starting point for sustainable urban mobility actions (Figure 3). Among them, it is worth noting the call for the optimised use of existing, available and proven technologies, which, thanks to process and product innovations, create a new impetus for the development of a sustainable distribution of transport tasks in urban areas, while the heart of the action includes an element of marketing strategies - information policy of end users.

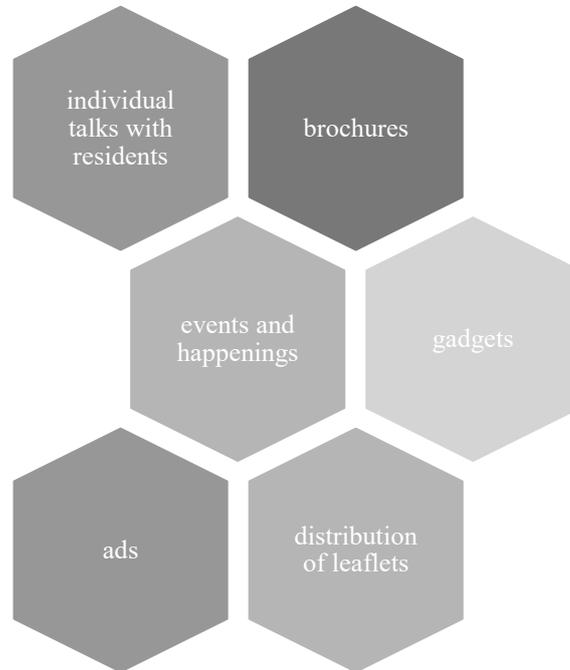
### **Analysis of the marketing activities of the cities**

Marketing research, marketing and educational activities are tools used in the context of urban mobility management concepts that aim to influence the transport awareness and behaviour of city dwellers, so that the demand for car travel decreases and the interest in public transport, cycling, walking and car sharing increases.

The reasons for using marketing research information in sustainable mobility planning are related to the participatory and evaluation principles applied in this process and the need to forecast the transport behaviour of city dwellers. One of the necessary forms of citizen participation is to get to know their needs, preferences and attitudes towards transport, as well as their opinions on various solutions for sustainable urban mobility through marketing research. It is important to first understand and then anticipate how citizens will behave in choosing how to be mobile in certain conditions that depend on or are independent of them. Therefore, it is not possible to develop a mobility plan and then evaluate its effects without methodological marketing studies. The essence of urban mobility research is, first of all, its size and diagnosis of the specific needs of the inhabitants. The study of postulates related to public transport is of exceptional importance, because only with this knowledge is it possible to build an optimal plan for it to be compatible with sustainable urban mobility (Wołek, 2016, pp. 68-69).

Due to their correlative nature, educational and marketing activities are often used together. Education is aimed at increasing the awareness of residents in terms of the existence of sustainable types of mobility and their ability to meet transport needs. Thanks to these initiatives, residents possess the knowledge that their communication choices can strongly

influence the quality and way of moving around the city, in the near and long term. Information activities, on the other hand, aim to promote forms of transport alternative to individual communication by means of a wide range of marketing strategies (Nosal, 2011). An overview of the activities of the aforementioned information measures is presented in Fig. 1.



**Figure 6. Marketing strategies to promote alternative transport means**

Source: own study based on: Nosal, 2011; Nosal and Starowicz, 2010.

The mission of marketing and educational activities, apart from changing transport views and behaviours, is to explain the impact of travel on people's health and the environment, and often also to advertise new mobility policies and local transport plans. The need to communicate them was included in the Green Paper "Towards a new culture for urban mobility". (Green Paper, 2007), 25 September 2007. According to the above document, a new culture of urban mobility requires educational and information activities or campaigns to increase the awareness of citizens about sustainable urban development.

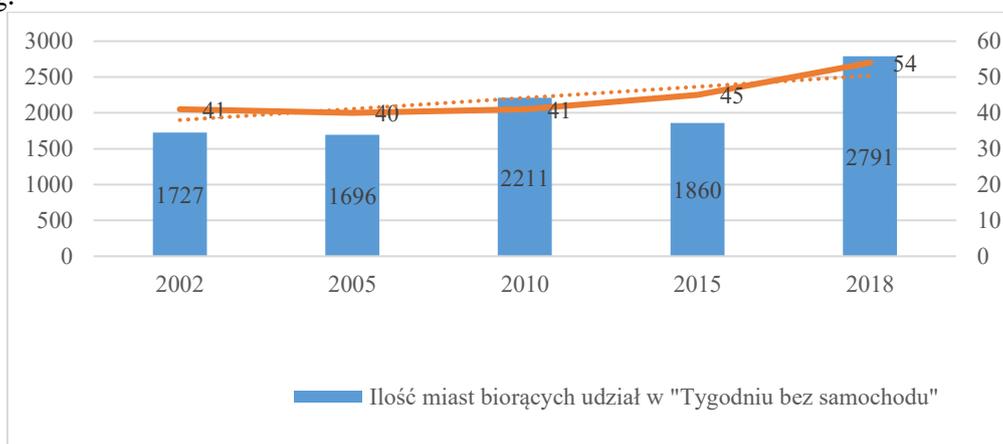
The most popular form of marketing and educational activities are campaigns organized on an international, national, regional and urban scale, focused on specific groups of recipients, popularizing cycling and walking, using public transport or carpooling technique (Nosal, 2011). The most frequently organised events are: "**Mobility week**" and "**Car-Free Day**", which take place every year in cities around the world. During the Car-Free Day, drivers are encouraged to leave their car for one day and travel by other sustainable means of transport. The idea behind this project is not only to promote alternative forms of transport to individual communication, but above all to encourage the integration of land-use planning and transport planning in such a way that places of residence, workplaces and services are located in close proximity, within walking distance (Eurocities, European Mobility Week, 2019. [online] Available at: <<http://www.mobilityweek.eu>> [Accessed 10 July 2019]).

In the initial phase of the events described above, during the 1973 oil crisis, they were organised on an ad hoc basis, and only in October 1994, at the International Ciudades Accesibles international conference in Toledo, Spain, did the need for such events arise (Eurocities, European Mobility Week, 2019. [online] Available at: <<http://www.mobilityweek.eu>> [Accessed 10 July 2019]).

In the next few years, the "Car - Free Day" was celebrated in Reykjavík (Iceland), Bath (UK) and La Rochelle (France), and to support the organisation of the event worldwide, a Consortium for a World Car Free Day was established in 1995. The first national campaign, launched in 1997 in the UK gave rise to the French campaign "In town, without my car!", which the European Commission announced in 2000 as a European initiative. In the same year, the event's timeframe was extended to include the "European Mobility Week", always taking place from 16 to 22 September, with the "Car- Free Day" to mark the end of the campaign on 22 September. In 2000, the "Car Free Day" was organised globally as the "World Car Free Day".

At that time, the "Mobility Week" and the "Car -Free Day" were the largest of their kind in the world. Each year, thousands of European cities and metropolises from outside the continent take part, mainly from Brazil, Argentina, Canada and Japan. The 2012 edition was joined by 1727 cities, including 41 from Poland (Eurocities, European Mobility Week, 2019. [online] Available at: <<http://www.mobilityweek.eu>> [Accessed 10 July 2019]).

In 2018, the event was joined by 54 countries from all over the world, 2791 cities, including 160 Polish cities. A detailed plan of participation of countries and cities in the "Week without a car" is presented in Figure 4, while Table 1 adds Poland's position to the world ranking.



**Figure 4. Number of cities and countries participating in the "Week without a car" campaign in selected years**

Source: own study based on: Eurocities, European Mobility Week, 2019. [online] Available at: <<http://www.mobilityweek.eu>> [Accessed 10 July 2019].

**Table 4. Number of cities and countries participating in the "Week without a car" campaign in selected years, including Poland**

Year	Number of cities participating in "Week without a car".	Number of countries participating in "Week without a car".	Number of cities participating in "Week without a car" in Poland
2002	1727	41	41
2005	1696	40	86
2010	2211	41	114
2016	1860	45	30
2018	2791	54	160

Source: own study based on: Eurocities, European Mobility Week, 2019. [online] Available at: <<http://www.mobilityweek.eu>> [Accessed 10 July 2019].

Each year, more and more countries and cities from around the world take part in the "Week without a car" event, which confirms the necessity and effectiveness of such initiatives, manifested as marketing activities supporting sustainable urban mobility.

**Carsharing** is another activity, gaining more and more popularity all over the world, promoted for sustainable urban mobility through educational and marketing actions. It is worth mentioning that many solutions increasing sustainable urban mobility and the efficiency of the urban transport system, operate on the basis of modern information and communication technologies, such as carsharing, bikesharing, integrated fee management, real-time traffic management, real-time passenger information or mobile applications supporting decision making by passengers (Kos-Łabędowicz, 2016). The literature on the subject concludes many terms describing the studied phenomenon. Van Malderen Thomas Vanoutrive and Jourquin (2010) describe it as a situation where two or more employees commute together to work in a private or company car. Massachusetts Civil Engineering and Environment (2009) defines carpooling as "the transport of two or more persons in a motor vehicle with a capacity not exceeding 15 passengers, where such transport is ancillary to the driver's principal purpose of arriving at its destination and where such transport is not intended to transport passengers for profit". On the website of the Road and Green Administration in Gdynia (2019), you can read that: "Carpooling is a system of joint, organised journeys in one car. By using this solution, more than one person travels with one car, resulting in lower travel costs (when sharing costs between travelers) and a more enjoyable journey because of the company. In the long term, the use of shared journeys leads to reduced congestion on the roads, reduced emissions and reduced parking space requirements.

To sum up, the use of carpooling is a rational form of transport, which does not require large investment outlays. It concerns the sharing of passenger cars on common routes by the driver, who decides where and when he or she intends to make the trip, and the co-passengers who want to participate in the trip, on terms set by the driver - route, date and payment. The drivers offer joint journeys through e.g. special applications or websites, providing the number of seats in the car, the cost of the journey for the passenger, the place of departure and the destination, the days and hours of the journey and contact details. Passengers, by finding a suitable trip for them, make an agreement with the driver, plan the trip together, and carry out the trip. A description of the benefits of the carpooling scheme by beneficiary is provided in Table 2.

*Table 5. Benefits of carpooling by beneficiaries*

<b>Social benefits</b>	<b>Benefits for employers</b>	<b>Benefits for individual passengers</b>
Reduced number of kilometres travelled by passenger cars	Reduced need for parking	Sharing of travel expenses
Reduced fuel consumption and greenhouse gas emissions	Improved morale and productivity of employees	Cost savings due to joint travel costs
Reducing harmful air pollution	Financial benefits	Reduced stress due to sharing of driving responsibilities and travel time related to access to HOV lane [a lane intended solely for vehicles carrying the driver and one or more passengers]
Cost savings for public agencies and employers	Fiscal benefits	Increased comfort of travel

Source: own study based on: Shaheen and Cohen, 2018.

The carpooling system has many benefits, both for carpoolers and transport seekers, and has many social benefits, reducing environmental costs, congestion, noise, the use of point and line infrastructure, thereby improving the quality of life of city dwellers and thus influencing sustainable urban mobility.

## Conclusions

The measures identified both in EU documents and by the scientific community include four areas: use of modern technologies, adjustment of regulations and costs to account for external transport costs, integration of spatial planning with transport policy, ensuring public acceptance of solutions to ensure sustainable urban mobility (Banister, 2008). These actions should be undertaken simultaneously and take into account the interrelationships and impacts. The lack of a holistic approach to ensuring sustainable mobility in urban areas will have an impact on the limited effectiveness of the actions taken. From the point of view of effectiveness of the implemented measures, it is necessary to achieve social acceptance of the importance of sustainable mobility for the improvement of the quality of life and economic and social development in the urban area. All marketing and educational activities serve to ensure public acceptance. Mental change and awareness-raising on sustainable mobility should be planned in the long term, taking into account different target groups, especially children and young people, as a group not yet accustomed to the lifestyle in which the car plays an important role. It should also be emphasised that marketing activities should be carried out in a continuous and strategically planned manner, and not only by chance and in operational manner, as they will not achieve the intended long-term effect of sustainable urban mobility, but will take the form of one-off activities which will not be continued by city dwellers.

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## Customer Engagement Consequences for Firms

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### Abstract

**Purpose:** Customer engagement (CE) is a customers' voluntary resource contribution to firms' functions, and it goes beyond transactions during customers' behavioral manifestations toward the brand or firm's offerings or activities. The effective CE management requires to understand the potential CE effects, and leverage the potential benefit and threat of CE, however negative consequences or risks of CE have remained unexplored in existing literature. Therefore, this paper explores both negative and positive consequences of customer engagement for firms. **Methodology:** Based on computer-assisted telephone interviews with 402 firms operating in the field of consumer goods and services, descriptive statistics and structural equation modelling were used in this study. **Findings:** This study recognizes firm-level risks of CE associated with customer resource integration and reveals the linkages between those risks and firm-level benefits of engaging customers by firms. **Originality/value:** The paper proposes realistic view on firm-level consequences of CE and provides insights into how firms should manage CE by understanding the dark-side of CE resulting from integrating customers' resources in business processes.

**Keywords:** Customer engagement, Firm-level risks of customer engagement, Firm-level risks of customer engagement.

**JEL classification:** M31

### 1. Introduction

End-users, customers and user communities are network actors, in addition to other types of actors, such as developers, research organizations, or competitors (Aarika-Stenroos and Rittala 2017; Żyminkowska 2019). Therefore, consumers and consumer communities are the source of new competencies for firms that have access to the competence and investment of time and effort from those actors, in addition to the firm's resource base (Prahalad and Ramaswamy 2004; Żyminkowska 2019). The new marketing concept of customer engagement (CE) refers to the abovementioned phenomenon of consumers' activism in offering their resources during interactions with the brand or firm's offerings or activities, often involving others in the social network created around the brand, offering or activity (Vivek et al. 2014; Żyminkowska 2018). CE is a customer's voluntary resource contribution to a firm's marketing function above and beyond financial patronage (Harmeling et al. 2017; Żyminkowska 2018; Żyminkowska 2019). In other words, CE is a customer's behavioural manifestations towards the brand or firm that goes beyond transactions (Verhoef et al. 2010, Żyminkowska 2019). The marketing literature suggests the need for customer engagement management (Żyminkowska 2019; Palmatier et al. 2018; Alvarez-Milán et al. 2018; Beckers et al. 2018; Venkatesan 2017;

Harmeling et al. 2017; Kumar and Pansari 2016; Kumar 2013). Firms should develop a set of capabilities and resources to manage customer engagement (Verhoef and Lemon 2013). Such management efforts should leverage the potential benefits or threats of CE internally and externally (Verhoef and Lemon 2013, Żyminkowska 2019).

However, most existing studies on managing customer engagement represent the optimistic view on CE outcomes for companies, focusing on CE benefits, positive consequences or value co-creation (Żyminkowska 2019). CE is perceived as the mechanics of a customer's value addition to the firm through indirect customer contributions (e.g., customer feedback, social media conversations, etc.) (Pansari and Kumar 2017; Kumar et al. 2010). Positive firm-level consequences of CE outlined in the literature include higher sales (Wirtz et al. 2013), customer equity (So et al. 2014), and shareholder value (Beckers et al. 2016). On the other hand, negative outcomes or firm-level risks of CE have rarely been noted (Żyminkowska 2019). Despite the general awareness of possible CE threats for firms due to the shift of control over some aspects of a firm's marketing functions from the firm to the customers (Harmeling et al. 2017), detailed risks of customer engagement have remained unexplored to date (Żyminkowska 2019).

In response to this research gap, this study proposes a realistic approach to the customer engagement consequences for firms and refers to CE risks next to CE benefits (Żyminkowska 2019). Thus, it aims to explore the following research questions:

RQ1. What are the potential CE risks from the managerial perspective?

RQ2. What is the level of CE risks in firms in the context of CE benefits?

RQ3. Does the growing intensity of engaging customers in firm business practices result in higher levels of risks?

Based on the research results, this paper makes two main contributions. First, drawing on the literature in regards to risks associated with the integration of external, customer resources, this study identifies potential firm-level risks of customer engagement (i.e., customer's voluntary resource contribution to a firm's marketing function that goes beyond financial patronage). Understanding the existence of such risks is useful for scholars and managers focused on profitable CE management (Żyminkowska 2019). Second, the paper examines the relationship between the intensity of engaging customers in firm business practices and CE benefits and risks. All forms of CE are combined in this analysis in order to discover the consequences of this multi-faced concept.

The paper is organized as follows. The next section reviews customer engagement concepts in a managerial perspective and its firm-level outcomes. Next, we present a discussion on risks associated with the integration of external, customer resources by firms, followed by an overview of the research methodology deployed to collect and analyse the data. Then, the findings are presented. The paper concludes with a discussion of the theoretical and managerial implications arising from this research.

## **2. Theoretical background**

### **2.1. Interpretation of customer engagement in a managerial perspective**

In managerial research, customer engagement (CE) is defined as a customer's behavioural manifestations towards a brand or firm, that has a brand or firm focus, extending beyond purchases, resulting from motivational drivers (van Doorn et al. 2010). CE goes beyond transactions (Verhoef et al. 2010; Beckers et al. 2018); it is a customer's voluntary resource contribution to a firm's marketing functions (Harmeling et al. 2017; Żyminkowska 2018; Żyminkowska 2019).

The literature distinguishes among different forms of customer engagement that occur in interactions between firms and customers and between customers themselves (Żyminkowska

2018; Żyminkowska 2019). Jaakkola and Alexander (2014) identified two general types of customer engagement behaviours in the existing literature. The first is customer involvement in product development and innovation and signifies that customers help to improve or develop the firm's offerings by providing feedback, ideas, and information, or by participating in product design or assembly. The second one, customers' communications about the focal firm or brand, implies that customers may acquire new customers for the firm through firm-incentivized referral programmes or influence other customers' perceptions on their own initiative through word-of-mouth, blogging and other forms of customer-to-customer interactions. Verleye et al. (2014) distinguishes five forms of customer engagement behaviours: cooperation (customers' benevolent acts to help employees to do their work), feedback (giving feedback to the firm and its employees via suggestions for service improvements or through participation in new product and service development processes), compliance (the degree to which customers comply with organizational rules and procedures), helping other customers (by expressing empathy, encouraging each other to show appropriate behaviours, helping each other to get better service experiences), and spreading positive word-of-mouth or recommending the firm to other customers.

## 2.2. Outcomes of customer engagement

Engaged customers may be perceived as specific collaborators with the firm in value formation (Żyminkowska 2019). Value propositions are mutually determined and co-created and seek active engagement of a customer through sharing resources and contributing to mutually rewarding outcomes (Payne et al. 2017). Such a co-creation is not only based on the customer-provider dyad (i.e., promises of reciprocal value between service providers and their customers), but its coverage should be broadened to multilateral settings and networked environments (Kowalkowski 2011; Żyminkowska 2019). Firms should identify customers that would such as to engage (actors), understand the potential effects of their engagement, and evaluate the likely consequences in terms of short- and long-term objectives (van Doorn et al. 2010; Verhoef and Lemon 2013).

The consequences of customer engagement for firms include marketing metrics (Żyminkowska 2019) such as customer retention, customer lifetime value / customer equity, new product performance (Verhoef et al. 2010), firm performance (Kumar and Pansari 2016; Pansari and Kumar 2017; Harmeling et al. 2017), and firm value (Verhoef et al. 2010). These consequences are perceived to be positive and include higher sales (Wirtz et al. 2013), higher customer equity (So et al. 2014), and higher shareholder value (Beckers et al. 2016). The optimistic view on CE outcomes for firms predominates in the marketing literature (Żyminkowska 2019). However, some authors recognize the negative outcomes associated with the negative engagement valence form, such as negative word-of-mouth (Bowden et al. 2017; Azer and Alexander 2018). Few studies have highlighted the potential negative consequences of customer engagement for firms (Żyminkowska 2019). Customer engagement may result in employee job stress or decreases in product innovation and speed to the market (Beckers et al. 2016) and thus negatively affect companies' financial measures (Beckers et al. 2018). CE may also cause a state of vulnerability for the firm or increases in negative word-of-mouth (due to amplifying customers' actions by providing them platforms and audiences that increase their reach) and may disrupt existing mechanisms that facilitate repurchase behaviours or inflate costs (Harmeling et al. 2017). Recent research has revealed that customer engagement decreases the market value of the firm on average (Beckers et al. 2018).

### 2.3. Risks of customer resource integration

Customer engagement management is strictly combined with integrating the customers' resources in the firm's marketing process (Żyminkowska 2019). Customers make voluntary resource contributions that have a brand or firm focus but go beyond what is fundamental to transactions (Jaakkola and Alexander 2014; Żyminkowska 2018). CE comprises an investment of cognitive, emotional, temporal, and monetary resources by consumers (Masłowska et al. 2016). Customer-owned resources contribute to a firm's marketing function through engagement, including network assets, persuasion capital, knowledge stores, and creativity (Harmeling et al. 2017; Żyminkowska 2019).

External resources (including customer resources) cannot be controlled directly by a firm (Doz and Hamel 1998). Therefore, during the interactive value formation not only value co-creation but also value co-destruction is possible (Echeverri and Skålén 2011) because customer resources allocated during value formation may be utilized not only positively to the benefit of the firm (resource integrator) but may be misused in a detrimental manner (Plé et al. 2010). Thus, customer engagement may bring considerable risks such as other customer activism in contributing his/her resources to the interactive value formation reflected in the concepts of customer participation, customer integration or customer co-creation. Drawing on the research findings that refer to the abovementioned concepts and its potential negative consequences or risks, we may better understand the risks of customer activism that may impede co-creation of additional value in cases of customer engagement (Żyminkowska 2019).

Customer participation may decrease the efficiency of the firm operations (Żyminkowska 2019) because the firm is losing control of quality and the waste may increase, which in turn brings about an increase in operation costs (Hoffman and Bateson 2006). Additional costs appear at times, such as when new or changed inputs are needed (Fließ and Kleinaltenkamp 2004), as well as increased job stress or role conflicts for service providers' frontline employees (Mustak et al. 2016; Hsieh and Yen 2005).

Customer integration in innovation may also be associated with some risks because developing innovation from external sources can be time consuming, expensive, and laborious (Żyminkowska 2019). The search for external sources of knowledge may hinder innovation performance, as the costs of openness exceed the benefits (Laursen and Salter 2006). Moreover, close ties with customers may lead to inertia against change and innovation (Piller and Ihl 2009). Detailed risks of customer integration include customers' conflicts in regards to scarce resources and rewards, misunderstandings between employees and users, disagreements about the ownership of intellectual property, customers' limited domain of expertise and customers' inability to articulate their needs, wishes and ideas (Song et al. 2013). Regarding virtual customer integration, the potential risks include similar disadvantages: customers' inability to articulate their needs, intellectual property problems, lack of secrecy, disturbance of internal processes, and unbalanced target group orientation (Bartl et al. 2012). This phenomenon is consistent with the findings of Siakas and Siakas (2016) regarding challenges in open innovation and customer integration that encompass lack of control, protection of intellectual property rights, difficulties in managing and integrating incoming ideas, insights, concepts, and solutions, as well as coordination and control of overhead costs and loss of know-how (Żyminkowska 2019).

The general risks of customer co-creation include diminished control over strategic planning, increased complexity of a managing firm's objectives, and the complexity of managing mis-performance and selection of consumers' ideas (Hoyer et al. 2010). The main challenges in consumer co-creation involve concerns about secrecy of information (since co-creation involves their revelation to consumers, and, through them, potentially to competitors), concerns about the ownership of intellectual property, information overload (since co-creation

can yield large volumes of consumer input), and the risk that consumer co-creators provide ideas infeasible from a production standpoint (Hoyer et al. 2010).

### 3. Research Methodology

We conducted an empirical study in firms operating in the field of consumer goods and services (Żymkowska 2018; Żymkowska 2019). The sampling framework was stratified by industry type and number of employees to represent the population structure of firms registered in Poland employing at least 5 persons. The sample was selected from the Polish Bisnode database by Dun & Bradstreet since all firms registered in the Central Statistical Office in Poland are included in Bisnode. The total number of firms in this database is approximately 6.3 million. We focused on firms operating in the following consumer markets: fashion, food & beverages, household appliances, and banking & financial services. In each firm, one manager responsible for marketing or marketing-related activities (such as customer relationship management, promotion campaigns, customer complaints management, new product development and innovation) was interviewed. The data were collected through computer-assisted telephone interviewing (CATI) between August 22<sup>nd</sup> and September 21<sup>st</sup> 2017. From a total sample framework of 9,384 companies, we collected data from 402 firms.

It is important to highlight that our research refers to the CE management practices that firms undertake towards the certain type of customers, i.e. individuals. We then refer to consumer buyers, final consumers, or consumer end-users of particular consumption goods and services. To measure customer engagement risks, benefits and intensity in firms' business practice we adopted and developed the conceptualizations and sets of items based on the existing literature (Żymkowska 2019; Żymkowska 2018; Bartl et al. 2012, Siakas and Siakas 2016, Hoyer et al. 2010, Beckers et al. 2016, Verleye et al. 2014, Muntinga et al. 2011, Stauss and Seidel 2007, Jaakkola and Alexander 2014, Rohrbeck et al. 2010). To operationalize the items 5-point Likert scales were used to measure all variables. We supported convergent validity of all measures (Żymkowska 2018; Żymkowska 2019) as all standardized factor loadings and average variances extracted (AVE) surpassed (or were close to) the recommended value of 0.50 (MacKenzie et al. 2011) and all composite reliability scores exceeded the recommended value of 0.70 (Hair et al. 2010). All scales internal reliability is significant: all constructs present the Cronbach Alphas above the recommended values of 0.70 (Nunnally 1978, Churchill 1979) (see Table 1).

*Table 1. Validity and reliability statistics for the variables used in the research*

Construct	Mean	Number of Items	Average Variance Extracted	Composite reliability	Alpha Cronbach
CE risks	3.21	6	0.520	0.884	0.894
CE benefits	3.90	7	0.448	0.829	0.833
Customers' communication	2.57	7	0.478	0.864	0.849
Customer complaints	3.50	6	0.418	0.798	0.787
Customer collaboration	2.13	9	0.465	0.885	0.896

To explore the risks of CE in a management perspective, in the context of firm-level benefits gained, we used structural equation modelling (SEM) and Mplus (version 8) for the analysis (Muthén and Muthén 2017). We conducted structural equation modelling (Żymkowska 2018; Żymkowska 2019). The fit indices, i.e., CFI, TLI and RMSEA, revealed that the model fit was quite good (Bentler 1990; Tucker and Lewis 1973; Steiger 1990). In our analysis, both CFI and TLI were above 0.95 and close to 1.0, which confirms the goodness of fit of the model. The RMSEA estimates were less than 0.05, which indicates that the estimated model approximates the true model appropriately.

## 4. Research Results and Discussion

### 4.1. Descriptive data

To assess the intensity of customer engagement in firms' practices, the managers were asked to refer to detailed examples of consumer activism for each particular CE form. Generally, the potential of customer collaboration, similar to the customers' communication capabilities, is still weakly utilized by the surveyed firms (Żyminkowska 2019). The mean of engaging consumers by companies ranges from 2.1 for collaboration with consumers to 2.57 for managing consumers' communication to 3.50 for using customers' complaints.

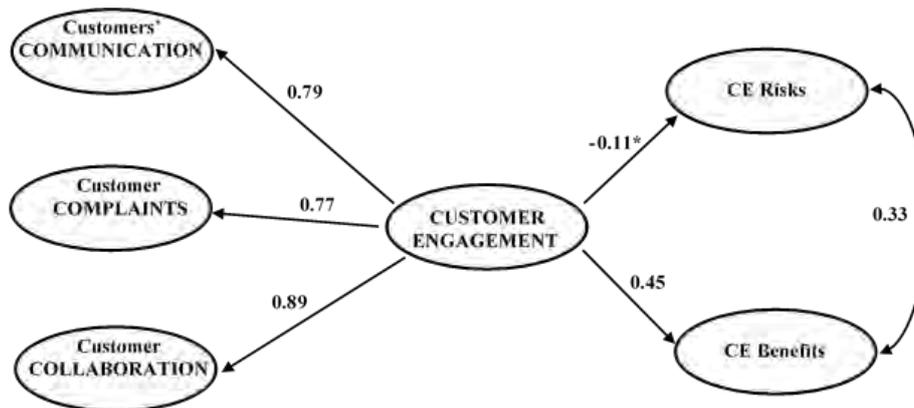
The frequency of engaging customers in the surveyed companies also varies. Concerning customers' communication about focal brand or firm in the interactions among consumers, the most frequent firms' practices include reactions (answering) to the negative consumers' comments (66% of firms agree, strongly or somewhat, to undertake such efforts), and encouraging customers to click 'likes' in social media (62%). Relatively few firms initiate customers' communication about brand or firm: only 37% of companies initiate the discussions in the firm's media (website, fan page), and 23% initiate such conversations in the external channels (internet forum, discussion groups, etc.). The companies quite rarely collaborate with independent bloggers to make them initiate consumers' discussions about products or firms (only 12% of surveyed companies). On the other hand, firms are more operative in utilizing customer complaints. More than three quarters of companies make use of complaints provided verbally during or after purchase (81% of firms agreed) and in writing (75%). Quite frequently, companies used customers' input provided when the complaints were received (73%). With regard to companies' practices in utilizing customer collaboration behaviour, organizing events dedicated to brand or firm is the most frequent activity (48% of firms agree, strongly or somewhat, to doing this), next to giving consumers the opportunity to personalize the offer (44%). Only 6% of surveyed companies organized crowdfunding to finance product prototypes, and 8% organized customer voting for the products or brands offered.

Although the overall intensity of customer engagement in firms' business practices is still rather low, managers recognize negative aspects of engaging customers (Żyminkowska 2019). The most important risks include receiving ideas infeasible from a firm standpoint due to the lack of customer knowledge (56% managers agreed that this is a risk in their companies), information overload (54%), the loss of secrecy of information or know-how to the competitors' advantage (51%), and additional costs of integrating customers' ideas in business processes and coordinating those processes (46%). On the other hand, only one third of surveyed companies perceived the lack of target market orientation and the lack of / or diminishing control of business processes as CE risks (32% and 33% respectively). It is quite surprising that the lack of / or diminishing control was ranked lower. Perhaps this risk is perceived as more general than the others, and thus, the managers pay more attention to the current impediments in their management practice, but this potential explanation requires further research (Żyminkowska 2019).

Positive outcomes of CE in the surveyed firms are recognized more often (Żyminkowska 2019). Increased customer satisfaction and acquisition of new customers turned out to be the highest ranked benefits of CE in the surveyed companies (respectively 87% and 86% of managers agree, strongly or somewhat, that these are the CE benefits in their firms). Other highly ranked CE benefits include increased market share (73%) and increased customer retention (72%). These findings correspond with the Convero study (Convero 2016), in which 88% of companies declared that customer engagement programmes in place drove significant increases in customer loyalty and 51% indicated that it increased sales to existing customers (Żyminkowska 2019).

## 4.2. Structural model

The results of structural equation modelling lead to three key findings. First, taking the entire model structure into consideration, the analyses provide support for a link between the intensity of engaging customers in firms' business practices (customer engagement variable), delineated by three forms of customer activism: customers' communication, customer complaints and collaboration, and firm benefits. This linkage is moderate and positive (0.45,  $p < 0.01$ ); CE explains 21% of the variance in this latent variable of CE benefits.



\* / not significant

Figure 1. Research model

Second, the relationship between the intensity of engaging customers in firms' business practice and the CE risks, which are negative and weak, is not statistically significant in the context of the entire model structure comprising CE benefits. This does not allow us to make a claim that there is a negative weak relationship ( $-0.11$ ) between these two concepts. However, it could be tested further if more range and intensity of engaging customers by firms is associated with less CE risk. This would be in line with the concept of a learning curve effect in CE management (Day and Montgomery, 1983).

And third, there is a weak and positive correlation between firm-level CE risks and firm benefits from engaging customers (0.33,  $p < 0.01$ ). In other words, the more value firms attempt to capture from customer engagement, the more the risks need to be managed and minimized. This requires adequate firm's competencies and investments to develop them, i.e., an effective process of CE management (Żyminkowska 2019; Palmatier et al. 2018; Alvarez-Milán et al. 2018; Beckers et al. 2018; Venkatesan 2017; Harmeling et al. 2017; Kumar and Pansari 2016; Kumar 2013). This is associated with firms' decisions on developing engagement orientation, since some firms may prefer not to be engagement-oriented due to the potential risks involved (Żyminkowska 2019). For example, some companies in the same industry, such as fashion, decide to engage customers intensively (e.g., Betabrand or Threadless) while others engage customers to quite a limited extent (e.g., Zara).

## 5. Conclusion

This study revealed customer engagement risks for firms resulting from external, customer resource integration. The most important risks include receiving ideas infeasible from a firm standpoint due to the lack of customer knowledge, information overload, the loss of secrecy of information or know-how to a competitors' advantage, and additional costs of integrating customers' ideas into business processes and coordinating those processes. It was also found that the average level of CE risks in firms is slightly lower than the average level of

benefits obtained from customer engagement (Żyminkowska 2019). These research findings also shed light on the links between CE risks and firm-level benefits of engaging customers by firms. The more value firms attempt to capture from customer engagement, the more risks need to be managed and minimized, which requires an effective process of CE management and developing the engagement orientation in the firm.

Based on the research results, this paper makes the following theoretical contributions. First, drawing on the literature on risks associated with the integration of external, customer resources (Żyminkowska 2019), this study identifies potential firm-level risks of customer engagement (i.e., customer's voluntary resource contribution to a firm's marketing function that goes beyond financial patronage). Thus, it offers a realistic approach to the customer engagement consequences and contributes to the developing theory of CE management (Żyminkowska 2019), termed CE marketing, focusing on a firm's deliberate effort to motivate, empower, and measure a customer's voluntary contribution to the firm's marketing functions beyond the core, economic transaction (Harmeling et al. 2017). Second, this study offers a holistic picture of engaging customers by firms and related risks and benefits for firms. It combines all forms of CE to discover the consequences of this multi-faced concept including customers' communication, customer complaints and customer collaboration (Żyminkowska 2018). Thus, this paper fills the gap identified by Beckers et al. (2016), who posited that most research studies only evaluate the effectiveness of a single CE behavioural manifestation in isolation, instead of the overarching multi-faced CE construct.

Our findings also provide managerial implications. It identifies potential firm-level risks of customer engagement that may impede co-creation of additional value. By recognizing CE risks that must be addressed, we suggest that customer engagement may lead both to positive firm-level effects (value is co-created) but also that the opposite situation is possible, where firm-level value is co-destroyed, when CE risks are not managed properly. Proper evaluation of those risks is an important element of effective CE management. In addition, our study provides insights into how firms can better manage customer engagement by understanding the potential CE risks, which is in line with the recent suggestions discussed in the literature (Żyminkowska 2019; Beckers et al. 2018; Harmeling et al. 2017).

The findings of this study should be interpreted in light of its limitation related to the research sample. It comprises only the companies registered in Poland which represents the developed economy. Future studies could replicate our study across other countries representing emerging economies.

The current research examines the relationship between the intensity of engaging customers in firm business practices and CE risks. The findings confirm that firms face a dark side of engaging their customers that consists of receiving ideas infeasible from a firm standpoint, information overload, or additional costs of customer engagement, among others. However, this study does not confirm a direct, statistically significant relationship between the intensity of engaging customers in firm business practices and CE risks. Thus, further research is necessary. First, it could be tested if more range and intensity of engaging customers by firms paradoxically decreases CE risks. Second, CE risks could be examined as the moderator of the relationship between the CE management process and firm performance, as previously suggested in the literature (Żyminkowska and Żyminkowski 2018).

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## **Environmental Policy in the Romanian Public Sector**

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### **Abstract**

Romania has very extensive legislation dealing with environmental issues. Romania's accession to the European Union on 1 January 2007 played a significant role in the drafting of this legislation. Thus, both before and after the date of accession, Romania has taken steps to transpose EU and European Community legislation on the environment and to implement them at national level. Transitional periods have been obtained for the implementation of the specific environmental provisions established by EU legislation through the Accession Treaty of 2005. This paper represents an overview of the actual status of the public policy for environmental protection is or was developed by the Romanian government in the last 15 years.

**Keywords:** environmental protection, public sector, public policy, durable development.

**JEL classification:** M31

### **Introduction**

Despite its EU membership, Romania continues to struggle with the development and implementation of comprehensive environmental regulations (Profiroiu, A. et al., 2019). In the period under review, progress has been made in combating illegal logging and waste management, the central focus of the Romanian environmental policy (Bodislav, D.A. 2011, 2012). The National Environmental Guard (NMH), the Romanian Environmental Protection Agency and its waste management subcontractors have collaborated to develop an information exchange application aimed at improving waste traceability and improving the implementation by Romania of EU strategy and legislation on waste dangerous substances and chemicals. In the first seven months of 2017, GNM made 10% less control raids than the same period in 2016. The efficiency of the public sector, the quality of services and the relationship with the business environment can also be enhanced through E-Government. (Fulga, T.; Profiroiu, M.C., 2019).

## **1. Presentation of the legal framework for the implementation of environmental protection policy**

The National Environmental Protection Action Plan (NPAP) is a planning tool addressing the most important issues identified according to well established criteria. Problem-solving solutions should be based on a mix of institutional and investment strategies and capabilities, so that the national financial resources available are used as efficiently as possible (Jianu, I. et al., 2019). PNAPM is a dynamic process with a continuous evolution due to the development of economic and social factors in time, which is why it needs constant updating and monitoring (Ionita, F. et al., 2009a,b).

In 1992, the first official document setting out the national objectives in the field - the "National Environmental Protection Strategy", updated in 1996 and 2002, was elaborated. The strategy is structured in two parts:

1. Review of the main natural resources, elements regarding the economic status and the quality of the environmental factors,
2. the strategy itself, ie the general principles of environmental protection, priorities, short, medium and long term objectives.

There are three main authorities with competences in the field of environmental protection, each covering a specific area of activity:

1. The Ministry of Environment and Sustainable Development (MESD) is currently the central environmental authority with policy-making and coordination responsibilities as well as supervisory responsibilities with other environmental authorities. The MESD also acts as a link with the European Community to meet Romania's reporting obligations under different EU directives.
2. The National Environmental Protection Agency (ANPA) is the authority with implementation responsibilities. It is mainly responsible for coordinating the various authorization procedures through its regional and local agencies. This authority also took over the duties of the former National Agency for Dangerous Chemicals, which was dissolved in December 2007.
3. The National Environmental Guard (NEG) is the main enforcement authority, having competence primarily in verifying compliance with environmental laws and regulations.

## **2. What does environmental policy mean?**

Environmental policy assumes all environmental priorities and objectives, regulatory methods and implementation tools designed to ensure the sustainable use of natural resources and to prevent environmental degradation (Bran, F. et al., 2018)

Objectives of environmental protection policy:

1. Sustainable development of the country in the context of public health: public health, consumer protection and harmonization of legislation in the context of the creation of the single market.
2. Less impact on the environment as a result of economic activities.
3. Improving, protecting and preserving the environment, to achieve these goals, some actions are taken, such as environmental education, technology promotion, information campaigns.
4. The use of natural resources such as wood, water, fauna, flora, minerals with as much care and ration so that the reproduction of resources is compatible with the development of economic activities and diminishing the risk of natural resource depletion.
5. Some measures have been proposed at international level against regional or world-wide problems with respect to energy resources for each state.

Environmental protection includes several activities aimed at better maintenance or restoration of a clean environment by collecting, recycling and treating waste, preventing emissions of pollutants, noise, or reducing the presence of pollutants in the environment.

Environmental cost analysis allows an assessment of the effort made to prevent, reduce and eliminate pollution resulting from the production or consumption of goods and services. Expenditures for environmental protection include the current investments and expenditures made by public administration, non-specialized and specialized producers (Rădulescu, C.V. et al., 2018a,b)

### **3. Principles of environmental policy**

The principles of environmental policy are:

1. *The polluter pays* - this principle assumes that the polluter has to pay the measures that the public authorities have on an acceptable level of environmental protection, so this cost appears in the cost of the goods and services that produced the pollution.
2. *Preventive actions* - it is based on the premise that it is better to prevent than to treat.
3. *Precaution* - represents measures taken to prevent what threatens human health or the environment.
4. *High-level protection* - refers to environmental policy aimed at protection at the highest possible level.
5. *Integration* - refers to measures that help to protect the environment are implemented in all sectors of the EU's protection policy.
6. *Proximity* - involves assuming responsibility for the communities that produce the waste.

#### **3.1. Applying environmental policy tools**

Over the years, due to the evolution and the envisioned environmental policy, we have highlighted the objectives, their priorities and the continued growth of the implementation tools.

Instruments:

- *Legislative* - represents the entirety of legislation in this area, creating the legal framework of environmental protection policy.
- *Technical* - meets environmental quality standards using the best technologies available: emission standards and limits, best available technologies (BAT), eco labeling, environmental inspection criteria in Member States.
- *Financial* - as the main financial instruments for environmental policies are the LIFE programs, but also the Structural and Cohesion Funds.

#### **4. Environment pollution in Romania - investments and expenditures**

To move on with this study, we need to clarify the term underlying our pyramid, that is, what pollution means. Pollution is the contamination of the environment with materials intersecting with human health, but also with the quality of life or the natural function of ecosystems (living organisms and the environment in which they live).

Environmental pollution also occurs naturally, such as volcanic eruptions, but most often the biggest pollution comes from human activities. We can classify polluting materials into two categories: biodegradable pollutants and non-degradable compounds. Complex pollution and environmental protection processes require that all principles be respected in order to achieve their goal.

#### 4.1. Double environmental standards

It is well known that northern European countries have, over time, extremely high environmental standards compared to those in the South and more recently in the Central European region. While the Nordic countries negotiated treaty changes to allow them to overcome the environmental norms set by Brussels, the poorer members of the South have endeavored to meet these standards. This is likely to lead to ruptures in the development of environmental policies and to reduce the coherence that is so necessary to achieve effective results. The existence of this cleavage between the rich northern and the southern poor was more evident during the southern enlargements of 1981.

After 1993, with the emergence of the Cohesion Fund, important funds were directed to reduce these gaps. However, the Nordic states continue to be avant-garde when it comes to environmental standards. The opposition between industrialized and developing countries on environmental norms leads to difficulties in making decisions, with specific needs being generated by problems specific to each type of state, which creates bottlenecks in the adoption of common rules. Thus, if the group of industrialized countries needs measures aimed at reducing airborne nuisances, waste treatment or noise reduction, developing ones, with an extended rural and agricultural sector, emphasis is placed on improving soil quality, water quality and protection nature. The enlargement process and the costs that this expansion represents. Enlargement is one of the most ambitious projects of the European Union. Appeared on the backdrop of the idea of reunifying the European continent following its division, following the wars that took place in Europe, the enlargement process is complex and aims at reunifying the continent. Pollution and environmental risks have been important areas in the accession process. It should be noted that this does not take into account the specific national issues, but rather the common European ones. Environmental protection and climate change are important issues on the European agenda (Burlacu, S. et al., 2018, 2019). Over the years, the European Union has set high standards for the protection of the environment, the marine environment and nuclear safety. The accession process is an effective tool to help export these European standards to the candidate countries. The level of environmental standards has sometimes been higher than that existing in the old Member States.

Thus, corroborating all of these considerations, we can state that enlargement is an increase in environmental protection. Renewable Energy Resources Ensuring energy sources has become an indispensable element of our society, a key element of the economic and social development of all countries. A world without energy resources cannot be conceived, energy generation systems are a necessity in people's activity. The energy resources currently used are limited, exhaustible, and their distribution across the Earth's surface is uneven. Quantities and reserves of fossil fuels have been considerably reduced, and issues such as climate change, dependence on fossil fuels, consumption growth, demand and prices have led to rethinking the way energy is produced and consumed, and reorienting to alternative and renewable energy sources. "Renewable Energy" is the energy that derives from resources that are renewable or inexhaustible. Thus, the energy of sunlight, wind, flowing waters, biological processes and geothermal heat can be captured by humans using different processes (Costache, G., et al., 2015). Renewable energy sources are resource alternatives for fossil fuels. Their use may include a reduction in carbon dioxide, a diversification of energy generation, and a reduction in dependency on fossil fuels markets. The new Renewable Energy Directive establishes that the European Union will increase its share of renewable energy by 20% by 2020 and increase the level of biofuel used in transport by 10% by 2020. "Renewable energy" promotes the safety of its own energy production in Europe, greenhouse gas emissions, provides support to the European economy by developing new technologies and innovations in the European economy.

## Conclusions

In conclusion, as the World Health Organization (WHO) says, air pollution is the highest environmental health risk in the EU and the EEA estimates that it causes around 400 000 premature deaths each year, the most exposed being inhabitants of urban areas. Suspended particles, nitrogen dioxide, sulfur dioxide and ground-level ozone are the most harmful among atmospheric pollutants. The 2008 Air Quality Directive is the cornerstone of EU clean air policy as it sets the limit values for pollutant concentrations in the air we breathe.

As measures to prevent these losses, all people should take action and combat environmental pollution by organizing and participating in activities such as tree planting, water cleaning, waste collection, etc.

We can confidently say that Romania still has many problems to solve in terms of environmental protection, and that it still does not fit into an ecological Europe. However, it is important that the first steps have been taken to achieve this goal by accepting the ecological challenges of EU accession and integration and that the commitments of the EU Accession Treaty in the field of environmental protection have been respected, taking steps in this direction.

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## **An EEG Analysis on the Perception of the Consumers Regarding Video-Commercials from the Automotive Industry**

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### **Abstract**

Nowadays, every human individual interacts with video-commercials on digital devices such as TV, laptop, smartphones. The persona that watches the video-commercials may be or not able to react and perceive the subconscious emotions that are sent once with the verbal message and the exposure of the product. The research explained in this article uses the cognitive neuroscience applied in marketing to see the effects of the video-commercials onto the human brain and how the attention of the consumers is influenced by certain stimuli, like sound on and off, the narrative speech of one auto brand in the native language (Romanian) of the participants involved in the experiment, and also a foreign language (English), the speed of the movie, the intensity of the light in the room. In this research was used the NeuroSpectrum 2 electroencephalograph, which provided useful information regarding the states of the human mind and the impact of the video-commercials for two types of audience: healthy brain subjects and subjects with certain neurological brain damages. The first objective of this research based on medical tools, is to see what modifications appear in the electrical activity of the brain of the participants before and after watching the commercials. The second objective is to detect certain feelings that make the commercial be likable, such as the states of happiness and calmness that the video-commercials produces to the subjects exposed to the video-commercials. The main results obtained after the experiment are that the movie induces to all the subjects a state of relaxation and meditation leading in some cases to a better, nearly normal cognitive activity for the participants with brain damages, by inducing them the state of calmness and finally leading them to sleep.

**Keywords:** EEG, video-commercials, brainwaves, neuromarketing research.

**JEL classification:** C45, D87, M31, M37.

### **Introduction**

The following article is structured in three sections: the introduction, which contains the theoretical aspects about the medical tool used and relevant information about cognitive neuroscience applied in marketing, the methodology which presents the techniques used in this research and the conclusions and recommendations section that are drawn from the report analysis of the EEG.

The Nobel Prize Winner, Gerald Edelman presents in his work the scientific information of Darwin and he refers to them as neural Darwinism which show how the human brain influences our decisions in the daily life. He debates that “each individual brain, even before birth, uses a process that resembles natural selection to develop during its own lifetime” (Course Hero, 2018). This consumer science has a great impact on the marketing research

studies, and it is considered that “the theoretical, empirical and practical scope of neuromarketing” ( Bercea, 2013) are still in continuous improvement.

A specialist in this consumer science “considers that there is an important opportunity for this field, by better understanding the neural world of consumers, we can help them and the brands that serve them better adapt to an increasingly complex and overwhelming world” ( Bercea, 2013). This network of connections between neurons shapes the choices of people in life. This starts from small things such as taking objects to the decisions that influence the cultural and social settings. Although, the pattern of connections in a brain is unpredictable. The human brain is not a “hard-drive” on a computer. It is flexible and is designed by the natural environment that surrounds the consumer. Sometimes the neural networks made by the human brain that lead to the final decision are not always right due to other factors involved in the process. Watching a video-commercial on online media sharing platforms by a consumer fulfills their needs of entertaining and finding the desired information. But the customers will adapt their decision to fit what works to the specific situation. As Angus Jenkinson states the “consumer is an individual with one brain processing all” (Jenkinson, 2007) the information on online environment (an online video commercial, a promotional message) with different purposes, but them “both manifest as facets of mental experience” (Jenkinson, 2007).

The emotional response of the individual when watching a video-commercial may be seen in the electrical activity of the occipital lobe that receives visual information from the eyes. From a medical perspective, the electroencephalograph is made to measure the brain waves of the subject and detect certain anomalies that appear during neurological diseases. First time, when the EEG was used to measure the brain electric activity in relation with the rational and emotional brain of the people was in “1979 by Davidson” (Vechiatto, et al., 2010). The device used to get the results has electrodes that are placed on an individual’s head and linked “by using a helmet or a band” (Vechiatto, et al., 2010). It registers the brainwaves triggered by the subject that is tested and the device “can record up to 10,000 times per second” (Morin, 2011) at small time intervals. Electroencephalogram is basically a method of “reading the mind” and transpose it into actual writing of the electric activity of the brain.

The role of the EEG in this marketing research is to see the links between the two-cerebral hemisphere and how the activity of the brain reacts to different triggered stimuli when watching a video commercial.

In the EEG report of the electrical activity of the brain can be present the following brainwaves: alpha, beta, theta and delta. “Alpha waves are EEG oscillations at approximately 10 Hz that are typically largest at posterior electrode sites and occur most frequently when subjects are tired or have their eyes-closed” (Luck, 2014). Beta waves are EEG fluctuations ranging between 12 to 38 Hz. The alpha-waves recorded in the left frontal hemisphere indicates positive emotional state and reactions, subjective preferences and the ones in the right frontal hemisphere indicate the opposite ones. This kind of emotions have a great influence on our daily decisions such as: eat, buy a product, watch the commercials that motivates you to choose that product or service instead of others.

“Beta brainwaves dominate our normal waking state of consciousness when attention is directed towards cognitive tasks and the outside world” (Brainworks, 2007). “Beta brainwaves are further divided into three bands; Lo-Beta (Beta1, 12-15Hz) can be thought of as a 'fast idle' or musing. Beta (Beta2, 15-22Hz) is high engagement or actively figuring something out. Hi-Beta (Beta3, 22-38Hz) is highly complex thought, integrating new experiences, high anxiety, or excitement” (Brainworks, 2007).

Gamma waves are EEG fluctuations with the following frequencies 38 to 42 Hz. This brainwaves are specific for “pass information rapidly and quietly” (Brainworks, 2007) and making “new brain cells in the frontal cortex, thus increasing our capacity for intelligence”

( Pennington, Mitchell, & Dupuy, 2007) which are representative for “mental lucidity, clarity, creativity, insight, a relaxed sensory awareness, and access to delta’s psychic awareness and empathy” ( Pennington, Mitchell, & Dupuy, 2007).

Delta waves are EEG fluctuations with these frequencies 0.5-3 Hz. This waves are defined as “a high amplitude electrical rhythm of the brain with a low frequency of less than four cycles per second that occurs especially in slow-wave sleep, is most prominent in infancy and early childhood, and may exhibit abnormal activity in various conditions (such as traumatic brain injury or dementia)” (Merriam-Webster, 2019) and were first used using this definition in 1936.

“Theta rhythm (4-7 Hz): This rhythm is recorded during low brain activities, sleep, or drowsiness” (Aamidfar, Heysieattalab, Azimi, & Roohi-Azizi, 2017 ).It is connected “with inhibition of elicited responses (has been found to spike in situations where a person is actively trying to repress a response or action)” (Aamidfar, Heysieattalab, Azimi, & Roohi-Azizi, 2017 ) in a normal electrical activity of the brain.

Besides these findings, “Ambler” (Wang, Chang, & Chuang, 2016) discovered that video commercial online which have a greater emotional impact “may increase activity in the orbitofrontal region and the amygdala” (Wang, Chang, & Chuang, 2016).The frontal brain sections present asymmetric psychological functions, while the right one indicates the negative emotions, the quitting state the left frontal side represents the motivation, the positive feelings, the commitment to do the specific thing which they have in mind.

A video-commercial can be analyzed by splitting the 1-minute video in time-frames of 2 seconds each overlapping by 1 second. While the video commercial is shown on a computer, the device is recording the brain activity and is transposing into a written report by using Fast Fourier Transformation (FFT) and create frequency-amplitude charts. After this it is interpret the report using the following instruments: “The frontal asymmetry index which indicates a person motivations, emotions and engagements” (MarketingMind, n.d.).The formula is as follows: “Frontal Asymmetry Index (FAI)=  $\log(\text{alphapower}_{\text{rightF4}}/\text{alphapower}_{\text{leftF3}})$  ” (MarketingMind, n.d.). This can show negative emotions, such as fear, anxiety, anger, sadness, but also positive emotions such as joy, excitement, satisfaction.

(Brown, Randolph, & Burkhalter, 2012) made a neuromarketing research on the printed ads of two soft drink brands, using EEG device from the Kennesaw State University BrainLab. The research involved 12 participants,8 female and 4 males. This study enhanced the fact that neutral emotions are experienced by the participants, rather than a positive or negative preference for one of the two soft drink brands.

(Melody, 2013) made a neuromarketing research in collaboration with 2 firms, Plastic Mobile and True Impact Marketing on the perception of the consumers regarding mobile apps for pizza. The research methodology had 4 main factors to be analyzed: “advantages and obstacles in user experience, impact on brand emphasis, engagement, qualitative versus quantitative” (Melody, 2013). It revealed that the consumers are more emotionally engaged in proceeding to checkout for one of the pizza applications.

(Atilla & Ahmed , 2019) made a neuromarketing research on brand perceptions on automotive industry based on information about 6 auto brands: Fiat, Ford, Hyundai, Renault, Volkswagen and Toyota. The research revealed that the consumers identify the Volkswagen brand with quality service dimension, prestige dimension and performance dimension. In this research “a 10 channel-EEG device was used” (Atilla & Ahmed , 2019) to analyze data of “30 participants from the students and academicians at Fırat University” (Atilla & Ahmed , 2019).

## Methodology

The research made with the Neuro Spectrum 2 electroencephalograph took place at the private clinic Mens Sana from Târgoviște, Dâmbovița county. The research sample was of 16 people, from which 10 females and 6 males. The subjects for the experiment belong to the following age gaps: 18-28 years old, 40-50 years old, 51-61 years old and over 61 years old. These subjects are divided in 2 groups: people with brain damages and people without brain damages. These subjects were chosen to see specific changes in brain activity regarding the following criteria's: age, gender, people with normal EEG activity and pathological EEG activity. In our research, we choose this people due to their agreement to participate in this experiment and to their availability to come at the clinic.

The subject had to wear a helmet on which were mounted 16 electrodes, montage type, monopolar 16, connected at Neuro-Spectrum 2 electroencephalograph during the period when he or she watched the movie with the video-commercials. In this experiment, we use repetition priming, which is the process when a person is experiencing a certain stimulus (in our case the video-commercial with the sound on) and this will make it "easier for a person to process the same stimulus later" (Krauss Whitbourne Ph.D., McDonald Ph.D., & Yellowlees Douglas Phd., 2019) (*in our case the first video-commercial with the sound off*). The electroencephalography analysis was recorded following this methodology:

- EEG analysis performed for 1 minute without the movie, during which the participant was with eyes-closed and in a physical and mental resting state
- EEG analysis performed 5,36 minutes, during which the participant viewed the movie with the video-commercials
- Report analysis comparison of the brain activity with and without video-stimulus.

## Research results

During the movie with the video-commercials, the participants brain activity registered slow theta, delta, alpha and beta waves combined with high beta waves frequencies. This means that the commercials induced them an alpha state of relaxation and calmness and high positive arousal which lead to sleep and meditation towards the pleasant images and sounds from the movies.

The activity most requested was of the occipital lobe, which is responsible for the visual function in combination with the temporal lobe, which is responsible for the auditory function. These two lobes were activated, because people wanted to make sense of what they watch.

On the frontal lobe, most of the participants, during the visualization of the movie with the Mercedes-Benz and Volkswagen video-commercials, experienced slow delta waves and slow theta waves and beta rhythm. This is a sign of a deep, dreamless sleep, a deep relaxation and deep subconscious creativity of the mind. The left frontal lobe is responsible for positive emotions, while the right frontal lobe is responsible for negative emotions. The high order functions of the brain like the ability of solving a logical scientific problem, philosophical issues, the capacity to understand and analyses the specific movie and the social environment.

The brain activity of most of the participants in the parietal lobe, recorded slow delta and theta waves and alpha and beta rhythms. In the occipital lobe, most of the participants, recorded the following rhythms: slow delta and theta waves, alpha rhythm in the O1-Occipital and beta rhythm in O2-Occipital.

On the temporal lobe, most of the participants during the visualization of the movie, experienced in their brain activities alpha rhythm, beta rhythm and slow delta waves in the regions T3, T4, T5 and T6.

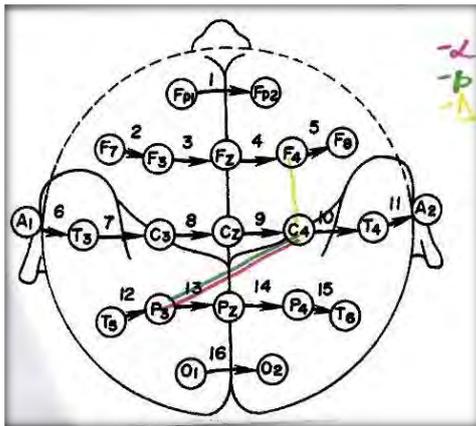
The central lobe of the brain of the subjects registered mostly alpha and beta rhythm. In

both hemispheres where registered slow frequency of alpha rhythm and high frequency beta rhythm. The “alpha state”, feelings of calm, release of the worrying state and the induce of the state of happiness and calm were recorded at the participants when viewing the movie. This lobe and this combination of waves shows that the human body is in a general resting state. In the C3 area of the central lobe, some of the participants experienced alpha, beta rhythm and slow delta waves and in C4 are of the central lobe, some of the participants experienced beta rhythm, slow delta waves and slow theta waves.

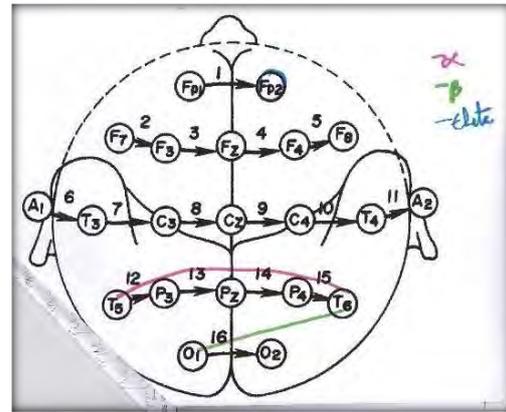
The 1<sup>st</sup> female participant tried to understand and make sense of what she saw in the movies, facts that were shown by the activation of the central lobe and temporal lobes, where the EEG registered the flat alpha waves, which represent the state of calm of the brain. The right hemisphere of the brain which coordinates all the functions of the creative mind (imagination, music, awareness, creativity, shape of the forms from the video) were in a “state of alert”, focus and high arousal combined with positive emotions, due to the presence of the low-frequency beta-rhythm and flat alpha-rhythm. This combination of flat alpha and high beta waves show that the subject experienced positive emotions of calm, relaxation, but she was in a state of concentration, focus and alert when she saw the video. The 2<sup>nd</sup> female participant registered low alpha rhythm in occipital and frontal lobes which leads to a calm and relaxed positive state of feeling and in occipital lobe registered high frequency beta rhythm which indicates high arousal impact on the eyes from a visual perspective and focus. The 3<sup>rd</sup> female participant registered slow theta and delta waves-fall asleep and meditation in the frontal and temporal regions which were cumulated with the state of calmness emphasized by the low alpha rhythm. In the temporal lobe, high beta frequency rhythm was observed, which means that this person was feeling irritated by the music. The 4<sup>th</sup> female registered high frequency beta rhythm in the central and occipital lobes which may signify that she was focused at what she sees and induce her a state of excitement. The slow waves of theta and delta in all the hemispheres suggests that she fall into a state of meditation and is in a deep relaxation state, this thing induced also in the frontal and temporal lobes, mostly. Everywhere in the brain the alpha rhythm is present, which indicates positive feelings of calm, relaxation and tranquility. The 5<sup>th</sup> female registered alpha rhythm in the occipital and temporal lobes-primary visual cortex connected to the identity of seen objects correlated with the audio information’s about the brands Volkswagen and Mercedes-Benz and music in the short-term memory. In the frontal lobe, slow theta waves were registered which indicates a state of meditation and relaxation, reasoning towards the information’s received. The 6<sup>th</sup> female registered alpha rhythm in the parietal lobes which may indicate that she perceives and makes sense of the information’s from the commercials and the language used and this induces a feeling of calmness and tranquility. The frontal lobe registered high frequency beta rhythm which leads to the fact that the person is analyzing what she sees and causes her excitement and high arousal sensations.

The 1<sup>st</sup> male is paying attention at the video, and experiences positive feelings of calm and high arousal, excitement, all triggered by the visual stimuli shown in the commercials, thing emphasized by the low alpha and high beta rhythms from the occipital and parietal lobe. Slow theta waves are present onto the frontal lobes which may indicate that the individual is in a state of meditation and reflection towards the information’s which are shown. The 2<sup>nd</sup> male registered high frequency beta rhythm in the occipital and parietal lobes which leads to an excitement of the visual and sensory area that may signify that he enjoys seeing the movie. In the frontal and occipital lobe registered slow theta waves, which signifies a state of meditation and relaxation during the visualization of the movie commercials.

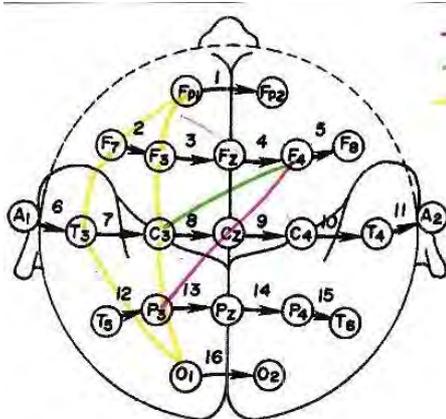
The following neural networks were obtained during the visualization of the video-commercials for the participants:



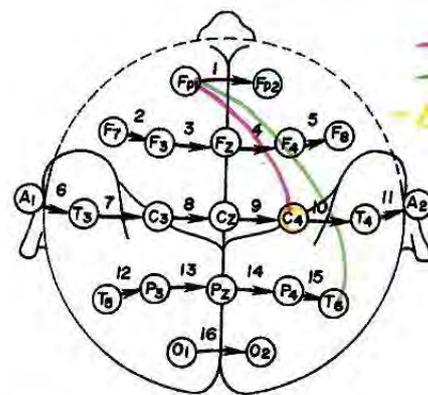
7. Female EEG with video stimulus



8. Female EEG without video stimulus



10. Male EEG with video stimulus



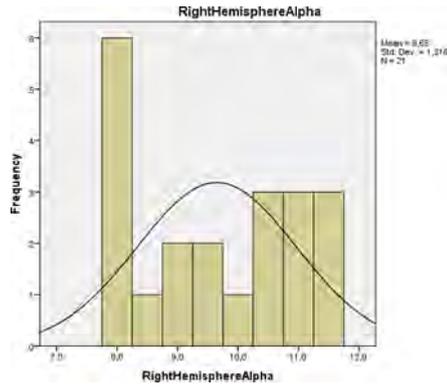
11. Male EEG without video stimulus

### The analysis for EEG using Radial Basis Function in SPSS and Frequencies table

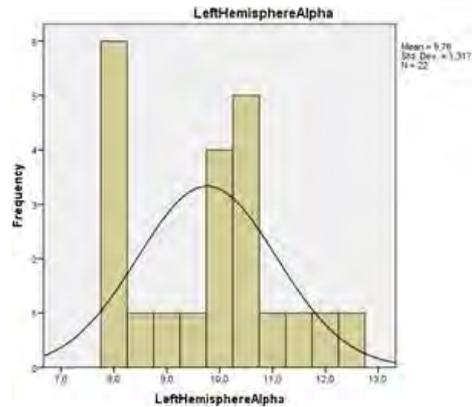
The overall analysis for all the participants for the alpha rhythm frequency waves presents the mean of 9,76Hz for left hemisphere versus 9,65Hz for right hemisphere. This suggests the presence of low alpha waves rhythm for all the participants during the commercial which means that the video-commercial induces a state of calm and relaxation. The minimum frequency for the alpha rhythm waves is the same for both hemisphere on all the participants no matter the difference between ages. But, the maximum frequency for the alpha rhythm waves is greater on the left hemisphere, rather than on the right hemisphere. At one respondent the alpha rhythm is missing on the left hemisphere, while at the right hemisphere, two respondents lack the alpha rhythm. This means that the both functions of the brain creative and logical are in a state of calm and relaxation.

The overall analysis for the beta rhythm amplitude presents the mean of 9,89 uV for left hemisphere and 11,24 uV for the right hemisphere. The amplitude of beta rhythm in the right hemisphere varies from low to high which means that some people are delighted of what they see, while others are tired, and this commercial induces them poor cognition. As it can be seen, in the graphs above, there are significant differences in the brain of the people, before watching the commercial and in the time when watching the video-commercial.

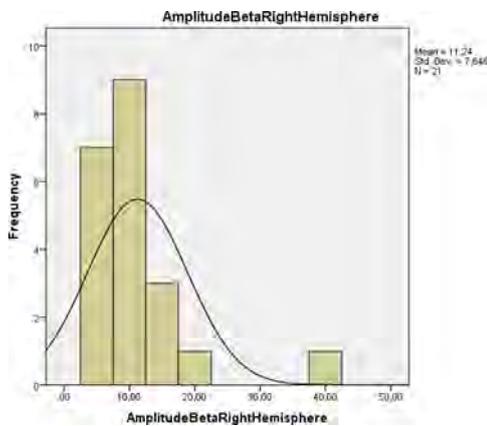
The fluctuation of the frequencies for each brainwave are shown in the following histograms:



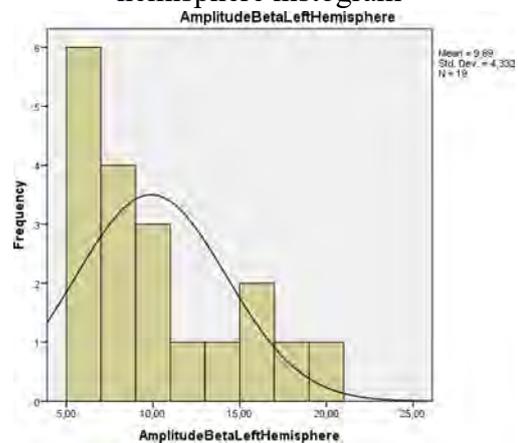
12. Alpha rhythm frequency right hemisphere histogram



13. Alpha rhythm frequency left hemisphere histogram



14. Histogram Beta Amplitude Right Hemisphere



15. Histogram Beta Amplitude Left Hemisphere

## Conclusion

Neuromarketing research provides significant data from the viewers perception regarding automotive industry advertisements towards discovering their emotional engagement connected with the specific brands. The video-commercial with a long duration relaxes people, longer than 1 minute, inducing them a state of meditation connected to sleep and calmness. The presence of slow frequency rhythm of the waves delta and theta is significant for the state of deep meditation, when watching these commercials. Another significant aspect is that the amplitude of beta rhythm waves decreases significantly, which means that the respondent attention and concentration decreases.

The music from the video-commercials and the relaxed atmosphere from the clinic makes the respondents with pathological EEG brainwaves from brain damages feel more relaxed when are exposed to it, than during the EEG analysis without the video-stimulus. This may show, that the content of the video, the frequencies of the waves from the music, the voice of the native Romanian speaker from the one of the video-commercials, the friendly atmosphere makes the respondent fill safer from the point of view of the state of feeling that he has during watching the movie.

As a general conclusion, video-commercials need to be adapted not only for the target audience, which are the automotive industry consumers, but also for the public, himself, because it is not known who is watching the video-commercial, and certain stimulus from the video-commercial may affect the consumers with pathological brain damages.

### Limitation

Due to the lack of a proper number of respondents which have, this research cannot be generalized. This research was made only for academic purposes.

The present marketing research experiment has several limitations: the participants at the study were mostly people who don't know technical details about the brand models of cars shown in the movie. Another limitation is the age gap for the chosen respondents and the lack of a proper software configuration, in order to gather the required numbers from the EEG analysis and fully interpret them.

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## **Automotive Industry video-commercials – A pluralistic research based on an eye-tracking experiment**

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### **Abstract**

Eye-tracking is an innovative way of finding where participants look in a video-commercial, at which car components from the automotive industry video-commercials and if they can express in words what they perceive with their eyes. The objective of this study is to see if the video-commercials are efficient to promote the main technology of famous brands car models, their unique features, the brand, the logo, the slogan presented during the commercial. We used 5 video-commercials freely available from YouTube™, the SMI™ Eye-Tracking Glasses and SMI™ Eye-Tracking Fixed-Device for performing the experiment on 37 participants, males and females. The analysis of the results was made with the BeGaze™ Software for the eye-tracking experiment and Radial Basis Function of the SPSS™ for the survey. Our results show that people look mostly at the spinning wheels and the grill of the cars during the movie, although only 1 participant could express also, in words what draw her attention at the car models presented during the commercial. This shows, that although people using their visual senses organs know what they need, they cannot rationalize it and express in words to the people in front of them.

**Keywords:** Eye-Tracking, Survey, Radial Basis Function, AOI.

**JEL classification:** C45, C53, C83, D87, M31, M37.

### **1. Introduction**

The automotive industry tries to revolutionize their products, by bringing new features on the engine, design and technology that make a car efficient for the customers. These features are also promoted during the video-commercials of any car brands. The interesting aspect researched in this study, is if the consumers are looking at the improvements brought by the developers of the car from the video-commercial, or not. This paper has the following structure: in the beginning there will be a small resume about the main tools used in this research. The literature review presents a short history about the eye-tracking devices and neuromarketing, the first and the second cars brands used in experiment, signification of their logo and their slogan. The methodology presents the research and the results of it, while in the conclusions are presented the main ideas obtained from the research and the technical limitations we had encountered during this research.

### **2.Literature review**

Neuromarketing appeared in 2002 and lead to controversial opinions among marketing specialists. The term of “neuromarketing” (Vlasceanu, 2013) was first used by the professor Ale Smidt. Due to the failure of the old methods of research, because they need the consumer consent to describe how they feel regarding that video-commercial and sometimes what they said they felt was not entirely true, it appeared this science which gives sincere results about the emotions of the consumers. The first companies that offered neuromarketing services were

Bright House and Sales Brain from US. Most of the researchers use the term “consumer neuroscience” (Ramsøym T.Z., 2015) or “decision science” (Dooley, 2015) besides different alternatives for this kind of field.

The early studies of eye-tracking began in 1800s by using direct observation. But, the first eye-tracking machine was developed “by Guy Thomas Buswell in Chicago, using beams of light that were reflected on the eye and then recording them on film” (Buswell, 1922 & 1937). Another significant personality who did research on this domain and stated in his book was Alfred L. Yarbus who explains that “Often an observer will focus his attention on elements that are unusual in the particular circumstances, unfamiliar, incomprehensible, and so on” (Yarbus, 1967). The human eye is a “device” that captures images and acts or reacts more rapidly than any other electronical gadget, even by doing this consciously or subconsciously based on primary instincts.

Eye-tracking is a domain that focuses on the consumers “point of gaze (where one is looking)” to evaluate the region on which they are focused. Also, this process can be used to see the movement of the eye in comparison with the head. The devices are used in marketing to find out the interaction between the consumer and videos performed on the computer, designing a new advertisement, focus on the key points that define the brand, medicine to evaluate the health and accuracy of the eyes capacity to see and psychology to see the behavior of the individual in comparison with the movement of the eyes. There are different types of eye-tracking devices: “eye-attached tracking” (Robinson, 1963), “optical tracking” (Crane & Steele 1985) and “electric potential measurement” (Elbert & al., 1985). The eye-attached tracking uses a device that attaches to the individuals head and follows the movement of the eye and the dilatation or contraction of the eyeball. The optical tracking uses a machine that is mainly specialized for ophthalmology to see the accuracy of the eye. This evaluates the size, the shape and the distance where an object located in correspondence to the eye. The electric potential measurement is made for detecting the movement of the eyes by discovering the “electrooculographic signal (EOG). By placing the electrodes of our BYB headband so that each electrode lies on either side of the eye, we can detect left vs right movement” (Backyard Brains, n.d.). The video commercials on which the consumers are exposed virtually needs to provide a memorable souvenir stored in their long-term memory. This must contain the brand, the slogan that the commercial promotes, the product, the message and the special features of that company in comparison with another. The pictures captured from the video are randomly, mainly selected by the consumer’s emotional preferences, and not by logical facts.

This kind of memories are stored in the short-term memory and are based by how the consumers felt by interacting with the advertisement. But the facts captured by the eye are compared with other information that already exist in the brain and helps to improve the general image on that product by providing more details about it. Although at the first interaction with the video commercial there are memorized plenty of details “the shorter the latency of brand memory is” (Wedel & Pieters, 2000). Because the information may be insufficient, a “systematic recency effect” (Wedel & Pieters, 2000) is made by showing the consumers the video commercial later to memorize the details from the first view. There were “found common patterns in these sequences” (Jacob & Karn, 2003) recorded by the subjects looking at a commercial. Researchers made studies to find out on which of the vivid pictures and on which place in the picture they fixed it with the eye. So, the video motion pictures they were seeing cannot be defined by the fixation or the preoccupation of the consumers to that specific detail. But their obsessive interest on that detail is linked to the rapid movement of the eye between fixation points.

“With a high-precision eye tracker, even small micro-saccades” (Jacob & Karn, 2003) can distract the subject’s attention on that video. Although, these devices have their errors, in

time scientists have done improvements to them by changing the attaching type on the head, by improving the accuracy of the glasses when capturing the movements of the eyes. It is frequently used in usability case-studies. On those studies, the researchers are focused on the following metrics: “fixation”, “gaze duration”, “area of interest” and “scan path” (Jacob & Karn, 2003).

The SensoMotoric Instruments™ (SMI™) company was made at the initiative of “Dr. Winfried Teiwes in 1991” (Alio, 2014). The SensoMotoric Instruments received the “Innovation Prize of Berlin-Brandenburg for VOG - Video-Oculography, its video-based eye movement technology” (SensoMotoric Instruments, 2015) in 1992. This technology is used in ophthalmology, neurology, psychology, marketing and many other fields of research to test the consequences of different external factors to the human eye, and the capacity of the individuals to perceive certain elements that surround them in their natural environment or the artificial laboratory custom-made environment.

Besides the fields of research mentioned above, the eye-tracking devices are used also in the automotive industry to improve the quality of the products and to send the right message by promoting the desired car model to reach to the final consumer. Before, the car reaches its destination, the consumer navigates for information, mainly on social networks as YouTube™ and Facebook™ and gather information about it from different promotional tools, such as: television, smartphone, pc and laptop, tablet and advertising panels.

The first brand of car utilized in the experiment, is an expression which offers the personality of the firm and means “people’s car” (Rodriguez, 2016) initially accessible to all the classes. The Company was founded by Ferdinand Porsche in May 1937, in Wolfsburg Germany. The origins of the logo are still unknown, although three leads are suggested for it, according to the website The News Wheel: “graphic designer Nikolai Borg, German artist Martin Freyer and Franz Xaver Reimspeiss” (The News Wheel, 2015). Another passionate on the auto brands design, Dr. Rex Curry finds similarities of the logo in these two different domains and legends: the swastika as an “intertwined “S” shapes symbolizing “Socialism” and “the Odal rune, was used as a symbol of the “Wiking Jugend” (Viking Youth, or Viking Young'uns)” (Curry, 2018)

The automotive industry of Daimler Company is designed for all three environments, air, water and soil. Daimler Company has as founders and pioneers the following people: Carl Benz and Bertha Benz, Gottlieb Daimler, Wilhelm Maybach. The incipient of the automobiles are strongly linked with the first car designed by Carl Benz, for which received the “Benz Patent Motor Car, in 1886 with the patent No. 37 435 – the birth certificate of the automobile” (Daimler Company, 2019). Although, they never met, in the same year Daimler also produced an automobile (Daimler Company, 2019). The brand is an important component of a video-commercial. For second brand of car utilized in the experiment its name is a patronymic name (the combination of the name of one of the daughter’s clients and the inventor of the engine). “The trademark resulted (Daimler-Motoren-Gesellschaft) was registered on September 23, 1902” (Daimler Company, 2019). This trademark, was named after the daughter of Emil Jellinek and was initially addressed to well-known personalities from Germany. The logo is the element of visual identity for the specific brand. The history of the logo of the automotive vehicles is linked with the merger between the two companies Daimler and Benz&Cie which took place in 1926. Then, the logo became a “laurel wreath surrounding a three-pointed star” (The News Wheel, 2015) with the trademark of the company.

### 3. Methodology

#### 3.1. Research objective

The objective of this study is to see if the main car components and elements that define the brand commercial from a psychological point of view are observed by the human eye of the consumer. Furthermore, the study tested the perception of females versus males regarding what they see in the movie, and their opinions about the car components and the elements that are present in the commercial: music, motion pictures and characters using the survey method.

#### 3.2. Sample and method

The study was made using a sample of 37 people, mostly students and employees of the biggest university of economic study in Romania, from whom: 2 males with ages between 29-39 years old, 13 males with ages between 18-28 years old, 20 females with ages between 18-28 years old, 1 female with age between 29-39 years old and 1 female with age between 40-50 years old.

The experiment took place during March-May 2019 at the Bucharest University of Economic Studies, at the Marketing Laboratories using the neuromarketing instruments of the SensoMotoric Instruments Company and a PC Monitor of 24 inches on which the movie was viewed by the participants. On the other hand, at the quantitative research, to present the results from the survey analysis it was used the binning chart function and statistical graphs from the BeGaze™ software. It was outlined the duration of the time length for each participant for the AOI defined versus time, for each eye.

The movie utilized was made from 5 video-commercials that sum up to a total length of 5 minutes and 36 seconds. The distribution of the video-commercials in the movie is the following:

1. Never Stop Improving | 30 Seconds-0:10s- 0:44s with sound
2. Vision Van—0:44s-1:54s
3. Drive&Track—1:54s-3:17s
4. Infotainment—3:17s-4:05s
5. 60 seconds—4:05s-5:05s
6. Never Stop Improving | 30 Seconds-5:05s- 5:36s without sound.

Firstly, we made the experiment, with the SMI™ eye-tracking glasses manufactured by the SensoMotoric Instruments, which were connected at a Samsung™ smartphone. The calibration was made for each participant at 1-point, and at a distance from the PC monitor of approximatively 80 cm. The advantage of the eye-tracking glasses during this experiment was that the respondents were allowed the head movements and they were instructed to stay in a comfortable position while watching the movie. Some factors, which play a role in the efficiency of this experiment, were the ray of sunlight from the room which influenced the quality of the images from the movie, due to the direct interaction on the SMI PC Monitor. On the other hand, at the eye-tracking fixed device experiment, the participants were instructed to try to keep their head in a fixed position, to perform the calibration of the device accurately. The experiment using the eye-tracking equipment was performed at a Dell™ Precision M4800 laptop and with the REDN Scientific Eye-Tracker attached to the laptop. The calibration was of 5-point calibration at 30Hz combined with Smart Calibration and was made using the software iViewRED™, which is the controller software for the eye-tracking fixed-device.

The analysis of the questionnaire was made using Radial Basis Function, from the Neural Networks of SPSS™ with a random probability number of 29 people for training and 8 people for testing to build the models of prediction, chosen random from the respondents, but with the dichotomous dependent variable GENDER (1=MALE, 2=FEMALE), as a main factor in order to differentiate the choices of females versus males for promotional tools and social networks

on which they wish to watch commercials about cars.

### 3.3. Research results

For reasons belonging to the lack of the full options software for the video-analysis at the beginning of the experiment, the statistical results which are shown in the screenshot of the motion pictures captured from the movie are only from the REDN Scientific Eye-Tracker analyzed with the BeGaze™ software.



Figure 16. AOI-Bumping bar



Figure 2. AOI Spinning wheel



Figure 17. AOI - Vision Van - Future of Transportation

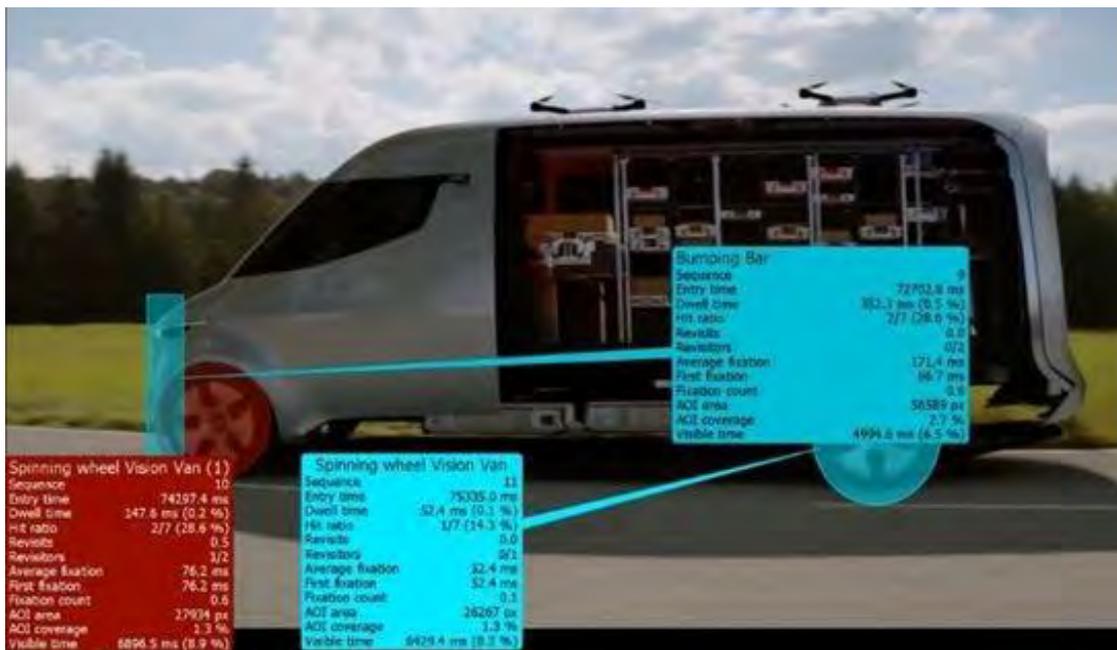


Figure 18. AOI Spinning wheel Vision Van

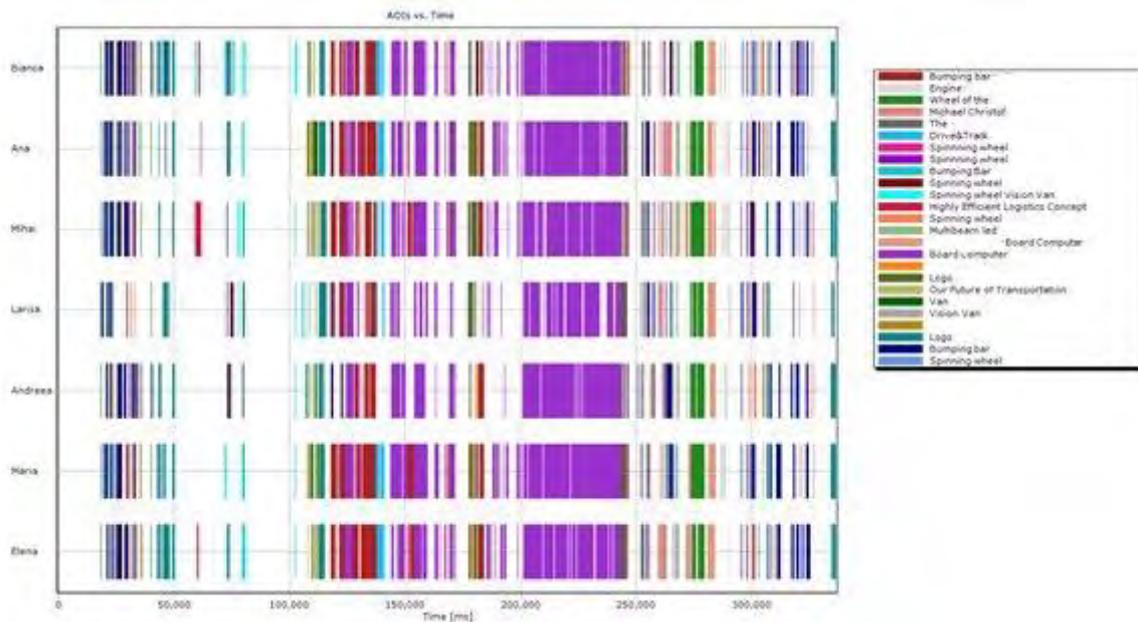


Figure 5. AOI vs. Time right eye

The respondents look first at the AOI Bumping bar of the second car brand and at the AOI Spinning wheel of the second car brand, Figure 1 to 4. The first maximum fixation duration was for the AOI Bumping Bar of the second car brand that was of 4532.8 ms, while the minimum fixation duration one was of 133.3 ms and the first fixation number of participants was of 4, Figure 5. The first fixation minimum duration was for the AOI Michael Cristof, Spinning wheel of the first car brand, Bumping Bar of the second car brand Vision Van which describes the front side of the Vision Van, that includes the engine, the grill, the headlights, Spinning wheel Vision Van and Spinning wheel of the second car brand. These AOI had no duration and 0 first fixation participation count. The maximum first fixation participation count

was for the AOI defined as Wheel of the second car brand, where all 7 participants looked at it. For this AOI, the fixation duration minimum was of 100.0 ms and the fixation duration maximum was of 566.6 ms. The first fixation participation count with 6 participants, which followed the maximum one, was the AOI The, that had first fixation duration maximum of 566.6 ms and first fixation duration minimum 100.0 ms.

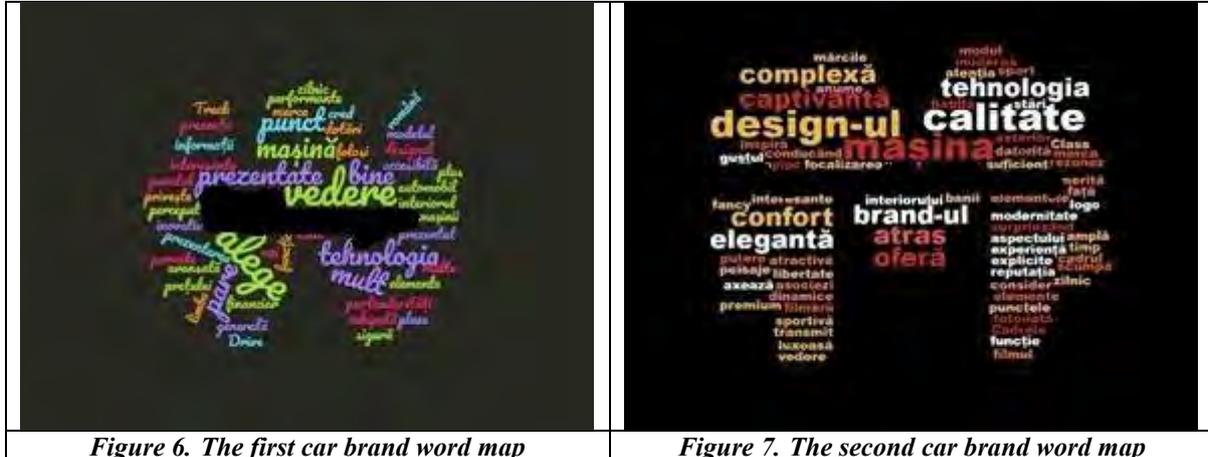


Figure 6. The first car brand word map

Figure 7. The second car brand word map

The main words with which the respondents associate the brand of the first car brand is described with words such as technology while the second car brand are the ones design, quality, elegance, comfort. The technical specifications of the cars are explained in Romanian language, see Figure 6 & 7.

The model used for generating these predictions using Radial Basis Function, in SPSS™ was of 15 respondents for testing and 22 respondents for building the model according to the gender of the respondent. The main promotional tools, from which males prefer to gather information about cars are: TABLET (0,857%), PANNEL (0,786%), TV (0,714%), PC (0,357%) and SMARTPHONE (0,286%). On the other hand, according to the survey, females prefer to gather information from the following tool, in the descending order: SMARTPHONE (0,714%), PC&LAPTOP (0,643%), TV (0,286%), PANNEL (0,214%) and TABLET (0,143%).

To determine the percentage of males and females who search information from the following social media networks, the data was assigned, using the Radial Basis Function, as follows: 21,6% (8 people) for testing and for building the model of training were used 78,4% (29 people). The main social networks from which males research about the features of the car desired are the following: NETWORKS (3,058%), GOOGLE™ (2,923%), FACEBOOK™ (0,788%), YOUTUBE™ (-0,250%). Females search information about cars from these social networks in the following descending order: YOUTUBE™ (4,250%), FACEBOOK™ (3,212%), GOOGLE™ (1,077%), NETWORKS (0,942%).

## Discussion and Conclusions

According to the analysis results, people prefer to watch video-commercials mostly on YouTube™. They would prefer on the future to see the commercials on smartphone or tablet. They give great importance to aspects such as information about car components and payment methods. Some of the respondents expressed their desire that the video-commercials of the first car brand viewed should be built around a story. At the second car brand viewed video-commercial, the respondents recommend providing more details about the car components during the video-commercials. The respondents focused their attention mostly on the spinning wheels of the second car brand viewed, the front side of the second car brand viewed, Board

Computer of the first car brand viewed. For the prototype car, there it is observed a pattern, all the participants look at what is written first about the technology of the car, and then this helps identify the specific segment. Here, the efficiency of the commercial, is increased by this fact. On the beginning, they are looking at the front-side of the car, then at the writing that indicates the first feature of the part of the car, then at the car itself. First, they read what's about that sequence, and then they analyze the car.

On these commercials of the second car brand viewed, the logo is placed at the end of it, on a black background. This could be considered a disadvantage for the company, because the people are distracted by the black background which is too dark comparing with the logo which is a transparent grey color and it doesn't get the attention of the human eye. For the logo, the combination of colors is not an efficient one, because, people need to identify the logo with the car. Here, it would be strongly recommended the changing of the background from black to a combination of warm and cold color scheme such as yellow and blue or other lighter colors.

Another important aspect is the speed of the video-commercial. The video frames should be in a slow pace motion, as for the consumers to perceive the elements of the car which are presented in the commercials. In addition, the music is not suitable for the video-commercials, since people are relaxing during the video-commercial, and their attention decreases.

Following the results of the research for the video-commercials of automotive industry, the consumers are “developing” their visual senses in order to filter the information that they receive from the commercials. When the advertising companies design a commercial for a car, they should also think at the purpose for which is developed and the physically, virtually devices and applications on which it will be promoted.

This research has some limitations regarding the number of people who attended in the experiment and their lack of knowledge about the automotive industry. Another limitation is the limitation of the software (not having the full license that would grant access to all options) used to analyze the data collected.

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## Necessity for Semantic Web Development in User Interaction

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### Abstract

Cyberspace compiles an enormous "network" of data created, transformed and informational resources designed to disseminate its products by users. Most of this data is designed to respond to users' requests, information that is often not hierarchical or structured. In an attempt to identify a number of concepts or information from the virtual environment, users are faced with the problem of accessing a large amount of data, and their "comprehension" and processing by the computer do not coincide with those of users. Although the amount of structured data available on the Web has increased significantly over the past few years, there is still a significant difference between the amount of structured and unstructured data available online. This has resulted in an acute need for accessible data identification, as well as a need for filtering, interpreting and summarizing information for the benefit of its users, with the help of newly developed programs and technologies. Semantic web eases the process with which large amounts of data is collected and distributed. Such programs that have the ability to "describe" user-entered content in the virtual environment. Semantic Web, through its standards and technologies, is constantly searching to provide solutions for such a paradigm while using the RDF data model. By introducing Semantic Web in the user, as well as the computer, disentangle the enormous amount of data available online. This, in turn, helps the user to better surf de internet. The current article concentrates on the process of how Semantic Web is used and created in order to help the user get more accurate results while surfing the web.

**Keywords:** Semantic Web, Social Media, ontology.

**JEL classification:** M31

### 1. Introduction

The current article focuses on the creation of ontologies with regard to the type of information that is consistently increasing throughout cyberspace. Taking into account the fact that every internet user is capable of creating new content very easy in the social web, this is mostly the type of ontologies that the article will focus upon. A main factor contributing to the data being created today is social media. Due to the increasing number of users and also the enormous amount of data created by them there is an increasing need to systematically store and sort it in a way that can be easily accessible and understood by computers.

Until a few years ago, most communication was usually written. More recently, audio and video content has taken the stage. However, this type of content is more difficult to be classified by computers.

Although the social media offers endless possibilities of communication and provides a platform that can be used by its users in order to better communicate and share information among one another, the story is completely different when it comes to computers. Data created

in this manner is largely unsorted and because of this, people rarely find the things they are searching for. This in turn, only sustains the idea mentioned earlier which regard to the low accuracy of results.

The versatility of social media is almost endless, also due to its great number of in-made apps and other possibilities of personalization. Taking this into consideration, one must also find a way to classify all the elements that can be encompassed in social media. In order to do this, there are three criteria to be taken into consideration as they have been mentioned by the Berners-Lee (2001):

- Collaboration: As per its name, here, social media users work together in creating new content. This can include elements such as evaluation, information, findings and so on.
- Information: This is usually first hand content created and shared by the user. In this category one can include images, videos, text and even comments and statistics.
- Relationship: This last aspect refers to the interconnectivity of social media users. It focuses on meeting other users in virtual space and other people in real life. And the result of this interaction will be more data.

Due to the large quantity of information created via social media it is easy to sort through it but there is a large proportion of it that still is potentially useful. However, sorting the data can prove to be very difficult. Therefore, “advanced filtering techniques are needed” (Pirolli, 2009). Most importantly, with the help of different sorting mechanisms users can interact better with one another and this can prove to be very beneficial for both people as well as the popularity of the social media networks. Another aspect worth mentioning is the one should not look at user interactions solely through links between them. “Apart from "friendship" relationships, users are able to join groups, follow other users and institutes, or they can share information” (Moi et al, 2016a) which can be seen by other users.

The search for information in social media is based on identifying words and matching them. For example, should one start a search for the word 'bat' on the internet, they will most likely enter their request in search engine, such as Google, Bing or even DuckDuckgo. However, based on the search term, on the Web the search engine will refer to the animal – “bat” or to a bat in the sense of a baseball bat. The search engine cannot differentiate between these homonyms if the user does not add additional information to the online search.

Search engines can encounter a similar problem as the one mentioned earlier in the case of acronyms, too. For example, UE can stand for Unit of Employment, whereas EU is most commonly used for the European Union. In other languages, more specifically Latin languages, UE almost always means European Union. Using more search terms will improve results and help the user better websites to respond the search. Unfortunately, search results will not present web results containing words that are synonymous to the terms that have been searched.

However, Semantic Web may just be the answer to better “comprehension” of information by computers. The idea of a Semantic Web involves shifting from the unstructured, to the structured. This involves moving from the more basic HTML website version, to the RDF coding. In doing so the new versions will also be available for the machine to understand and in turn, this will help computers understand user commands better. The semantic vocabulary is based on concepts defined in ontologies.

## 2. Short review on ontologies

The term ontology (derived from Greek) is defined in philosophy as the territory of existence. Using the term in computer science helps encompass new meanings in the “territory” vocabulary. Ontologies are artificial constructs, meaning that they are created by man. In doing so, man helps computers understand different terms by giving specific particularities to any given term. This is done easiest by creating links or connections inside the word family of a

specific term. Through these ontologies, words are defined by what is closest to them and the link words are also defined by their closest definitory term and so on. In this manner, computers offer the best results to their users by following previously made correlations.

Based on what was mentioned earlier one can easily how computers “think”. In the field of information and technology terms are a model that help with the “thinking process” or, better aid, the processing capabilities of computers. These terms are created through relationships between and through properties given to each one. Should the ontology be created correctly, it will respond to a set of criteria that will make it easily understandable by machines. According to (Gruber, 1993), an ontology is a "formal, explicit specification of a common conceptualization". In creating an ontology one might expect for a certain term to be connected in real life however, a term can be used to describe a much vaster domain. A domain refers to a concept or an object together with all the links in between them and their characteristics. In specialized literature, but also in practice, there are a number of strong but weak ontologies.

“Ontologies can unify and normalize data from different resources, e.g. social media, syntactically and semantically and to associate them with knowledge in the field of interest.” (Grolinger et al., 2011). This is even more important in the sense that given web search results can return with more accuracy. (Galton & Worboys 2011).

The importance of semantic web and ontologies per se, derives from the fact that it makes a promise to help humans and machines better understand each other. Because the ontology is about knowing the consensual domain, its development is often a process of cooperation that involves different people, possibly in different locations. “Ontology is a formal representation of knowledge through a set of concepts in a domain and the relationships between these concepts” (Giri, 2011).

Cyberspace can allow people and organizations to come in direct contact with citizens and to transmit important information – this is mostly done through the use of social media.

Ontologies are divided into several categories according to their destination. High-level ontologies are general ontologies that aim to hierarchize terms that will appear in any field at the top of the hierarchy. The ontologies specific to a domain contain particular terms and relationships for the described domain.

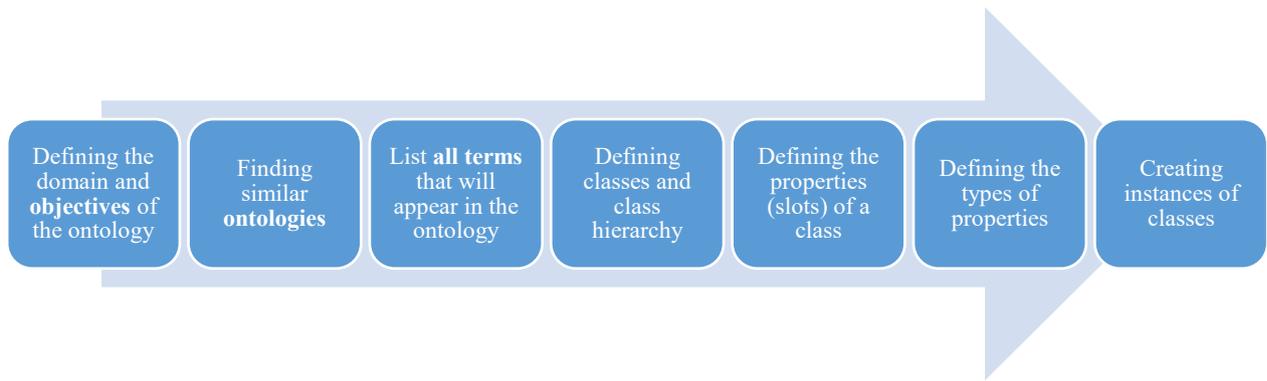
### 3. Methodology

The current article focuses on exploratory research regarding the creation and use of ontologies in cyberspace. Moreover, it will classify the existing ontologies and present a perspective on how to create a new ontology.

The table below focuses on the main criteria used in the development of ontologies. By following these requirements, it would be easier to create a more comprehensible ontology for the computer.

A common feature of ontologies is that they are formal. Due to this feature, the construction of an ontology is particularly complicated, because it must contain a large number of correct logical relationships based on a strict set of rules. Probably the most important one being that terms or instances should not be contradictory.

The figure bellows simplifies the logical steps that need to taken in order to create an ontology.



**Figure 1 Creating an Ontology**

*Source: Interpretation from Noy and McGuinness, 2001*

Noy and McGuinness (2001) present a methodology for the rapid and correct development of an ontology.

1. Defining the domain and objectives of the ontology. This can be easily done by answering the questions below:

- What is the domain that the ontology has to cover?
- What will we use it for?
- What kind of questions does the ontology have to answer?
- Who will have to use it and maintain it?

2. Finding similar ontologies for the purpose of reusing concepts or even using the existing ontology in case it exists

3. Make a list of the terms that will appear in the ontology

4. Defining classes and class hierarchy through:

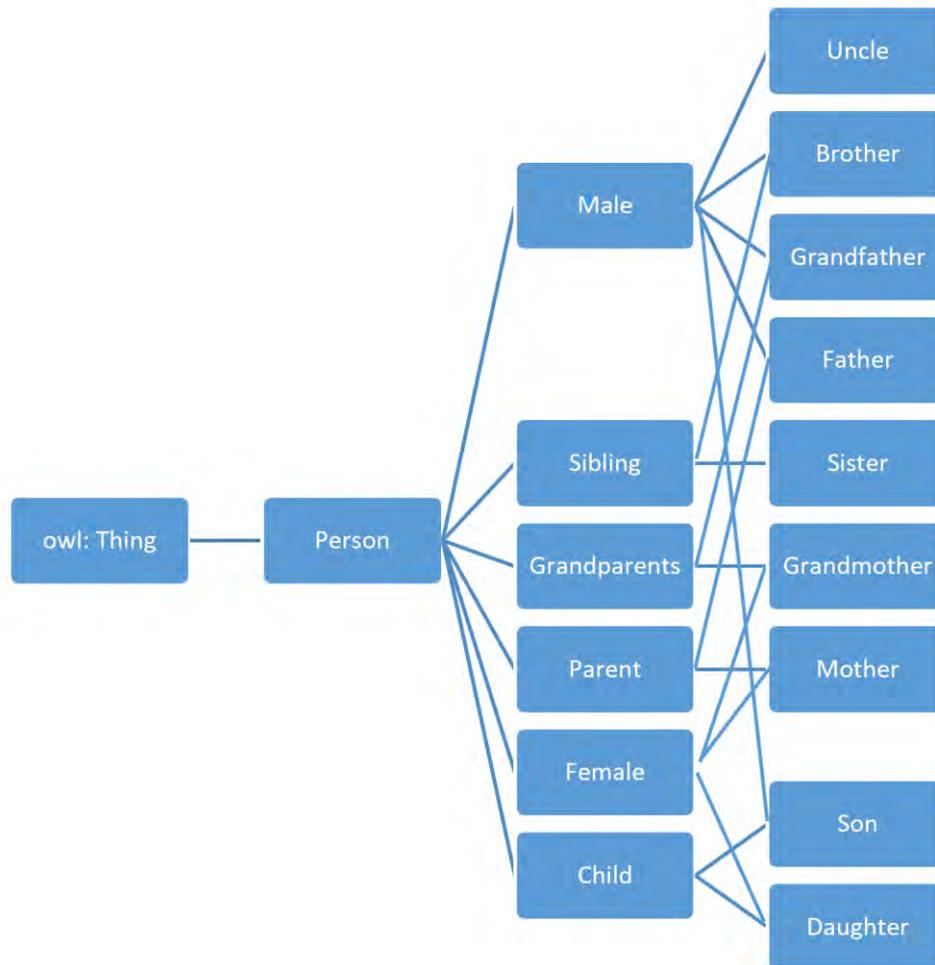
- top-down approach (from general concept to particular concepts)
- bottom-up (categorization of simple concepts) or mixed.

5. Defining the properties (slots) of a class

6. Defining the types of properties (cardinality, domain and co-domain of values)

7. Creating instances of classes

All of these steps as well as the criteria listed in the table above need to be taken into consideration when creating an ontology. This is due to the fact that the computer needs to have a very logical basis with the help of which to better understand the meaning of the terms. For this, listed below, there is a simple schematic of a family ontology that can aid in understanding how the comprehension process works, when it comes to computers.



**Figure 2: Family ontology**

*Source: Ontology-based modeling, available at: [shorturl.at/iqYZ5](http://shorturl.at/iqYZ5)*

The Semantic Web is a problem such as authentication technology, and it is currently difficult to use it on open networks such as the Web. If the Semantic Web is fully realized on the Internet, information scattered on the Web can be integrated and used as a single database, and efficient information processing can be performed. The semantic web is a web for computers, but the process of creating and maintaining it is a social one. To make semantic Web creation possible, W3C is actively working on defining open standards such as RDF and OWL. Although computers are useful in manipulating symbols according to predefined rules, only Semantic Web helps machines interpret language through “commonly agreed” methods so that both ends can raise their efficiency.

#### 4. Conclusions

The semantic web is not a separate web, but an extension of the current one, in which information and services have a well-defined meaning. The semantic web is for computers, but the process of creating and maintaining it is a social one. To make semantic Web creation possible, W3C is actively working on defining open standards such as RDF and OWL. Although computers are useful in manipulating symbols according to predefined rules, only

users of the Semantic Web have the necessary interpretation and association capabilities to create and maintain ontologies.

In creating ontologies, one must take into consideration a set of guidelines and link these with pre-existing knowledge. In this manner, computer “comprehension” will be more efficient. What is more, there is a great need for these ontologies as they create the environment for better understand between man and “machine”. Through this, one should understand the capability of the computer in assisting the human in daily tasks and decision making.

### Acknowledgments

This work was supported by a grant of the Romanian Ministry of Research and Innovation, UEFISCDI, project number PN-III-P1-1.2-PCCDI-2017-0800 / 86PCCDI/2018 - FutureWeb, within PNCDI III.

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## Leverage IoT Technologies for Customer Acquisition and Retention

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### Abstract

The Internet of things is a dynamic network of devices that communicate with each other and provide important data for any business. This communication is established through sensors embedded in devices and objects, which can be anything from your watch to an air pollution monitor. The adoption of IoT technologies can provide companies with opportunities to better understand clients behavior, to increase productivity and reduce costs. The internet of things has changed the way companies interact with clients, allowing marketers to collect more data about their clients preferences and habits. This paper reviews and classify applications of IoT technologies for an effective marketing, attracting new clients and increasing customer engagement.

**Keywords:** the Internet of Things, customer acquisition, customer retention, smart retail.

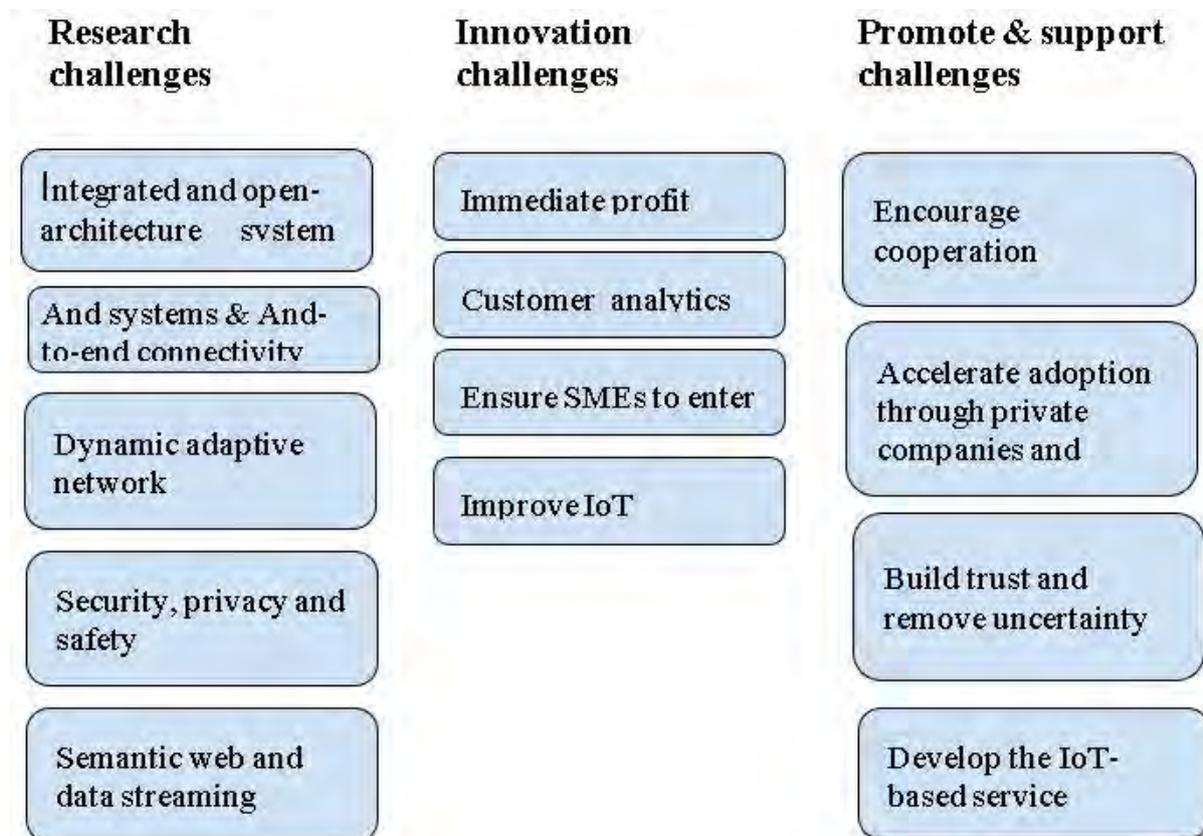
**JEL classification:** M31

### 1. Introduction

Since the development of IoT technologies generate competitive advantage for many fields, it started to be applied successfully in marketing strategies also. The interconnected devices increase data flow between customers, and between customers and companies. These networks are more about being social, but they are important sources of data. For ages the marketing customer has been about target audience or customers in general. Now, using IoT technologies companies can focus attention on individuals with their specific habits and behaviors. As well as companies can promote their brands to specific customers by using smart devices. This is generated by the dramatic decrease of sensors price and bandwidth cost, the spread of cellular coverage and the rise of cloud computing. (Minteer, 2017)

According to the European Commission the Internet of Things “represents the next step towards the digitization of our society and economy, where objects and people are interconnected through communication networks and report about their status and/or the surrounding environment”, according to European Commission policies (ec.europa.eu, 2019). Anyway this definition is just an attempt to define the broad field of IoT and its fast development. According to an European Commission study the number of IoT connection within the EU28 will increase from about 1.8 billion in 2013 to almost 6 billion in 2020. Also the IoT revenues will increase from approximately 307 billion EUR in 2013 to more than 1181 billion in 2020 (ec.europa.eu, 2019). The IoT-related researches and innovations support companies to better understand their clients and offer better services and products for specific target markets. Also this enables personalized customer services and provide new marketing opportunities.

There are more framework conditions for the IoT technologies to be used for marketing purposes: research challenges, innovation challenges and promotion and mass adoption through private companies and public sector.

**IoT research and innovation framework for marketing strategy**

*Figure 1: IoT framework conditions for marketing strategy*

Companies from every industry look for comprehensive data. That's why the right solutions for IoT research & innovation challenges will support companies for better results and meeting the objectives. IoT data supply the answer that helps companies to enhance efficiency of marketing plan, sharpen execution and retain customers. There are many ways IoT devices and data can be used, we should consider ethical issues and potential for hacking (Hurley, 2019).

## **2. IoT technologies in marketing as competitive advantage**

The implementation of IoT is growing very fast as a result of several new developments: computing innovation, storage and analytics; technology costs falling; increased use of mobile devices and cooperation between innovative companies. It is important for marketers to set up what kind of information they need from mobile devices and how to use them in order to grow the business.

There are more ways marketers use IoT technologies:

- a) Getting important data regarding customer's needs, habits and behaviors;
- b) Improving customer engagement;
- c) Getting important data regarding the buying process;
- d) A more efficient customer service.

### **a) Getting important data regarding customer's needs and preferences**

The major impact of technology on society and individuals can affect any business. That's why brand engagement measures how active users are. Observing and understanding

customers actions enable marketers to use better their marketing strategies. IoT devices could show how users act and react, what the user pays attention to, the purchasing history and specific user's preferences and needs. This integrated knowledge about customer could help companies to fit the products to the needs of individual customers.

The Internet of Things is a powerful tool to identify and predict customer preferences and needs and therefore to close the knowledge gap about individual customers. To understand data about individual customers become crucial for any business today. Retailers use IoT technologies to connect with customers and improve customer experiences. They use it also to pull customers into one of their channels and to attract them with products that have been personalized for customers special needs and preferences.

#### **b) Improving customer engagement**

Marketers are aware that quality connections between brand and customers can be a major source of success and profitability. Engaged customers show greater loyalty to brands. It is very important to understand differentiation between customer attitudes and behavior that go beyond a simple purchase. A purchase behavioral dimension includes preferences, needs, referrals or social media influence. Engagement is a way to generate customers interaction with brands. This is a customer value added to the brand and could influence other potential clients in their acquisition process. Today the relationship with customers is much more dynamic, the reviews have a high influence and customer's engagement has become a critical factor of any business success (Rogers, 2016).

In collaboration with the marketing agency Yolo Digital SRL we observed differentiation between Generation Z behavior and behavior of X and Y Generations. Generation Z being defined by a realistic behavior in a social networks context, in comparison with Generation X being individualistic and competitive in a political transition context. Considering these, marketers should consider the potential of IoT data to generate great flow experiences and provide effective marketing campaigns by using video materials and personalized messages.

Today's customer expects personalized products and services to meet specific needs and preferences and solve his unique issues. Customers demand quality interactions through a variety of communication channels. With IoT technologies marketers could fulfil both, not only establishing strong connection between services and products, customers and processes, but also by providing specific data so that companies can use to meet customer's needs and preferences.

There are a few ways companies could use IoT technologies for improving customer engagement:

- Greater personalization and gradual improvements - using IoT technologies companies get a tremendous volume of data about customers' needs and preferences. Today marketers could better promote their products and services to customers at the exact moment of need. IoT technologies help companies to reduce unnecessary marketing costs, delivering a better advertising ROI.

- Strengthening customer loyalty - IoT technologies allow companies to get real-time data insights about customers, offering specific benefits and rewards. Understanding better customer's needs marketers can offer targeted cross-promotions, getting immediate consumer action and boosting brand loyalty.

- Observe and improve experiences - marketers use IoT technologies to monitor customer experiences and when there is any issue it is fixed. Getting a

bigger volume of data about customers companies could fit better to their expectations and needs.

- Products and services continuously improvement - companies could get valuable insights from customers feedback and deliver personalized and high-performing products and services. Using data from IoT devices companies can update products and services features and better align with customer expectations.

**c) Getting important data regarding the buying process**

IoT technologies provide data for better way-finding and let the consumer know about special offers and discounts. Companies face more challenges when starting to use the IoT technologies: security concerns, implementation difficulties, lack of IoT specialists and data analysis specialists, unclear business benefits or limited internet skills. Despite having these challenges, companies became more comfortable with the fact that a buyer could get important competition data. Buyers get easily data about competition products and services, prices, reliability, location or quality. Marketers and business developers use this fact to increase the buying process transparency and meet customer's expectations.

According to marketing agency Lean Cuza Digital SRL video materials are more effective than pictures in any online marketing campaign. Considering a geolocation application, customers receive notifications on mobile phones when they are close to a specific location. A video spot would have a bigger impact than simple text and could convert a potential customer in a satisfied client. Lean Cuza Digital marketing agency mentioned that there are different ways to attract teenagers clients compared to their parents. The buying process data should be analyzed according to the customers segmentation.

**d) A more efficient customer service**

Many successful companies have superior customer service, re-inventing this service by using technology to deliver innovative service models. The implementation of IoT technologies before and after purchase is very important for the customers satisfaction and for the success of any business. This depends on different departments - business management, IT, engineering and marketing department. Companies are now exploring new IoT technologies and automation as a way to detect and solve issues with low human intervention. The big volume of data about the customers enable marketers to anticipate customer's issues and needs. This will provide faster problem solving and lower costs. The next generation of customer service is about connecting smart products and smart people to provide unique experience, increase loyalty, and attract new customers.

**3. IoT applications and use case scenarios**

Companies, governments, organizations and the individual consumer enjoy the benefits of IoT. The Internet of Things become a source of competitive advantage for companies, so that's why it is necessary to have a long-term strategy for this. There are many IoT applications, every day a new company decides IoT enabled products and services. The foundation for a connected world was born (Greengard, 2015).

**Wearables** - represent one of the earliest industries to use IoT and its applications. Glucose monitoring devices, heart rate monitor or smartwatches and gesture control devices are one of the many IoT applications. Wearables have a high potential among many IoT innovations and attract new customers.

**Smart Home** - the most efficient IoT applications that stand out is the smart home. The number of people searching for smart homes increases every year. Smart homes take care of energy control and reduction, offering comfort when you come home.

**Smart City** - there are various examples from traffic management to waste management and urban security. IoT applications for a Smart City are very popular, offering comfort to citizens and solving issues for people who live in cities.

**Healthcare IoT** - improve how physicians take care of their patients, allowing interactions directly with their doctors. IoT applications in medical field boost patient engagement and satisfaction and open ways for better data analysis, real-time field data, and testing.

**Industrial Internet** - industrial automation and the world of manufacturing have many IoT applications from sensors embedded in industrial machines to reduction of waste and lost time. Using IoT based applications companies become more efficient and create a sustainable advantage to get new clients and retain the existing ones.

**Smart Retail** - many retailers have adopted IoT based solutions, attracting new clients and increase customer's retention. These applications enable companies to reduce waste and energy, to increase purchasing, to improve store operations, enabling inventory management. Smart retail enhances consumer's shopping experiences. A potential application is a geolocation application for people interested in some specific products and services. Geolocation of customer address may help companies to set up a better customer segmentation (Sinha, 2016) This application allows companies to send notifications to interested people, when they are close to their shop.

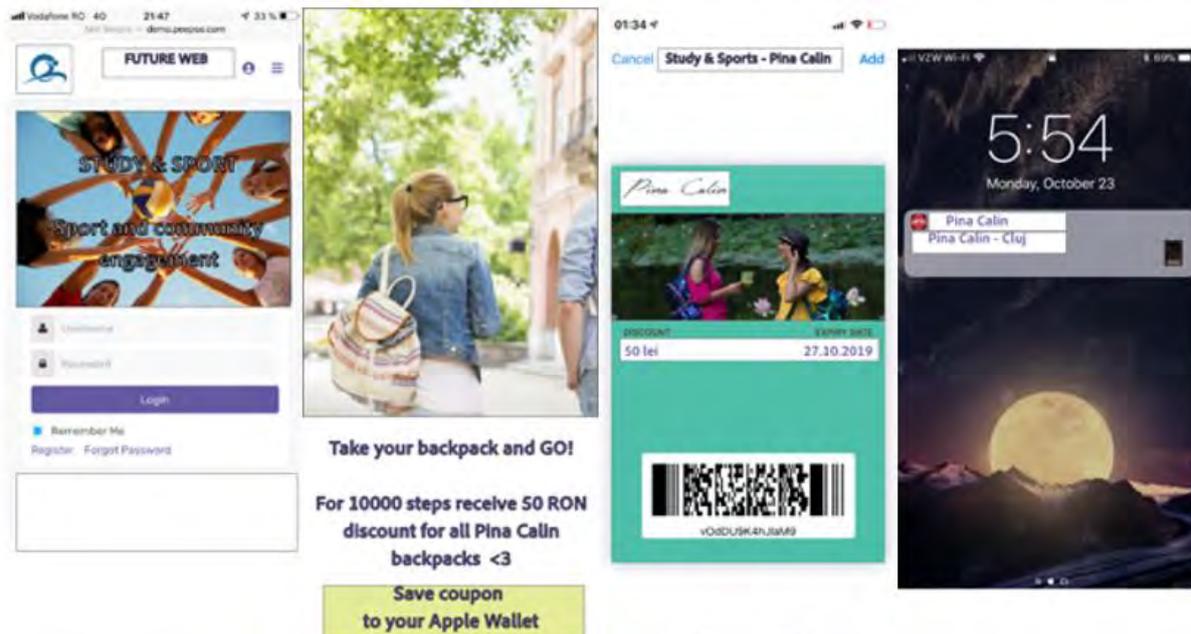


Figure 2 – Geolocation mobile application mockups

**Smart Car** - is a vast network of sensors and software which enables cars to be more safe, comfortable and fast. Companies use smart cars to differentiate from competitors and attract new clients.

**Smart farming** - using IoT technology companies can sense soil moisture and nutrients, improving irrigation system and fertilizer system, in conjunction with weather data. Like that, big farmers could supply good quality products at the right time, to meet clients preferences and needs.

The Internet of Things generates life-changing conditions in our lives. IoT technology greatly increase value and competitiveness of any business. (Sinclair, 2017) Many of the innovations mentioned are already in place for customer acquisition and retention.

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## **Assessing the applicability of neuromarketing tools in online social networks from a business perspective**

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### **Abstract**

Online migration characterizes both consumers and the business environment, which makes us see the integration of new technologies in this virtual environment as a natural development. User behavior requires additional efforts for technology adaptability, so integration does not seem to be forced, but the usefulness of such an immersion is felt by all companies, that want to have as much information about consumers as possible and monetize it in their strategy, by building up the most relevant products/services and communication campaigns. This is also the purpose of this article, which includes the results of a quantitative research among business representatives to assess their perception of the use of neuromarketing applications in online social networks. Although several apps were evaluated individually, the study indicates a high degree of utility for eye tracking and face coding, two methods through which companies can see the network users' direct and unaltered response to incoming messages.

**Keywords:** marketing research, consumer behavior, neuromarketing..

**JEL classification:** M31

### **1. Introduction**

In the nowadays digital world, online migration characterizes both consumers and the business environment, which makes us see the integration of new technologies in this virtual environment as a natural development. User behavior requires additional efforts for technology adaptability, so integration does not seem to be forced, but the usefulness of such an immersion is felt by all companies, that want to have as much information about consumers as possible and monetize it in their strategy, by building up the most relevant products/services and communication campaigns.

Among the new technologies that emerge from the synergy of marketing, neuropsychology, digital and ITC, neuromarketing stands out due to its multidiscipline character and its unaltered results when it comes to consumer behavior. Having so many advantages, but also so many barriers that still affect the decision-making process, it's very important to analyze the market perception on using neuromarketing technologies in business activities.

The present paper presents the results of a quantitative research among business representatives, assessing their perception of the use of neuromarketing applications in online social networks.

## 2. Literature review on neuromarketing and its use in social networks

Being a relatively new concept in the scientific world, neuromarketing doesn't have a long-established literature, as the world's first use of this concept was in June 2002, in a press release by BrightHouse, an advertising firm from Atlanta, announcing the creation of a business division using functional magnetic resonance imaging for marketing research (Fisher, Chin & Klitzman, 2010). Despite the fact that is a new marketing area of expertise, the last 10 years are abundant in papers presenting the results of neuromarketing studies about behavior research, testing/evaluating promotional campaigns, evaluating website design or analyzing package design decisions (Berčík et al., 2015; Agarwal & Dutta, 2015; de Oliveira et al., 2015; Horst, 2016).

Lee, Broderick and Chamberlain (2007) define neuromarketing as “the application of neuroscientific methods to analyze and understand human behavior in relation to markets and marketing exchanges”.

Reimann et al. (2011) make a more detailed definition of neuromarketing, highlighting its use for better understanding the psychological phenomena and emotions in purchase decisions, as well as providing a more comprehensive assessment of the efficacy of marketing phenomena like advertising, consumer competitions, and product placement, by analyzing the underlying neurobiology (Javor et al., 2013).

The importance of neuromarketing can be seen also in practice, as some of its techniques are soaring on the adoption scale of marketing research methods. According to the 2018 Greenbook Industry Trends Report, based on a survey of 1260 market research suppliers and clients, eye tracking is used 38% of companies on the market, facial analysis by 24%, applied neuroscience by 20%, biometric response by 16% and wearables-based research by 9% (Marketing Charts, 2019).

The neuromarketing techniques are various and have different functionalities, depending on the devices and soft skills involved in the process. Bitbrain (2019) makes a classification based on the manner in which body response is registered, presenting two categories:

- techniques that register the activity of the central nervous system (CNS) – where we have Electroencephalogram (EEG), Functional Magnetic Resonance (fMRI), Magnetoencephalography (MEG), Positron-emission tomography (PET) and Steady State Topography (SST);
- techniques that register the activity of the peripheral nervous system (PNS) – here we include Electrocardiogram (ECG), Galvanic skin response (GSR), Eye-tracking, Electromyogram (EMG) and Facial Coding.

Out of all these techniques, some are more efficient in marketing researches and campaigns, as they allow an easier data collection process, such as eye tracking and face coding, which are using web cameras or the integrated cameras of laptops and smartphones, or voice recognition, which is based on access to the build-in microphones from our devices.

Using these neuromarketing techniques in social networks comes as a natural step towards accessibility and adaptability to each user's behavior. We can see this change in important business decisions, such as acquisitions or partnerships between big ITC companies and neuromarketing providers. For example, Google has acquired in 2016 the startup Eyefluence, offering users the possibility to use eye tracking glasses instead of their mouse (Techcrunch, a, 2016). Facebook followed shortly with the acquisition of Danish Eye Tribe (Forbes, 2016), a company that allows the integration of eye tracking technique in businesses'

apps. Apple also joined the neuromarketing game and acquired the German company SensoMotoric Instruments (SMI) (Techcrunch. b, 2016).

In order to test the level of acceptance and usefulness for neuromarketing techniques, we have designed and implemented a quantitative research among business representants. Besides identifying the perception on neuromarketing use in social media, we have evaluated the opinion for four of the most used neuromarketing techniques – eye tracking, face coding, voice recognition and EEG.

## 4. Research

### 4.1. Research methodology

The scope of the present research is to identify companies' perception of the use of neuromarketing applications in online social networks.

The main objectives were as follows: Determining mental associations with the term of social media; Identify online social networks where companies have business accounts; Establish the usefulness of social media for the company; Identify the degree of familiarity of the business environment with the concept of neuromarketing; Evaluate the perception on usefulness for each neuromarketing application in social media; Identify the purposes for which these techniques could be used in online social networks.

Information sources: the researched collectivity is represented by companies operating on the Romanian market (business environment). NGOs and government bodies are excluded, having a different organizational behavior.

The sample size was 150 companies, chosen based on form of capital, area of activity and organization size.

The research method used for this study was the survey, more precisely the online survey, through which respondents could be reached in a shorter time. For the construction and hosting of the questionnaire, the Lime Survey platform was used. Respondents were sent the link to the questionnaire location, and their responses were automatically stored in the database available on the platform.

### 4.2. Research results

#### 4.2.1. Online social networks use

Before going into details about the use of neuromarketing in social networks, we wanted to better understand the context, thus we asked participants to mention which are the online social networks where they have business accounts. As it can be seen from Table 1, the most used platform is Facebook (87.93%), followed by LinkedIn (58.62%). Despite its growing level of use within the individuals, Instagram convinced only half of the business environment.

*Table 1. Online social networks where companies have a business account (%)*

Online social networking	%	Online social networking	%
Facebook	87.93	YouTube	46.55
LinkedIn	58.62	Twitter	25.86
Instagram	53.45	Google+	25.86

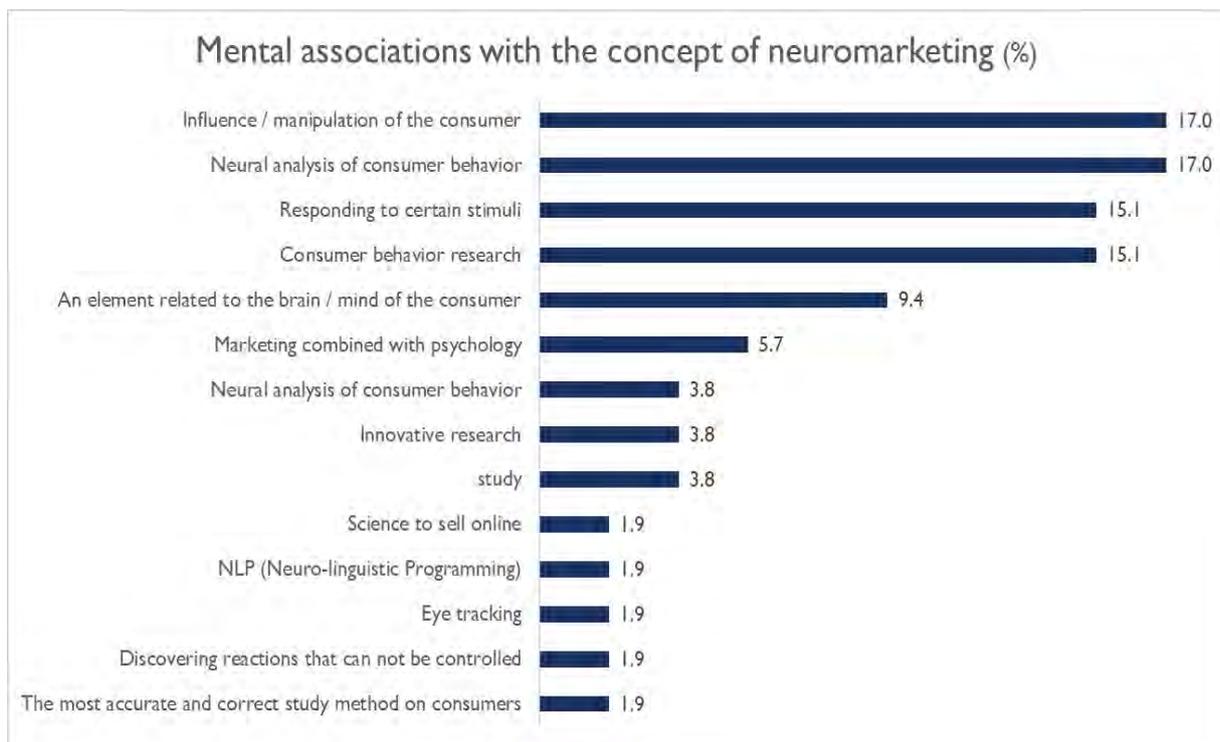
The decision of using online social platforms relies on the company's purposes and business objectives. As it can be observed in Table 2, Facebook is mainly used for products and services promotion, together with a general public information activity about the company. Instagram is seen also as a promotional tool, whereas Twitter is all about information. The main purposes for LinkedIn are staff recruitment and finding business partners.

*Table 2. The purpose for which companies use social network (%)*

Purpose	Facebook	Instagram	Twitter	Linkedin
Staff recruitment	11.7	1.3	6.5	23.2
Finding business partners	4.6	2.6	3.2	19.2
Promoting products and services	23.4	33.8	22.6	15.9
Communication with customers	16.8	16.9	16.1	9.8
General public information about the company	23.4	20.8	38.7	17.0
Collecting information about our market	8.6	7.8	9.7	10.7
Monitoring Competition Activity	11.2	14.3	3.2	6.3

#### 4.2.2. Perception on neuromarketing

The next step of our research was to discuss about neuromarketing studies, in order to have a better grasp on the level of familiarity that the business environment has with regard to this concept. When asked if they have ever ordered/done neuromarketing studies, only 3.6% said yes. Understanding such a small percentage requires an in-depth analysis into what neuromarketing means for companies. As it can be seen from Figure 1, the main associations that companies are making with this concept are influence/manipulation of the consumer, neural analysis of consumer behavior, the evaluation of responses to certain stimuli and consumer behavior research in general.

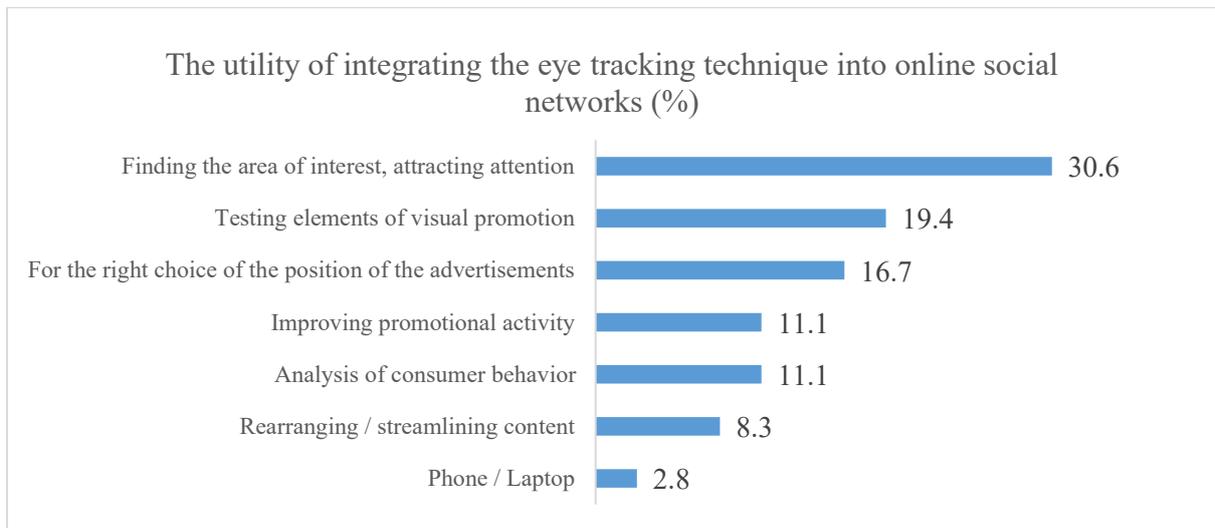
*Figure 1. Mental associations with the concept of neuromarketing (%)*

#### 4.2.3. Assessment of the utility of the eye tracking in social media

On a scale from 1 to 5, where 5 means ‘very useful’, the average score of perceived utility for eye tracking in social media was 4.02, with more that 70% of the respondents seeing it as ‘useful’ or ‘very useful’.

Companies would use this neuromarketing technique in order to find the area of interest, the area that attracts the attentions of users (30.6%), but also in order to test different

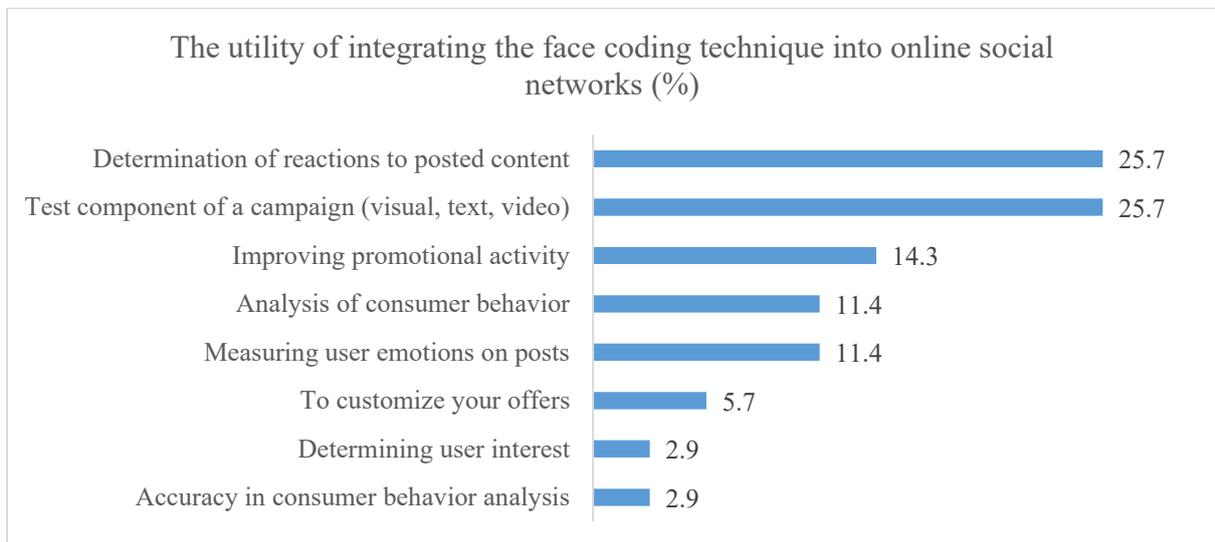
ideas of visual promotions (19.4%) and, thus, identifying the right choice of advertisement positioning (16.7%), as it can be seen in Figure 2.



*Figure 2. The utility of integrating the eye tracking technique into online social networks (%)*

#### 4.2.4. Assessment of the utility of the face coding in social media

Being also a well-known neuromarketing technique, face coding received, as well, a good score on level of acceptance, with more that 75% of respondents finding it ‘useful’ of ‘very useful’. In Figure 3 we can see the most mentioned purposes that a company may have for using face coding in social media – determination of reactions to posted content (25.7%), test campaign’s components (25.7%), which actually leads to improving the promotional activity (14.3%).

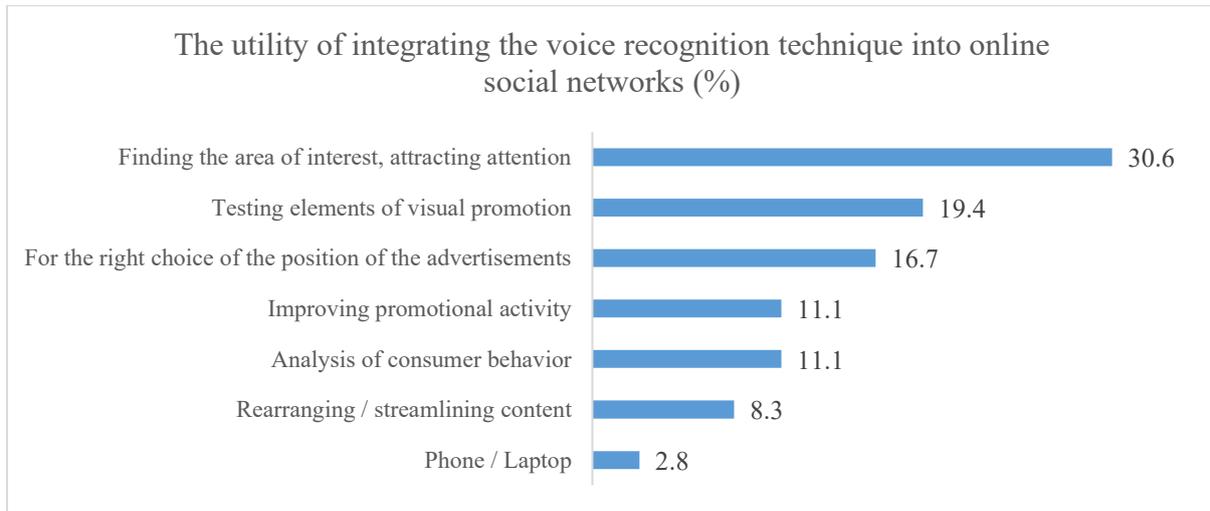


*Figure 3. The utility of integrating the face coding technique into online social networks (%)*

#### 4.2.5. Assessment of the utility of the voice recognition in social media

When it comes to voice recognition, as it a lesser known neuromarketing technique, the average score dropped to 3.46, which on a scale from 1 to 5 shows us a relatively a mid-level score (most respondents positioning themselves in the middle of the scale – 32.7%).

The main reason for which a company may use this technique in social media refers to the need to find the area of interest, the area that attracts user's attention (30.6%).

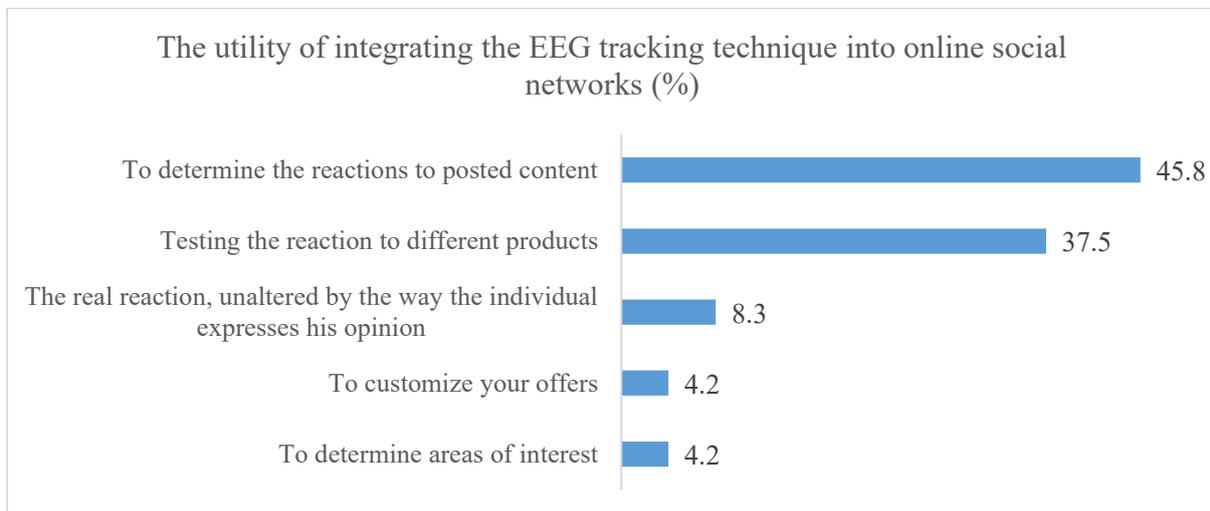


*Figure 4. The utility of integrating the voice recognition technique into online social networks (%)*

#### 4.2.6. Assessment of the utility of the EEG in social media

Being the most complicated technique out of the four evaluated in the present study, EEG perceived utility is the lowest, with only half of respondents finding it 'useful' or 'very useful', the average score being 3.32.

However, we can see in Figure 5 that companies can identify very easily what are the main benefits of using EEG in social media – to determine the reactions to posted content (45.8%) and to test the user's reaction to different products (37.5%).



*Figure 5. The utility of integrating the EEG tracking technique into online social networks (%)*

## 5. Conclusions

As we just saw in the research results section, the most common online social network among companies is Facebook, followed by LinkedIn, Instagram and Youtube, the main goal being to promote products and services and to communicate with the costumers. This should represent the basis for changing the business approach, as this one-way communication process is no longer working. Consumers expect that their voice should be heard, thus the need for better communicational channel and instruments arises. Neuromarketing techniques give

companies the opportunity not only to collect various data about users, but also to adapt their communicational model to each person, by integrating neuromarketing into their process.

The present study showed us, however, that neuromarketing techniques are still perceived as invading consumer space, especially for those who are not familiar with this concept. Consumer acceptance is, in fact, the main barrier mentioned by companies, making them somehow reluctant to integrate neuromarketing techniques into social media.

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## Using Marketing Research Methods in Order to Improve Teaching -Case Study Romanian Literature

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### Abstract

Designed as a case study, this paper explores the opportunity to use marketing research tools (eg., secondary data collection, experiment, descriptive research) in order to improve teaching methods even in less typical marketing areas, like Romanian language and literature. Three series of studies using marketing research methods applied to elementary school pupils, revealed many opportunities for Romanian language teachers in order to improve their professional skills and, more important, to increase young people interest in reading books.

**Keywords:** marketing research, teaching Romanian language, case study, teacher performance.

**JEL classification:** M30, M31, A2.

### 1. Introduction

Every teacher is responsible for finding the stimulating methods and the development of his students creativity, which triggers the usage of an artistic-literary language, because depending on the availability of adaptation, playing and implication of the teacher, you can achieve classes where the students overcome any stage fright and they don't feel constrained by the barriers of a school curriculum which can be reached in a different way other than traditional.

To this end, this paper aims to demonstrate that the usage of modern teaching Romanian literature methods can improve significantly the degree of knowledge, interest and participation of the preteens and teenagers in "Romanian language and literature" discipline.

In three middle schools there have been projected and applied marketing experiments using specific techniques (ethnographical study, case study, role play), by means of which it has been demonstrated the causal link between the used teaching method and the level of students knowledge and interest.

### 2. State of the art

Avermann (2002): "Despite the work of conscientious teachers, reading supervisors,

curriculum coordinators, and principals in middle schools and high schools across the country, young people's literacy skills are not keeping pace with societal demands of living in an information age that changes rapidly and shows no sign of slowing."

A successful comprehension requires, by early adolescence, the integration of multiple linguistic and cognitive processes (Cain & Oakhill, 2012; Cromley & Azevedo, 2007).

Reading motivation refers to an individual's attitudes, beliefs, values and goals related to reading (Conradi, Jang, & McKenna, 2014; Guthrie & Wigfield, 2000; Unrau & Quirk, 2014).

Reading motivation significantly decreases as students move through the early years of schooling and into adolescence (McKenna, Kear, & Ellsworth, 1995; Unrau & Schlackman, 2006), a pattern that particularly affects boys (De Naeghel et al., 2014; Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002; Kelley & Decker, 2009; McGeown, Duncan, Griffiths, & Stothard, 2015), students from low-income families (Guo, Sun, Breit-Smith, Morrison, & Connor, 2015) and African American and Latino students (Guthrie & McRae, 2012; Ryan & Deci, 2000a, 2000b). Refinements in reading sub-skills, however, are not enough for a profound comprehension. Adolescents need to be effectively exposed to complex texts and reading tasks that are open-ended enough to support sophisticated reasoning.

The successful instruction for the adolescents using written language (like studying various scientific texts, or understanding an online weather map, reading a travel guide, etc) occurs in concrete places and times as a component of societal practices (formal schooling, searching the internet, travelling).

Book reading is privileged in middle and high school classrooms, as a typical case. This privileging emphasizes the importance and value of academic reading but in the same time tells teachers little about their students' everyday uses of language and literacy.

Effective instruction grows on components of both formal and informal literacies. It takes into account students' needs and interests while at the same time attending to the challenges of living in an information-based economy during a time when the bar has been raised significantly for literacy achievement. (Savvidou, 2004, Baumann, Hooten & White, 1999).

Reading engagement contributes to growth in students' reading skills (Guthrie, Wigfield, Klauda, 2012; Guthrie & Klauda, 2014). The building of engagement has been defined as "involvement, participation, and commitment to some set of activities" (Guthrie et al., 2012, p. 601). Engaged reading incorporates behavioural, emotional, and cognitive processes (Fredricks, Blumenfeld, & Paris, 2004; Unrau & Quirk, 2014), such as reading involvement, interest, and active problem solving. In addition, recent research has suggested that "agentic engagement," such as "students' constructive contribution into the flow of organized discussion," may also contribute to student achievement (Reeve & Tseng, 2011; Reeve, 2013). There is growing evidence that reading engagement is a key mechanism underlying the effects of innovative reading programs.

Last but not least, beyond the issues related to teaching and learning the subject of study, there are a variety of related problems such as student behaviour or effective learning.

A large variety of strategies is provided by effective teaching for students to use before, during and after reading for constructing meaning, because ineffective instruction focuses mainly only on isolated skills and written practice. Most of the teachers do not always teach students how to learn but they take responsibility for what students know and what they do not know.

Many struggling pre-and adolescent readers hide behind, uncommon behaviours like apathy or rebellion. During the classes, behaviours such as sleeping, texting, or not completing assignments are common characteristics of struggling older readers. Experience and studies have shown that these students rarely ask for assistance and avoid participation in class, and,

consequently, teachers mistake their struggles with reading for behavioural problems. To this end, using innovative teaching methods may bring constructive solutions for these problems.

Paris, Wasik, & Turner (1996) explain in details what are the main strategies that readers need to develop, showing that there are strategies that can be used before, during and after reading and how important it is for the student to select well which one to use in each circumstance. They also discuss how the teacher can help the students to develop reading strategies by direct explaining them to the students by describing them, explaining the benefits of using them, how to use them, when they should be used as well as evaluating their use of the strategies. They also discuss the importance of peer interactions and the classroom climate, defending a multidimensional classroom that “avoid normative evaluations and stratification of students by abilities” and that “provide meaningful literacy tasks, employ a variety of instructional methods, apply multiple performance standards, and afford all students opportunities for success”.

Behaviours and thoughts can define learning strategies in which learner will engage and which are meant to influence the encoding process of the student. In this way, the purpose of any particular strategy of learning may be to affect the way in which the student selects, organizes and acquires or integrates new knowledge. An effective teaching includes the means through the students could learn, remember, think and motivate themselves (Weinstein, Mayer, 1983)

All these problems, previously exposed, have found solutions both in the specialized literature, but especially in practice, being proposed a multitude of strategic solutions to improve the reading and comprehension techniques, as illustrated by the figures below (1 and 2).



Figure no 1



Figure no 2

Source: Mr. Roy's Grasso Tech Resource Site. Source: TeachThought - We grow teachers  
<https://sites.google.com/a/cths.org/mr-roy-s-grasso-tech-r> <https://www.teachthought.com/literacy/25-reading-resource-site/reading-strategies-strategies-that-work-in-every-content-area/>

During the reading that improves comprehension, a multitude of reading strategies involving mental actions are applied. These are also defined by teachers, part of the deliberate efforts for understanding and remembering the read content. They also help readers overcoming the problems in text comprehension and compensate for weak textual knowledge. Every strategy should be easy to implement and keep the learners engaged in the learning to read process.

According to Bent Flyvbjerg (2006) "in a teaching situation, well chosen case studies can help the student achieve competence, while context-independent facts and rules will bring the student just to the beginner's level".

### **3. Marketing research**

#### **3.1 Research methodology and context**

The chosen investigation method was the marketing experiment one. For this approach, the following resources involved:

- 3 teachers

- 3 gymnasiums

- 18 groups (6 groups of 5th/6th graders and 7th graders) - 9 experimental groups, 9 control groups. 6 groups (3 experimental, 3 control groups) for each used method.

Timing: 3 months (April to May 2019)

Research scope: Experiments used in order to identify methods of improving students' reading appetite and comprehension

Main research objectives:

- identifying the causal relationship between the teaching method (modern versus traditional) and the acknowledgement level of the students

Secondary Research objectives:

- evaluating the degree to which modern methods of teaching influence students' capacity of understanding literary texts;

- evaluating the degree to which Romanian language teachers manage to meet the proposed educational objectives

- evaluating the degree to which teachers manage to meet the educational curricula objectives;

Research context:

The current educational curricula dynamic highlights a continuously high number of case studies, which could become the reasoning for thorough studies, integrated in the students training system (Cerghit, 2006).

Considering the Romanian literature and language classes in the gymnasium, literature could be placed as under-privileged, due to having only one third of the total of hours dedicated to studying this subject, which is why developing and stimulating students' creativity and their interest in using a literary artistic language could be considered a difficult, but not impossible process, having a basis of the theoretical robust foundations that respect the characteristics of each individual student (Parfene, 1980). Despite this possible impediment, a devoted teacher is able to harness the few dedicated classes to work up an interest (where there is none) or to develop the interest for reading, and even to advance the basic reading process to create something new with their students, even innovative, converting them to readers that possess critical thinking and perspective (Secieru, 2004, Parfene, 1999). All these aspects become possible only after each student manages to achieve a literary-artistic speech and possesses a large compendium of literary terminology.

Among the utilized methods that improve the communication and implicitly stimulate the development of literary-artistic language with gymnasium students, the following are to be mentioned: the cube method, the thinking hats method, the I know - I would like to know - I learnt method, the literary trial (Pavelescu 2010).

The case study can be used as a knowledge source, especially preferred for discovery tasks and as a practical method to applied tasks. Stake's research studies, cited by Cerghit (2006) show that: contextualists appreciate the value of case studies due to the fact that their

drafting requires additional attention to physical contexts, temporal and historical ones, as well as social, political, economical and aesthetic ones.

The case study elevates the knowledge, similar to “Miorita”, which can serve as a preparatory knowledge starting point, from particular to general, from acquiring some general conclusions, but also the reverse, as a basis of deductive knowledge from general to particular, to catalyzing an idea, a general manner of applying knowledge or acquired skills to new situations, for example learning new information about the history and civilization of the Romanian culture, such as: transhumance, relationships between sub-cultures, the spatial-temporal perception.

Ethnographic research is a qualitative method where researchers observe and/or interact with a study’s participants in their real-life environment. Ethnography was popularized anthropology, but is used across a wide range of social sciences. For the chosen subject, “Amintiri din copilărie” (Memories from my childhood), written by Ion Creanga, ethnographic research is the most relevant approach, due to the fact that it allows students to identify some elements still available in the Romanian country-side lifestyle. While this method has its flaws, such as observing and analyzing forgotten customs, these could be redeemed through the collaboration with other classes, where different activities were conducted, e.g.: during History classes, students attended different workshops that evoked Romanian peasants unpaid mandatory work required in feudal era.

### 3.2 Role play - experiment

The literary process is a active-participative method centered on the student, the only role of the teacher being to conduct the didactic activity from the shadow. The correspondent of the literary process in the marketing research technique is the role play combined with the brainstorming.

In the method of teaching literature, the literary process is a role play which has a general character and it is assuming an extreme positions debate: the prosecution and the defense, of some problematic issues met in the literature works. Being a modern method, it has both advantages and disadvantages. The student may be put into difficulty if this method was not used in the class, but if the student is familiar with the phases and the specialized specific terms, this may be quite an achievement.

This method was applied on terminal classes of the middle school, both on the classes where they studied “Baltagul” by Mihail Sadoveanu and on the reception of the message from “O scrisoare pierdută” by I.L. Caragiale. On the first class where we applied this method there were difficulties, as the students felt insecure and unusual with the terms: “your honor”, “the prosecution”, “the defense”, “counts”, used in such classes and they had stage fright when they were holding their opinions, situation in which they decided ad-hoc the realization of a directed literary process in order not to compromised the class. Thus, the teacher and the students have formulated together the questions brought to the prosecution and to the defense, after which the students would work on groups and prepare pleadings for a future meeting, and the judge would reach a verdict based on what he had heard.

Regarding the applying of tis method on the dramatic text by I.L. Caragiale, “O scrisoare pierdută”, the success was assured by the fact that the students knew the method and they were familiar with the terms and the conditions of realization, thus it was not necessary another prior class. When the teacher made sure the students know well the message of the text, the characters and everyone’s role, I challenged them to judge Zoe Trahanache, accusing her of: feminist movement promoting and the changing of the political decisions (woman involving in political life of that age). In order to avoid the subjectivity, the teacher prepared in prior 22 tickets such as: on one ticket was written “judge”, on another one was written “registrar”, on

other 10 tickets “the prosecution” and on the last 10 tickets “the defense”.

The students drew straws and so the class split as the organizing necessities in order to realize the literature work. The registrar was given a card with the counts (he supposed to present the counts in front of the class), each group was given a page of a flipchart in order to note their point of view/pleading pro or con. They were given 10 minutes to work, time for each group to sustain their opinion with arguments brought based on the entire text in front of them. After the time expired they nominated a lawyer who presented the group opinions regarding the incriminated character, opinions from the direct contact with the literary text. After completion of the presentation, the judge made a decision and dictated it to the registrar, who noted it in a voucher.

During the class dedicated to Zoe Trahanache trial the students were more active, more open, more implicated and more vehement arguing the opinions than the other situation, fact that determined the teacher to conclude that the students like to be creative, innovative and implicated in the didactic approach.

### **3.3 Case Study - experiment**

According to Silistraru (2011), the case study method represents a real or hypothetical problem, with representative value for a problematic situation, possible to solve by debating in a group. Practically, the case study applied as a teaching technique of the Romanian language, is circumscribed in the finding and implementation routes of approach for training to the real-life model, such as practical, social or productive actions. The application of this method ensures the learners are closer to real-life and the potential problems which he can be confronted with; it favors the development of mental capabilities for critical analysis to take decisions and to resolve the case promptly, it offers opportunities in the realization of the link between theory and practice; it cultivates the spirit of responsibility and accelerates the socio-moral maturity.

Referring to the rules governing this method, this particular case is considered, “Balada Miorita”. According to Opera (2009), for a situation to be able to be considered and analyzed like a case, it needs to fulfill certain conditions: it needs to be authentic and significant in relation to the prior objective; it needs to have instructive value in respect with the professional, scientific and ethical competences; it needs to have an exciting nature, motivating participants to solve it; it seeks active participation of all of the students in obtaining solutions.

The role of the professor in the case of using the case study method was to present the ballad “Miorita” - “case study”, to organize and to conduct the process to analyze the present situations (e.g., transhumance, interpersonal relations, human-animal relation, conflicts), to conduct with ability and competence the debates, to allay possible conflicts in the practical application of the cases.

The conduction of a case analysis requires the knowledge of the methodical model after which students are to work. The methodic model suggests the stages that lead to the adopting of the optimal decision for the presented case.

At the end of every contextual study the analysis and the evaluation of activities carried out, the work groups presented their results, they realized an exchange of information and opinions and they formulated conclusions.

The case study presents a big advantage by the fact that it closes the distance between students and the complex problems of practical problems, of situations similar to those they will face in everyday life (Petrovski, 2014). In this sense, analysis from multiple perspectives of some similar situations leads to useful and necessary lessons being learned. Thus, they created habits in: putting together an analysis, finding alternative solutions, adopting decisions and arguing them. In this hypostasis, the case study “Miorita” is used not for completing their

knowledge with new acquisitions (e.g., transhumance, the conflict are notions already known), but for creative valuation of some experiences already acquired (e.g., possible conflict resolution, understanding of the human nature) under new conditions and in new combinations imposed by the new problem.

### 3.4 Ethnographic study – experiment

“Once upon a time there was. Because if there wouldn’t be, it wouldn’t have been told”... This way started, invariably, all of the stories of the Romanian childhood. Childhood is culturally inspired by fairy tales, riddles, superstitions, subsequently rediscovered in different forms in national literature. In its essence, Smaranda Creangă - main character from “Amintiri din copilărie” - author I. Creanga, proves to be an important preserver of traditions, customs and rituals of the Romanian orthodox nation, as they were reflected in real life for the simple people from the Moldova region.

This situation makes possible a parallel between the traditions from “Amintiri din copilărie” and the places around the city where the school is located (Bacau).

If folklore represents all artistic, literary, musical and plastic creations, customs and traditions of a country or region, ethnographic research is one of the most used methods in its field research. Vulcanescu (1976) concluded that "The investigation (n.a. “Cercetarea etnografică”) was carried out, up to the twentieth century, in an empirical, accidental-subjective, oral way, without a prior theme, by improvised, amateur or fantasy researchers. Under the general impulse of the systematization of the scientific methodology, in the nineteenth century, the investigation began to become programmed, objective, carried out by small groups or research groups, which exercised a rigorous control of the results obtained on the basis of a previous topic and with auxiliary tools. of recording (questionnaires, video cameras etc.). In ethnography and, by extension, in literature, direct observation and interview “they complement each other and, through them, one can reach a good record of the folklore from a certain locality” (Birlea, 1969).

In this perspective, we have organized hours of field documentation, in the perimeter of the villages in the vicinity of the city of Bacau, to gather testimonies about the various customs and to record them considering elements of religion, superstitions, mysticism, literature.

The results of the ethnographic research are very valuable, but this is made difficult by the fact that these habits are no longer practiced and can no longer be observed on the spot, on their own ground, as they once were.

Fortunately, some of them could be observed in their current form, such as the reel, the goat or the little plough, and the rest were simulated - the corvée or the quilting bee - in educational projects that took place at the school where this research project was conducted. On the other hand, the photos that surprised some customs from Ion Creangă's native places, were taken during the shows / parade of folklore customs - occasioned by the winter holidays in the city where the students study (Bacău), being archived and discussed / taken into account in our project, only those that are related to the customs of this calendar time of the year.

Thus, the teacher found that the students liked from the beginning the idea of going on the field, with the camera and recorder in hand, to do different interviews and to understand better both Creangă's work, as well as our own traditions.

One first and essential observation was that the students involved in the project discovered that their ancestors always knew how to have fun, work, but also how to perpetuate spiritual habits and values, which today are admired by those from present, foreign. In the same time, they could also notice the fact that a number of habits ended up being forgotten.

#### 4. Main findings

A real challenge is the way in which a literary work reaches the child's soul. In this purpose, the teachers of the Romanian language and literature involved in the project used a number of modern methods, whose efficiency has been clearly demonstrated in relation to the traditional teaching-listening methods.

While the control groups were subjected to the classical teaching and learning methods, their responses to the pedagogical process were easily integrated into the general pattern presented in the first part of the research (eg, low interest in reading / learning, reduced applicability to daily life, lack of methods of analysis / interpretation of the text), the reaction to modern learning techniques was different.

The first method applied to the literary process (role play combined with brainstorming) proved to be a success and the result encouraged the teacher to use it during other classes. The biggest disadvantage of this method was that it requires a greater resource of time and the hours allocated to the study of each literary work do not always allow its successful application.

It has been proven to be a particularly applicable method for literature lessons in which it is thus possible to check students' creativity and spontaneity by conducting classes in which students have entered the skin of a judge, defenders and, implicitly, those who accuse.

The second method was that of the literary survey / ethnographic study, carried out directly, on the field, where it was demonstrated, using the modern and classic methods of investigation, that the students showed availability and increased interest in learning and discovering the fundamental patterns of Romanian civilization and folklore. From the beginning, the students liked the idea of going on the field, with the video camera and recorder in hand, to do different interviews and to better understand both Creangă's work and his own traditions.

In the third experimental situation, the case study method mediates a direct confrontation with a real life situation. Such concrete problem cases, taken as typical representative and significant examples for certain more general working conditions, may be subjected to careful analysis in all aspects until the students reach a complex understanding of the given problem and its solution, by making an optimal decision. The "case" chosen deliberately from a multitude of realities, condenses into itself the essential and thus its understanding makes it possible to a deeper comprehension of that reality, as well as of the similar cases of a category or class of objects or phenomena. The comparison of several cases between them (Miorita, Bubico, Toma Alimos, etc.) subsequently have led to a qualitative study, at a higher level.

The level of knowledge and involvement of the students who participated in the marketing experiments through the 3 methods (ethnographic study, case study and role play) is significantly higher than those who were exposed to the classical teaching style, that students being now better trained on: Supporting analysis and drawing inferences from a text by citing various evidences; Determining the meanings of words and phrases, including figurative, connotative, and technical meanings; Combining and integrating information from different sources (like charts and articles); Describing how a plot of a story spreads out in episodes; Contrasting and comparing different forms of text (like poetry and drama) that cover the same subject; Determining a number of central ideas in a text and explain their evolution; Comparing and contrasting audio and multimedia exposition and interpretation of a text; Analyzing the reasoning of authors and the proofs supporting their claims; Comparing fictional and nonfictional facts from the same time period; Analyzing the components of poetry, drama, and multimedia presentations; Demonstrating mastering of the conventions of standard Romanian grammar and usage during writing and speaking; Analyzing the use of comparisons, analogies, or categories inside a given text; Analyzing the rhetorical purpose of different sentences and

the structure of a paragraph; Analyzing texts based on the same topic that present conflicting information; Contrast classic and modern stories having similar themes.

The way in which these aspects were established was the classic knowledge level verification, oral / written test, the final grade being an average of 2 smaller points in control groups, on the scale from 1-10.

Each teacher is responsible for finding ways to stimulate and develop the creativity of his students, which entails the use of a literary-artistic language, because depending on the availability of adaptation, play and involvement of the teacher can be achieved in a few hours. course in which students overcome any traceability and do not feel constrained by the barriers of a school program, which can be covered in a different approach than the traditional one.

## 5. Conclusions

All three categories of teaching methods implicated in the marketing experiments carried out were revealed the fact that, without a doubt, using modern teaching methods substantially improved the process of acquisition of the information and the degree of interest for the studied school material. Adolescent struggling readers need to work on both basic reading skills and the skill that underlie deep comprehension: academic language, perspective-taking and critical reading. Peer talk about text can develop these three reading skills. Texts need to engage students with issues in their lives and in the world.

## 6. Study limitations

This study doesn't offer a complete solution to any marketing issue as there are many dominant variables between research conclusions and pupils/children response. Marketing research is not an exact science though it uses the techniques of science. Thus, the results and conclusions drawn upon by using marketing research are not very accurate. The results aren't a complete solution to any teaching issue as there are many dominant variables between research conclusions and children/pupils response. To conduct marketing research systematically is a luxury. On real basis, authors need money for research design, data collection, data analysis, interpretation, and report preparation. Also, to be noted when human being is involved, a completely bias-free response or result is not possible, especially when teaching involved.

The contribution on research project depends not only on quality and reliability alone, but also the proper use of information. Many times, such marketing research reports remain just a formality for schools management. Recommendations are neither considered seriously nor implemented fully.

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## **Funding scientific research in Romanian economic universities**

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### **Abstract**

Knowledge has always been a never-ending growth space where the more we discover, the more there is to be discovered. Within this framework, research has played an enormous role as an organized and clearly determined space that generated fundamental change for everyone involved. The increasing number of discoveries has happened simultaneously with the increasing number of research areas that awake interest. But since the same research funds were insufficient in covering the new research topics, various funding alternatives have emerged in the recent years. And the biggest question that emerges relates to researchers' familiarity with all the available opportunities in terms of research funding. In this context, the current research was developed, aiming to tackle with Romanian researchers' awareness, interest and future plan when referring to winning a research grant. Major findings of the current research show that, despite extensive general research experience, Romanian researchers lack experience in applying for international grants and, to some extent, they even lack awareness about the available calls they could apply to. This finding opens the door for a shift in communication strategy about these grants, and also a new perspective in terms of institution's research strategy.

**Keywords:** scientific research, international funding, economic universities.

**JEL classification:** I23, M31.

### **1. Introduction**

Scientific research has been long known as the engine for societal development in every area of life and for a long period of time it was the only path for generating evolution. Within this longstanding tradition of scientific research, the increasing specialization of university centers has also led to research areas expansion towards areas like Economics. This expansion has also led to an increase in funding options for scientific research projects, in all areas, including Economics. Even though external funding options are becoming more popular, there is little to no research in how the academics are perceiving these funding sources and, more importantly, how they intend to act about them when thinking about their own research interests. In this context, the present paper aims to fill the gap in the literature on scientific research projects and their external funding options in economic universities. After a brief evaluation of previous papers on similar topics, a direct research among academics is presented and discussed.

## 2. Scientific research

A country's progress has been a purpose of multiple human endeavors, out of which scientific research stands out as a way of determining evolution that is important to policymakers (Kovac, et al., 2018). Actually, previous studies have showed the positive effect of participation in R&D consortia compared to the performance of non-participants due to the complementarity or knowledge spillovers among participants (Nishimura, Okamuro, 2018). Given the high impact of any type of research that is well acknowledged by virtually everyone, policymakers have developed multiple ways of funding these initiatives and had to decide within limited country's budgets where and how to allocate the money (Kovac, et al., 2018).

Laying the foundation of what scientific research really is, Koshkina and Sharamko (2015) defined it as the production of scientific knowledge (mainly of fundamental character), which is characterized by self-selection of the research direction based on internal criteria. Therefore, scientific research aims to expand mostly theoretical fundamentals, that later on will translate into applicable theories and concepts. One common concern for scientific research and people engaged in this area is lack of funding or sporadic funding (Kovac, et al., 2018), which might be also determined by shortage in information on available funding options or shortage in interest of taking the necessary effort to attract outside funding for own research interests. Additionally, it is inherently difficult to provide incentives for innovative activity using formal contracts and rules (Nishimura, Okamuro, 2018) and yet research grants calls are the most popular funding alternative in the area of scientific research.

Still, the current development of scientific research has brought within this area the concept of 'project management', centered on applying organization theory and organizational behavior approaches to the project phenomena (Jacobsson, et al., 2016). In the context of project management when it comes to externally funded scientific research projects, the need for monitoring within scientific research projects has become essential for restraining moral hazard and discouraging opportunistic behavior among project participants, especially in the absence of incentive contracts (Nishimura, Okamuro, 2018).

One leading source for scientific research projects consists of university and their staff who frequently face research related performance evaluation in order to get ahead in their academic career. For example, Corsi, et al. (2019) have discovered substantial variability in the chances of qualifying for an academic position, depending on candidates' main fields, topics and methods of research. Moreover, the same authors have discovered that a candidate's chances to qualify as an acceptable associate or full professor under the Italian ASN procedure depend also on his/her research interests (Corsi, et al., 2019). At the university level, heightened competition has placed universities under considerable pressure to gain and attract continuous external investment in order to fund research center, the leading strategy in sustaining research excellence (Morrisson, Szumilo, 2019).

All in all, scientific research creates the premise of growth for every level: individual (academics and research results users and recipients), community (universities, research consortia and industries) and nations. But in order to achieve these positive outcomes, responsibility also falls on academics to develop sound research projects for attracting external funding. Next, our research in an economic university in a Romania will evaluate academics perception on this topic.

### **3. Romanian economic academic researchers' interest and experience in attracting external funding for research project**

#### **3.1. Research methodology**

##### **3.1.1. Scope**

The present study is focused on Romanian economic academic researchers' interest and experience in attracting external funding for research project, as this is one of the major concerns of ex-communist countries: lack of confidence and experience in accessing European funds.

##### **3.1.2. Objectives**

This research is split in three sections, as presented below, each section having a series of secondary objectives:

- A. Degree of involvement in the university research activity
  - a. The current researcher status
  - b. The scope of the academic research activity
  - c. The current level of involvement in university research activity
  - d. Number of projects conducted as manager or research team member
  - e. Type of involvement in the university research activity
- B. Funding sources for academic research activity – level of awareness and application
  - a. Known sources of funding for research projects
  - b. Sources of non-reimbursable funding for which at least one project application has been submitted
  - c. Funding sources accessed
  - d. The research topics for which the funding was obtained
  - e. Reasons why no grant applications have been submitted so far
- C. Future approaches of the research activity
  - a. Future scopes for academic research activity
  - b. Funding sources for future research activities

##### **3.1.3. Source of information**

The researched community is represented by the employees and collaborators of one of the biggest Romanian economic universities: the Bucharest University of Economic Studies (ASE). The observation unit coincides with the survey unit and is represented by the person who carried out or intends to carry out research activities as an ASE employee or collaborator.

##### **3.1.4. Data collection**

Research method: online survey, designed through the Lime Survey platform. The link to the questionnaire was distributed on the institution's intranet, thus achieving a balance between the percentage of those who had research concerns so far and those who have not yet carried out such activities but intends to do so.

The questionnaire had 27 questions, most of them with standardized answers, so as not to overload the respondent. There are, however, a few open-ended questions, just to give the research participant the opportunity to provide as much relevant information as possible. The questionnaire includes both questions directly related to the purpose of this survey, as well as other questions derived from the need to know as much as possible about the researchers' behavior.

The data collection process was carried out by the specialists of the project team, who carried out the following specific activities of a direct quantitative research: questionnaire

programming, data collection, interview verification, export of the database in Excel / SPSS format. The data was collected in the Fall of 2019.

**Sample size:** Being a representative research (both in terms of quantity and population structure), with a maxim margin of error  $\pm 5\%$ , a confidence level of 95% and an 80% incidence level within the whole community (the share of permanent and auxiliary teachers involved in research activities in 2018), the total sample is 246 people. Correcting this value based on the total size of the research community (total of permanent and auxiliary teachers from ASE in 2018,  $N = 1175$ ), we obtain a final sample size of 204 persons.

The **sample structure** was determined using the proportionate stratified sampling method, depending on what faculty the respondents belonged to and the purpose for which the research activity is carried out within the institution. For the faculty criterion, the weight of each faculty's teaching staff within the university total academic employees is taken into account. For the criterion regarding the purpose of the research activity, 60% of the research will be considered for grants and 40% of the research for scientific works (articles, conferences, doctoral works, etc.).

### 3.2. Research results

The analysis will be presented accordingly to the research objectives, going from the more general perspective on research involvement to the more specific funding access intentions and success rate.

#### 3.2.1. The current researcher status

Before going into details about research objectives, funding sources and future research topics, the current status of the participants was examined. Although we had as a selection criterion that everyone had to have experience in academic research, it is important to know if participants are still involved in research activities.

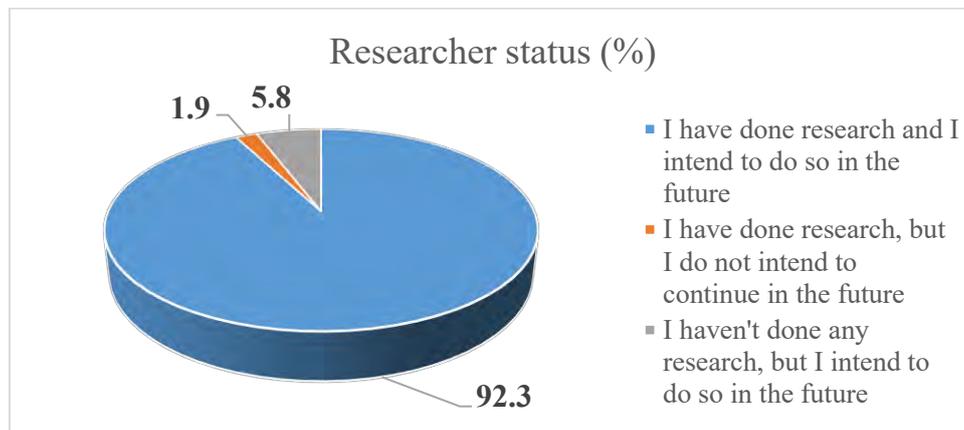
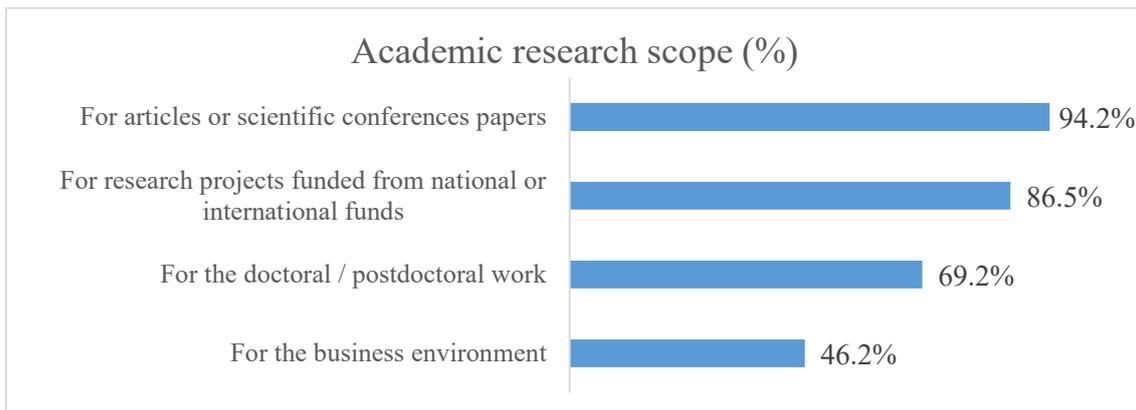


Figure 1. Research status for economic academic researchers (%)

As it can be seen in Figure 1, most participants (over 90%) have done research until now and intend to do so in the future. There is a small percentage that intends to quit this activity in the future, and the university management should find out what causes this decision, in order to diminish their spread in the researchers' community.

#### 3.2.2. The scope of the academic research activity

The present paper's purpose is to evaluate the research activity focused on funding projects, thus it is important to see what is its place among all the academic research scopes (see Figure 2).

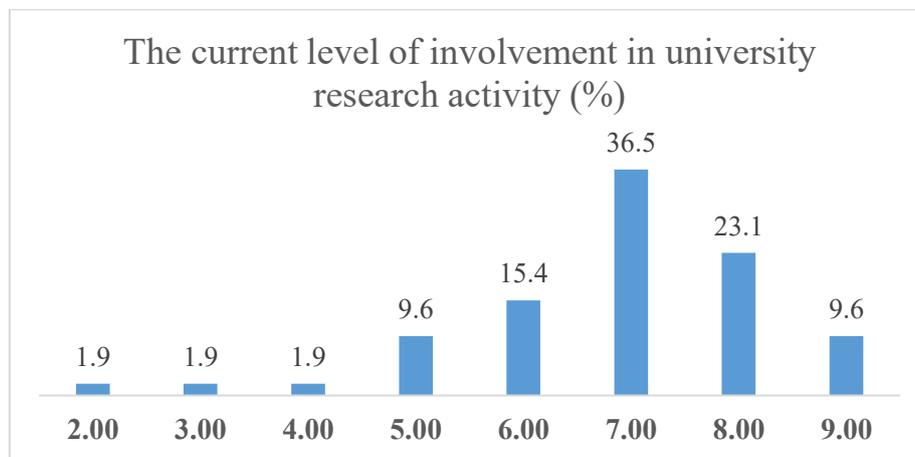


*Figure 2. The scope of economic academic research (%)*

We can observe that most of the times, when academic research is done, the scope is to write articles or scientific papers for conference attendance. Not far from this scope comes the research for funding projects, with a high percentage of 86.5%, thus we can draw the conclusion that there is a direct and strong association between doing research and getting the funds for it.

### **3.2.3. The current level of involvement in university research activity**

This objective is directly correlated to the intensity of the research activity within the university, as it's not all sufficient to be part of the research world, it is also important the degree of involvement and effort put into writing and implementing a research project.



*Figure 3. The current level of involvement in university research activity (%)*

As it can be seen in Figure 3, most participants evaluated their own involvement as being a 7, on a scale from 1 to 10. None of the participants mentioned the extremes (1 or 10). The average value of 6.85 show a score slightly above average, thus it can be improved, with the help of a coherent academic research strategy and a management policy that encourages university's employees to get involved more in the research activities.

### **3.2.4. Number of projects conducted as manager or research team member**

This quantitative objective shows us how experienced are the participants in managing and/or implementing a research project.

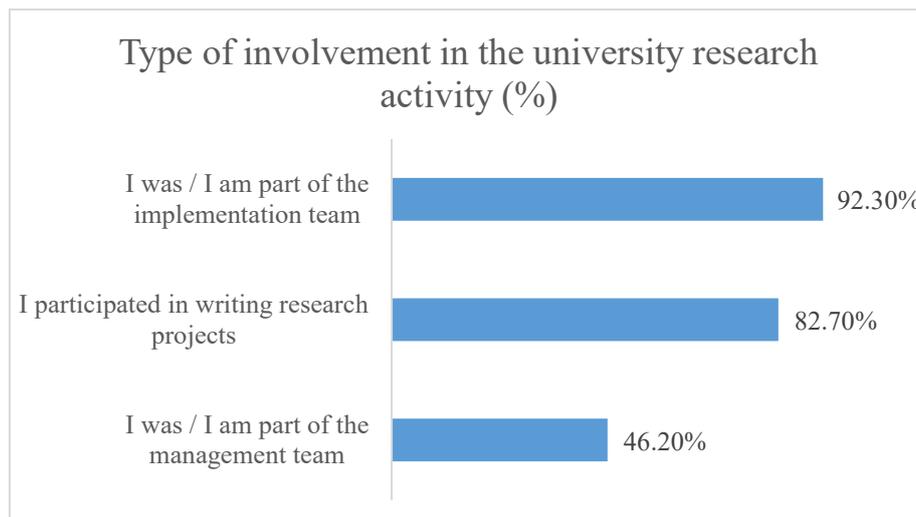
**Table 1. Number of projects conducted as manager or research team member (%)**

	Number of projects				
	0	1-2	3-4	5-6	> 6
<b>I was / am project manager</b>	65.4	25	5.8	3.8	0
<b>I was / am a member of the project team</b>	7.7	46.2	15.4	7.7	23.1

From Table 1 we can see the lack of experience in managing a project, as two thirds of participants have not held the position of manager and, out of those who have, most of them have the experience of 1 or 2 projects. When it comes to being a member in the implementation team, the situation changes, and we see that almost half of the respondents have had at least the experience of 1 or 2 research projects.

### 3.2.5. Type of involvement in the university research activity

The above-mentioned experience is also visible when we ask people to talk about the manner in which they have been involved in the research projects from their university. As it can be seen in Figure 4, there are at least three ways of involvement: we have one that is placed before the research's beginning, where we have a team effort of writing the project proposal, and two way of involvement during the research period: as part of the managerial or the implementation teams.

**Figure 4. Type of involvement in the university research activity (%)**

The percentage of people declaring to be part of the managerial team here is higher (46.2%) than what we have seen in the previous objective's results (34.6%), but this is because in the managerial team we have more than just the project manager (there is the financial responsible, the communication manager, the manager's assistant, etc.).

### 3.2.6. Known sources of funding for research projects; Sources of non-reimbursable funding for which at least one project application has been submitted; Funding sources accessed

This section presents the results of 3 research objectives, making a parallel between awareness, application and success rates for research funds. We will go from known funds, to those in which participants applied at least once and finish with the funding option from which they had a positive evaluation, obtaining the money for their research.

**Table 2. Sources of funding known, applied to and accessed (%)**

<b>Funding sources</b>	<b>Known</b>	<b>Applied to</b>	<b>Accessed</b>
Operational Program Competitiveness (POC)	<b>69.2%</b>	9.6%	5.8%
Horizon 2020 (H2020)	57.7%	3.8%	1.9%
UEFISCDI P2 - Increasing the competitiveness of the Romanian economy through RDI	53.8%	13.5%	<b>9.6%</b>
Projects with the economic-social environment	46.2%	7.7%	<b>9.6%</b>
UEFISCDI P1 - Development of the national R&D system	38.5%	<b>15.4%</b>	7.7%
UEFISCDI EEA & Norway Grants	38.5%	5.8%	0%
UEFISCDI P4 - Fundamental and borderline research	32.7%	5.8%	3.8%
Institutional Development Fund (FDI)	30.8%	3.8%	5.8%
International projects	26.9%	5.8%	3.8%
UEFISCDI P3 - European and international cooperation	25.0%	1.9%	0%
Institutional development project - Excellence financing projects RDI	23.1%	1.9%	0%
Sector plan	13.5%	1.9%	3.8%
I don't know any of the funding sources listed	3.85%		
I have not so far submitted any application for funding as a manager		57.7%	
I have submitted, but I have not received any funding so far			9.6%

As it can be seen in Table 2, the highest level of awareness (69.2%) belongs to the Operational Competitiveness Program (POC), which is a program financed by European funds, through the Romanian Ministry of European Funds. POC supports investments that respond to the needs and challenges related to the low level of economic competitiveness, in research, development and innovation (RDI) and in Information and Communication Technology (ICT).

The second most known program is Horizon 2020 (or H2020, as it's called in the branch). Horizon 2020 is the financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness. This is the biggest EU Research and Innovation program ever, with nearly €80 billion of funding available over 7 years, from 2014 to 2020 (European Commission, 2019)

The podium is completed with a funding source from UEFISCDI, concerning the increase of competitiveness for Romanian economy, through research, development and innovation. The UEFISCDI abbreviation comes from the Executive Unit for Financing Higher Education, Research, Development and Innovation, which is a public institution with legal personality, subordinated to the Ministry of National Education (MEN).

When it comes to applying to this funding sources, despite the fact that it is only in the 5<sup>th</sup> place in the awareness hierarchy, the 'Development of the national R&D system' program from UEFISCDI has the highest level of application: 15.4% of all respondents have tried at least once to get funding from this source.

An important result to highlight here is the huge portion of academic researchers that haven't tried up until now to apply as a project manager (57.7%), and we will see in section 3.2.8 what were the reasons behind this decision. Out of the remaining 42.3% participants that have applied to the above-mentioned funding sources, one quarter of them didn't get any funding until now. The most successful applications were for projects with the economic-social environment and UEFISCDI's 'Increasing the competitiveness of the Romanian economy through RDI' program.

### **3.2.7. The research topics for which the funding was obtained**

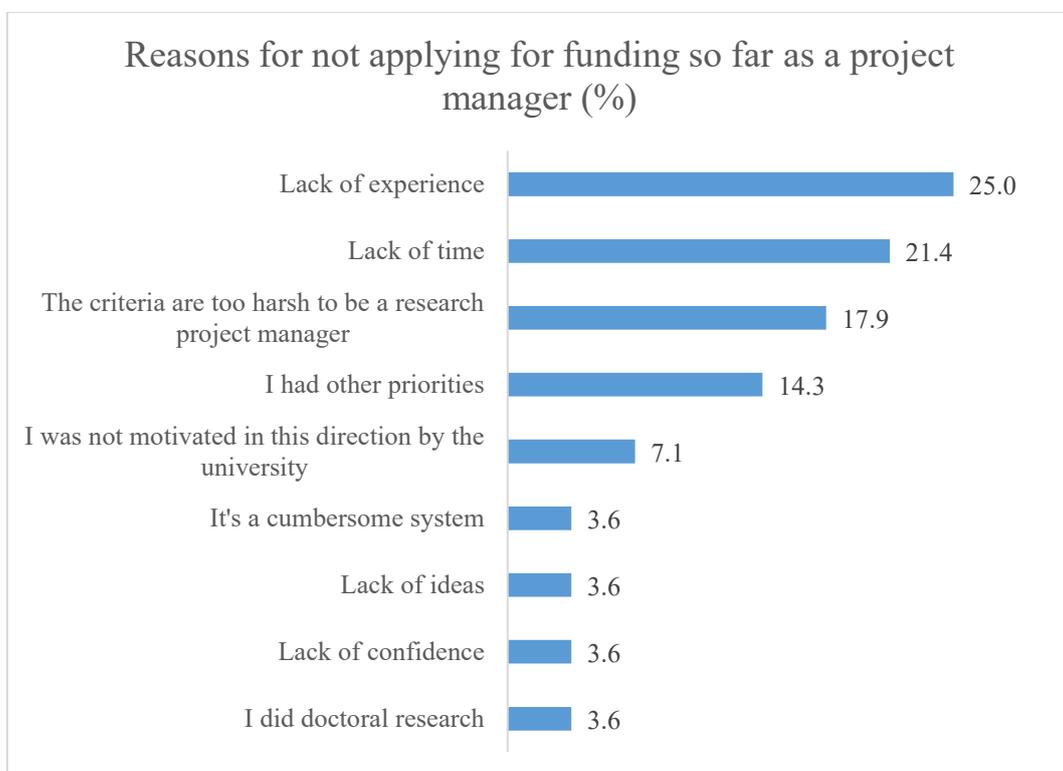
It is important to know what were the research topics that led to a successful application, and from Table 3 we can see that they are very heterogeneous. Participants gave answers that go from very general topics, such as marketing or agriculture, to very specific ones, such as waste management of electrical and electronic equipment.

**Table 3. Funded research topics**

<b>Funded research topics</b>
Agriculture
Entrepreneurship, the student entrepreneurial society
Insurance, corporate finance
SME marketing communication
Increasing performance and reducing university dropout
Development of entrepreneurial capacity
Risk and productivity assessment
Fiscal policy
Innovation, neuromarketing, eco-marketing
IT
University management
Waste management of electrical and electronic equipment, risk management in the context of the digital economy, Green economy
Marketing
Social responsibility - waste management
Strategy for tourism development and promotion of Dâmbovița county
Emerging technologies in marketing - knowledge transfer
Violence in the social field - knowledge transfer in public affairs

### 3.2.8. Reasons why no grant applications have been submitted so far

As mentioned in section 3.2.6, it is important to understand the barriers behind the low percentages of academic researchers applying for projects funding (see Figure 5).



**Figure 5. Reasons for not applying for funding so far as a project manager (%)**

Most of the times we see that the barriers are actually perceptions that it cannot be done, due to lack of experience (25%) or time (21.4%). There is also the self-evaluation that every researcher does in order to see if they qualify for project manager and the criteria aren't fitting some of them (17.9%). Other external barriers refer to the university's lack of support for its employees in applying for funding programs or the difficult systems that have to be used for such activities.

### 3.2.9. Future scopes for academic research activity

This objective shows us that the situation will not differ much in the future, as most academic researchers will still focus on articles and conference papers (Figure 6), with a higher percentage than before (95.9% compared to 94.2%). The worrying situation is related to doing research in order to apply to different funding programs, where we see an important drop from what we had until now (86.5%, Figure 2) to the self-estimations made for future research plans (69.4%, Figure 6).

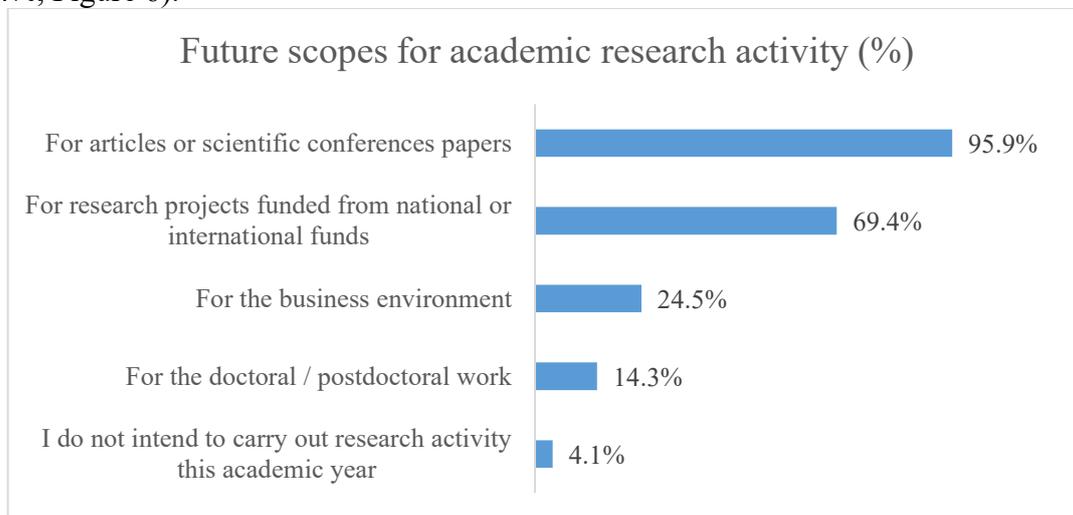
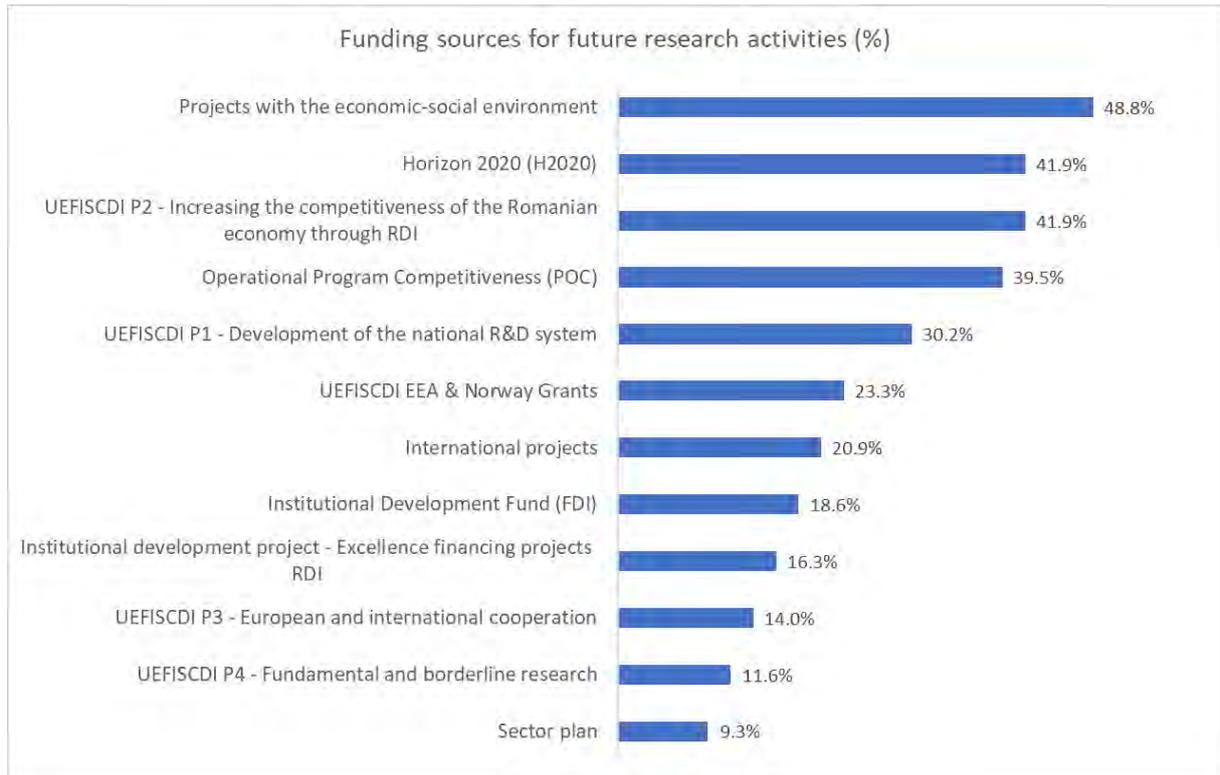


Figure 6. Future scopes for academic research activity (%)

### 3.2.10. Funding sources for future research activities

When it comes to funding future research projects, as seen in Figure 7, participants tend to focus more on projects for the economic-social environment (48.8%), as the criteria here are easier to fulfill. In second and third places we see three funding programs that actually have the highest awareness level: H2020 (41.9%), UEFISCDI's 'Increasing the competitiveness of the Romanian economy through RDI' (41.9%) and POC (39.5%).



*Figure 7. Funding sources for future activities (%)*

#### 4. Conclusions, managerial implications and future researches

This study uncovers a gap between funding opportunities and applications number, based on lack of awareness for several funding programs, but also lack of experience in accessing European money for research.

Although the Romanian economic academic employees have experience in doing research, this is not sufficient for high success rates in accessing national and European funds. We see some barriers that prevent them from increasing this rate, such as lack of confidence and lack of support from the university. These issues can be tackled with in an institutional research strategy that offers clear and transparent information about opened funding programs, promotes collaborative work and motivates academic employees to get more involved in research activities.

Having conducted the study only in one university may have limited the representativeness of our research, and for this reason we recommend that future researches extend the sample to more universities. Moreover, in order to better capture the usefulness of funding programs, the participants have to be from different scientific areas, not just Economics.

#### Acknowledgments

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## **The attitude of Romanian economic academic researchers towards the Horizon 2020 funding grants**

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### **Abstract**

Academic research and, more precisely, its funding have been a major concern for both institutions and policymakers. And one way to tackle with the shortage of funds compared to the huge diversity of research plans, various organisms have developed open competition grants like Horizon 2020 that have brought the support so needed for academic research. But the successfulness of such an initiative depends on academics and their willingness to apply and manage research projects funded from Horizon 2020 budget. Therefore, a direct research was conducted among the researchers from the Bucharest University of Economic Studies to determine their awareness about various funding options available for them, their experience when approaching a Horizon 2020 research grant and their future intentions in terms of research. The main finding of this research approach relates to Horizon 2020 grants low attractiveness among Romanian researchers determined by researchers' lack of experience, self-confidence and institutional management support. This also shows that there is still room for improvement and growth in terms of knowledge, awareness and courage to obtain a Horizon 2020 grant that can be beneficial for researchers, universities, industries, countries and society as a whole.

**Keywords:** scientific research, international funding, economic universities.

**JEL classification:** I23, M31.

### **1. Introduction**

Since the beginning of knowledge development and its structuring under comprehensive courses and educational institutions, research has always been the engine leading world's expansion and society's development. Beyond the increasing interest in expanding the limits of what the world knows, there is also a trend related to bringing forces, communities and people together to achieve development goals in a faster and more sustainable way. Within this framework, the Horizon 2020 emerged as the biggest European Union Research and Innovation program with €80 billion of funding available for seven years (2014-2020) (European Commission, 2019a). Focusing on the Horizon 2020 program as one major pillar for attracting funding in the academic research, the aim of this paper is to evaluate Romanian academics' perception and intention towards developing relevant research projects approaches in the Economics field. Upon establishing the current context of the field, a direct research was used to discover academics' attitude towards Horizon 2020 funding grants.

## 2. Literature review

Academic research is a major part of a university's mission since traditionally educational institutions have been one of the biggest providers of discoveries through research. Therefore, academics have been permanently pushed towards embracing a research challenge. The more interesting the research topic, the better for the authors in question and for their home universities, as a consequence. For example, Corsi, et al. (2019) proved that economists working on less popular research fields and/or with heterodox methods are less likely to qualify for top-tier academic positions, independently of their bibliometric indicators. Romanian academics research initiative is an even more interesting topic to approach since Romania is included in the group of Modest innovators with an innovation system's performance level below 50% of the EU average, even though after a substantial decrease for 4 years, 2015-2017 has brought a small, but steady increase (European Commission, 2019b).

Therefore, in an era of research expansion, external funding options are gaining more power and attractiveness, together with more popularity among researchers aiming to do profound and sustainable research, while evolving on the academic ladder. Moreover, research projects within different EU programs give an opportunity to expand knowledge and best practices transfer between members of project consortium (Yatskiv, et al., 2017). This becomes even more relevant, as European Union (EU) new member states (NMS) are lagging behind the western part of Europe in research and innovation (Luby, Lubyova, 2016). In the case of Romania, with a level of 0.4%, it had the lowest national budget for R&D of all CEE countries (and European Union) (Folea, 2017).

And this is where Horizon 2020 steps in as it aims to produce world-class science, remove barriers to innovation and make it easier for the public and private sectors to work together in delivering innovation (Folea, 2017). The same idea is also confirmed by Luby & Lubyova (2016) who argue that, given that R&D intensity in the EU new member states (except for Slovenia and Estonia) lags behind the EU average (2.03% in 2011), Horizon 2020 funding is a unique opportunity to advance the position of these states in research and innovation. As for Romania's involvement in Horizon 2020 projects, although it had a high number of successful European research projects, Romania attracted only 7.5% of the total EU funding attracted by CEE countries in Horizon 2020 in 2014-June 2017 (Folea, 2017).

Still, there are a few success enhancing factors to be considered when approaching Horizon 2020 research grants: a) having an excellent scientific idea; and b) having a thorough understanding of the evaluation process (McCarthy, 2017). Additionally, auxiliary factors that can help in bridging the divide between new and old EU member states in terms of European funding include, for example, effective information systems, granting the preparation of Horizon 2020 projects, and higher participation of doctoral students in Horizon 2020 projects (Luby, Lubyova, 2016).

Taking into consideration the major contribution of research in academic life, on a small scale, and in society's evolution, on a large scale, bringing the right funding options within this framework is of a major use. Since Horizon 2020 is a solid opportunity to finance all research, discovering academics' attitude towards this funding source can lead the way to increasing the participation and success rate of Romanian research projects within the Horizon 2020 framework. In order to uncover this, a research was conducted and analyzed as it follows.

## 3. Romanian economic academic researchers' interest and capacity to access Horizon 2020 funding grants

### 3.1. Research methodology

#### 3.1.1. Scope

The present study is focusing on Romanian economic academic researchers' interest and capacity to access Horizon 2020 (H2020) funding grants, as this is the biggest EU Research and Innovation program ever.

### **3.1.2. Objectives**

The study goes from a broader perspective on funding sources, in order to identify H2020's place, to a more specific analysis focused only of this program's attractiveness for Romanian academic researchers, as it can be seen from the following objectives' structure:

- A. Funding sources for academic research activity
  - a. Level of awareness for existing funding sources of research
  - b. Application and success rate within these programs
- B. Knowledge and actions towards Horizon 2020
  - a. Level of familiarity with H2020 program
  - b. Intensity of the application process for H2020
  - c. H2020 subprograms with the highest rate of application
- C. Research interests for Romanian economic academic researchers
  - a. Topics of interest for the Romanian economic academic researchers
  - b. The research topics for which the funding was obtained
  - c. H2020 topics with interest for Romanian economic academic researchers
  - d. Future research priorities in terms of funding programs

### **3.1.3. Source of information**

Information has been gathered directly from the source: employees and collaborators of one of the biggest Romanian economic universities, Bucharest University of Economic Studies (ASE). The research unit is represented by the person who carried out or intends to carry out research activities as an ASE employee or collaborator and knows about the H2020 program.

### **3.1.4. Data collection**

The data was collected through an online survey in the Fall of 2019, using Lime Survey platform for designing, implementing and disseminating the questionnaire. The link to the questionnaire was sent to respondents within the intranet of ASE.

The sample size was determined with the condition of having a representative study, with a maximum margin of error of +/-5%, a confidence level of 95% and an 80% incidence level within the whole community (the share of permanent and auxiliary teachers involved in research activities in 2018). These values led to a total of 246 respondents needed. However, having a small researched collectivity allowed us to do a correction in the sample size, using  $N=1175$  (total researchers from ASE) and reaching a final sample size of 204 persons.

In order to determine de sample structure, we have used the proportionate stratified sampling method, having as criteria which faculty the respondent belongs to and the scope of his/her research activity.

## **3.2. Research results**

This part will be structured accordingly to the research objectives, thus presenting the information from the general perspective on research funds opportunities to the specific analysis on perception and actions taken towards H2020 funding.

### **3.2.1. Level of awareness for existing funding sources of research**

It is important to evaluate the H2020 program not just by itself, but also in comparison with other funding opportunities, thus participants have been asked to first indicate which

funding sources they know, from a pre-established list (Table 1). This list has been previously identified and tested in a qualitative research.

**Table 1. Known sources of research funding (%)**

<b>Funding sources</b>	<b>Known</b>
Operational Program Competitiveness (POC)	<b>69.2%</b>
Horizon 2020 (H2020)	57.7%
UEFISCDI P2 - Increasing the competitiveness of the Romanian economy through RDI	53.8%
Projects with the economic-social environment	46.2%
UEFISCDI P1 - Development of the national R&D system	38.5%
UEFISCDI EEA & Norway Grants	38.5%
UEFISCDI P4 - Fundamental and borderline research	32.7%
Institutional Development Fund (FDI)	30.8%
International projects	26.9%
UEFISCDI P3 - European and international cooperation	25.0%
Institutional development project - Excellence financing projects RDI	23.1%
Sector plan	13.5%
I don't know any of the funding sources listed	3.85%

Horizon 2020 comes second (with 57.7%) in the awareness hierarchy, after a much more promoted program in Romania – Operational Program Competitiveness (POC), known by 69.2% of the respondents. POC is a program financed by European funds, through the Romanian Ministry of European Funds. POC supports investments that respond to the needs and challenges related to the low level of economic competitiveness, in research, development and innovation (RDI) and in Information and Communication Technology (ICT). On the third place (53,8%), we find an UEFISCDI program aimed at increasing the Romanian economy competitiveness through research, development and innovation. The UEFISCDI abbreviation comes from the Executive Unit for Financing Higher Education, Research, Development and Innovation, which is a public institution with legal personality, subordinated to the Ministry of National Education (MEN).

### **3.2.2. Application and success rate within these programs**

This section highlights the precarious situation of Romanian researchers' involvement in H2020 projects, compared to other funding programs, both in applications and success rate. As it can be seen in Table 2, H2020 is on the 8<sup>th</sup> place when it comes to applications, with 3.8% of respondents checking this program for their research grants. The percentage is halved when it comes to the success rate, where just 1.9% have obtained funding within this program.

**Table 2. Sources of funding applied to and accessed (%)**

<b>Funding sources</b>	<b>Applied to as a project manager</b>	<b>Accessed (percentage out of those 42.3% who applied to at least one program)</b>
UEFISCDI P1 - Development of the national R&D system	15.4%	7.7%
UEFISCDI P2 - Increasing the competitiveness of the Romanian economy through RDI	13.5%	9.6%
Operational Program Competitiveness (POC)	9.6%	5.8%
Projects with the economic-social environment	7.7%	9.6%
UEFISCDI EEA & Norway Grants	5.8%	0%
UEFISCDI P4 - Fundamental and borderline research	5.8%	3.8%
International projects	5.8%	3.8%
Horizon 2020 (H2020)	3.8%	1.9%
Institutional Development Fund (FDI)	3.8%	5.8%

UEFISCDI P3 - European and international cooperation	1.9%	0%
Institutional development project - Excellence financing projects RDI	1.9%	0%
Sector plan	1.9%	3.8%
I have not so far submitted any application for funding as a manager	57.7%	
I have submitted, but I have not received any funding so far		9.6%

### 3.2.3. Level of familiarity with H2020 program

We can see that just knowing about the existence of H2020 fund is not sufficient, thus we have asked participants to evaluate their own level of familiarity about this program (see Figure 1). Most participants gave a rate of 5 out of 10, which led to an average score of 4.7, on a scale from 1 to 10. This shows the instability felt by researchers when deciding to apply for H2020 grant funding, as there are not sure that they properly understand the system.

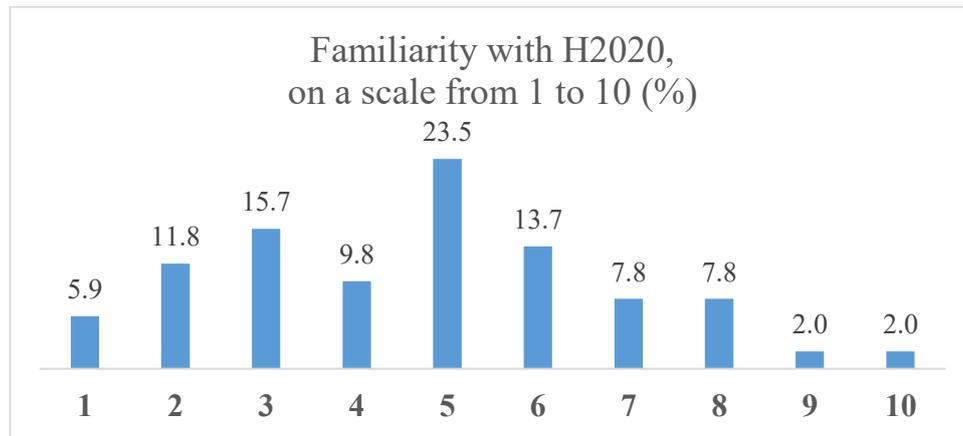


Figure 1. Familiarity with H2020, on a scale from 1 to 10 (%)

### 3.2.4. Intensity of the application process for H2020

The familiarity level has a big influence in the intensity of the application process, defined here in numbers of applications as a member of the research team.

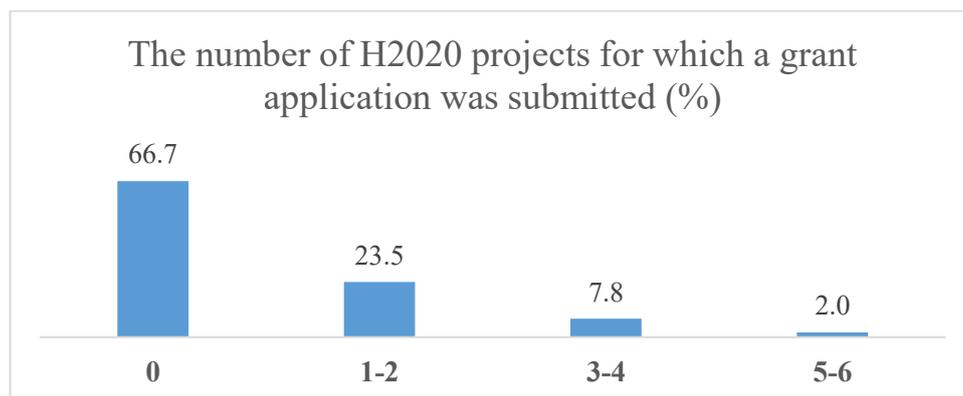


Figure 2. The number of H2020 projects for which a grant application was submitted (%)

A comment is needed here when speaking about the percentage of people declaring that they have applied at least once to H2020 grants: the question here relates not only to decisions taken as project manager, but also as team member. We all know that not all the time the manager is the one handling the submission application, thus in this section we have the total participants that have put in the work in writing and registering the grant proposal. As seen in

Figure 2, out of 33,3% participants that have applied at least once, two thirds of them have a low intensity of the application process, with the experience of 1 or 2 applications.

### 3.2.5. H2020 subprograms with the highest rate of application

The whole purpose of this research is to correlate the research interests of Romanian economic academic researchers with the subprograms and research topics offered by H2020 grants. In order to do that, we have first asked respondents to mention which are the subprograms for which they have already applied.

*Table 3. H2020 subprogram applied to as a member of the research team (%)*

<b>Subprograms of H2020</b>	<b>%</b>
Innovation in SMEs	7.7
Societal Challenge 1 (Health, demographic change and wellbeing)	7.7
Europe in a changing world - Inclusive, innovative and reflective societies	7.7
Excellent Science - European Research Council	3.8
Excellent Science - Future and Emerging Technologies	3.8
Excellent Science - Research Infrastructures, including e-Infrastructures	3.8
Leadership in Enabling and Industrial Technologies - Information and Communication Technologies	3.8
Leadership in Enabling and Industrial Technologies - Nanotechnologies, Advanced Materials, Biotechnology, and Advanced Manufacturing and Processing (NMBP)	1.9
Societal Challenge 2 (Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and the Bioeconomy)	1.9
Societal Challenge 5 (Climate Action, Environment, Resource Efficiency and Raw Materials)	1.9
Secure societies – Protecting freedom and security of Europe and its citizens	1.9
Spreading Excellence and Widening Participation	1.9
Excellent Science - Marie Skłodowska-Curie actions	0.0
Access to Risk Finance	0.0
Societal Challenge 3 (Secure, Clean and Efficient Energy)	0.0
Societal Challenge 4 (Smart, Green and Integrated Transport)	0.0
Science with and for Society	0.0

As we can see in Table 3, researchers from ASE were attracted to subprograms that tackle with innovation and social issues, the most frequent applications being for:

- **Innovation in SMEs**  
The objective of ‘Innovation in SMEs’ is to optimize the Research, Development & Innovation environment for SMEs, including through the establishment and facilitation of a range of support services, with the aim of strengthening the innovation capacity of SMEs and creating value on the market and/or into society, thus underpinning the Europe2020 strategy for smart, inclusive and sustainable growth (European Commission, 2019c).
- **Societal Challenge 1 (Health, demographic change and wellbeing)**  
This program aims to improve our understanding of the causes and mechanisms underlying health, healthy ageing and disease; improve our ability to monitor health and to prevent, detect, treat and manage disease; support older persons to remain active and healthy; and test and demonstrate new models and tools for health and care delivery (European Commission, 2019d)
- **Europe in a changing world - Inclusive, innovative and reflective societies**  
This program aims at fostering a greater understanding of Europe, by providing solutions and support inclusive, innovative and reflective European societies with an

innovative public sector in a context of unprecedented transformations and growing global interdependencies.

### 3.2.6. Topics of interest for the Romanian economic academic researchers

When asked about their own interests related to the research activities, participants have presented a variety of topics, as it can be seen in Table 4. In order to increase the application rate to H2020, all these topics have to be matched in the future with the above-mentioned subprograms, in order to give more sense to the application proposals and a higher involvement per total in the academic research activity.

One of the most frequent topics of interest seems to be sustainable development (34.1%). This topic, which is defined by the European Commission as the development that meets the needs of present generations without compromising the ability of future generations to meet their needs, is deeply rooted in the European project also (European Commission, 2019e). Thus, having interest in such a topic is very opportune for the future development of Romanian economic academic research.

**Table 4. Research topics of interest for Romanian academic researchers (%)**

<i>Research topic</i>	<i>%</i>	<i>Research topic</i>	<i>%</i>
Sustainable Development	34.1%	Development of insurance markets	2.3%
Entrepreneurship	11.4%	VUCA world	2.3%
Good governance / public administration	11.4%	The market of agri-food products	2.3%
Consumer behavior	11.4%	Management	2.3%
Online/digital marketing	11.4%	Big data	2.3%
Competitiveness	9.1%	Institutional economics	2.3%
Cyber security	9.1%	Semantic web	2.3%
Capitalizing on tourism resources	9.1%	SAP	2.3%
Marketing	9%	Social inclusion	2.3%
Fiscal policy	9%	Smart-marketing	2.3%
Agriculture	6.8%	Circular economy	2.3%
Investment management	6.8%	Financial contagion	2.3%
Economic growth and development	6.8%	Artificial intelligence	2.3%
Human resources	6.8%	Financial Accounting audit	2.3%
Emerging technologies in marketing	6.8%	Personal branding	2.3%
Business Intelligence	4.5%	Services quality	2.3%
Marketing communication	4.5%	Industrial economy	2.3%
e-learning	4.5%	Green economy in tourism	2.3%
ERP	4.5%	Ecotourism	2.3%
Risk assessment and management	4.5%	Education	2.3%
Neuromarketing	4.5%	Ethics	2.3%
Capital markets	4.5%	Health	2.3%
Productivity	4.5%	Technology in agriculture	2.3%
Innovation	4.5%	IoT	2.3%
Business Administration	4.5%	Machine Learning	2.3%
Cloud computing	2.3%	Ecological marketing	2.3%
Inter-communal cooperation	2.3%	Migration	2.3%
The efficiency of the marketing activity	2.3%		

Other topics of interest that are worth mentioning are Entrepreneurship, Good governance/public administration, Consumer behavior and Online/digital marketing, all of them being, first of all, aligned with the economic specialization and, secondly, correlated with the market's need (both in the private and public sector).

### 3.2.7. *The research topics for which the funding was obtained*

Besides research interests, it is important to also know which are the areas of expertise for our participants, so the university research strategy can be developed in a sustainable way, based on its actual resources and potential. For this aim, Table 5 shows that successful research projects are very different, covering a lot of economic specializations, such as agriculture, marketing, business administration, IT, finance or tourism. Thus, there is a vast potential for covering several H2020 subprograms with specialists from within the university, based on their previous experience in other research projects.

**Table 5. Funded research topics**

<i>Funded research topics</i>
Agriculture
Entrepreneurship, the student entrepreneurial society
Insurance, corporate finance
SME marketing communication
Increasing performance and reducing university dropout
Development of entrepreneurial capacity
Risk and productivity assessment
Fiscal policy
Innovation, neuromarketing, eco-marketing
IT
University management
Waste management of electrical and electronic equipment, risk management in the context of the digital economy, Green economy
Marketing
Social responsibility - waste management
Strategy for tourism development and promotion of Dâmbovița county
Emerging technologies in marketing - knowledge transfer
Violence in the social field - knowledge transfer in public affairs

We can mention also an area in which the expertise seems to be already high: academic management, in which we find funded research projects such as increasing performance and reducing university dropout.

### 3.2.8. *H2020 topics of interest for Romanian economic academic researchers*

Now that we already know which are the topics of interest for Romanian economic academic researchers, we can correlate them with the interest in H2020 topics, which is presented in Table 6.

**Table 6. Interest shown in H2020 topics (%)**

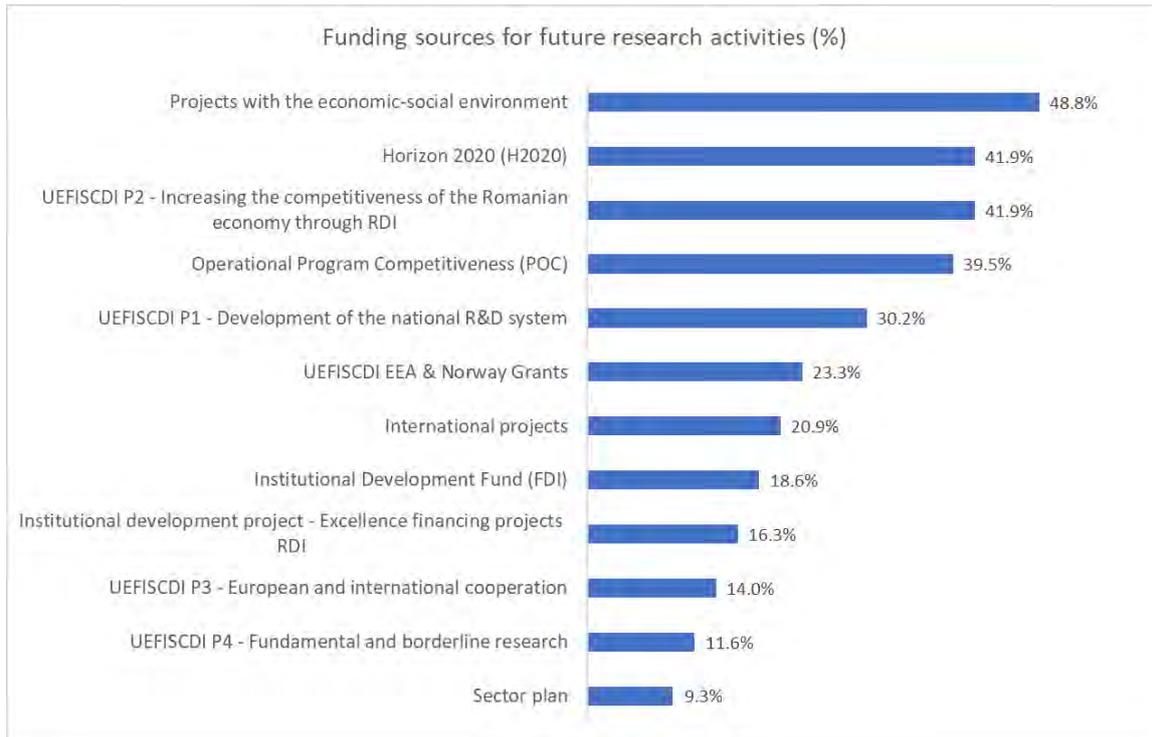
<i>H2020 topics</i>	<i>%</i>
Social Sciences and Humanities	59.6%
Innovation	51.1%

SMEs	42.6%
Environment & Climate Action	34.0%
Society	29.8%
ICT Research & Innovation	25.5%
Agriculture and forestry	19.1%
Food & Healthy Diet	17.0%
International Cooperation	17.0%
Funding Researchers	14.9%
The European Research Area (ERA)	14.9%
Energy	12.8%
Partnerships with Industry and Member States	12.8%
Security	10.6%
Health	8.5%
Research Infrastructures	8.5%
Biotechnology	4.3%
Key Enabling Technologies	4.3%
Bio-based Industries	2.1%
Plastics	2.1%
Space	2.1%

As expected, the most interesting research topics are the ones related to the economic specialization: social sciences and humanities (59.6%), innovation (51.5%) and SMEs (42.6%). One other topic that is not directly related to the economic disciplines, but it can be embedded through research and strategies of sustainable development, is Environment & Climate Action, which draws the attention of 34% respondents.

### ***3.2.9. Future research priorities in terms of funding programs***

In the end of our study we wanted to see if there is an intention towards changing in the future, thus we have asked participants to point out which will be the funding sources that they will try to access for their future research projects. Figure 3 shows that participants tend to focus more on projects for the economic-social environment (48.8%), as the criteria here are easier to fulfill. In second and third places we see 3 funding programs that actually have the highest awareness level: H2020 (41.9%), UEFISCDI's 'Increasing the competitiveness of the Romanian economy through RDI' (41.9%) and POC (39.5%).



*Figure 3. Funding sources for future activities (%)*

The high percentage corresponding to H2020 (41.9%) is more than nourishing for the future institutional strategies regarding research involvement increase and H2020 application growth.

#### **4. Conclusions, managerial implications and future researches**

The main conclusion that can be drawn from this research is that, although H2020 is one of the most known funding programs, it is at the bottom of the list when it comes to applications and funded projects. We can explain this situation both by researchers' lack of experience and confidence in their own capabilities of winning a grant competition, and by the lack of support from the institution's management.

The present study's managerial implications stand, first of all, in the valuable insight offered to the institution's research responsible about employees' level of knowledge and implication in the research activities and, secondly, in the correlations that can be made between the H2020 subprograms and topics and the Romanian economic academic researcher's interests. The latter is necessary so that the success rate of research proposals can be increased, which will lead to a higher visibility of Romanian researchers in the international environment.

Regarding the research limits, the present study can be criticized based on its sample, which represents just one university from Romania, a fact that limits the extrapolation of results. Future research directions on this topic might relate to extending to various educational institutions, covering all important fields of study, not just Economics.

#### **Acknowledgments**

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