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# Journal of **EMERGING TRENDS IN MARKETING AND MANAGEMENT**

**Marketing School, The Bucharest University of Economic Studies  
Bucharest  
2018**



**Vol. I, No. 1/2018**

**ISSN: 2537 - 5865**

**ISSN-L: 2537 - 5865**

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**The Bucharest University of Economic Studies Publishing House**

6 Romana Square, 1st district, Bucharest, Romania

Postal Code: 010374

E-mail: [editura@ase.ro](mailto:editura@ase.ro)

Phone: 021.319.19.00 / 021.319.19.01 int. 401

Website: <https://editura.ase.ro/>

The Bucharest University of Economic Studies Publishing House

ISSN: 2537 - 5865

ISSN-L: 2537 - 5865



**Journal of Emerging Trends in Marketing and Management** comprises the full papers accepted by the Scientific Committee of the **Emerging Trends in Marketing and Management International Conference**. Last edition took place on **2018, September 27<sup>th</sup> – 29<sup>th</sup> Bucharest, Romania**.

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## **The Influence of the Rehabilitated Servicespace on the Customers' Response**

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### **Abstract**

This article investigates how the fingerprints of the past, allow customers to experience a unique experience. It aims to explore the role of acculturation in the perception of servicescape rehabilitated. The methodology is based on structural equation modeling, using a total sample of 326 respondents. The results allowed us (1) to identify the dimensions of a culturally marked service space and the perceptions of clients according to their degree of acculturation and appropriation of space, (2) to show that the client's level of acculturation moderates the relationship between the perception of the rehabilitated physical environment and the quality of service. Based on these findings, we proposed theoretical and managerial implications.

**Key-words:** servicescape, physical environment, rehabilitation, acculturation.

**JEL classification:** M31.

### **1. Introduction**

Wealth refers to a consensual recognition of the historical value of a place and the need for its conservation. Heritage does not exist a priori (Leniaud, 1992). It is a heterogeneous set of both material and immaterial objects: architectural heritage, linguistic heritage, world heritage, etc. (Amougou, 2004).

Promoting heritage can be seen as a local economic development project, particularly through tourism (Chastel, 2011). This consists, in some cases, in developing places by entailing several issues such as restoration, conservation or rehabilitation. Thus, the rehabilitation of a site contributes to the affirmation of its heritage, since it concerns certain initiatives that make it possible to preserve its cultural, historical and patrimonial character by promoting, in certain cases, a commercial activity. The rehabilitation can be translated by the opening of the place to the public so that it becomes conducive to strolling, transport, leisure (David, 2009).

In a purely commercial vision, many managers, especially in the field of service, have known the importance of developing places of rehabilitation, to theatricalize them, to particularize them in order to make them friendlier and more favorable to support the service experience. They have returned to heritage places whose first life could give a sense of emotion.

As a result, many service activities take place in diverted places. These new spaces have lost their initial vocation, which, despite everything, is still present in certain architectural details. Providers will then exploit the dual identity of the place to play on ambiguity and strengthen the symbolic burden. For example, and not exhaustive, let us quote the hotel "Intercontinental" installed in an old hospital Dieu hotel in Marseille in France, where the church rehabilitated in luxury hotel "Martin's Patershof" in Mechelen in Belgium, or also the old military fortress transformed into hotel "Caprocat" in Mallorca in Spain. Rehabilitating old places in service space is an interesting innovation track in terms of space that allows you to remake an abandoned place and reevaluate it in the eyes of the client from its history.

A service space refers to all controllable physical elements that can influence individuals' psychological and / or behavioral emotional responses (Bitner, 1992). This link between space and the individual becomes more complex when there is a strong cultural dimension. We can then ask ourselves what are the perceptions of a culturally charged space for an individual who is also acculturated? Indeed, acculturation is a process of adapting a certain change in the attitude of an individual, his cultural identity and his social behavior when faced with a culture different from that of his origin. (Berry, 2000). Thus, we can imagine that a service space installed in a place that is part of the historical and cultural heritage, is perceived differently according to the customer's own history: its level of acculturation.

However, the literature is poor in terms of topical issues such as spaces for rehabilitation and acculturation of the client, addressed in the same context. Clearly, their link has never been specified. The goal of this research is to fill this gap. Thus, our study is part of the general problematic that questions the place-individual relationship widely discussed in the literature. We envisage this relationship by introducing two new elements: one specific to the place: a rehabilitation area strongly marked culturally, the other relating to the client: his level of acculturation. The objective is to show that the acculturation of the client can have a moderating effect on the relationships between the elements of a culturally marked service space and the quality of the offer.

Understanding the link between the client's level of acculturation and his / her perception of a culturally marked space will shed new light on the field of space perception research. Specifying this link is of considerable theoretical and managerial importance. At the theoretical level, the main contribution is based on the effort to bring together two themes often tackled in marketing in different contexts, but never in one single context: service space and acculturation. On the managerial level, our study will provide managers with rehabilitated places of service, practical information on the degree of acculturation of the customers that can be considered as a segmentation criterion.

Our field of research consists of ancient palaces of Umayyad caliphs rehabilitated and transformed into restaurants in Old Damascus in Syria. They are frequented by varied customers which goes from the foreign tourist to the local inhabitant. These places have the peculiarity of the houses of court formerly built according to the characteristics peculiar to the Syrian culture. At the time of globalization and the mobility of individuals, we have chosen to consider this perception according to the level of acculturation of clients from two different cultures: Syrian and French. Finally, this research presents a fortuitous but instructive interest: at a time when Syria is experiencing war, certain buildings that are part of the cultural heritage (including the palaces) are unfortunately destroyed. Our research was able to be realized just before the events and thus has a unique character.

After having presented the theoretical framework and the research hypotheses, as a first step; we will then describe our methodology; the results of the research will then be detailed; finally, we will propose theoretical and managerial implications of the research and will identify the limits and ways of future research.

## **2. Review of the literature and research hypotheses**

### **2.1 The physical environment of services and its effects on the customer**

The role of the point-of-sale physical environment has been the focus of much research for a long time. This research dealt with the effect of the place on the affective, cognitive and behavioral responses of the individual. As part of this research, we envision the physical environment through historic spaces rehabilitated into service activities.

### 2.1.1 The service environment, a concept with multiple identities

Since the pioneering article by Kotler (1973) using the term "atmospherics" and the works of Mahrabian and Russelle (1974) in the field of environmental psychology, much research has been conducted to study the physical environment of retail outlets. Aubert-Gamet (1997) emphasizes the existence of a vagueness on this notion. The author recalls the terms used in French writings such as the physical environment, the physical medium, the design of the environment, the place of service. The same amalgam of the concept exists in an Anglo-Saxon context where several terms are used, such as servicescapes, environment cues, physical evidence, physical environment, physical setting, atmospherics, physical support (Aubert-Gamet, 1997).

According to Kotler's (1973) first conceptualization, the term atmospherics refers to "efforts to design a purchasing environment that can produce specific emotional effects for buyers who can increase their likelihood of buying". Several authors have used this conceptualization to identify the term physical environment. Thus, in the service marketing field, Bitner (1992) has studied the effects of the service environment that she calls servicescapes.

It proposes a complete integrative model on the influence of service elements on the reactions of the occupants of the place of service (employees and customers). For the author, the dimensions of the servicescape consist of "all the physical factors that can be controlled by the service company to improve the actions of employees and customers".

The literature testifies to a multiplicity of definition of the concept of physical environment which contributed to a difficulty of establishing an adequate typology of its components. Kotler (1973) describes the physical environment in a sensory way by grouping it into three factors: visual (color, light, size, shape), sound (music, noise), olfactory (odors, freshness) and touch (temperature, materials, air quality). Baker (1987) defines three constituents of the physical environment: 1) environmental factors (air quality, sensoriality and cleanliness); 2) design factors (layout, shapes and materials) and 3) social factors related to all co-present people in the place (other guests and staff). We chose to adopt Baker's typology (1987) because it is considered to be the most cited typology in marketing research, the most complete and the most general in a wide variety of industries (Hightower, 2010).

### 2.1.2 from the private historic place to the service area

The meeting points between economy and culture are becoming more numerous and enlightening. Thus, recognition of the value of heritage can play the role of a lever for local development: economic development (particularly through tourism), development of services, general improvement of living conditions, etc. Placing heritage and culture at the heart of local development can be considered as one of the most effective policies of a country (Chastel, 2011), through the conservation of traces of its past to perform various interventions necessary for economic development (Burle, 2001). In this respect, architecture is seen as a useful art whose incorporation into heritage induces a certain rehabilitation of spaces (Rautenberg, 2003), such is the case of the rehabilitation of a private place by its opening to the public so that it becomes suitable for walking, transportation or leisure (David 2009). It is in this sense that architecture becomes a source of market activities.

From a marketing perspective, the architectural style of the place is considered to be an essential factor (Turley and Milliman, 2000). Architecture as well as other elements such as color and decoration are visual stimuli that have significant effects on consumer behavior (Aubert-Gamet, 1997). These elements play the aesthetic role of the place (Koo and Kim, 2013). Indeed, the aesthetic feature of servicescape occurs through the association of certain elements among which fig shape (Borghini et al., 2012). For the authors, aesthetics of form involves two types of factors: tangible or physical factors such as architecture, furniture, colors,

objects, spaces; and intangible factors such as atmosphere, room smells, symbols and emotions. Other elements such as time, history and culture can play a vital role in the aesthetics of the place, and subsequently influence the perception of it by individuals. As a result, we are interested in a space whose architecture is culturally marked with details reflecting the history of the place.

### 2.1.3 The effect of the service space on the quality of the offer

The literature shows that the relationships between the physical environment and emotional, cognitive and behavioral responses have been repeatedly tested. We have therefore chosen to enrich the literature with a new element (acculturation) by studying its moderating effect on the relation of the physical environment with the quality of service.

Rehabilitating a heritage space as a service activity represents a major challenge for managers, who, for their part, initially take as their point of departure the needs and expectations of customers, focusing primarily on the attributes of the service. In this respect, the notion of perceived quality of service would be favored in the determination of competitive advantages. It reflects a cognitive assessment of the intangible aspects of service (Wakefield and Blodgett, 1999). This evaluation being complex is due to the specificities of the service (intangibility, perishability, etc.); this leads the customer to rely on other elements existing in the service location to estimate performance, before, during and after service consumption (Huang et al., 2016). As such, the servicescape appears as a tangible element that helps the customer to assess the quality of service (Bitner, 1992). Thus, perception of the environment influences beliefs about the environment itself, but also beliefs about service quality (Hooper et al., 2013, Kim and Moon, 2009). In the catering sector, for example, the customer perceives positively the quality of the offer when he enjoys the service space (Kim and Moon, 2009). We therefore postulate the following hypothesis:

**H1a, b, c:** Perceived ambient (a), perceived design (b) and perceived social factors (c) have a direct positive influence on perceived quality of service.

## 2.2 The place of acculturation in the place-client relationship

The place-client relationship has been widely studied in the literature. Many authors incorporate variables that play the moderating role. The highlighting of these is an essential contribution of the Bitner model (1992). The author cites some moderating variables related to the character of the client, such as the need for stimulation, the purpose of visit, the mood of the client, etc. Based on this idea, we will examine the place-individual relationship by considering the moderating role of the cultural character of the client, more precisely, his level of acculturation.

### 2.2.1 Acculturation, which phenomenon?

Acculturation describes all the changes that occur as a result of contact between individuals and groups from different cultures. Thus, by entering the process of acculturation, individuals or groups gradually adopt elements of the other culture (ideas, words, values, norms, institutions) (Stamboli-Rodriguez, 2011). Berry (2000) defines acculturation as the general process of intercultural contacts and their results. For Peñaloza (1994), acculturation is the movement and adaptation to the cultural environment of the consumer in one country by people from another country.

Marketing research has examined the role of acculturation in leisure (Carr and Williams, 1993), with the type of object consumed (Lee and Tse, 1994), in terms of advertising effectiveness (Kara and Kara, 1996), or product attributes (Quester and Chong, 2001).

Although acculturation is a widespread phenomenon with important consequences for consumer behavior, to our knowledge there is no work that has verified the role that the client's level of acculturation can play in the perception of a rehabilitated service space. However, acculturation seems important to us to evaluate the perception of a rehabilitated place which, by definition, is strongly marked culturally by its history. When the client shares the cultural values that are legible in the place, we can assume that his perception will be different and more intense than when he is foreign to it. This is what our research model aims to demonstrate.

### 2.2.2 The moderating role of acculturation in the process of perception of space

Few studies consider the effect of point-of-sale environmental elements on consumer behavior by considering their culture.

Some exceptions, however, must be emphasized: Seock (2009) who has studied the influence of perception of the environmental elements of clothing stores as well as the influence of demographic characteristics of the Hispanic client, such as his age and the number of years that he lived in the United States, on his choice of different store formats; Veresiu and Giesler (2011) who cited the role of public and private space in constructing the ethnic identity of immigrants; and Schau et al. (2017) who have examined online forums as an acculturation platform for Chinese consumers in the United States, where they help each other by navigating and even exploiting the American retail servicescape. If these online forums are considered a virtual space, play the role of a lever of acculturation of Chinese immigrants to the United States (Schau et al., 2017), we can think that a culturally marked place of service can be perceived differently depending on the level of acculturation of the client. For the sake of clarity, let us clarify before acculturation with respect to a national culture does not interest us, but it is vis-à-vis the degree of appropriation of a culturally strongly marked space that we envisage the concept of acculturation.

We conducted a qualitative exploratory study whose objective was to determine the factors that make up the physical environment of a rehabilitated domestic space, as well as to have a better understanding of the perception of the latter by clients with different levels of familiarity with space. As a result, we conducted semi-structured individual interviews with 12 clients of Old Damascus restaurants in Syria (6 Syrian native and 6 French immigrants in Syria) and 4 experts (architects and archaeologists including 3 native Syrians and 1 French immigrant). The interviews lasted between 30 and 45 minutes for the clients, and between 1:00 and 1:30 for the experts. They were recorded and fully transcribed. The client interview guide themes were as follows: perception of space (sensory perception, social perception, perception of design and temporal dating), the influence of the client's cultural origin, the evaluation of servicescene (the functional, aesthetic, emotional and social role of space). The topics of the expert interviews are based on those in the client interview guide. Three themes were discussed: history, architecture and the aesthetic aspect of space. The information obtained from clients and experts was the subject of a content analysis and, more specifically, a thematic analysis. Our qualitative study shows two main results: 1) the identification of the particularity of the place: three typicalities of the restaurant have been identified: A) the atmosphere characterized by the sound of the pond water present in the middle of the courtyard, smells emanating from jasmine and orange blossoms, lighting, etc., B) authentic architectural design with typical interior facades and alternating light and dark stones, and C) social factors components of other customers and employees whose dress appearance is congruent with the traditional style of the place.

2) the difference in perception of culturally marked space according to the culture of the client: A) Syrians declare their attachment to their culture of origin by citing the concept of "at home" when they find themselves in the restaurant; for these clients, the place also promotes the

emergence of their cultural identity. B) The French are mainly interested in the richness of the history, heritage and architecture of Syria, of which Old Damascus is a very important part; they do not have family or traditional ties to the reconstitution of the past through restaurants, but they chose to adapt a particular practice of a consumer activity: the frequentation of restaurants.

Highlighting the rehabilitation of former Umayyad palaces made it possible to question the new look that could have customers who, too, have different levels of familiarity with the place concerned.

We can assume that acculturation is a moderator and we formulate the following hypothesis: **H2a, b, c:** Client acculturation has a moderating influence on the relationship between perceived ambient (a), perceived design (b), perceived social factors (c) and perceived quality of service.

Figure 1 shows the different hypotheses elaborated previously.

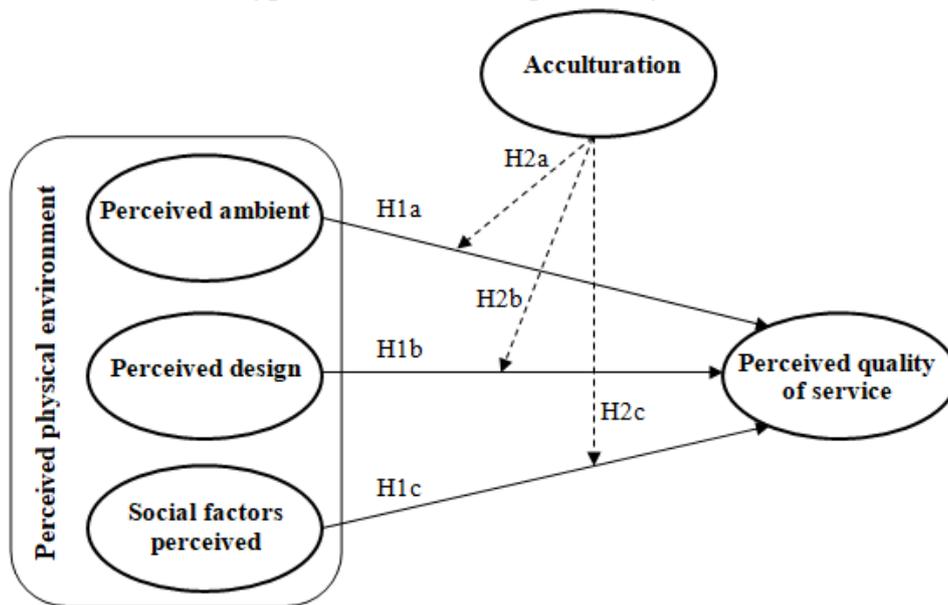


Figure 1: Conceptual Model of Research

### 3. Research Methodology

#### 3.1 Data collection and sample

This research was conducted in the restaurants of Old Damascus in Syria. These restaurants exist in the historic heart of the city in old neighborhoods like "Bab Touma", "BabSharqi", "Medhat Pasha", "Qaimaryah".

Measurement items already tested and validated in a French context have been translated from French to Arabic using the method of blind parallel translation. They have been validated by 4 experts who speak perfect French and Arabic. The surveys were administered electronically to a sample of clients from Old Damascus restaurants. This step yielded 326 usable surveys divided into two equal sets of data (N1 = 163, N2 = 163) for exploratory factor analysis and test hypothesis testing. The distribution of respondents in the Syrian sample (176 Syrian native and Syrian expatriates) is varied in terms of sex (61.4% of men), age (59.7% between 25 and 34 years) and of occupation (30.7% of employees, 25.6% of students and 10.8% of professors). The French sample (150 French immigrants residing in Syria) also shows some variation since it consists of 52% of men and 48% of women for an average age of between 35 and 44 years; 30.7% are employees and 20.7% are professors.

### 3.2 Measurement of variables

The instruments for measuring the constructs were developed based on the literature supplemented by an exploratory qualitative phase. The majority of the items were measured on a 5-point Likert scale. The scale of measurement of the perceived physical environment of rehabilitation was created by applying the approach of Churchill (1979). We wanted to create a new scale that better fits our culturally marked space. A first pool of items with 54 items has been identified. This number of items being large, was the subject of a qualitative purification by six French experts (two architects, two historians and two archaeologists interesting to the Umayyad palaces of Damascus). This purification yielded a sample of 47 items that were quantitatively purified using exploratory factor analysis (ACP). The final validated scale consists of two levels of latent variables and 27 final items measuring ambient, design and social factors. Measuring instruments for other variables were also subject to an ACP to purify them. The perceived quality of service was measured by adapting the SERVQUAL measurement scale of Parasuraman et al. (1988) (3 dimensions "relational, reliability and tangibility" measured by 12 items). Acculturation, which consists of three dimensions of "self-identification, food and media", was measured by 11 items adapted from the Jolibert and Benabdallah scale (2009) and that of Sabatier and Berry (2008). Table 1 below will present the final list of items used after the statistical purification process.

We processed the data through structural modeling using a PLS approach of the XLSTAT software. Measurement models first made it possible to ascertain the structure and validity of the scales of measurement. Then, the global model test revealed the hypothetical causal relationships of the research model. The acceptance or rejection of a hypothesis is based on the significant relationships provided by PLS, that is to say, by reading significant structural ratios (path coefficients) at 1% or 5%. We also checked the predictive power of the model presented by the  $R^2$ . The moderating effect of acculturation was verified using an interaction variable of the acculturation variable in the relationship between two other variables (environment - quality of service, design - quality of service, social factors - quality of service). In order to measure the impact of each interaction variable created and integrated in the model, the analysis was done in three parts, since it is not possible to study the moderating effect of the three interaction variables at the same time.

## 4. Search results

### 4.1 Validation of measurements and quality of fit of the global model

As shown in Table 1, the indices of reliability and convergent validity of the measurement model are satisfactory ( $Rho$  of  $DG \geq 0.7$  and  $AVE \geq 0.5$ ). Discriminant validity is also provided in Table 2 (we did not integrate the discriminant validity for acculturation in Table 2, because the values of  $Cor^2(x, y)$  change slightly, since we performed the analysis of the moderating effect of acculturation in three times, as underlined above. It should be emphasized, however, that the discriminating validity of acculturation is ensured during each analysis).

The quality of the overall model was verified based on a global fit indicator that probes the performance of the PLS model: the Gof. The results show that the Gof is 0.595; value greater than the reference value (0.36) proposed by Wetzels et al. (2009). This leads us to conclude from the satisfactory quality of the research model.

**Table 1: Reliability and validity of the measurement model**

Variable Level 2	Variable Level 1	Items	Reliability (Dillon-Goldstein's rho)	Convergent validity (AVE)
Perceived Ambient	Pond water quality	Le bruit de l'eau du bassin attire l'attention	0,843	0,572
		J'aime entendre le bruit de l'eau du bassin		
		Le bruit de l'eau du bassin est apaisant		
		Je sens le frais grâce à l'eau du bassin		
	Cleanliness	Le restaurant est propre	0,813	0,582
		La vaisselle est propre		
		Les habits du personnel sont propres		
	Odor	Je sens l'odeur du jasmin	0,888	0,776
		Je sens l'odeur de la cuisine damascène		
	Lighting	Je trouve la lumière : agressive/ douce	0,815	0,592
		Je trouve la lumière : artificielle/ naturelle		
		La cour est éclairée par la lumière de soleil		
	Noise intensity	Je trouve la musique d'ambiance : forte/ faible	0,819	0,694
		L'ambiance est bruyante/ calme		
Temperature	La cour amène de la fraîcheur	0,786	0,647	
	La végétation permet d'avoir une température modérée			
Perceived design	Islamic architecture	L'architecture du restaurant est islamique	0,782	0,548
		Je trouve l'alternance des pierres déplaisante/ séduisante		
		Je trouve les motifs décoratifs non islamiques/ islamiques		
	Layout	L'aménagement est bien adapté	0,848	0,729
		La disposition des tables facilite la prestation de service		
	Authenticity	Le restaurant est inauthentique/ authentique	0,856	0,744
Je trouve la décoration rénovée/ en l'état				
Perceived social factors	Staff	Le personnel est en nombre suffisant	0,727	0,559
		La tenue de la personne qui s'occupe des narguilés est inspirée de la tradition		
	Other clients	Les autres clients sont dérangeants/ sympathiques	0,743	0,591
		Les autres clients sont bien habillés		
Perceived quality of service	Perceived quality of service	Le personnel travaille bien et rapidement	0,835	0,500
		Quand le restaurant promet de faire quelque chose dans un certain temps, il le fait		
		Le personnel est très à l'écoute		
		Le personnel a le souci de me rendre service		
		Le personnel accorde une attention individualisée à chacun		
Acculturation	Acculturation	J'aime écouter de la musique arabe orientale	0,860	0,546
		Je parle avec mes amis en arabe		
		Je parle avec mes amis en français		
		Je pense que ma culture est plutôt syrienne		
		Je pense que ma culture est plutôt française		

**Table 2: Discriminant validity of the measurement model**

	1	2	3	4	5	6	7	8	9	10	11	12
<b>AVE (x) &gt; Cor<sup>2</sup> (x,y)</b>												
Pond water quality	<b>0,572</b>											
Cleanliness	0,067	<b>0,582</b>										
Odor	0,002	0,005	<b>0,776</b>									
Lights	0,036	0,059	0,002	<b>0,592</b>								
Noise intensity	0,075	0,052	0,001	0,262	<b>0,694</b>							
Temperature	0,082	0,030	0,001	0,093	0,041	<b>0,647</b>						
Islamic character	0,007	0,000	0,011	0,080	0,000	0,019	<b>0,548</b>					
Planning	0,076	0,115	0,007	0,007	0,010	0,010	0,001	<b>0,729</b>				
Authenticity	0,011	0,010	0,001	0,271	0,231	0,020	0,058	0,001	<b>0,744</b>			
Staff	0,049	0,045	0,038	0,006	0,020	0,003	0,023	0,035	0,014	<b>0,559</b>		
Other customers	0,130	0,090	0,007	0,008	0,042	0,030	0,000	0,054	0,000	0,010	<b>0,591</b>	
Quality of service	0,056	0,141	0,010	0,019	0,026	0,108	0,002	0,096	0,005	0,047	0,083	<b>0,500</b>

Thus, we can appreciate the structural model and look at testing the hypotheses of the research.

#### 4.2 Hypothesis Testing and Discussion

We present and discuss first, the test results of the direct effects of the elements of the servicescape on the quality of service, then the test results of the moderating effect of acculturation.

##### 4.2.1 Test of the direct effects of environmental elements on perceived quality of service

The verification of hypotheses relating to the effect of the physical environment on the perceived quality of service (Table 3) shows that 20.8% of the variability in the quality of service perceived was explained by the atmosphere, design and social factors, and two environmental elements contribute to a positive perception of quality of service: environment and social factors (Path coefficient respectively = 0.294 and 0.240,  $p < 0.01$ ). However, the design has no direct effect on perceived quality of service. Hypotheses H1a and H1c are therefore corroborated while H1b is rejected. Thus, the elements of the atmosphere (the quality of the water of the basin, the cleanliness, the smells emanating from the flowers and the plants, the lighting, the intensity of noise and the temperature) have an influence on the perception quality of service. Indeed, the perception of the servicescape is an antecedent of the perception of the quality of the offer (Hooper et al., 2013). Our results confirm previous work that has highlighted the strategic role played by the servicescape as a determinant of quality of service (Bitner 1992, Kim and Moon 2009). Moreover, the direct link between social factors and quality of service confirms that it is possible to act on it through interpersonal relationships. In other words, client-employee interactions influence the quality of service assessment, particularly in high-contact services (Butche et al., 2002). However, the lack of a direct effect of design on quality of service contradicts previous work showing that design is a key environmental element and an important visual cue (Jang and Namkung, 2009). This result is not really surprising: on the one hand, the majority of the validated statements of the scale of the quality of the supply measures the relational quality of service, on the other hand, this relation, as we will see by the rest will be moderated by the acculturation that reveals the link between design and quality, which highlights the crucial role of acculturation in the context of the influence of the rehabilitated physical environment on the quality of service.

**Table 3: Results of the hypothesis testing of the direct effects of the model**

Direct effects	Path coefficient	R <sup>2</sup>
H1a: Ambient → Quality of service	0,294 **	0,208
H1b: Design → Quality of service	0,044 n.s.	
H1c: Social factors → Quality of service	0,240 **	

\* :  $p < 0,05$  ; \*\* :  $p < 0,01$  ; n.s. = not significant

#### 4.2.2 Test of the moderating effect of acculturation on the relationship between environment and quality

We verified the moderating effect of acculturation at the level of the global sample and at the level of the Syrian sub-sample ( $n_1 = 88$ ) and the French sub-sample ( $n_2 = 75$ ),

The hypothesis test results H2a, H2b, H2c (Table 4) show that at the level of the overall sample, there is a significant positive effect of interaction of the variables "environment" and "acculturation" at the threshold of 1%, and a significant negative interaction effect of the "design" and "acculturation" variables and the "social factors" and "acculturation" variables at the 1% level. The cross-validation on the subsamples partially confirms the hypothesis H2b with a positive moderator effect of acculturation for the French sub-sample (path coefficient = 0.373,  $p < 0.01$ ) and fully confirms the hypothesis H2a with a negative moderating effect for the Syrian subsample (path coefficient = -0.274,  $p < 0.01$ ) and a positive moderating effect for the French sub-sample (path coefficient = 0.531,  $p < 0.01$ ); as well as the H2c hypothesis with a negative moderating effect for both Syrian and French subsamples (path coefficient = -0.199,  $p < 0.05$ , path coefficient = -0.378,  $p < 0.01$  respectively).

**Table 4: Results of the hypothesis test on the moderating effect of acculturation**

Hypothesis	Testing of the moderating effect of acculturation		
	Overall sample	Syrian sub-sample	French sub-sample
	Path coefficient	Path coefficient	Path coefficient
H2a: Ambient x Acculturation → Quality of service	0,339**	-0,274**	0,531**
H2b: Design x Acculturation → Quality of service	-0,228**	-0,190n.s.	0,373**
H2c: Social factors x Acculturation → Quality of service	-0,281**	-0,199*	-0,378**

\*:  $p < 0,05$ ; \*\*:  $p < 0,01$ ; n.s. = not significant

Before highlighting the role of acculturation in the process of perception of rehabilitated space, it would be interesting to specify the level of acculturation of Syrian and French clients. For this fact, as shown in Box 2, we calculated the distance in terms of degree of appropriation of the culturally strongly marked space, between, on the one hand, Syrian expatriates and French immigrants, and on the other hand the native Syrians considered as the reference group that best appropriates these places in the host country (Syria). This calculation shows that Syrian expatriates are more acculturated to space than French immigrants.

In order to calculate the distance in terms of degree of appropriation of space, we used the Euclidean distance indicator applied by Jolibert and Jourdan (2006). The results show that French immigrants are far from native Syrians in terms of the degree of appropriation of space while Syrian expatriates are the closest to native Syrians (the distance is 0.580 and 0.293 respectively). The Syrians are therefore strongly acculturated to the culturally marked space compared to the French who are weakly acculturated. The Euclidean distance is given by the following formula:

$$D_{ij} = \left( \sum_{k=1}^p (X_{ik} - X_{jk})^2 \right)^{1/2}$$

Where:  $D_{ij}$ : distance between individuals  $i$  and  $j$

$P$ : number of variables

$X_{ik}$ : value of the variable  $k$  for the subject  $i$

$X_{jk}$ : value of the variable  $k$  for the subject  $j$

In order to calculate this distance, we relied on client responses to items related to the measurement of acculturation elements, as follows:

1. We calculated the average of each item in each sub-sample obtained after dividing our database according to groups of respondents (48 native Syrians, 40 Syrian expatriates and 75 French immigrants);
2. based on the averages of the items making up each cultural element, we calculated the means by element;
3. Once these averages were obtained, we used the Euclidean distance formula to calculate the distance between the groups of Syrian expatriates and French on one side, and the group of native Syrians on the other side;
4. After calculating the distances between these groups, we proceeded to interpret the results to empirically identify the close group and that far from the reference group.

We conclude a moderating effect of the acculturation on the relations environment - quality, design - quality and social factors - quality. Taking into account the elements of the relationship, its significance and the level of acculturation of the client, we identified three acculturation roles: 1) relationship enhancer, 2) relationship reducer, 3) relationship developer.

**1.** The amplifying role is the positive moderating role of acculturation on already significant relationships. One link is concerned in the least accultured group (French):

- Ambient - Quality of service: elements that culturally mark the ambient (water basin and the specific noise that it makes, the smell of jasmine and orange, etc.) may seem unknown or unusual to French customers who perceive the ambient positively, and therefore, positively evaluate the quality of service. In other words, the positive perception of quality of service will be amplified by the culturally marked environment.

**2.** The reducing role of acculturation indicates that it moderates negatively a (already significant) link between two variables. The relationships involved are:

- Ambient - Quality of service and social factors - Quality of service for the highly accultured group (Syrians). This is explained by a habituation effect, or habituation effect to the ambient and social factors. These customers are so accustomed to assuming that they are becoming less sensitive to the ambient and social factors and that, as a result, the perceived quality of service will be less related to the perception of the ambient and social factors.

- Social Factors - Quality of service in the weakly accultured group, which results in the client being less expensive and more socially reserved and, as a result, social factors (culturally marked by their traditional appearance) are less linked with perceived quality of service.

**3.** The revealing role is the role of acculturation when it moderates an insignificant relationship. One link is concerned in the group less accultured:

- the link Design - Quality of service that acculturation reveals with a positive moderation. This is explained by the existence of a form of gradual adoption of the design of the rehabilitated space. These customers are gradually getting used to design elements to positively evaluate the quality of the offer.

## **5. Conclusion**

At the end of our research, we present, first, the theoretical contributions as well as the managerial contributions and then, we put in perspective the results obtained.

### **5.1 Theoretical contributions and managerial implications**

From a theoretical point of view, the major contribution is based on the effort of synthesis of the concepts of physical environment and acculturation, concepts being often approached in marketing in different contexts but never in one and the same context. In addition, the service environment we have been working on only concerns culturally marked rehabilitation areas.

Our research aims to enrich the literature with a new vision by introducing two elements that have not been studied together: one specific to the client: his level of acculturation, the other related to the place: the traditional space of an old palace rehabilitated in a commercial place. For this reason, we have relied on research from different disciplines such as marketing, environmental psychology, sociology but also geography and architecture.

On the managerial level, this research has several contributions. The empirical results lead us to emphasize the link between the elements of the physical environment and perceived quality of service. In reading these results, we emphasized the importance of ambient and social factors as two environmental elements that have a direct impact on the assessment of quality of service. In this respect, the key to success for managers would be to work (or update) their offer in a holistic and congruent way, while giving greater importance to the elements of the ambient by mobilizing all sensory variables, and to social factors reinforcing employee training and appearance so that it is congruent with the style of service provided.

In addition, the three roles (amplifier, reducer or developer) played by acculturation open up new horizons for the management of rehabilitated sites. More specifically, it can be said that in the case of rehabilitated places of service, the degree of acculturation of the clientele can be considered as a segmentation criterion:

- For highly acculturated clients (ie who are familiar with the architectural and spatial culture expressed by the place), the strong level of acculturation:

- reduces the link between the ambient elements and the quality of service as well as that of the social factors with the quality of service. In other words, Aboriginal clients who know the history of the place and share the values of culture that this place symbolizes, rely less on ambient factors and social factors to assess the quality of service. Thus the manager does not have interest to bet on the servicescape if he wants to increase the perception of the quality of service and more specifically on the ambient and the social factors. Other marketing variables, other than the servicescape, deserve the attention of the manager (such as the value for money or the accessibility of the service).

- For low acculturated clients (ie those who do not know the culture to which the building refers), the low level of acculturation:

- amplifies the link between ambient factors and quality of service. For these low-acculturated clients, managers have an interest in focusing on ambient factors to increase perceived quality.

This situation could be particularly effective when other variables of the service (quality of food for a restaurant, competence of the staff, process of delivery of the service ... etc), other variables relating to the customer (the duration of his stay, his tourist vs. resident status) or other market variables (competitive roughness) are unfavorable; ambient and design factors offset these disadvantages. Its to the manager to communicate on the history of his place, to stage the initial culture, even to build an experiential offer of animation (music, dance, exhibitions) or visit the place.

- reduces the link between social factors and perceived quality. For these clients, the folklore of the staff in contact does not intervene in perceived quality. The same goes for actions devoted to the management of other customers. Knowing, as said above, that our results show the same thing for highly acculturated clients, we may wonder if the manager really has an interest in investing in the social factors (staff and other clients) of the servicescape. The

manager should focus on other elements typically marked with place culture, such as ambiance or also design for non-native clients.

- reveals the link between design factors and quality. For the manager, it would be interesting to emphasize the fact of marking, even culturally over-semantising the design and to preserve as much as possible the traditional and authentic character of the place. The gain realized at this level lies in the positive evaluation of the design and, subsequently, in the positive evaluation of the quality of service.

We can see that the manager can exploit acculturation as a segmentation criterion. If, in a non-counter-intuitive manner, low-acculturated clients are more sensitive to the place in their assessment of the quality of service, for highly acculturated clients, the rehabilitated place intervenes little on the relations of the environmental elements with the quality of service. But we can assume that for these, the place strongly marked culturally, plays a major role in their process of spatial appropriation. This is in line with the identity dimension of acculturation (Berry, 2000). Contrary to what we thought, when the client shares the cultural values legible in the place, his perception is not more intense than when he is foreign to it.

## 5.2 Putting the results of the research into perspective

It should be noted that this research has limitations that are ways of future research. First, we conducted this research in a single sector (the catering sector) with customers of a single rehabilitated space (former Umayyad palace rehabilitated in restaurants) and in one country (Syria). As a result, it is difficult to generalize the results to other sectors, to other rehabilitation areas and to other countries. These are indeed different from an economic, cultural and social point of view. We therefore recommend replicating this search by considering these different elements. For example, it would be interesting to validate our results in other sectors, such as the hotel sector, especially that there are hotels that look like the restaurants we studied. It would also be desirable to examine the influence of a rehabilitated servicescape in the cultural field (such as museums and live performances) or for other forms of rehabilitation (from an industrial space to a restaurant) or cultural origin (rehabilitation of Riad in North Africa or castle in France). Finally, acculturation remains a concept to be explored, such as the relevance of an acculturation in general or according to the reference cultures. What we did by differentiating natives, expatriates, and immigrants deserves to be reworked according to different cultures.

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## **Purchasing Decisions and Consumer Behavior in BoP- Albanian Reality**

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### **Abstract**

Poverty is a rather complex phenomenon combining several dimensions. One of the best approaches to define poverty is perhaps just to ask ordinary people how they would define it and list what features they perceive as most important. Many studies have been made about customer behavior, but few have dealt with the bottom of the pyramid. The World Bank defines extreme poverty as living on less than \$1.90 per day, whereas poverty is defined as living \$2–\$5.5 per day. According to data from the World Bank over 2016 published in its recent Migration and Mobility report, 5.8% of the Albanian population lives in extreme poverty, while 34% live in poverty. About 25% of Albanians are living with less than US\$ 2 per day. On a daily basis, the poorest people (representing 5% of the total population) struggle to eat adequately. More than half the population also lives in rural areas, where the poverty rate is 66% higher than in the capital – Tirana. Such a situation is partly explained by the lack of non-farm job opportunities. To cut the effects of poverty, the state provides economic aid to this category of people. The full amount of family economic assistance, regardless of its composition, can not be higher than 8,000 lek or US \$ 65 per month. In our study, we focused only on one city of Albania (Permet). From the data of the institution dealing with the registration of the poor and the distribution of economic aid, 244 families received economic assistance at this institution. 45 questionnaires were conducted, out of which 40 were valid and were further studied to get a descriptive approach about the behaviors and habits of these consumers. The questionnaire consists on 21 closed questions, mainly about purchasing decisions and habits using Likert's scale (5 scales) according to which: 1-not important to 5-extremely important. Data analyses point out the main factors affecting purchasing decisions for BOP customers, such as: the place where they usually buy the products, the frequency of purchase and the most purchased type of food. Most BOP consumers do not adapt to the new products, they do not want to read the instructions on the packaging or reluctant to try new products because they underestimate yourself. Respondents give priority to the senses of touch, sight and wind in purchasing food products and, unlike other consumers do not focus on packaging and product advertising, but want to have on hand and see the product. The main criteria for buying a food product for these customers are the quality and the price. This means that the survival consumers seeking affordable products but are not willing to sacrifice quality. Respondents do not feel a bond or strong brand loyalty. It is assumed that the poor can not afford being loyal to the brands but they just want to satisfy their basic food needs and tend to give priority to price and quality. So the brand's impact is not important in choosing food products for survival customers.

**Keywords:** BoP, consumer behavior, marketing mix, Albanian consumers.

**JEL Clasification:** M31.

### **1. BOP market**

According to a study of the World Bank, based on people's perception, and other sources, the following factors are important in characterizing poverty: basic needs satisfaction, health, disability, access to assets property, employment, gender, age, education, geography, ethnicity, discrimination, religion, season (for farmers and construction workers), access to public infrastructures and services, power and voice, dependency and exploitation, environment, etc. Indeed, the list can be very long.

BOP is not a homogeneous market (Subrahmanyam and Tomas Gomez-Arias 2008). The level of income, distribution of people between needs and urban and rural areas varies by region. It should be said that some researchers (Kasturi Rangan et al, 2011) have tried to distinguish some similarities within the BOP markets and define three segments:

- Low incomes (between \$ 5 and \$ 10 per day): This group represents about 1, 4 billion people, is composed mainly of people who have barely reached secondary education

and have enough skills to enter the labor market. They also make purchases in both formal and informal markets. This segment is characterized by special needs such as good housing, education for their children and the health care service. They have a hope that their children will have a better life.

- Income to survive (between \$ 3 and \$ 5 per day). This group comprises about 1.6 billion people, consisting of uneducated and low-skilled people. Consequently, they do not have a regular income, but they have temporary jobs. They live in poor neighborhoods. They manage to offer daily nutrition with difficulty, suffer from deficiencies, are susceptible to disease and need education. They have little hope to somehow improve their situation.
- Extreme poverty (less than \$ 3 per day). This group is about 1 billion people. They have a shortage of everything: food, water, shelter. Their insecurity prevents them from joining the market as consumers or producers. They are imprisoned by the informal market so they can not access the formal market. They are often the first victims of natural disasters or conflicts. Currently their only light of hope is the help provided by NGOs.

This segmentation (Kasturi Rangan et al, 2011) allows us to understand which products and services are most likely to satisfy or meet the needs of some segments more than others. Buying food is a major challenge for BoP customers. The food sector represents the largest market, around 58% of the entire BoP market.

Subrahmanyam and al. (2008) focused their attention on the characteristics of poor consumption and their links to the pyramid of Maslow. They divided each sector (housing, food, etc.) mentioned by the WRI report (2007) into 5 broad categories of the Maslow pyramid. In their investigation they discovered that BoP customers sometimes spend their money on items that can be considered as luxurious or at least non-essential. Why? Because sometimes the poor want to buy special things to celebrate something like a marriage, sometimes the poor want to avoid the pressure of society or just the poor want to experience the promise of a brand (Hammond, a.l., & Prahalad 2002, 2004). The authors also added that BoP customers are not so different from other customers. These consumers also look for goods and services that bring fun, culture, or even high spirits (Kirchgeorg, M., & Winn, M.I., 2006).

## **2. Poverty in Albania**

Albania is one of the poorest countries in Europe. Despite the strong growth of the economy in recent years, almost a quarter of the population lives at a poverty level of less than \$ 2 per day. The poorest of the poor, who make up about 5 percent of the population, struggle to have food on the table every day. According to data from the World Bank over 2016 published in its recent Migration and Mobility report, 5.8% of the Albanian population lives in extreme poverty, while 34% live in poverty. The World Bank defines extreme poverty is living on less than \$1.90 per day, whereas poverty is defined as living \$2–\$5.5 per day.

Compared to 2015 and 2014, there is a slight reduction of 2% of people living poverty, while the group living in extreme poverty has not shrunk significantly over the years. Compared to the other countries in the region, poverty levels in Albanian remain high. About 25% of the Albanian populations live with less than US\$ 2 per day. On a daily basis, the poorest people (representing 5% of the total population) struggle to eat adequately. More than half the population also lives in rural areas, where the poverty rate is 66% higher than in the capital – Tirana. Such a situation is partly explained by the lack of non-farm job opportunities.

As in many countries, the poverty rate is higher in rural areas. About 57 percent of Albania's population lives in these areas and most of their income is dependent on agriculture. Poverty

is 66 percent higher in rural areas than in Tirana, and is 50 percent higher in rural areas than in other urban areas.

### 3. Methodology

Through this study we will analyze the characteristics of the population in order to derive a general overview of the habits, behaviors and preferences of this specific population in the BOP market. The purpose of this study is to provide useful data so that marketing intentions and visions can be changed with respect to this category of consumers. The questionnaire has different sections that correspond to traditional 4P marketing and new 4A approaches. The study will present purchase practices, favorite places to buy, favorite products, and ways to be aware of new products. This step is essential for marketers in order to adapt their strategies to reality.

The questionnaire has different sections that correspond to traditional 4P marketing and new 4A approaches. The study will present purchase practices, favorite places to buy, favorite products, and ways to be aware of new products.

The questionnaire is composed of 25 closed and structured questions to be understood by this segment, including demographics, how often they buy food, the relationship between seller and customer, their knowledge about products and brands. Some questions are related to traditional 4P theory: "place", "prize", "product", "promotion" mixed with Prahalad (2011) theory 4A: "awareness", "availability", "affordability" and "accessibility."

People interviewed are people who receive economic assistance at Permet Municipality. A total of 45 questionnaires were collected, of which 40 were valid and were used for further study. Questionnaires were handed over to a representative of each family, which was mainly the person who dealt with the family shopping.

The analysis was conducted through the SPSS program.

The hypotheses that will be addressed following the study are:

H1: There is a significant link between the gender of the people that are part of the bottom of the pyramid and the impact of other people on their purchases.

H2: There is a significant correlation between the Bottom of Pyramid customer age group and brand considerations as an important criterion for judging product quality.

H3: There is a significant correlation between customer incomes and the frequency of purchasing food products.

### 4. Data analysis

80% of respondents were women, while 20% were men (Fig. 1). These percentages were expected due to the fact that in the case of home purchases, especially in Albanian culture, the main role is female (mothers), while men have a lower impact on purchasing decisions. In men interviewed, some of the reasons that they have played a crucial role in purchasing decisions have been because their spouse had passed away, the wife was sick, and in very few cases was a joint decision (both spouses) that men taking part in family purchases.

*Table 1 Demographic data*

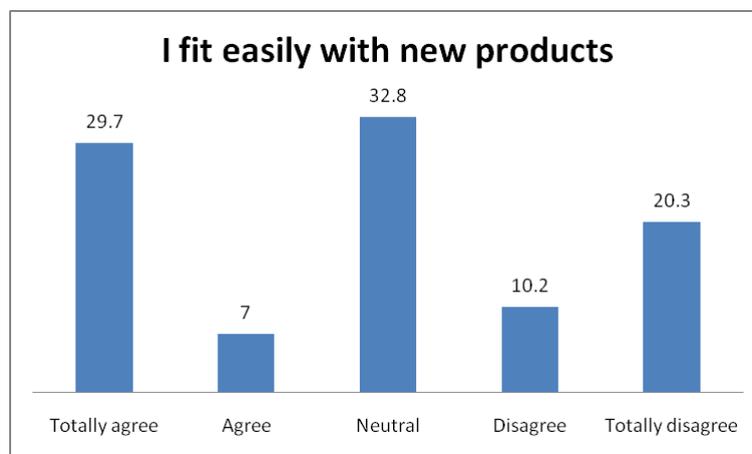
Demographic data	Percentage
<i>Gender</i>	
Male	20
Female	80
<i>Age</i>	
18-30	25
31-40	40

41-50	25
51-60	10
<b>Incomes</b>	
0-15,000 Lek	32.5
15,001-25,000 Lek	30
25,001-35,000 Lek	37.5

Source: Author's original finding from research

### Product and acceptability

For the statement "I fit easily with new products", the answers are mostly divided into three categories "Totally agree" 29.7%, "Totally disagree" 20.3% and "Neutral" 32.8% (Figure 2). From this result it can be concluded that most respondents can not adapt to new products.



**Figure 1. Adaption with new products**

Source: Author's original finding from research

It is understandable because this population consists mainly of people with low education, so they do not want or can not read the instructions on packaging or are reluctant to try new products because they underestimate themselves. It is assumed that these people feel they can not understand how the product works so they do not prefer to try new products. This shows that they find it difficult to adapt to new products. Also among the 5 questionnaires that were not used and not analyzed, respondents stated that they are not able to read. This point reinforces the need for traders to design packaging guidelines that are understandable to everyone. It has been proved that drawings can overcome this literacy problem.

Mostly, respondents give priority to the senses of touch, visibility and wind of food products. Indeed, survival consumers perceive the product, smell the product to make sure it is not spoiled and see it as believing they will buy such an item and not another if it is the same product. This result should not be neglected because it shows that consumers of existence do not use the same criteria as customers of other layers when they buy food.

High-income consumers trust sellers and companies so when they want a product, they look at packaging and advertising and decide what product they want. Rather, survival consumers do not focus on packaging and product advertising, but want to see and touch the product.

This means that if the marketers launch a food product with an opaque package, the poor will not be able to see it, smell it, and touch it so it would be likely they would not buy it.

Another result that deserves to be noted is the neutral results for buying a product suggested by friends. This shows that the BoP consumers are not very susceptible to suggestions of friends and decide to buy the products themselves.

If a comparison was made between the criteria, it would be noted that the most important buying criterion with 72.5% is "Need to see the product", followed by "Need to smell the product" by 55%, and then "Need to test the product with 50%". So the product for this consumer category has to be persuasive in appearance.

Almost all consumers say they never need to test the product before the purchase. This is explained by the fact that food products do not offer the opportunity to try before the purchase. Also, as the customer's income is low, they do not have the opportunity to buy the product to test, and then decide if they want to consume it again.

A cross-tab of the variable "I fit easily with new products" and "The seller gives me information about the product" show that 14 out of 40 respondents who can not easily adapt to new products do not see the information from the vendor as an important criterion. There is no strong link between information received from the seller and adaptation to new products. However, the fact that these customers are not relying on the seller can be fully explained by the fact that these customers prefer to seek help from family or make their own decision about using a new product

#### Price and affordability

In the table below we can see respondents' answers to the question "what are the most important criteria when buying a food product"?

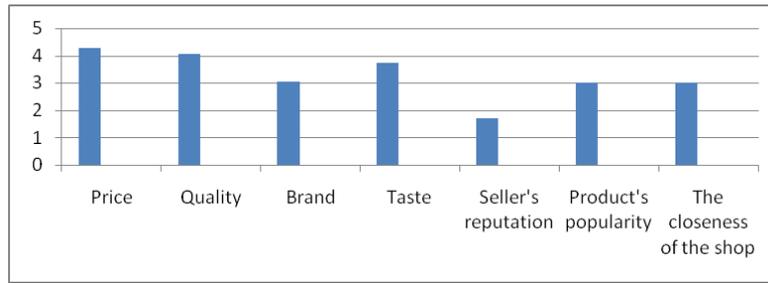
*Table 2. The most important criteria in buying a food product*

	N	Minimum	Maximum	Mean	Std. Deviation
Price	40	2.00	5.00	4.2750	.96044
Quality	40	1.00	5.00	4.0750	1.04728
Brand	40	1.00	5.00	3.0500	1.39505
Taste	40	1.00	5.00	3.7250	1.08575
Seller's reputation	40	1.00	5.00	1.7000	1.22370
Product popularity	40	1.00	5.00	3.0000	1.26085
The closeness of the shop	40	1.00	5.00	3.0250	1.44093
Valid N	40				

Source: Author's original finding from research

The two most obvious answers are "Quality" and "Price". This proves that survival customers are looking for affordable products but are not willing to sacrifice quality. Though these people are poor, they still focus on price / quality performance because they can not afford to spend their money on poor quality products that will quickly break down. The third most important criterion is "Taste" which is understandable as the study is focusing on the food product. Although the subject is a food product, respondents' responses show that "Taste" is not as important as "Quality and Price".

This ranking shows that BoP customers are not affected by the reputation of retailers and the popularity of food products. They prefer to rely more on criteria such as price and quality than product popularity.



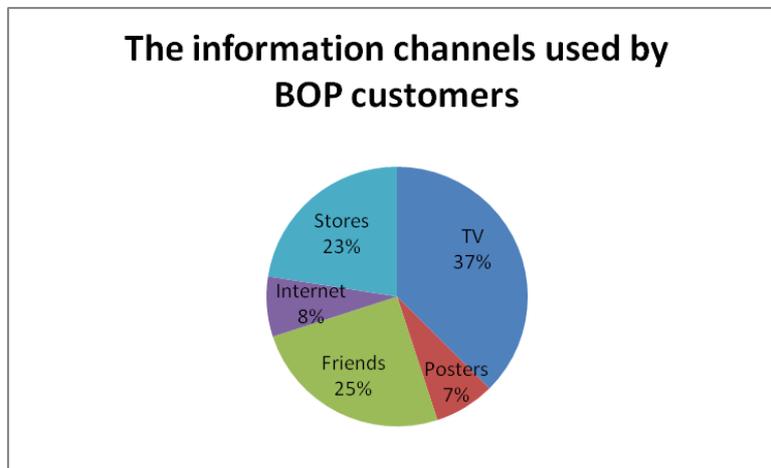
**Figure 2. Average results regarding the most important criteria for buying a food product**

Source: Author's original finding from research

Almost 83% of respondents (33 of them) are not willing to raise their money to buy expensive food.

Promotion and awareness

The results shown in figure 3 refer to how BOP customers are informed about products.



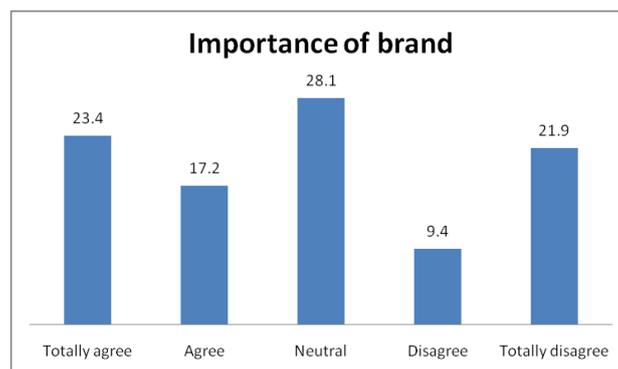
**Figure 3. The information channels used by BOP customers**

Source: Author's original finding from research

The goal was to assess whether BOP consumers tend to be more affected by ads or people. From the data analysis we notice that TV is the main medium for getting information about products, followed by discussions with friends and shops.

The lowest percentage is the internet and advertising posters. Television is one of the first non-basic products purchased, because it is a tool to discover new things, to spend fun time watching, to forget their bad conditions and to get a higher status.

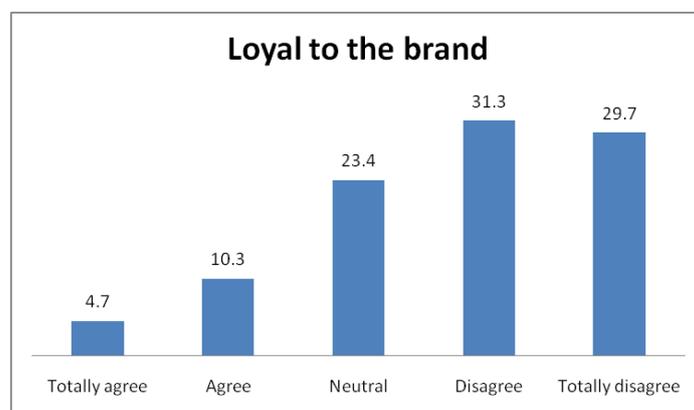
There is a slight predominance of respondents who care about brands, but without doubt these results are not enough to draw an indisputable conclusion (figure 4).



**Figure 4. Importance of brand to BOP consumers**

Source: Author's original finding from research

Respondents do not feel a strong bond with brands or strong brand loyalty as is shown in figure 5. It is assumed that the poor can not afford to be loyal, they just want to satisfy their basic food needs and tend to give priority to the price and quality to any brand either.

**Figure 5. Loyalty to the brand for BOP consumers**

Source: Author's original finding from research

BOP customers not only are not loyal to the brands, but it does not matter to them even the country of origin from these brands or products. 30% of them are neutral and 52% are not affected by the country of origin while choosing food products.

#### Place and availability

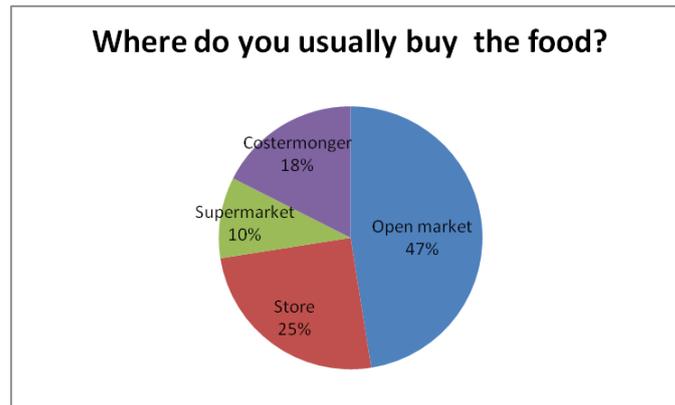
Table 3 presents cross tabulation to see if there is a link between "the frequency customers buy food" and "if these customers tend to buy mostly fresh food or canned food". The result is meaningful because as many people consume fresh food, the more often they buy food.

**Table 3. The frequency of purchases and the type of food consumed**

Frequency of purchases	of	Types of food consumed		Total
		Usually buy fresh food	Usually buy canned food	
Frequency of purchases	Every day	18	0	18
	2-3 times a week	15	0	15
	Every week	2	4	6
	2-3 times a month	0	1	1
Total		35	5	40

Source: Author's original finding from research

Most of the respondents, 47%, responded that they usually buy the food on the open market (figure 6). BOP customers buy in open markets because food there is somewhat cheaper than in stores or supermarkets.



**Figure 6. Place buying usually the food**

Source: Author's original finding from research

BOP customers are not rich enough to buy large quantities of products as usually can happen in the supermarket. There are many other reasons why most respondents go to "open markets" such as: it is the place to talk, to listen the others' opinions, to feed a relationship with a salesman, to find affordable products or because their friends go to the market etc.

*H1: There is a significant link between the gender of the individuals that are part of the bottom of the pyramid and the impact of other individuals on their purchases*

**Table 4. The correlation test between gender and 'suggestion of a friend as an important criterion for the purchase of a food product**

		Suggest by a friend as an important criterion for buying	
		Gender	
Spearman'rho	Gender	Correlation Coefficient	1.000
		Sig.(2-tailed)	-.371*
		N	.018
		N	40
	Suggest by a friend as an important criterion for buying	Correlation Coefficient	-.371*
		Sig.(2-tailed)	1.000
		N	.018
		N	40

Source: Author's original finding from research

According to the results in table 4, there is a moderate negative correlation between the gender and the consideration of a friend's suggestion as an important criterion for buying a food product. It turns out that respondents no matter of gender, have different tendencies of the criterion of influence from other people in their purchases. However, the link is considered to have statistical significance, and serving as a strategic reason for management products for companies operating in this segment and the importance of 'word of mouth' as an important element of marketing.

*H2 : There is a significant correlation between the age of BOP consumers and considering the brand as an important criterion to judge the quality of the product.*

**Table 5. Correlation test between age and brand as an important criterion for buying a food product**

			Age	Brand as an important criteria to buy the food
Spearman'rho	Age	Correlation Coefficient	1.000	-.126
		Sig.(2-tailed)	.	.440
		N	40	40
	Brand as an important criteria to buy the food	Correlation Coefficient	-.126	1.000
		Sig.(2-tailed)	.440	.
		N	40	40

Source: Author's original finding from research

The relationship between age and brand impact is in a weakly negative correlation but it does not have a statistical significance between branded product and customer age groups. Consequently, the second hypothesis fails because it seems that the age difference does not have influence on the reaction of consumers to brands. The data obtained show no significant connection or are not statistically significant between these two parameters.

*H3: There is a significant correlation between customer incomes and the frequency of purchasing food products.*

**Table 6. Correlation test between incomes and frequency of food's purchasing**

			Incomes	Frequency of food's purchasing
Spearman'rho	comes	Correlation Coefficient	1.000	-.731
		Sig.(2-tailed)	.	.045
		N	40	40
	Frequency of food's purchasing	Correlation Coefficient	-.731	1.000
		Sig.(2-tailed)	.045	.
		N	40	40

Source: Author's original finding from research

The test shows that there is a strong negative correlation between revenue and the frequency of purchases, which means that with increasing of incomes, the frequency of consumer purchases will decrease.

This is explained by the fact that consumers with lower incomes tend to buy more often products because their incomes are fluctuating and are never fair, and it 'forces' them to buy food once they offer a certain amount of money. On the other hand, consumers with relatively high incomes, have a regular interval to make sure their income, so that their purchases will be at regular intervals. Consequently, there is a statistically significant correlation between incomes and frequency of purchases for BOP customers.

## 5. Conclusions

Companies wishing to enter this market segment should consider living conditions and key features of the BOP customer segment. Food products belong to the largest purchase group because consumers buy them regularly and often. Most BOP customers do not adapt to new products, they do not want to read the instructions on packaging or are reluctant to try new products because they underestimate themselves.

Respondents give priority to touching, visibility and wind senses to a food product. They do not focus on packaging and advertising the product but want to have it in hand and to see the product. Marketers should focus in particular on the packaging of the product they will offer. This involves the creation of a simple and understandable packaging, and on the other hand the packaging must be resistant to conserve the food in the longest possible period.

The main criteria for buying a food product for these customers are the quality and price. This means that BOP customers are looking for affordable products but are not ready to sacrifice quality. Respondents are not loyal to brands. This is because the poor can not afford being loyal, they just want to satisfy their basic food needs and tend to give priority to the price and quality of any brand. So, brand influence is not important to consumers survival related to food products.

The age difference does not have any impact on customer response to brands. There is a strong negative correlation between incomes and the frequency of purchases. The age difference does not have any impact on customer response to brands. This study made it clear that BOP customers should be informed about using the product. Marketers should therefore design a product that will be understandable to them.

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## Customer's Perspective on Customer Data Usage in Mobile Banking Context

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### Abstract

Digitalization provides various opportunities for organizations to collect, analyze and exchange a massive amount of customer data. However, the extant research on customer data usage has mainly focused on how this could benefit firms and ignored the perspective of the customers. The purpose of this study is to explore how customer data can create value for customers in mobile banking context. Customers are increasingly aware of firms' (e.g. banks) interest to collect data and are becoming more conscious about giving away their personal information. This forces firms to think how to use customer data to explicitly benefit also customers. Along with the recent research within service and customer-centric logics that emphasizes customer-oriented thinking, there is a growing need to explore customer data usage from the perspective of customers. This paper presents an empirically grounded qualitative, exploratory study. The data was collected through 23 in-depth interviews among Finnish mobile banking customers and it was analyzed using theory-based content analysis method. Findings suggest that customers still have difficulties to understand the possibilities that customer data collected by companies could bring to them. The attitudes towards banks collecting customer data are primarily negative and customers do not see much value in banks' use of customer data. Theoretically, this study contributes to extant service research by exploring this under-researched topic in a timely context, i.e. mobile banking services. In addition, the opportunities and challenges brought by digitalization into customer data management is a topic that needs further research attention. From the managerial perspective, understanding the reconfigured role of customer data helps in creating new ways to serve customers better, which will result in engaging customers into long-term relationships and thus creating more value for both the service providers and their customers.

**Keywords:** customer data, customer value, digitalization, mobile banking, service marketing, value creation.

**JEL classification:** M31.

### 1. Introduction

Digitalization has created a massive capacity to capture customer data through different channels, thus providing variety of ways to develop deeper customer understanding and further customer engagement (Kunz et al., 2017). Customer data usage is commonly equated with conventional customer relationship management (CRM) activities aimed at supporting firm's internal processes, e.g. segmentation, identification of the most profitable customers and supply chain management (Payne and Frow, 2005). These methods for using customer data are inherently very firm-oriented and focused on using customer data for the benefit of a company (Thaler, 2011). At the same time, the examples of customer data benefiting customers have remained scarce (Saarijärvi et al., 2014). Traditional use of customer data is not in tune with the current service research as service and customer-centric logics emphasize the importance of understanding customers, their experiences and value creation (e.g. Grönroos, 2008; Vargo and Lusch, 2008; Heinonen and Strandvik, 2015). Only by creating this understanding, firms can understand their customers' everyday life, provide superior value and further engage customers in the long-term relationship, thus creating more value for both parties.

The massive amounts of data under the control of organizations and public bodies have inspired discussions on data privacy, data ownership, regulations and data usage in general. For instance, the new data protection legislation (GDPR) in Europe is a topical example of the phenomenon. This also compels firms to take a closer look at their existing marketing practices;

how do they collect, share and use the customer data. On the other hand, consumers are also aware of firms' increasing interest towards customer data and are becoming more and more conscious about giving away their personal information. This forces firms to think how to use the customer data to benefit also their customers. The major question then is: how to utilize customer data to benefit both service providers and their customers? Saarijärvi et al. (2014) use the concept of "reverse use of customer data" which refers to converting customer data into information that directly support customers' value creation. This represents a major future development in service business environment and thus demands further attention from marketing and service researchers.

This study explores customer data usage in banking context that is experiencing rapid and widespread changes due to technological changes such as immediate payment infrastructures across bank borders, blockchain, and mobile applications. This blurs the boundaries between banks and makes competition of the customers fierce. In relation to this, providing superior value for the customers and engaging them in joint service development and value co-creation becomes critical. Banking services have traditionally been to a great extent provider-oriented, i.e. their mindset gives primacy to banks' own processes and the customer is often seen only as a target of banks' marketing activities (Lähteenmäki and Nätti, 2013; Medberg and Heinonen, 2014). Banks also have a wide access to various different customer data. However, customer data cannot be viewed anymore as exclusively owned or used by the banks but rather as a way to provide customers more value. Shifting the focus from internal to external use of customer data finds also theoretical support in recent discussion about customer-centered logic (e.g. Heinonen and Strandvik, 2015) suggesting that value is formed in the joint processes between service providers and customers and determined by the customer.

Even though the importance of understanding reverse use of customer data has been explored e.g. in the food retailing context (Saarijärvi et al., 2013), current research lacks empirical evidence from different types of service contexts. Due to its topicality and specific features, more research is needed in the field of banking services and mobile banking services in particular. This paper will address the topic by presenting an empirically grounded study conducted among Finnish bank customers. The purpose is to answer the question: *How can customer data create value for the customer in mobile banking context?*

Theoretically, this study contributes to the extant service research by exploring this under-research topic in the timely context, i.e. mobile banking services. Despite the growing amount of research emphasizing customer-centricity, more research is needed from the consumers' perspective (Heinonen et al., 2013). In addition, the opportunities and challenges brought by digitalization into customer data management are a topic that needs further research attention. From the managerial perspective, understanding the reconfigured role of customer data has important implications. It helps in creating new ways to serve customers better, which will result in engaging customers into the long-term relationship with the service provider and creating more value both for the company and its customers. In addition, reverse use of customer data combined with digitalization opens up new ways to support customers' value creation. Most importantly, it enables companies to get involved in their customers' everyday life and thus better responding to their continuously changing needs by providing services that create improved value for the customers.

The remainder of this study is organized as follows. First, literature review sheds light on the previous research in the field of (reverse) use of customer data and value creation. After that, methodology of the study is described and next, the empirical findings are discussed. Finally, conclusions present theoretical contributions, managerial implications and future research avenues of the study.

## 2. Literature review

### 2.1 Mobile banking

Banks can be considered as pioneers in the digitalization of services as they have developed numerous new methods for their customers to handle the daily banking and financial operations (Heinonen, 2006; Chemingui and Iallouna, 2013). Recently, the importance of mobile banking services has emerged as one of the key priorities for banks (Sahoo and Pillai, 2017). Generally defined, mobile banking can be seen as “a service or product offered by financial institutions that makes use of portable technologies” (Tam and Oliveira, 2017, p. 1046). In practice, consumers can use mobile banking services to perform different banking activities such as paying invoices, conducting payment transactions, checking the balance of their account and retrieving credit card details.

The benefits of mobile banking for end customers relate to immediate access to banking services regardless of time or location, enabling time savings and real-time information, and creating feelings of convenience and control (e.g. Laukkanen and Lauronen, 2005; Mortimer et al., 2015). Banking industry is experiencing rapid and widespread changes even more than before as digitalization is creating new ways for banks and other financial institutions to operate and develop their services. Consequently, customers’ needs are changing as more and more transactions take place on mobile devices. As competition in banking industry is growing and customers become more demanding, creating superior customer value has become increasingly important (Lähtenmäki and Nätti, 2013; Medberg and Heinonen, 2014). Therefore, it is crucial for banks to create understanding of their customers’ everyday value creation, as it can help them to differentiate their services on the market and enhance customer satisfaction and loyalty (Frow and Payne, 2007; Gentile et al., 2007). Related to this, finding new ways to use customer data in order to create more value for the customers is one important future development.

### 2.2 Customer data usage

Traditionally, customer data has mainly been used instrumentally to serve companies’ purposes (e.g. Saarijärvi et al., 2013). For example, with support of CRM technologies companies have used customer data e.g. to customized communications, cross-selling or segmentation (Payne and Frow, 2005), in other words to support their own processes and efforts to sell more products or services. However, increasing number of private and public initiatives challenge conventional CRM activities and suggest new, innovative ways of using customer data (Saarijärvi et al. 2013). Even though companies’ traditional use of customer data can also be useful for customers in an indirect way through e.g. category management (i.e. better fit between customers’ needs and the company’s product categories) or direct marketing campaigns, the current CRM framework has been inherently very firm-centric and focused on using customer data mostly for the benefit of a company (see Thaler, 2011; Thaler & Tucker, 2013). Saarijärvi et al. (2013) found in their study that there has been evolution from data dispersion through data organization and data ownership towards data sharing, since companies are constantly seeking new ways to refine and give customer data back to customers to support their value creating processes. In relation to this, they suggested four emerging themes that characterize the reconfigured role of customer data. First, due to customer data reconfiguration the companies are able to *increase the loyalty of customers* that find the information provided relevant and interesting. Secondly, companies are able to *differentiate* themselves from the competitors and attract new customers because of customer data reconfiguration. Thirdly, by reconfiguring the customer data companies can *put their values and strategy into practice* e.g. by emphasizing customer orientation and providing customers with access to their own data. Finally, the customer data reconfiguration may *improve companies image* and customers may perceive companies in a more positive light, e.g. as pioneers that give customer data back to

customers. It is therefore suggested (ibid.) that this shift towards customer data sharing opens up many new business and service opportunities. For example, healthcare actors could return data about customers (i.e. patients) back for customers' own use and social media applications enable firms to use customer data to support their customers' processes. Therefore, customer data cannot be seen anymore as exclusively owned and useful for the service providers, such as banks, but rather as a way to better serve customers and provide them more value.

### **2.3 Value creation and customer orientation**

Value has been broadly studied in the field of marketing and during the last decade specifically in relation to services (see e.g. Heinonen *et al.*, 2013). Traditionally there has been numerous ways of approaching customer value, such as value component models (focusing on product or service features), benefits/costs ratio models (exploring trade-offs customers are expected to make between benefits and sacrifices) and means-end models (based on the assumption that customers acquire and use products/services to accomplish favourable ends) (Khalifa, 2004). One of the most used conceptualizations of value defines it as the "consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given" (Zeithaml, 1988, p. 14).

In this study, the recently emphasized customer-centric perspective on value is adopted and value is here seen as experiential and closely involved in the context of customer's everyday life (e.g. Helkkula and Kelleher, 2010; Heinonen and Strandvik, 2015) and thus more comprehensively than traditional value approaches. More specifically, a customer-oriented perspective on customer data usage is being used here. It means approaching customer data collection and usage from the customer's perspective, i.e. how to improve customer value with the aid of customer data, instead of focusing on the company's (in this case bank's) perspective. Therefore, in line with the study of Saarijärvi *et al.* (2013) our starting point is that customer data needs to be viewed as a way to provide customers with additional resources in order to better serve those customers and enhance their value creation processes in their everyday life. With this theoretical understanding, we will next move on to empirical part of the study to see how customer data usage is currently perceived by the customers of mobile banking service providers. Before that, the methodology of the study is shortly discussed.

## **3. Methodology**

This paper presents a qualitative exploratory study (Denzin and Lincoln, 2000). The research process follows an abductive logic, in terms of constantly going back and forth between empirical observations and theoretical concepts (Dubois and Gadde, 2002). The data was collected through 23 interviews with Finnish bank customers. Interviewees were 21-64 years old, and both genders as well as various occupational groups were represented equally. Interviews were conducted as semi-structured theme interviews, and they varied in length between 20 and 55 minutes. All interviews were recorded and transcribed word-for-word. The interviews and their themes were based on a comprehensive literature review of current studies relating to customer-centered thinking, value creation, and reverse use of customer data.

The data was analysed using content analysis method. As suggested by Miles and Huberman (1994), the analysis was implemented through phases of data reduction, data display and drawing conclusions. NVivo 8 software was used to facilitate the content analysis.

## **4. Findings**

### **4.1 Customers' knowledge of customer data usage**

Based on the empirical data, customers seem to be quite well aware that banks are collecting data about them while they are using mobile banking services and also other banking services.

Some of the interviewees assumed that they know exactly what kind of data banks are collecting about them whereas some admitted that they do not have a clue about it. However, most of the customers seem to know that some kind of data is being collected but they are unsure about what this data actually is and for what purposes it is being used. This causes a lot of uncertainty and suspiciousness among customers and they think there is nothing they can do about it. This is illustrated in the following quotation:

*“Information (about customer data usage) is usually hidden into the long and unclear clauses, those service terms and conditions you have to accept before you start using the service. Nobody reads them and there are definitely some surprises and things that you cannot even think about.” Woman, 38 years*

However, interviews clearly indicate that when the service provider is a bank, customers are more trusting and less suspicious in their attitudes compared to e.g. other mobile service providers. Many of the interviewees seem to have a strong confidence on banks' data security and that they are reliable in taking care of their customers' private matters.

#### **4.2 Customers' attitudes and perceptions of customer data usage**

When discussing about the benefits the customers get as a positive side of customer data usage, some of the interviewees openly stated that there is absolutely nothing positive for them in bank's customer data usage but it only benefits the service provider itself.

*“I cannot think anything good about it. I don't think it provides anything to me. The bank is only one getting benefits from it.” Man, 40 years*

On the other hand, some of the interviewees think that banks are using customer data to develop their services. This, however, does not seem to concretize to customers in any way but they think that service development will be realized somewhere in the distant future and it does not provide any value for them yet. In relation to the service development, some customers had suggestions how the mobile banking service could be developed to provide more value for them in the future. These thoughts were mostly related to tailoring and targeting the mobile banking service according to the customers' behavior, needs and preferences of which bank gets information by collecting data about customers' use habits in mobile banking. This is demonstrated in the following quotation:

*“If there are for example regular money transfers between family members the bank could, in the future, to identify it and suggest for instance a common bank card for that family based on their previous behavior. So yes, I think it could be useful for me that they collect data about us.” Man, 58*

Attitudes and perceived benefits varied also based on for what purposes the interviewees think the bank uses the customer data:

*“It depends on what they use my data for. If they use it to improve the mobile banking application to suit me better, it sounds very good! But if they use it to advertising, then I don't like it at all.” Woman, 33 years*

In contrast to benefits, many interviewees reported negative aspects related to bank's usage of customer data. These negative feelings and suspicions were due to many uncertainties and even fears the customers may have. Some customers were afraid that banks will sell their personal data to third parties without asking their permission. In relation to this, many were unsure about who will finally use their data and for what purposes, which stirred up anxiety. This is illustrated in the subsequent quotation:

*“I'm really annoyed that they sell my personal information and it ends up to somewhere that nobody wanted it to end up. Other parties use it and you don't know anything about it.” Man, 33 years*

One common assumption and even a fear among customers was that their personal data is used purely to commercial purposes:

*“I don’t see any benefits (in banks’ customer data usage) but I see many disadvantages if they put some targeted advertisements into my mobile bank. I don’t like that idea at all.” Man, 58 years*

Some customers were worried about data security and thought that if there were security breach or their data is otherwise leaked to outsiders there might be a thread of serious data misuse or even an identity theft.

*“I’m thinking about for example an identity theft. Because you don’t know what people may do with your personal data. All the scary things they may think of. I’m a skeptical and suspicious person and truly afraid of all these kinds of things.” Woman, 37 years*

Finally, there were some customers that did not have either positive or negative thoughts about banks’ usage of customer data but had very neutral attitude towards it:

*“Well, it does not bother me that they use my personal data but on the other hand, I also think that it doesn’t benefit me at all.” Woman, 20 years*

In sum, it can be said that the general attitude among customers was quite negative and doubtful which is mainly due to the many uncertainties and open questions related to banks’ customer data collection and usage.

#### **4.3 What kind of information customers are willing to share and why?**

When discussing what kind of personal information customers are willing to share with banks their thoughts and opinions varied quite a lot. Some were ready to share for example their location or previous purchasing history if the bank ensures that this will directly benefit the customer. However, they emphasized that the benefits need to be concrete and clear to them before they are willing to share their personal data. Some suggested that banks could offer a certain compensation for data sharing, e.g. money or different discounts, and the customers could then decide whether they share their personal data or not.

*“If it is possible to choose, I usually don’t allow them to collect any data that doesn’t clearly benefit me. For example my GPS or location information. But if I see that it really creates value for me and not only for the service provider, then I could say yes. But it depends on the situation.” Man, 37 years*

Some of the interviewees emphasized that banks have access to their most personal information such as social security number, bank account number and balance in any case. In relation to this, they also considered banks to be such a reliable service provider that they were not worried about it but shared this information without any suspicions. Other service providers, however, were not seen as reliable as banks. Many interviewees stated that they would share their information with banks but not with other service providers, as the following quotation points out:

*“Sometimes I haven’t downloaded an application if it has asked me to fill in too much personal information. But then, with this mobile bank application, I feel like my bank is so secure and reliable that I don’t even hesitate to give them my personal data.” Woman, 37 years*

There were also many customers, who were reluctant to share any kind of information voluntarily, even with their banks. They told that it is best when their personal data is collected and used as little as possible.

#### **4.4 Attitude towards customer data sharing to third parties**

Again, there were great variations in customer’s attitudes towards banks sharing their data forward to third parties. Some thought it was acceptable if the customer was aware of this and had given his/her permission. Some even brought out that it is quite self-evident for them that

service providers are sharing data with each other. Then again, some saw this as very negative and felt that they cannot affect this data distribution, as only market forces rule:

*“Unfortunately you cannot do anything about it but they give away your personal data anyway. If somebody wants to buy it, banks only think about their economic benefits and how to get all the possible money out of it.” Man, 40 years*

Some interviewees pointed out that similarly with banks collecting and using customer data for their own purposes, sharing this data with third parties was acceptable as long as it creates value for the customers and makes their daily life easier. For example taking care of insurance or healthcare processes could be made easier if the customer data was available between different instances. Also different discounts or other monetary benefits were pointed out as useful aspects as the next quotation reveals:

*“We have this mobile bank that is owned by the cooperative retail society. So you can easily see your shopping history and how much money you have spent and also the bonuses you have collected from different stores. And there are also monthly discounts and other useful information. I find it quite cool.” Man, 38 years*

On the contrary, many customers pointed out that giving their personal data purely for commercial or advertising purposes was very distracting. It was seen important to whom the customer data is distributed. For some it was acceptable to give customer data to tax authorities or research institutions but not to other commercial actors. To sum up, customers seem to think it is highly important that they can control the sharing of their personal data to third parties (i.e. give or decline their permission) and it needs to provide them clearly identifiable benefits.

#### **4.5 Development ideas concerning customer data usage in mobile banking services**

Based on the data, mobile banking customers have interesting insights and ideas about the future development of mobile banking service from the customer data perspective to meet the customers' needs better and to create more value to them. For example, many interviewees suggested utilizing the temporality or the location of the customer.

*“It could utilize location of the user or the time s/he is using the service more effectively than now. So that ‘you are in this location and you might find this kind of content useful here’. Those kinds of things would be very nice to have.” Woman, 38 years*

Providing real-time and topical information was seen useful by many interviewees since mobile bank service is always available and in hand in the mobile phone. Information could be about money or spending, such as investment or saving tips or it could be purely entertaining content.

*“Joy and entertainment would be nice to have in your mobile bank and maybe it could also give you some new ideas or experiences. If it would proactively give you such information, I'd be happy to receive it. But not too much, I don't want any information overflow.” Man, 40 years*

Some hoped that mobile banking service could use customer's usage history to predict his/her consuming behavior and react to it by offering e.g. discounts in their regular shopping places. Also proactively providing tailored and relevant information was seen as a good thing. On the contrary, some strongly pointed out that in their opinion mobile banking service and use of customer data should be used merely in communication between the bank and the customer and nothing else.

#### **5. Conclusions**

The purpose of this study was to increase understanding about how can customer data create value for the customer in mobile banking context. To answer this question, an empirically grounded study was conducted among 23 Finnish bank customers. It reveals that customers still have difficulties to understand the possibilities that customer data collected by service

providers, such as banks, could bring to them. The attitudes towards banks collecting customer data are primarily doubtful and negative and specifically in mobile banking context customers do not currently experience much value from reverse use of customer data. However, this study provides suggestions how this situation could be improved and how the usage of customer data could be developed further to create more value to both the service providers and their customers.

As one of the key findings of this study, we suggest that it is highly important for service providers to develop in-depth understanding about their customers' value-creating processes and about how to support these processes in their daily life. In this, effectively collecting and utilizing customer data plays an important role. Using the customer data to develop such mobile banking services that create superior value for the customers helps banks to increase service usage and thus engage their customers into enduring relationships with them, which in turn creates value for both parties in the long run. Furthermore, customer data usage should not be looked at only from the service provider's perspective but the benefits for the customer need to be understood and emphasized as well. Purely firm-oriented approach easily results in negative and suspicious attitudes among customers and further leads to decrease in voluntary information sharing and service usage.

### **5.1. Theoretical contributions**

This research makes valuable contributions into both the theory and practice of marketing, specifically in the field of service marketing. Firstly, it explores customer data usage from the customer's perspective instead of focusing on service provider's view that has been prevailing in most previous studies on customer data usage. In addition, this under-research topic is examined in a very timely context, i.e. mobile banking services. Banking business is undergoing drastic changes along, for instance, digitalization, new data protection legislation and banking industry disruption that challenge the traditional banking services and require constant development among service providers in the field. Hence, this study answers to the call of more empirical research on reverse use of customer data in different topical contexts (see Saarijärvi et al. 2013).

Our research finds support from the study of Saarijärvi et al. (2013) in that the role of customer data needs to be reconfigured to increasingly benefit customers and to enhance their value creation processes. This can also benefit the companies in many ways, e.g. by differentiating them from competitors and engaging them into long-term relationship with the customers due to the improved services that create more value to customers. As an extension of their study, this paper reveals customer's actual perceptions and attitudes towards customer data usage that aid the service providers to focus on right things while developing and re-designing their usage of customer data.

Our empirical findings are also in line with previous research addressing the dark side of CRM, i.e. customers becoming more and more suspicious about the customer data usage due to the unethical behavior of some companies that are e.g. misusing information, invading privacy or operating different customer lock-in strategies (Frow et al. 2011). Even though the banks are mainly considered trustworthy and more reliable compared to other mobile service providers, some customers are still concerned about how the banks are using their personal data and whether there is a risk of unethical behavior harming the customers' privacy.

### **5.2. Managerial implications and future research avenues**

As digitalization brings along both opportunities and challenges into customer data management, this paper has concretized these by exploring customer data usage from the customer's perspective in mobile banking context. Thus, from the managerial perspective, this

study also provides many important implications. In relation to customers' knowledge of customer data usage, banks need to be more open and clear in their communications. They need explicitly inform their customers of what kind of information is being collected and more specifically, to communicate the benefits of customer data collection for the customers more visibly. Also concretizing those benefits is important since currently the customers have a very indefinite idea of customer data usage and they therefore assume that banks are using this data only for their own benefit.

Mainly due to the uncertainty and ignorance of benefits, many customers have negative thoughts and attitudes towards customer data usage. It is important that banks are aware of these to be able disprove them. For instance, selling the customers' information further without explicitly asking for their permission and the general uncertainty of who is using the customer data and for what purposes are common doubts among the customers, not to mention data security issues that are highly important to be taken care of. It is also important to acknowledge that banking services in particular are such a critical and fundamental part of customers' life that customer data usage needs to be planned, organized and handled with extreme caution.

In addition, utilizing customer data purely for commercial purposes is something that banks need to be careful with since customers do not want to be bombed with irrelevant advertisements. On the other hand, well-targeted and personalized advertisements related to banking services can be turned into benefits in the eyes of the customers if they are planned carefully, based on the customer data. In general, customers are very conscious and strict with their rights to control the use of their own data so the banks need to provide detailed information about what data is being collected, for what purposes it is used and who has a right to access this data.

In relation to this, sharing customer data to third parties becomes an important issue. Based on our findings, customers seem to assume that this happens quite automatically e.g. between banks and insurance companies or banks and chain stores. On the other hand they see this as normal and acceptable and on the other they want to control themselves what kind of data is being shared and to whom. Again, banks need to make sure that they are as open as possible about their policies to keep customers informed and thus satisfied.

Finally, there are many development ideas concerning customer data usage in mobile banking services that banks can utilize in the future. This study reveals that there is an interesting contradiction in customers' attitudes: they do not want their data to be used for commercial purposes (advertising) but then again they wish that in the future the mobile banking service could identify their buying habits and behavior and based on them, to offer appropriate suggestions e.g. for saving money or making investments. Therefore, it is very important for banks to identify the differences between customers and to target different mobile banking services to certain customer segments. This way it is possible to serve each customer group according to their needs and to provide them optimal value.

In the future, more research is needed on different possibilities, e.g. service and business concepts, brought by reverse use of customer data. Here, taking into account both customers' and service providers' perspectives is imperative, instead of focusing only on firms benefitting from customer data usage in developing their business. Also use of different research methods, such as focus groups or surveys, could be used to create new understanding of this under-research yet important topic.

### **Acknowledgments**

The author gratefully acknowledges the financial support of Finnish Cultural Foundation and Finnish Funding Agency for Innovation (TEKES).

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## **International Scientific Cooperation Networks of Top Universities in the CEE Region**

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### **Abstract**

Competitiveness of higher education institutions depends highly on the ability of universities to interact with the national and international scientific community. Publishing with researchers from other countries can greatly improve the scientific and economic performance of universities and can increase international visibility. This is the reason why building international collaboration links with other countries' research and higher education institutions has become priority for most universities, colleges. International publication links of the top universities in Central and Eastern Europe (CEE), although showing a growing trend, are still lagging behind Western European or North American higher education institutions. The aim of this research is to identify the main characteristics of the international publication network of the top universities of Poland, Slovenia, Slovakia, Hungary, Romania and Bulgaria. The study focuses solely on international publication links. Data were retrieved from the Scopus database. Higher education institutions were chosen using the QS Emerging Europe and Central Asia University Rankings (2018). A map containing publication links for the best universities in Central and Eastern Europe can be drawn using network theory tools. Higher education institutions in the CEE region prefer Western European or North American research partners than build publication links with scientists from neighbouring countries. A higher number of publication links can indicate a deeper integration in the international scientific community. Decision makers should support the formation of international scientific cooperations, as these can not only improve the institutions' economic and scientific performance, but can also enhance international visibility and attract national and international students.

**Keywords:** higher education, publication networks, CEE countries.

**JEL classification:** I23, F15, C45, D85.

### **1. Introduction**

International competitiveness and visibility of higher education institutions depends greatly on their ability to interact with the national and international scientific community. The aim of this study is to analyze the publication links of top higher education institutions from six Central and Eastern European countries, Bulgaria, Hungary, Poland, Romania, Slovakia and Slovenia. The focus is on the scientific collaboration of these universities measured through publications. Do they tend to cooperate more with institutions from neighbour countries or prefer to collaborate with researchers from Western Europe or the USA, the leaders of the global scientific market?

Scientific cooperation can greatly influence the scientific performance of researchers, higher education and research institutions or even countries (see for example Chen et al., 2016; Zhou et al., 2013; Ding, 2011). Glänzel (2001) has shown that co-authored publications tend to get more citations than one-authored publications. Less developed countries can increase the quantity and quality of their scientific performance by cooperating with researchers from developed countries (see for example Vogel, 1997; Wagner et al., 2001; Harris, 2004; Zhou-Lv, 2015). For example, a researcher coming from an African country has more chance to publish in an internationally known journal if she or he has as co-author a researcher from the USA or Western Europe. According to Zhou-Lv (2015), developed countries can also take

advantage from these kinds of collaborations. It can counterbalance the decrease of the number of their young researchers.

Higher education institutions such as universities can increase their scientific competitiveness by cooperating with other countries' higher education or research institutions. Khor and Yu (2016) analysed the effect of international co-authorship on the impact of publications of some selected well established and young universities. They concluded that both young and old universities benefitted from these type of collaborations.

## 2. Methodology

This study focuses on the scientific cooperation of the top higher education institutions of Bulgaria, Hungary, Poland, Romania, Slovakia and Slovenia. Scientific collaboration is measured through publications. For identifying the best universities in the analysed countries, the QS EECA (Emerging Europe and Central Asia) University Ranking was used. Several international university rankings are published every year. The most known are the Academic Ranking of World Universities (ARWU) or the Times Higher Education World University Ranking. Very popular are also the rankings published by Webometrics and the university rankings by Quacquarelli Symonds (QS) (QS Rankings). The QS EECA ranking was chosen for this analyses as universities from the CEE region are almost invisible in other international university rankings. For example the first higher education institution from this region in the ARWU ranking is the Charles University ranked 201-300.

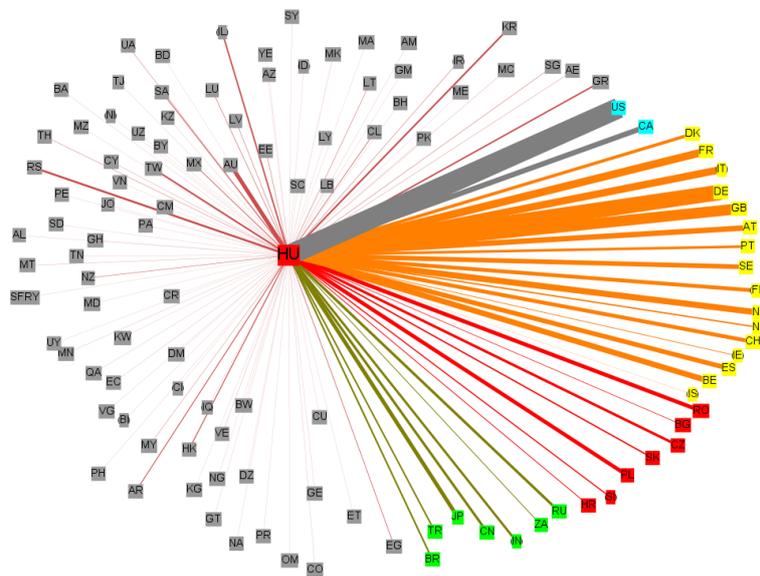
The international scientific cooperation of the top universities was analysed. As this study focuses only on international links, all national collaborations were excluded from the analysis. Publication and affiliation data for all research fields were retrieved from the Elsevier, Scopus database (all publications until June, 2018). Publication links are defined as publications where in the affiliation, besides one top university analysed, there is at least another institution mentioned from a foreign country. This means that not only co-authored papers are regarded as scientific links, but all those one-author publications are taken into consideration where the author has mentioned in the affiliation, besides the university analysed, at least one more institution from a foreign country.

## 3. Main Findings

Network theory tools were used to analyse the international publication links of the top universities of Bulgaria, Hungary, Poland, Romania, Slovakia and Slovenia. Countries with which the universities had been mentioned together in publication affiliations are the nodes. Edges represent the publication links between higher education institutions and countries. The width of these show the number of links. The greater is the size of an edge, the more the university and country have published together. Red nodes represent countries of the CEE region, the yellow ones show countries from Western Europe and Scandinavia (Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and Great Britain). Countries from Western Europe and Scandinavia were grouped together as their scientific performance is very similar (see for example the EU Commission's SRIP Report, 2018). Blue nodes are for countries from North America (USA and Canada), while BRICS (Brazil, Russia, India, China, South Africa), Japan and Turkey are represented by green nodes. The latter group entails the main emerging markets (both economically and scientifically) and Japan. Gray nodes represent all other countries with which the analyzed universities had scientific connection measured through publications.

According to the QS EECA Ranking (2018), the top university in Bulgaria is the University of Sofia (rank 47), in Hungary it is the University of Szeged (rank 27), in Poland it is the



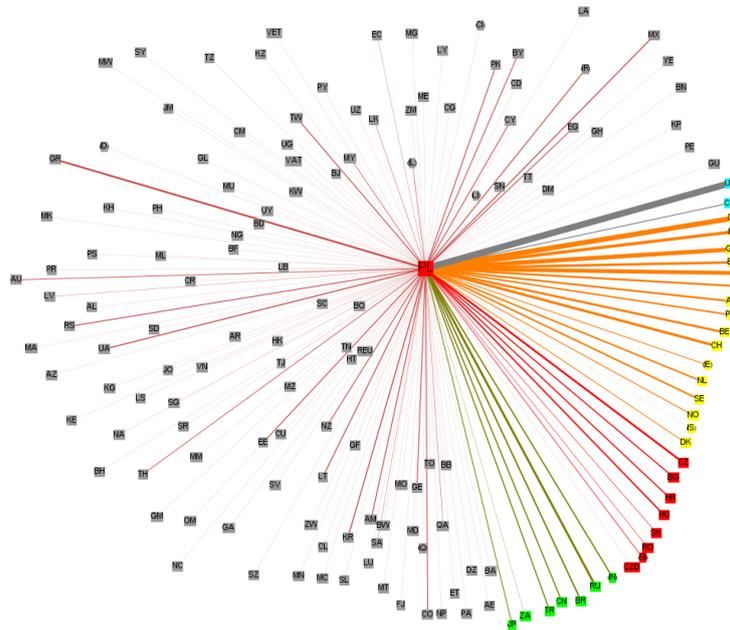


**Figure 2. International publication links of University of Szeged (Hungary)**

Source: Scopus, own editing

Question arises, whether the distribution of publication links for the top university of Hungary shows similar characteristics than that of University of Sofia. The link ratios for the five country groups are almost identical to the previous one. North America, Western Europe and Scandinavia are the ones with the highest number of links (15.80% and 51.34%). BRICS, Japan and Turkey hardly reach 10% (9.38%), while the CEE region holds less than 10% from the total number of publication links (8.84%). The ‘other’ category (the gray group), although it entails 84 countries, has only 14.64%. It seems that, as seen by the Bulgarian higher education institution, the University of Szeged prefers to have Western European, North American or Scandinavian than CEE research partners. The very wide edge linking the university to the USA shows a great interest of the university towards scientists from the North America.

The network of international publications for the University of Warsaw can be seen on Figure 3. The total number of links was 66 940, while the nodes representing partner countries was 156. Both the quantity of links and nodes are very different from the University of Sofia or University of Szeged. This means that the Polish higher education institution has almost six times greater number of publication links than Hungary or Bulgaria, and also it built scientific cooperation with almost half as much countries than did the previously analyzed two universities. Looking at this data, the University of Warsaw seems to be much more open when it comes to international publications than does the top university from Hungary or Bulgaria.



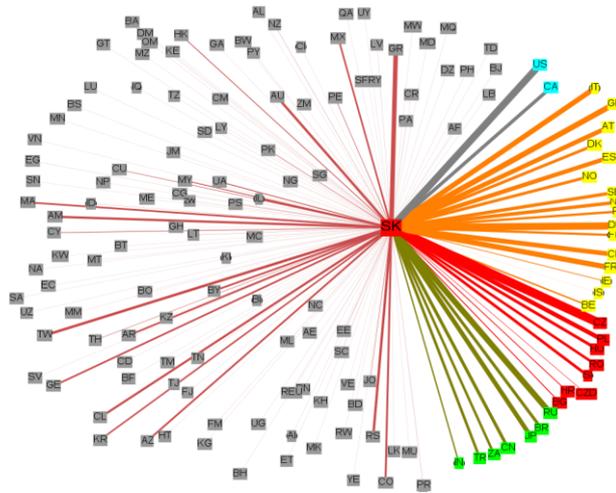
**Figure 3. International publication links of University of Warsaw (Poland)**

Source: Scopus, own editing

It is interesting to see how the geographical distribution of publication links differs from the previous ones. Is it different at all? Looking at the publication network of the university, one can see, that the groups with higher ratios are the same as for the other top universities. Countries denoted with yellow and blue color are the ones with the highest number of links. The only difference is that the distribution is a little more even than seen by the other higher education institutions. The data outlines this observation. The Western European and Scandinavian countries have a ratio of less than 50% (43.04%). The North American region has also a smaller proportion from the total publication links, 9.144%. The big difference is at the gray group, which entails 28.48% from all scientific collaborations analyzed. This is greater with more than 10% than by the universities of Hungary and Bulgaria. The number of nodes (countries) belonging to this group is also higher (123 compared to 79 and 84). Interestingly, the only feature which is almost identical with the other two higher education institutions, is the ratio of CEE countries, 8.91%. It seems, that, although the University of Warsaw has some differences regarding its geographical link distribution, its publication partner preferences are the same as for the University of Sofia or University of Szeged. It tends to publish more with partners from Western European, Scandinavian or North American countries than with scientists from the CEE region.

The geographical distribution of publication links of University of Bucharest is shown on Figure 4. The total number of nodes and links are similar to those seen by the University of Sofia and University of Szeged (110 nodes and 17 869 links).

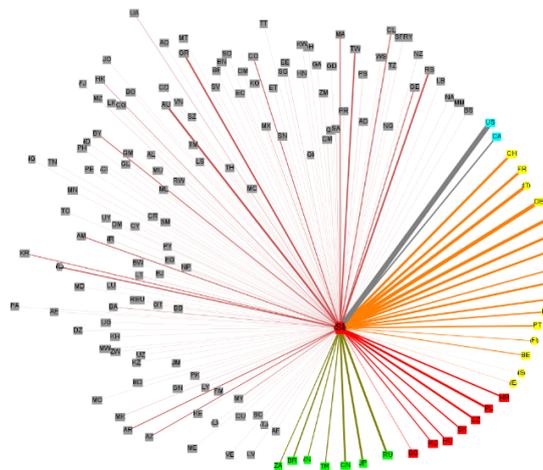




**Figure 5. International publication links of Comenius University in Bratislava (Slovakia)**

Source: Scopus, own editing

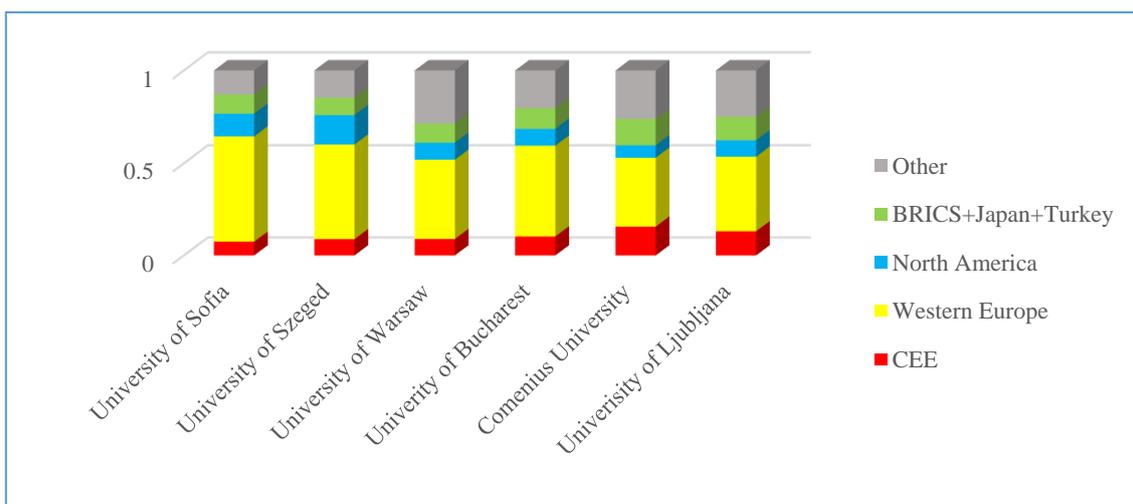
The geographical distribution of publication links, however, shows a relative different picture compared to the other universities analyzed. The ratio of Western European and Scandinavian countries is less than 40% (37.37%) and for North America is 6.64%. A very low value compared to the ones analyzed before. Interestingly, the green group's ratio of the total links reaches almost 15% (14.21%). The gray group has a value similar to the one seen by the University of Warsaw (26.1% for 151 countries). Surprisingly, the ratio for the CEE region is also quite high, 15.68%. Looking at the links with Central and Eastern European countries, one can see that the 'collaboration' is relatively high with Czechoslovakia. This is a methodological issue as this study deals only with international publication links. Slovakia and the Czech Republic were part of Czechoslovakia until end of 1992. The high ratio of links with Czechoslovakia (and through it with the CEE region) should be interpreted with caution as this might also entail links with institutions which are now part of Slovakia.



**Figure 6. International publication links of University of Ljubljana (Slovenia)**

Source: Scopus, own editing

The publication links for the top university of Slovenia can be seen on Figure 6. It contains 157 nodes and 72 058 links. The University of Ljubljana has the most scientific collaboration links from all top higher education institutions analyzed. The number of countries (nodes) with which it has scientific cooperation is roughly the same as seen by the University of Warsaw. The question is whether there are major differences in the geographical distribution of its publication links compared to the others. The dominant countries are from Western Europe, Scandinavia (40.46%) and North America (8.82%). The distribution is very similar to the one seen by the Comenius University. The gray group has a relatively high ratio (24.87%), while the countries denoted with green entail 12.73% from the total number of links. Interestingly, the ratio of the CEE region is also quite high (13.11%). The almost 15% ratio by the Comenius University was mainly due to the high number of links to Czechoslovakia (a methodological problem). Slovenia in the other hand had significant number of publication links with the Czech Republic (2.66% from the total number of links), with Poland (3.07%) or Croatia (2.09%). It seems that the University of Ljubljana has the most scientific collaborations with other countries from the CEE region measured through publications, although, the major scientific partners - here also - come from Western European, Scandinavian or North American countries. Simple network theory tools have been also used to analyze the publication networks of the University of Sofia, University of Szeged, University of Warsaw, University of Bucharest, Comenius University and University of Ljubljana. In graph theory, the degree of a node is the number of edges incident to the node. The average degree shows the average number of links per nodes (Barabási, 2004). The highest average degree belongs to the top universities from Poland, Slovakia and Slovenia (1.987), while the lowest are for higher education institutions of Bulgaria and Romania (1.982) and Hungary (1.983). The average weighted degree is the average of sum of weights of the edges of nodes (here countries) (Ouyang-Reilly, 2015). There is a great difference between the average weighted degree of the top universities from Bulgaria (141.054), Hungary (253.282), Romania (321.964) and Poland (852.739), Slovakia (856.039), Slovenia (912.127). These outline the previous findings, namely, that the later higher education institutions are internationally more open compared to the other analyzed universities when it comes to international publications. This can be also seen on Figure 7., where the geographical distribution of publication links for the six universities is presented together.



**Figure 7. Geographical Distribution of Publication Links for the Analyzed Universities**

Source: Scopus database, own editing.

The top 5 countries with which the universities had the most publication links was also examined. It has been found that, except the Comenius University, no other higher education institution had countries from the CEE region in the top 5. The countries with which all universities had the most links are the United States and Germany. Great-Britain, Italy, France and Spain were also among the preferred ones. All these show that higher education institutions from the CEE region prefer publishing with scientists from Western Europe or Northern America rather than with researchers from neighboring countries. The Comenius University (the exception) had the most publication links with the Czech Republic. This, however, comes as no surprise, as Slovakia and the Czech Republic for many years were part of the same country, Czechoslovakia.

It seems that all six universities analyzed show a very similar geographical distribution regarding their publication links. They prefer countries from Western Europe, Scandinavia or North America rather than neighboring countries from the CEE region. One reason for this is the belief that collaboration with well-known institutions may facilitate international visibility.

#### 4. Conclusion

The competitiveness of higher education institutions depends greatly on their scientific ability and performance. Scientific collaborations can positively influence scientific achievements. This study focuses on the publication links of the top universities of Bulgaria (University of Sofia), Hungary (University of Szeged), Poland (University of Warsaw), Romania (University of Bucharest), Slovakia (Comenius University in Bratislava) and Slovenia (University of Ljubljana). Using simple network theory tools, it has been shown that the most important publication partners for the analysed universities are Western European, Scandinavian countries, the USA and Canada. Geographical distance does not seem to have a significant role when it comes to choosing international scientific partners.

This study argues that decision makers should try to enhance the scientific cooperation of higher education institutions from the CEE region. This could improve the participants' scientific performance, which in turn would lead to a higher international visibility for Central and Eastern European universities.

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## Comparative Advantages of Territories – the Residents’ View

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### **Abstract**

Territories just like any other entity are “on the market” competing between each other on different levels depending on the stakeholders they are interested in attracting or keeping satisfied. In regards to the residents of the territory they usually compare the provided levels of quality of life, security, medical services provided, educational services, job opportunities, rates of payment for labor, purchasing power of average wages, entrepreneurship opportunities, cultural and social events and so on. No matter what the specific reason for competition territories are under a constantly growing competitive pressure. To strive in these conditions, they need to use their comparative advantages in order to build their competitiveness. Comparative advantages however are not always easily identified as various stakeholders of a territory see different characteristics as advantages. In order to comprehensively list all of them the territory needs to research the opinion of all diverse stakeholders since they are attracted by the territory for different reasons. The view of the local residents is important as they are a vital part of the community and their satisfaction with the territory they live on is a source of building a stronger community and overall competitiveness over similar territories. The present paper discusses the view of the residents of Varna municipality in Bulgaria on what comparative advantages the territory has if they are used in the best way possible, if they are effectively and efficiently utilized, and if they can be used to build its competitiveness for the people living there.

**Keywords:** comparative advantages, territories, stakeholders.

**JEL classification:** M31.

### **1. Introduction**

Territories nowadays are competing between each other just like any other entity for resources locally and globally. They are trying to attract not only visitors and finances like investments and local and national budgets but are also competing for being an appealing place to live and do business in. Comparative advantages are important for territories because they give them the uniqueness to build advantages over competitors and develop (Tonkova, 2015). Based on the high competition between places, there is a growing need for local organizations to pay more attention to their audiences, which become more comprehensive. Stakeholders are not only residents of the territory and visiting tourists, but also companies operating on the territory, potential investors, visitors to other destinations passing through, and so on. These contact audiences can be divided into internal and external. The internal audiences are composed by the residents of the territory, those working on the territory and companies already operating on the territory. The external audiences consist of people who do not live on the territory, companies that do not work on the territory, investors, visitors and tourists. Separating the audiences is based on the various goals pursued by the territory, in its relationship with each one. For internal audiences the aim is to build high levels satisfaction with the people living on this territory and the businesses operating on it. The aim for external audiences is to create attractiveness - through local government policy, to improve working conditions, to attract investment, to develop tourism, etc. These two strategies are interconnected, i.e. by increasing the satisfaction of internal audiences; the attractiveness to the external ones also increases, thus increasing the value of the territory as a whole.

The competition between territories is based on different factors depending on the stakeholders that the territory is addressing therefore identifying the advantages that the certain group of

stakeholders is looking for is of great importance. Literature review on the topic and previous research has revealed the main comparative advantages that the territory of Varna municipality has according to experts. The purpose of the current article is to acknowledge the opinion of the residents of the area in regards to its development and to check if the priorities set by the experts and the managing organization of the territory actually match the needs of its residents regarding the improvement of their quality of life which is what territory development aims at in the long-run. Since the process of developing a territory is described as a four-staged process which includes attractiveness, competitiveness, growth and development (Lonska, 2013). Lonska (2013) states that the process of territorial development starts with attraction and retention of capital, which is necessary for making the area attractive. It then helps attract competitive resources to the area. The territory gets competitive, when the attracted competitive resources become competitive advantages of the area and the next stage of the process of territorial development is achieved. Optimal and productive usage of these resources leads to the growth of the territory. Growth of the territory accumulates, enhances and improves present resources with the aim to achieve improvement of citizens' general life well-being, which is the final target of the process of territorial development.

## 2. Comparative advantages for territories

According to Kotler (1993), territorial marketing must support and facilitate the solution of the problems of the territory in different ways. It pays special attention to strategic planning that needs to be carried out jointly with residents, businesses and local authorities in the area. He argues that the purpose of territorial marketing is to increase the capacity of the community in the area to adapt to changes in the market and to increase its vitality. Among the main tasks of territorial marketing according to Kotler are research and diagnosis of the state of the community, its main problems, the reasons for their occurrence, developing a vision for solving these problems on the basis of a realistic assessment of the values of the community, its resources and capabilities, developing a long-term, step-by-step plan for community investment and transformations. The focus according to Kotler should be on:

- Orientation of basic services and infrastructure solutions to meeting the needs of the three most important target groups of the territory - residents, businesses and guests;
- Creation of new positive characteristics of the territory in terms of quality of life and entrepreneurship with the support of the community to attract new investors and new businesses.
- Communicating and promoting the development of new positive features, improving the quality of life and the image of the area as a whole.
- Providing support to people and community leaders to attract new companies, investments and tourist programs.

To implement all of the above comparative advantages of the territory should be used. Comparative advantages or the so-called factors of production like land, labor, natural resources and capital (Porter, 1990) for territories can be found in the specific resources pertaining to the territory – natural resources, historic and special interest sites, production specific to the territory, local crafts and arts, traditional cuisine and customs and so on. Specifically literature review and previous research has determined the following possible features that could bring comparative advantages to territories:

**Table 1. Types of comparative advantages**

Type of comparative advantage:	Possible variations:
Natural resources (Mulec and Wise, 2013)	Geographical position and size of territory; Geological resources; Climate;

	Water resources (rivers, lakes, sea); Landscape Specific flora and fauna; Balneology resources.
Socio-Economic resources (Birnlleitner, 2014)	Economic structure (available production); Socio-demographic structure – population characteristics, migration, professional training, special education; Political and administrative structure – local government, decision-making process.
Infrastructure and available services (Tonkova, 2015)	Transport – public transport, good conditions of highways and local roads, railway and airport availability; Public services like healthcare, security, educational infrastructure, sports and recreational infrastructure; Available amenities – gas, electricity, waste processing, water services.
Cultural and historical resources (Zbuceha, 2014)	Historic sightseeing; Traditions, local crafts and productions (Pustylnick, 2011); Sites layout; Monuments and sights of interest; Events; Entertainment; Guided tours; Specific cuisine; Festivals.
Available sports facilities (Zimmer and Grassmann, 1996)	Water sports and swimming; Aviation; Horseback riding; Walking and cycling trails; Winter sports; Golf; Other sports facilities.
Available accommodation for tourists and visitors (Zimmer and Grassmann, 1996)	Overall capacity of the territory; Distribution of accommodation on the territory; Breakdown of accommodation by types and sizes; Quality and rates of boarding; Camping sites and caravan parking opportunities; Possibilities of farming tourism or rural getaways; Available conference centers; Exhibition halls; Accommodation for conferences and availability of technical services; Diversity of restaurants offering different kinds of meals; Quality and prices of food; Distribution of restaurants on the territory.
Local conditions for setting up and carrying out business operations (Tonkova, 2014)	Local taxes and fees for businesses; Bureaucracy setting for starting and carrying out businesses; Ease of access to local authorities and funds for entrepreneurs; Openness of local policy to cooperation with businesses; Availability of qualified workforce.
Quality of life for local resident (Nuvolati, 2003) (Shafranskaya and Potapov, 2012)	Payment rates of local employers; Fairness of payment and workload; Purchasing power of local wages; Ease of access to local infrastructure for residents – playgrounds, libraries, etc.; Safety and security of life in the local community; Public transport and transport infrastructure; Reliable educational services – kindergartens, schools, universities and so on. High quality of social life opportunities – events, festivals, happenings etc. Dependable medical services offered on the territory. Opportunity for local residents to be part of the local decision-making process of authorities.

Source: Based on literature review

### 3. Research framework

Literature review and previous research has revealed the main comparative advantages related to territories and also the features of the territory of Varna municipality that are considered comparative advantages by the experts in territorial development in the region. The purpose of this article is to find out what the residents of the territory see as comparative advantage and if there are advantages that the experts do not explore to the fullest as related to the residents. To achieve this goal an online survey was conducted among residents of Varna municipality. The survey was constructed based on the literature review and previous research done by the author. It includes the comparative advantages found in the official documents, presented by Varna municipality and takes into account the in-depth interviews conducted with experts in territorial development in the region.

Based on the literature review and the conducted in-depth interviews the residents of Varna region were asked to assess the importance of all comparative advantages pointed out before and also evaluate the extent to which the comparative advantages that are important to them match their needs. Also for each group of resources an open question was left for advantages that residents see as such but are not officially recognized by experts or in the official documents.

The Discussion section offers an assessment of the answers of the residents of Varna municipality as related to the author's previous research and knowledge of the territory's advantages.

The data in this study was collected by using an online survey conducted through <https://docs.google.com/forms/> where only one answer could be sent from each e-mail account. The survey was distributed through social media to registered groups of people from Varna municipality. An English presentation of all questions of the survey can be seen in Appendix 1.

Respondents were selected among local residents of Varna municipality. They were all provided initially with an introduction to the study's purpose and objectives as well as an thorough definition of the term "comparative advantage" as used by the author in her research. Respondents' details are provided in Table 2.

*Table 2. Respondents' details*

Gender	%
Male	44
Female	56
Level of Education	%
Primary school	3
Middle school	0
Secondary school	7
Higher education	90
Occupation	%
Student	3
Working fulltime	79
Working part-time	12
Unemployed	3
Retired	3
Age	%
18-24	3
25-34	36
35-44	31
45-54	18
55-64	12
Over 65	0

Source: Conducted survey

#### 4. Results

The survey has revealed the following results:

- 33% of the respondents state that the quality of life is the most important advantage due to which they live in Varna municipality. 26% - believe that the socio-economic factors are most important, while 18% pick the natural resources.
- Regarding natural resources: the geographical position and the available water resources are picked as the most important comparative advantages of Varna municipality, followed by the climate of the area.
- Comparative advantages that local residents suggest related to natural resources are the opportunities for fishing, the well-developed resorts, nature sights of interests and the availability of different clubs of interest connected with exploring nature.
- 54% of the respondents acknowledge that the available water resources are the most important advantage of Varna municipality. Followed by the geographical position by 36%.
- From the set of socio-economic resources – the access to educational services and available production are put in the top as most important to local residents. Followed by the opportunities for professional development and special training.
- Over 50 % of the respondents have confirmed that the condition of educational services is very satisfying. Followed closely by the condition of special education opportunities and the opportunities for professional development. The political structure and the administrative structure of the municipality of Varna are rated as the two resources in very unsatisfactory condition.
- It was confirmed that the access to educational services and the possibilities for professional development are recognized as the comparative advantages defining the positive image of Varna municipality among its residents according to the survey.
- According to the answers to the survey the most important comparative advantage related to the infrastructure is the availability of the port (33%). Followed by the availability of an airport and the entertainment opportunities (18% each).
- 61% of respondents pointed out that the airport's condition is currently very satisfactory. The condition of the port was rated as very satisfactory by 56%. The condition of local roads is considered very unsatisfactory.
- Respondents state that the comparative advantages related to infrastructure that define the positive image of Varna municipality among its residents are: the availability of an airport (90%); the educational infrastructure (74%); the availability of a port (72%); entertainment opportunities (64%) and the availability of a railroad (62%).
- Respondents suggested the availability of cycling trails and the opportunities for sea transport to be included as comparative advantages related to the infrastructure of the municipality.
- Out of the comparative advantages related to cultural and historical resources the historical sights are pointed out as most important. The second place is shared by the local events and annual festivals.
- All cultural and historic resources have received satisfactory mark for the current condition they are in.
- According to the survey results 28% of the respondents have stated that the positive image of the municipality among its residents is due to the organized annual festivals. Followed by the events organized on the territory.
- The respondents have pointed out the museums and the shared alternative areas can be

considered as comparative advantages related to the cultural and historical resources.

- As far as comparative advantages related to sports infrastructure are concerned – 41 % of the respondents point out the available walking trails as the most important ones. Followed by the available infrastructure to practice water sports by 21 %.
- The available walking trails have been evaluated as very satisfactory. The available infrastructure for swimming, cycling trails, team sports infrastructure and the opportunities to practice dance have also received high marks.
- According to the study the available walking trails and the available swimming infrastructure define the positive image of Varna municipality among its resident.
- The respondents have specified the wide range of climbing walls and the opportunities to practice running as comparative advantages that could be added to the sports infrastructure.
- From the comparative advantages, related to setting up and carrying out a business in Varna municipality, respondents have pointed out the availability of qualified workforce as the most important one (44%) followed by the conditions for setting up a business (36%).
- The conditions for setting up and running a business in Varna municipality have been rated as unsatisfactory. And only the available qualified workforce has been pointed out as an advantage that gives a positive image to the territory.
- The comparative advantages, related to the quality of life, have been put in the following order of importance: dependable medical services (18%), reliable educational services (13%), high quality of social life opportunities (13%), payment rates of local employers (10%) and purchasing power of local wages (10%).
- The condition of the following comparative advantages, related to the quality of life, has been evaluated as very satisfactory: educational level of the population, reliable educational services, workplace safety, fairness of payment and workload. The opportunities of residents to be part of the local decision-taking process and the purchasing power of local wages have been assessed as unsatisfactory.
- According to the respondents the educational level of the local residents, the reliable educational services and the ease of access to the local infrastructure give the positive image of the municipality of Varna.
- The available new form of education offered on the territory like Montessori and Suggestopedia should be considered as comparative advantages, related to the quality of life, according to the respondents.

## 5. Discussion

The results of the survey show clearly that generally even though the managing organization of the territory and the experts in territorial development suggest a wide range of comparative advantages of Varna municipality as related to other similar territories, only specific advantages are important to its residents and influence their decision to live and work on the territory. There is a great number of comparative advantages that are pointed out as very important to the residents and considered as advantages by the experts and the municipality, but are currently in a very unsatisfactory condition. This needs to be addressed by the managing organization of the territory because it could influence the choice of the residents to stay on the territory or move to a different one.

In more details the following conclusions can be made from the current survey results and the previous research:

- The geographical position and the climate of the municipality are rated very highly by local residents and should be considered as a selling point by the managing organization as this is also considered of very high importance for developing the attraction of the area towards tourists and prospective workforce.
- The ideas of the residents for further development of the municipality should be considered and tested if they are of importance to other audiences also and to what extent as they can influence the attractiveness of the territory as a whole.
- As far as comparative advantages related to the socio-economic resources are concerned, residents recognize the available educational opportunities as well as the access to professional and specific training as a very important advantage of the municipality. The previous research has also confirmed the great potential of the local population confirmed by the large numbers of micro enterprises. This is something local authorities should look closely into and support the building of a strong relationship between universities, local businesses and investors. This advantage holds a great potential for the development of the territory as a whole.
- According to the survey results local residents recognize the availability of the airport and the port as very important advantages. They also rank their condition as satisfying or very satisfying. This is in line with the experts' view of development of the municipality. But credit should be given also to the suggestions of local residents for further development of the sea transport and of services related to sea transport in general. These could be of great help for developing the municipality's potential. Special attention should be paid to local roads as they hinder not only local residents' satisfaction levels, but also influence the perception of the tourists and visitors and worsen the working conditions of the businesses in the area.
- The importance of local historic sights, organized events and annual festivals outlined by experts has been confirmed by the survey results. Residents also appreciate the existence of shared spaces as an advantage of the area. Local authorities have it in their power to support such initiatives on a larger scale and in various areas of the municipality as they are currently concentrated in the center of the city.
- Experts suggest that the sports are very important to local government. Significance of sports infrastructure is confirmed by local residents. This is an advantage that requires the local authorities' attention as it is very important to keep the built infrastructure in good condition and also develop and promote the available resources to other stakeholders that might be interested. Climbing walls for example could open a whole new niche of visitors or tourists coming to the area.
- The survey results have confirmed experts' view that the conditions for setting up and running a business in the municipality are very unsatisfactory. Local authorities should pay close attention to this fact since the potential of the area in terms of qualified workforce is great.
- In general the quality of life is considered satisfactory by local residents, which confirms the experts' view on the matter. Attention should be paid by local authorities to the quality of the services that are important to residents and also to the desire of people to take part in the decision-taking process.

## 6. Conclusion

In the present paper the results of a survey among local residents of Varna municipality has been reviewed and they have been matched towards previous studies of experts in the field of territory development in order to discover the comparative advantages of Varna Municipality and the opportunities the area has for growth and enhancement. The research has revealed that

the territory is rich in resources and has the needed prerequisites for the advancement of the quality of life of the residents of the area. The favorable geographical location and natural resources, sea coastline, built infrastructure, employment levels and great economic and human potential create real opportunities for successful and sustainable development of the city and its hinterland. As a major problem with the application of territory marketing is informing the different stakeholders and matching their interests. To reconcile these discrepancies studying the different points of view, needs and requirements is needed together with a thorough research of possible ideas for development. The private efforts of the subjects on the territory are not able to guarantee prosperity and sustainable development (Tonkova, 2012). This defines the need for integrated territorial marketing to coordinate the interests and actions of the various stakeholders. For this purpose, it is recommended to design and organize platforms for the implementation of integrated marketing of territories, in accordance with the interests of the partners, companies, institutions and inhabitants of the territory, to put marketing purposes oriented towards improving the socio-economic conditions, raising the marketing efficiency and communication, positioning of the brand, updating and disclosing marketing strategies for the development of the territory, promotion of significant partnership programs and events. Further research on the topic will define the comparative advantages that the businesses are looking for and try to incorporate them with into those of the residents and the experts in order to come out with a comprehensive idea of where to start the developing plan for the territory in such a way that most stakeholders' interests are taken care of.

### Acknowledgments

The current article is funded as part of project №191/2017.

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### Appendix 1

1. Please confirm that you are a resident of Varna municipality.  
 Yes
2. Were you born in Varna municipality?  
 Yes  
 No
3. According to you what is the most important advantage of Varna municipality that makes you live there?

Related to natural resources  
 Related to infrastructure and available services  
 Related to sports infrastructure  
 Related to the quality of life

Related to socio-economic structure  
 Related to cultural and historic resources  
 Related to the opportunities for setting up and running a business

4. Please arrange the following comparative advantages, related to natural resources, in order of importance to you:
  - Geographical position
  - Water resources
  - Specific flora and fauna
  - Climate
  - Landscape
  - Balneology resources

5. Please evaluate the condition of the listed comparative advantages related to the natural resources of the municipality of Varna.

	Very unsatisfactory	Unsatisfactory	Good	Very good	I cannot decide
Geographical position					
Climate					
Water resources					
Landscape					
Specific flora and fauna					
Balneology resources					

6. According to you which of the comparative advantages, related to the natural resources define the positive image of Varna municipality among its residents?
  - Geographical position
  - Water resources
  - Specific flora and fauna
  - Climate
  - Landscape
  - Balneology resources
7. Are there comparative advantages, related to natural resources, which were not mentioned here according to you? If yes, please list.

8. According to you what is the most important comparative advantage of Varna municipality, related to natural resources?

- Geographical position
- Water resources
- Specific flora and fauna
- Climate
- Landscape
- Balneology resources

9. Please put the following comparative advantages, related to socio-economic resources, in order of importance to you:

- |   |   |
|---|---|
| Economic structure                            | Available production on the territory       |
| Socio-demographic structure                   | Access to educational services              |
| Opportunities for professional development    | Opportunities for special education         |
| Political structure (decision-taking process) | Administrative structure (local government) |

10. Please evaluate the condition of the listed comparative advantages related to the socio-economic structure of the municipality of Varna.

	Very unsatisfactory	Unsatisfactory	Good	Very good	I cannot decide
Economic structure					
Available production on the territory					
Socio-demographic structure					
Access to educational services					
Opportunities for professional development					
Opportunities for special education					
Political structure (decision-taking process)					
Administrative structure (local government)					

11. Which of these socio-economic comparative advantages define the positive image of Varna municipality among its residents?

- |   |   |
|---|---|
| Economic structure                            | Available production on the territory       |
| Socio-demographic structure                   | Access to educational services              |
| Opportunities for professional development    | Opportunities for special education         |
| Political structure (decision-taking process) | Administrative structure (local government) |

12. Are there comparative advantages, related to the socio-economic structure, which were not mentioned according to you? If yes, please list.

13. According to you which is the most important comparative advantage of Varna municipality, related to socio-economic structure?

- |   |   |
|---|---|
| Economic structure                            | Available production on the territory       |
| Socio-demographic structure                   | Access to educational services              |
| Opportunities for professional development    | Opportunities for special education         |
| Political structure (decision-taking process) | Administrative structure (local government) |

14. Please put the following comparative advantages, related to the infrastructure and the available services of Varna municipality, in order of importance to you:

- |   |                                   |
|---|-----------------------------------|
| Level of development of local public transport          | Condition of local roads          |
| Available highways                                      | Condition of highways             |
| Availability of an airport                              | Availability of railway transport |
| Availability of a port                                  | Available healthcare services     |
| Safety  | Educational infrastructure        |
| Opportunities to practice different sports              | Electricity services condition    |
| Entertainment opportunities (theatre, cinema and so on) | Water services condition          |
| Waste treatment opportunities                           | Possibilities for gasification    |

15. Please evaluate the condition of the listed comparative advantages related to the infrastructure and available services of the municipality of Varna.

	Very unsatisfactory	Unsatisfactory	Good	Very good	I cannot decide
Level of development of local public transport					
Good condition of local roads					
Available highways					
Condition of highways					
Availability of an airport					
Availability of railway transport					
Availability of a port					
Available healthcare services					
Safety					
Educational infrastructure					
Opportunities to practice different sports					
Entertainment opportunities					
Electricity services condition					
Water services condition					
Possibilities for gasification					
Waste treatment opportunities					

16. Which of the comparative advantages, related to the infrastructure and available resources, define the positive image of Varna municipality among its residents?

Level of development of local public transport	Condition of local roads
Available highways	Condition of highways
Availability of an airport	Availability of railway transport
Availability of a port	Available healthcare services
Safety	Educational infrastructure
Opportunities to practice different sports	Electricity services condition
Entertainment opportunities (theatre, cinema and so on)	Water services condition
Waste treatment opportunities	Possibilities for gasification

17. Are there comparative advantages, related to the infrastructure and the available services that are not mentioned? If yes, please list.

18. According to you which is the most important comparative advantage of Varna municipality, related to the infrastructure and available services?

Level of development of local public transport	Condition of local roads
Available highways	Condition of highways
Availability of an airport	Availability of railway transport
Availability of a port	Available healthcare services
Safety	Educational infrastructure
Opportunities to practice different sports	Electricity services condition
Entertainment opportunities (theatre, cinema and so on)	Water services condition
Waste treatment opportunities	Possibilities for gasification

19. Please put the following comparative advantages, related to the cultural and historical resources, in order of importance to you:

Historic sightseeing	Events
Monuments and sights of special interest	Festivals
Opportunities for entertainment	

20. Please evaluate the condition of the listed comparative advantages related to the cultural and historical resources of the municipality of Varna.

	Very unsatisfactory	Unsatisfactory	Good	Very good	I cannot decide
Historic sightseeing					
Monuments and sights of special interest					
Events					
Opportunities for entertainment					
Festivals					

21. Which of the comparative advantages, related to cultural and historical resources define the positive image of Varna municipality among its residents?

Historic sightseeing	Events
Monuments and sights of special interest	Festivals
Opportunities for entertainment	

22. Are there comparative advantages, related to cultural and historical resources of Varna municipality that are not mentioned? If yes, please list.

23. Which according to you is the most important comparative advantage related to cultural and historical resources of Varna municipality?

Historic sightseeing	Events
Monuments and sights of special interest	Festivals
Opportunities for entertainment	

24. Please put the following comparative advantages, related to the sports infrastructure of Varna municipality in order of importance to you:

Available infrastructure for water sports	Available infrastructure for horseback riding
Available infrastructure for swimming	Available walking trails
Available cycling trails	Opportunities to practice dances
Available playgrounds	Available infrastructure to play tennis
Available infrastructure for team sports (football, basketball etc.)	

25. Please evaluate the condition of the listed comparative advantages related to the sports infrastructure of the municipality of Varna.

	Very unsatisfactory	Unsatisfactory	Good	Very good	I cannot decide
Available infrastructure for water sports					
Available infrastructure for horseback riding					
Available infrastructure for swimming					
Available walking trails					
Available cycling trails					
Available playgrounds					
Opportunities to practice dances					
Available infrastructure for team sports					
Available infrastructure to play tennis					

26. Which of the comparative advantages related to sports infrastructure define the positive image of Varna municipality among its residents?

Available infrastructure for water sports	Available infrastructure for horseback riding
Available infrastructure for swimming	Available walking trails
Available cycling trails	Opportunities to practice dances
Available playgrounds	Available infrastructure to play tennis
Available infrastructure for team sports (football, basketball etc.)	

27. Are there comparative advantages related to sports infrastructure that are not mentioned according to you? If yes, please list.

28. According to you which is the most important comparative advantage of Varna municipality, related to sports infrastructure?

Available infrastructure for water sports	Available infrastructure for horseback riding
Available infrastructure for swimming	Available walking trails
Available cycling trails	Opportunities to practice dances
Available playgrounds	Available infrastructure to play tennis

Available infrastructure for team sports (football, basketball etc.)

29. Please put the following comparative advantages related to the opportunities for setting up and carrying out a business in Varna municipality in order of importance to you:

Bureaucracy setting for starting a business  
 Bureaucracy setting for carrying out a business  
 Ease of access to local authorities and funds for entrepreneurs

Local taxes and fees for businesses  
 Availability of qualified workforce

30. Please evaluate the condition of the listed comparative advantages related to setting up and carrying out a business in the municipality of Varna.

	Very unsatisfactory	Unsatisfactory	Good	Very good	I cannot decide
Bureaucracy setting for starting a business					
Bureaucracy setting for carrying out a business					
Local taxes and fees for businesses					
Ease of access to local authorities and funds for entrepreneurs					
Availability of qualified workforce					

31. Which of the comparative advantages, related to setting up and carrying out a business define the positive image of Varna municipality among its residents?

Bureaucracy setting for starting a business  
 Bureaucracy setting for carrying out a business  
 Ease of access to local authorities and funds for entrepreneurs

Local taxes and fees for businesses  
 Availability of qualified workforce

32. Are there comparative advantages related to the possibilities for setting up and carrying out a business in Varna municipality that are not listed? If yes, please list.

33. According to you which is the most important comparative advantage, related to the opportunities for setting up and carrying out a business in Varna municipality?

Bureaucracy setting for starting a business  
 Bureaucracy setting for carrying out a business  
 Ease of access to local authorities and funds for entrepreneurs

Local taxes and fees for businesses  
 Availability of qualified workforce

34. Please put the following comparative advantages, related to the quality of life in Varna municipality in order of importance to you:

Payment rates of local employers  
 Fairness of payment and workload  
 Good ethics in the workplace  
 Average life expectancy  
 Educational level of the population  
 Ease of access to local infrastructure for residents  
 Safety and security of life in the local community

Purchasing power of local wages  
 Workplace safety  
 Dependable medical services offered  
 Reliable educational services  
 Participation in lifelong learning opportunities  
 High quality of social life opportunities  
 Opportunity to be part of the local decision-making process

35. Please evaluate the condition of the listed comparative advantages related to the quality of life in the municipality of Varna.

	Very unsatisfactory	Unsatisfactory	Good	Very good	I cannot decide
Payment rates of local employers					
Purchasing power of local wages					
Fairness of payment and workload					
Workplace safety					
Good ethics in the workplace					
Dependable medical services					

Reliable educational services					
Educational level of the population					
Participation in lifelong learning opportunities					
Ease of access to local infrastructure for residents					
High quality of social life opportunities					
Safety and security of life in the local community					
Opportunity to be part of the local decision-making process					

36. Which of the comparative advantages, related to the quality of life, define the positive image of Varna municipality among its residents?

Payment rates of local employers  
 Fairness of payment and workload  
 Good ethics in the workplace  
 Average life expectancy  
 Educational level of the population  
 Ease of access to local infrastructure for residents  
 Safety and security of life in the local community

Purchasing power of local wages  
 Workplace safety  
 Dependable medical services offered  
 Reliable educational services  
 Participation in lifelong learning opportunities  
 High quality of social life opportunities  
 Opportunity to be part of the local decision-making process

37. Are there comparative advantages, related to the quality of life in Varna municipality that are not mentioned? If yes, please list.

38. Which according to you is the most important comparative advantage, related to the quality of life in Varna municipality?

Payment rates of local employers  
 Fairness of payment and workload  
 Good ethics in the workplace  
 Average life expectancy  
 Educational level of the population  
 Ease of access to local infrastructure for residents  
 Safety and security of life in the local community

Purchasing power of local wages  
 Workplace safety  
 Dependable medical services offered  
 Reliable educational services  
 Participation in lifelong learning opportunities  
 High quality of social life opportunities  
 Opportunity to be part of the local decision-making process

39. Please specify your gender: Male Female

40. Please specify your level of education: Primary school; Middle school; Secondary school; Higher education

41. Please indicate your occupation at the moment: Student; Working fulltime; Working part-time; Unemployed; Retired

42. Age group: 15-24, 25-34, 35-44, 45-54, 55-64, 65 and older

43. Family status: unmarried, married, divorced, widowed

44. Number of children in the family: I still don't have; 1; 2; 3; More

45. Income: Low (up to 510 leva); Average (510-1020 leva); High (above 1020 leva)

## **Developing Activities in Social Media and their Functions Illustrated with an Example of Companies from the ICT Sector**

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### **Abstract**

Nowadays, when social media has become a very common communication channel between companies and customers, of particular importance is their proper selection that will allow achieving the company's goals. Companies very rarely focus their attention on the possibilities offered by various, not limited to only the most popular channels and tools of social media. By analysing the activities of companies and consumer behaviour in various social media channels, the authors developed a flowchart based on the 5C categorization proposed by V. Vuori, which constitutes a useful classification of social media functions. For the purpose of this study, a concept was developed, under which the authors connected the above-mentioned 5C categorization of social media with selected fields of marketing activities, while choosing channels and tools appropriate for a given area of such marketing activities. The indicated concept was the basis for the assessment of the method and scope of social media usage in the surveyed companies. The aim of this article is to present the way in which companies from the ICT sector use social media in their marketing activities. Moreover, the objective is to indicate factors that affect the use of social media channels and tools by the surveyed companies. The authors have applied triangulation of research methods within the analysed case studies. This has allowed distinguishing action methods and reasons for improper selection of social media tools used to fulfil the set objectives.

**Keywords:** Social Media, Business Economics, Case Study, Marketing Management, ICT industry.

**JEL classification:** M21, M31.

### **1. Introduction**

Social media has become an important phenomenon in the last decade in both social and business areas. The development of tools such as Facebook, LinkedIn or YouTube has modified not only the relations between online users, but mainly changed the way companies communicate with the market. On the one hand, the user, i.e., the consumer, has gained tools allowing them to evaluate and express opinions on products, brands, and ways companies operate, while on the other, companies have been provided with a real opportunity to exchange information on the market, and to actively involve the user in various areas of the company's activities.

When investigating the social media usage with the aim to fulfil marketing goals, the authors have observed that, in practice, companies do not use all of the available social media functions, and that selection of tools is very often accidental, dictated by current trends, and caused by the need for imitation. Among companies there can also be observed the lack of knowledge about benefits resulting from the proper use of social media in marketing activities. This has also been proved by research carried out in foreign markets, e.g. Finland (Jussila, Kärkkäinen, Aramo-Immonen, 2014). The presented research results indicate that there is a significant discrepancy between the perceived potential of social media and its usage in the framework of cooperation between clients and partners in business-to business companies.

The main goal of the research was increasing the knowledge about the identified phenomenon and searching for its causes. The authors have applied triangulation of research methods within the analysed case studies. This has allowed identification of the degree of use of social media functions as well as reasons for the incorrect selection of tools and channels to implement selected marketing activities

## **2. The essence and functions of social media in marketing activities**

Neither the literature on the subject nor practical examples provide a clear definition of individual social media. Among social media one can find websites (informative, social, Q&A), communicators, platforms, blogs, forums, discussion groups, etc. From the point of view of the diverse possibilities, social media can be defined as “communication channels of the online community that enable information exchange, but also interaction or integration between individual users of the network (Internet users) or Internet users and brands. Published information is available to all users or selected groups and is subject to varying degrees of social control” (Mróz-Gorgoń, Peszko, 2016). The following essential features of social media could be distinguished (Vouri, 2011): interactivity, reciprocal communication, many-to-many communication, open channel, and information democratization. For the above reasons, the use of social media when carrying out activities within a company, allows:

- engaging customers in the co-creation process,
- publishing and sharing content online,
- connecting users and creating convenient conditions for interaction between them,
- completing content by adding a description or filtering information, marking content and showing connections between it,
- consolidating and adjusting content by attaching already existing online content.

The complexity of functions executed by social media has been presented in the 5C categorization by Vouri. The indicated categorization divides social media into five basic functions: communicating, collaborating, connecting, completing, combining (Vouri, 2011).

Communicating function can be understood as sharing opinions, storing and publishing content/image or audio. Its main communication channels include: blogs, websites, microblogs, forums, discussion groups, presentations. Examples of tools that perform the above function include: YouTube, Blogger, Twitter, Instagram, SlideShare, and Skype.

Collaborating is associated with mutual creating, testing and editing of content without location and time constraints. Tools most often used in this context are wikis, forums and discussion groups, as well as specialist/industry related communicators. Exemplary tools include TWiki and Google Docs.

One of the most popular functions is connecting, understood as creating a community, communicating and making contacts within the community. The channels most often used in connecting are social networks and virtual reality. In case of tools, the most important function is performed by Facebook, LinkedIn, and SecondLife.

Completing is a function whose aim is to complete, describe, acquire, add or filter information, and display links between content. The most often used channels include social bookmarking, forums and discussion groups with the exemplary tools being Pinterest, FeedDemon, and Twitter.

The last function is combining, which is understood as connecting and integrating information via external channels on platforms that function as mash-ups. In this case, the most typical tool that performs the combining function is Google Maps, while other services such as Facebook or Snapchat are just starting to perform this function as well, due to their constant development.

The above-mentioned 5C concept organizes social media by focusing on functions of selected channels and tools assigned to it. On the one hand, it indicates the spectrum of possibilities provided by social media, and on the other, it underlines the need to properly assign individual channels and tools to the objectives pursued in various business areas. Therefore, the authors of this article considered the described categorization useful for use in the research process described later in the article.

Turning to the aim of this article, attention should be paid to the area where social media is used, namely marketing activities. This is significantly relevant to the changes that were made in regards to the role of the customer, who has become a potential co-creator of the organization, its partner, adviser, ambassador and innovator ready to propose to the company numerous improvements and innovations. Therefore, marketing is no longer a one-dimensional activity, but a multidimensional process engaging both the brand and the recipients (Łopacińska 2014). It should be noted that it was the Internet, and especially social media, that created the above situation. The conducted research indicates areas of marketing activities where usage of social media becomes obligatory in order to meet key goals. Among important activities, there could be distinguished: collecting information, sales support, image creation (product or company brand), marketing content creation, idea creation and development of new products (innovation development), information collection and research marketing.

The literature on the subject frequently confirms that the indicated goals are significant for companies. In their publications, the authors refer to their own or analyzed research results (Kamiński 2012; Greg Broekemier, Ngan N Chau, Srivatsa Seshadri 2015; Bajdak 2017; Bojanowska 2017, E. Goryńska-Goldmann and M. Kozera-Kowalska, 2018; Papa, Santoro, Tirabeni, Monge, 2018).

Among others, the research conducted by A. Bajdak shows that the most frequently chosen goals indicated by companies were presenting complete and up-to-date information about the company, its products and purchase conditions (63.3% indications), as well as providing clients with access to information about the company (55.8% of indications). Moreover, about one third of the surveyed companies pointed to the use of new media, including social media, to build the image of a modern company and conduct a dialogue with clients (Bajdak 2017). Similar results were found in the research performed by G. Broekemier, N. N Chau, S. Seshadri – the main goals companies aim at with the use of social media are improving the company's reputation, increasing customer interest and awareness, as well as promoting business among new customers (Broekemier, N Chau, Seshadri 2015). Research conducted by E. Goryńska-Goldmann and M. Kozera-Kowalska (E. Goryńska-Goldmann and M. Kozera-Kowalska, 2018) confirmed that social media significantly changes the approach towards communication. The changes concern the way of reaching and attracting new customers. Social media allows current observation of trends on an ongoing basis, improvement and development of companies and their employees, following the changing tastes and consumer preferences, but also monitoring the activities of competitors. Furthermore, of *particular importance* is the fact that improvement concerns contact with customers, who more willingly choose to express opinions through social media (E. Goryńska-Goldmann and M. Kozera-Kowalska, 2018). Social media is also one of channels for distributing content that primarily affects the way new customers are acquired, brand awareness is built, and sales of products and services are carried out (Mazurek, Nosalska, 2018). Furthermore, it is an ideal place to meet for interest groups, which also complements traditional ways of finding partners. Established relationships contribute to the development of companies not only at the domestic, but also international level (Deszczyński, 2017).

The research results obtained by Papa, Santoro, Tirabeni, Monge showed that social media has a positive effect on the process of forming knowledge and contributes to supporting innovation

process (Papa, Santoro, Tirabeni, Monge, 2018). As indicated by the authors, from the managerial perspective, managers should consider the implementation and involvement of social media in business and innovation processes.

Numerous confirmations presented in the research results of the possibilities offered by social media, as well as connecting the social media functions described in the 5C categorization with the key areas of marketing activities constituted the starting point for the authors' deliberations and contributed to the exploration of the subject under study.

### **3. The importance and methodological assumptions of the research**

In order to achieve the pursued research objective, the authors have chosen the case study method. The method is defined as “empirical reasoning, which concerns the contemporary phenomenon in its natural context, especially when the boundary between the case and its context cannot be unambiguously determined” (Dańda, Lubecka, 2010). Based on the gathered information, the case study method allows in-depth analysis of the examined problem, presentation of its specificity, and interaction with other elements of the organization or its environment. In the context of the examined phenomenon, it was important to study not only the scope of social media usage, but also find the reasons for this state. As far as business practice is concerned, conclusions obtained from the implementation of the case study can provide a lot of relevant information that will constitute the basis for future management decisions.

Solving scientific problems by using the above-described method may include research in the form of single or multiple case studies. The authors chose a multiple case study that examines a few of deliberately selected companies.

The scientific nature of the case study method is proved by objectified, rational, organized, systematic and structured activities aimed at ensuring the credibility of the conclusions (Merriam, 2002). The most important method is triangulation, which in this case is understood as obtaining data from several independent sources. This method implies usage of a variety of different methods and research techniques, including participant observations, non-participant observations, unstructured interviews, document analysis, and analysis of the key document content created by the research subject (Lee, 1986). The authors applied both primary research, i.e., individual interviews additionally supported by projection methods, or observation of social media profiles, and secondary research within which information from literature sources, reports and summaries presenting the characteristics of the studied industry were analysed.

The authors conducted a case study analysis based on a schema covering seven consecutive stages (Grzegorzcyk, 2015):

**Stage one** – determining the subject and objectives of the case study.

The main aim of the research was to verify the degree of social media usage by surveyed companies in order to implement selected marketing activities. A supporting objective was to determine factors affecting the examined level of usage of social media channels and tools. Whereas, the practical objective was to support marketing departments in their optimal use of social media for marketing purposes.

**Stage two** – determining the subject of the case study.

The research covered companies from the ICT sector. The business profile of the surveyed companies is presented in the table below.

**Table 1. Identification of the examined entities**

Type of company	Type of offered products/services
Company A	Consumer electronics, information technology and telecommunications
Company B	Electricity services for business customer
Company C	Mobile and Web Apps, Data science, Business software
Company D	Designing, visualization, 3D printing

Source: own work

The companies described in the table above operate on both individual and business customer market. Companies B and D operate mainly on the market of business customers. All of the above-mentioned companies use social media in their marketing activities. The choice of companies from the ICT sector was based on the relationship, often described in the industry literature, indicating that companies which create products and applications supporting communication process with the market, successfully use them themselves. Therefore, the authors decided to choose entities for the study from this sector.

**Stage three** - contact with the case study subject.

Visits at selected enterprises were preceded by analyses of secondary information obtained from industry reports related both to the state of social media usage and the character of companies' activities from the ICT sector. This made it easier for the authors to prepare questions used during individual interviews as well as to plan other research methods.

**Stage four** – determination of the case study structure.

Firstly, research problems and selection of research methods were specified. Next, research scenario and matrices for collecting information were developed. The employed matrix was created as a result of combining the above-described 5C categorization with selected areas of marketing activities also described above, to which social media channels and tools were subsequently assigned. The prepared matrix was a useful tool for the implementation of the research process.

**Stage five** – collecting information for the case study.

Industry reports, specialist and scientific articles were analysed as part of secondary sources. The primary sources comprised information collected during individual interviews and observations of activities carried out in social media and indicated by the surveyed company.

**Stage six** - verification and evaluation of the collected research material.

When taking into consideration the research aim, it seemed important to compare research results obtained from the interviews with observations regarding practical use of social media by a given company. This refers to the essence of triangulation of research methods used in the case study.

**Stage seven** – writing a case study.

To describe the case study, a linear-analytical system was adopted, which was later used to present selected problems. This, in practice, came down to the indication and description to what extent the surveyed companies used social media included in the proposed concept. Next, the proposed directions of changes in the decision areas of the surveyed companies were indicated in the conclusions.

#### 4. Research results

The case study developed by the authors had made it possible to illustrate to what degree channels and social media tools are used in accordance with the adopted 5C categorization. The following table presents research results describing the degree to which social media functions are used by given companies in selected areas of marketing activities.

**Table 2. Use of channels and tools in accordance with the 5C categorization in the surveyed companies from the ICT industry**

Social media functions	Image creation	Sales support	Content creation	Innovation creation	Marketing research
Communicating	A,B,C,D	B			B
Collaborating					
Connecting	B, C, D	A, C, D		A, C	
Completing					
Combining					

Source: own work

As can be seen from the table 2 above, the surveyed companies from the ICT industry use only two main functions of social media, i.e. communicating and connecting, in their marketing activities. This means that social media is used by the examined entities to mainly publish and share content online, as well as connect users and create favourable conditions for interaction between them.

As far as communicating function is concerned, the tools playing the key role are YouTube and Instagram, as well as, to a lesser extent, Twitter and Blogger. Connecting is implemented mainly by such tools as Facebook and LinkedIn.

The area where the surveyed companies use most often communicating and connecting functions are: creating an image of a product or a company, as well as sales support.

In relation to activities concerning creation of an image, the examined companies present information (communicating) related mainly to:

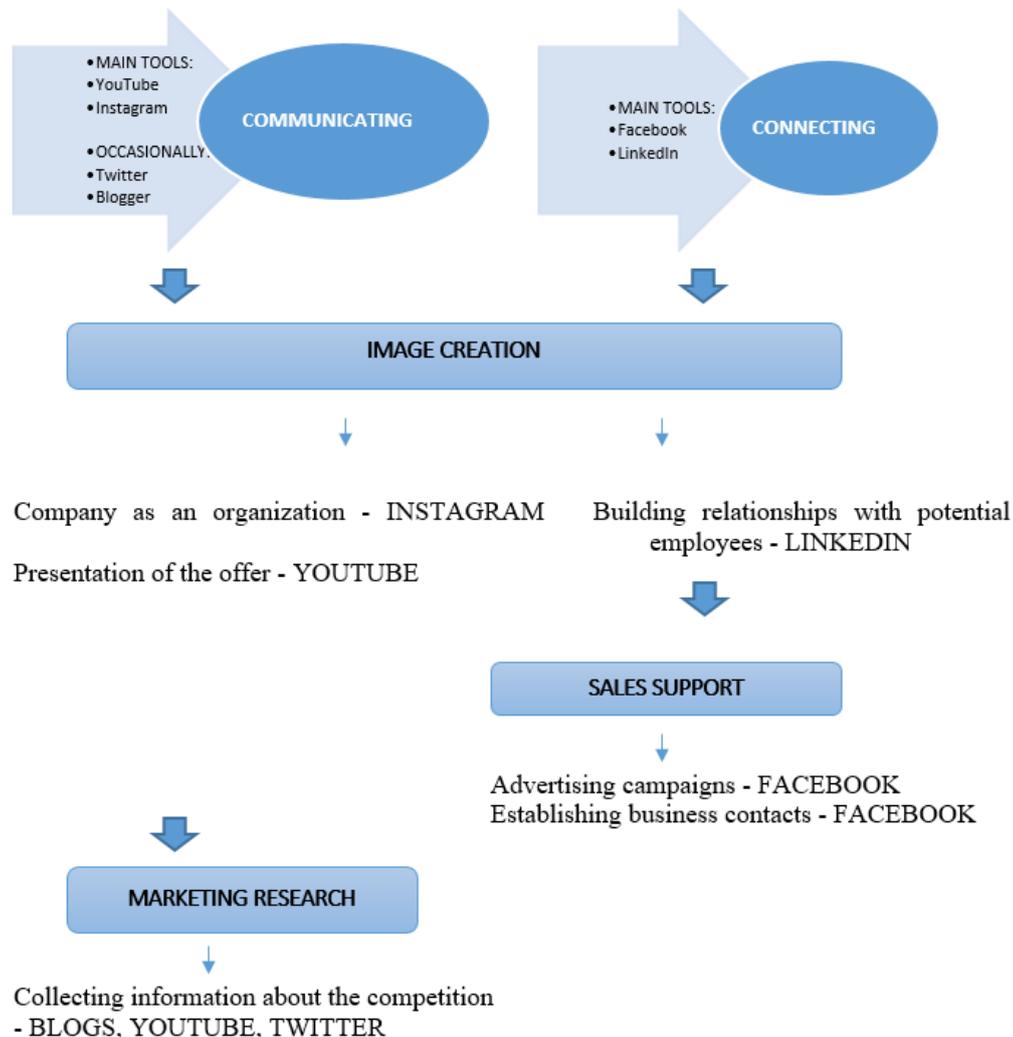
- functioning of the company as an organisation, mainly by Instagram
- product and service offer by using YouTube, and more rarely Blogger.

It should be noted that the described function is mainly used as “information mouthpiece” that presents specially developed content. In the case of connecting function, companies mainly use LinkedIn to build relationships with potential employees in the selected area.

In the scope of activities related to sales support, the surveyed entities indicated mainly the connecting function, within which they use the popular social networking site, Facebook, to implement advertising campaigns and establish business contacts. The examined companies barely engage in building communities around their organizations and do not create conditions for active cooperation with portal users. Therefore, it can be stated that the main objectives attributed to connecting tools are not fulfilled in the examined companies.

Communicating function is also used, albeit occasionally, in marketing research. One of the surveyed companies uses blogs, YouTube and Twitter, to collect information about its competition. In addition, two more companies indicated the tools assigned to the connecting category, including Facebook, as a place for testing new products.

In order to better visualize the used tools and the pursued objectives within the specific functions of social media, the authors presented the described relationships in Figure 1.



*Figure 1. The used tools and the assumed goals of companies within the specific functions of social media*  
Source: own work

The other functions, including collaborating, completing and combining, are not used by the examined companies. This may imply lack of understanding of the way social media works and the role it plays in the process of engaging clients in the activities carried out by the company.

It should be noted that the examined companies use only selected social media functions, and it cannot be said that they implement them correctly. This is especially visible in the case of connecting tools, where Facebook, a social networking site, is used as a place for successful promotion, not as a tool to build relationships and create favourable conditions for cooperation between community participants.

The reasons for this phenomenon can be found in various areas of the examined company's activities. There could be observed similarities in the opinions regarding the use of social media in marketing activities. However, one of the key limitations was the lack of people responsible for social media in the company. The respondents explained the situation with a failed recruitment or lack of knowledge about the role and function played by such an employee in the company. Among the companies that managed to acquire a specialist from the given industry, the problem occurred at the stage of implementation of set objectives. The readiness of social media specialist to play their role in the company was met with resistance of other

employees, who did not support them with knowledge and materials necessary to create content in various communication channels.

The prevailing opinion among the surveyed companies concerned the lack of need to engage customers or online communities in direct cooperation with a company.

This kind of approach resulted in the emergence of another factor limiting the use of social media due to the assigned functions. In accordance with the previously described theory, an important element of the 5C categorization is the use of functions, e.g. collaborating, to engage social media users in co-creation processes. Moreover, the connecting function, understood as a creation of communities and conditions necessary to establish cooperation between their participants, positively affects engaging consumers in company's marketing activities. Active involvement of online communities in the implementation of marketing activities in the company is now a manifestation of the acceptance of a new approach towards the role of the consumer in the market. The examined companies did not recognise such need, as they perceived a customer as a passive recipient of product information. They also emphasized that there are organizational limitations to implementing this type of process.

However, it should be also noted that the key factor limiting the use of social media functions was low awareness in regards to the concerned area. The examined companies were characterized by a limited knowledge level concerning the essence of how channels operate and how to choose social media tools.

As indicated by the presented research results, the limited scope of using social media functions may be connected with factors characterized as organisational obstacles.

## **5. Summary and recommendations**

Based on the case study of companies from the ICT industry, it can be concluded that the examined entities use social media in many areas of marketing activities, although their level and scope of use of social media channels and tools is too narrow, when taking into consideration aims attributed to the mentioned marketing activities. With reference to the new customer role described in marketing, where the customer is seen as a co-creator of values (Prahalad, Krishnan, 2010), an active participant and market commentator (von Hippel, 1986), as well as a supernumerary (Rieder, Voss, 2010), it should be noted that in this respect, social media plays a key role, whereas the richness of functions enables effective implementation of activities. Furthermore, proper use of social media channels and tools for intended purpose may significantly decrease costs related to marketing activities. However, this requires a company to redefine its way of thinking about communication, leaving the safe position of the information creator and becoming a coordinator creating convenient conditions for communication with the online community, clients, and partners.

With reference to the practical aims of the conducted case study, as well as in regards to decisions related to the use of social media in marketing activities, it is worth considering the introduction of the above-described changes in functions played by individual social media.

In the case of image-building activities, it is important that the customers become product ambassadors and support the company's activities. This is possible with the proper use of social media. It is important that companies use a wider range of tools, when working within the categories described above, as well include new ones related to, among others, the collaborating category. The collaborating function creates opportunities and prerequisites for active and direct involvement of online communities in the company's marketing activities. Using tools such as Google Docs or TWiki can effectively support activities in the area of creating marketing content, as well as actively involve communities in the process of creating new products. For image purposes, it is worth considering various social media channels and

analysing the target group. Tools that allow building relationships with the environment as part of the connecting function include not only Facebook, but also numerous business portals such as LinkedIn, which can also help build a positive image among potential associates or business partners.

Involving customers in generating ideas for promotional activities or improving customer service would be important in case of sales support. In this context, it may be worth employing the tools from the collaborating and combining functions, especially if mash-ups are to be created.

The area which is the least supported by social media is marketing content creation. The development of the Internet, especially of social media, has opened new possibilities that had, until now, remained out of reach for companies. Acquiring content from the online community, including specialists, lead users and enthusiasts, could significantly improve the effectiveness at the level of presentation of interesting content, videos, photos. Such users could become supernumeraries at the company and effectively support those for whom content creation is an additional responsibility. Engaging users to create content through social media also brings additional benefits, namely, tailoring content to the needs of its recipients.

It should also be noted that the surveyed entities indicated social networking sites as channels that are used to create new products. In addition to searching for testers of new solutions, the surveyed companies could also focus on acquiring ideas for new products as well as engage users in the remaining stages of product development. Many researchers in the field of innovation have noted that the engaging customers in the entire process of innovation development increases the real chances of developing a valuable product tailored to the needs of market and customer. Moreover, social media channels and tools provide real opportunities to co-create new products and services with the customer.

As far as marketing research is concerned, companies should to a greater extent focus on collected information, without engaging external entities. It is through connecting and combining functions that the companies can exchange information in a group, be it experts, specialists in a given area or among potential clients. The described functions enable not only collecting but also presenting information from various sources in an interesting way, which significantly improves cooperation between participants.

In the context of the presented considerations, attention is drawn to the fact that increase of the efficiency of social media usage in companies may involve some changes in their organization. In addition to employing competent employees, there is a need to change the approach towards the role of the customer who gets included in the company. Moreover, social media provides new opportunities and challenges for companies. Ignoring this fact may, in consequence, slow down the development of even such enterprises that operate in industries with intensive growth, e.g. the ICT sector. A wider analysis of this area has been investigated by the authors in other publications.

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## Conceptualising Influencer Marketing

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### Abstract

Social media has become a prolific tool for companies to build their brands. An effective way to interact with stakeholders on social media has been the relatively new discipline of ‘influencer marketing’. Here, companies engage social media stars to use their large fan-base to promote products and services on their brand’s behalf. While related to the promotional tactic of word-of-mouth marketing, influencer marketing lacks a theoretical foundation in the academic discourse. This paper aims to fill this gap by offering a conceptualisation to operationalize the new discipline in practice. The conceptualisation proposes brand owners a methodology to choose the right influencers for their brands and guides influencers to perform optimally with their fan base. Lastly, a consumer perspective is taken to the discussion to emphasize the relevance of influencer marketing in the consumer purchase decision-making process.

**Keywords:** Influencer marketing, social media, brand communication.

**JEL classification:** M37.

### 1. Introduction

Companies continuously are in pursuit of reaching their customers by using different and diverse means of communication. Consumers on the other hand are overwhelmed with too many commercial messages and try to avoid what they consider “unwanted communication” as much as possible (Ries and Trout, 2001). At the same time, new forms of communication are developed and applied which adds more and more to the everyday clutter. Especially digital technologies promise brand communicators a more direct and effective way to reach and communicate with customers. While traditional forms of communication are characterised by a ‘one-to-many’ flow of information, the interactive nature of the internet allows better for a dialogue with and among consumers. More recently, social media have become popular and widespread with organisations and in their communication mixes. “Social media is the umbrella term for web-based software and services that allow users to come together and exchange, discuss, communicate and participate in any form of social interaction” (Ryan, 2014, p. 151). Such social interaction takes place in many virtual places whereas social media sites like Facebook, Twitter, or Instagram have become synonymous with the category. Brands alike have discovered these social platforms as effective ways to connect and interact with their stakeholders (Tuten and Solomon, 2013). It is social media where one of the newest phenomena in brand communication takes place: ‘influencer marketing’.

This paper will take a triangular view on influencer marketing by examining it from a brand, influencer, and user perspective. It will foremost attempt to position this new digital marketing discipline into a theoretical framework serving primarily marketers to implement influencer marketing in their brand communications mix. To the author’s best knowledge, no systematic conceptual framework that encompasses the three perspectives exists in the extant literature.

### 2. Influencer Marketing – Theoretical Foundations

Influencer marketing is not yet academically defined in literature. So far mainly online encyclopaedias and business magazines have covered the topic at length. Influencer marketing shows similarities to word-of-mouth marketing and can be considered as a digital form of

word-of-mouth marketing. Kotler et al. (2002) define ‘word-of-mouth influence’ as a form of personal communication about a product that reaches buyers through channels not directly controlled by the company. Such channels are independent experts, consumer advocates, consumer buying guides or personal acquaintances like neighbours, friends, or family members (ibid.). In influencer marketing, these channels are social media platforms where consumers inform their opinions and purchase decisions by following fellow consumers or internet personalities. In commercial terms, influencer marketing is a form of advertising. While traditional ‘word-of-mouth’ can be either a free form of communication or paid, modern word-of-mouth in the internet age involves brand owners who engage people that have a large followership on social media platforms to speak - for payment - on their brand’s behalf. Additionally, paid influencer posts have to be marked as advertising by the posting influencer so that users can fully identify paid from voluntary (genuine) endorsements. For this paper, influencer marketing is defined as *a process in digital marketing where opinion leaders (influencers) are identified and then integrated into a brand’s brand communication on social media platforms.*

In the overall context it is important to understand the concept of brand purchase decision making and to look at the roles people play in the decision process leading to a purchase. According to Percy and Elliott (2016) there are five decision participants that are involved in the lead-up of a purchase decision and the use of the product or service. The *initiator* suggests the purchase; the *influencer* recommends or discourages; the *decider* makes the choice; the *purchaser* does the actual purchasing and the *user* finally consumes or uses the product or service. It is not obligatory that all roles are taken by different participants in the decision process. For example with low-involvement product decisions, usually less people are involved in the shaping of the decision. On the other hand, high-involvement product categories often require an initiation and influence from outside the purchaser’s or user’s personal scope (ibid.). Brand managers are required to understand the roles in the decision process and that marketing communication is aimed not only at individuals but foremost at individuals in a role (ibid.). Attached to these roles are the communication objectives that they can achieve on the brand’s behalf. According to Percy and Elliott (2016) influencers can mainly accomplish communication goals that are related to changing behaviour and in particular increasing brand attitude. This understanding is important as brand managers need to instrumentalize the individuals in their roles in order to effectively communicate. For instance, if a popular influencer promotes a product on his or her Instagram page, then this product receives a positive endorsement by the influencer and this in turn can positively affect the attitude towards this product by the respective followership. The influencer’s post should therefore build on existing brand awareness and should ideally lead to brand purchase intention among the intended target. Therefore, an influencer can play a critical role in the brand purchase decision making process and this critical role constitutes the main purpose of influencer marketing.

In summary, influencer marketing is a digital and paid form of word-of-mouth marketing where communication takes place on social media channels. Influencers are part of the purchase decision process where they can take on an important role on the brand’s behalf. The next section will discuss the marketing relevance of influencer marketing from three perspectives, i.e. the brand owner’s, the influencer’s and the consumer’s direction.

### **3. The Marketing Relevance of Influencer Marketing**

#### **3.1 The Brand Owner Perspective**

Influencer marketing is a new form of digital communication that should primarily help brand owners to accomplish communication goals (Brown and Hayes, 2008). Although affecting

brand attitude can be considered as the overall communication goal, more defined and operational goals need to be established.

In general, brands benefit when they participate in the social media space. Tuten and Solomon (2014) point out that with social media, brands can engage consumers, enhance brand reputation and image, build positive brand attitudes, improve organic search rankings, and drive traffic to online and offline brand locations among others. The same metrics in social media can be applied as in traditional online media to that effect. Advertisers can measure reach and frequency, clickthroughs and sales conversions to name a few (ibid.). However, social media offers more specific metrics that also better reflect the interactivity of the channel. The following example will illustrate how social media metrics can be applied to influencer marketing.

Caro Daur is a fashion, lifestyle, and travel blogger mainly active on the social media platform Instagram where she can account for 1.5 million followers (Lang, 2017, Instagram, 2018). In a recent Instagram post that was marked as an advertisement (a legal requirement), Daur uploaded a picture where she wears a hand bag with the following message attached to the post: “Comeback the iconic @dior saddle bag is finally back #DiorSaddle” (Daur, 2018). Six days after the initial posting, the post had received 38.620 likes and 380 comments. Likes and comments are the obvious metrics visible to any user. The likes are a measurement related to reach and also engagement. Likes will be visible on the follower’s personal pages which may drive traffic to the original post by the influencer. The comments can be further analysed quantitatively and qualitatively. Firstly, comment volumes and reply comments are measured. Comment ratios and response numbers give a first hint at the popularity of a particular post. Comparing these metrics to other posts by the same influencer or comparable influencers can bring meaning. Sentiment is another interaction category for measurement. In a content analysis for example, the nature of the comments (e.g. likeability) and expressed attitudes can be examined. The quality of the comments is also relevant. A comment that only consists of a symbol like a heart or a smiley icon shows less quality and sentiment than a written comment in which the follower admires the product at length. Performance metrics such as lead conversion, cost efficiencies, share of voice, or return on investment are very relevant but can only be measured from the site owners with relevant access. However, qualitative performance measures and in particular measures such as brand attitude can be taken into account. This should be accomplished from a longitudinal perspective. Here, measuring and comparing brand attitudinal developments among followers overtime and by evaluating brand sentiments is mainly called for.

As shown above by the example, a single paid post by an influencer for a brand, can lead to numerous measurable brand metrics both in quantitative and qualitative terms. Technically an advertisement, such a post by influencers is content generated by users for fellow users. This also makes them less intrusive as regular advertisements or endorsements by celebrity spokespersons (Gründel, 2018). Not the corporation or a well-paid celebrity is communicating; instead a fellow user speaks with the same language of the target audience. The word-of-mouth marketing by users to users has become a true alternative to traditional celebrity sponsorships especially for the ‘digital natives’ and has evolved into a multi-million dollar business (Wakabayashi, 2018). Given the effect on brands and the financial dimensions of influencer marketing, this marketing discipline requires thorough planning and justification. Influencers bear brand responsibilities that need to be accounted for. Therefore picking the right influencer for a brand becomes an important task for brand managers who have to assure a ‘brand-fit’ and a ‘target audience-fit’ of the influencer with the brand in question.

When selecting a spokesperson, it is key to determine what it is about the person who presents a message (the source) that affects the way how well the message is received (Percy and Elliott,

2009). Or in other words, what characteristics does an influencer need to have in order to best appeal and deliver a message to the intended target audience. A model that can assist marketers to choose the most appropriate presenter (influencer) can be found in the VisCAP model of source effectiveness that was introduced by Percy and Rossiter in 1980 (ibid, Percy and Rossiter, 1980). The VisCAP model, summarized in table 1, provides a mechanism to determine the visibility of a message endorser together with credibility, attractiveness, power, and the main source characteristics in communication (Rossiter and Percy, 1997, Rossiter and Smidts, 2001). The four components of the model are defined as follows (Percy and Elliott, 2016):

- Visibility is how well-known or recognizable the source is from public exposure.
- Credibility is divided into two components: expertise, which is the perceived knowledge of the source concerning what is being advertised, and objectivity, the perceived sincerity or trustworthiness in communicating what the source speaks for.
- Attractiveness also has two components: likeability of the source and the perceived similarity of the source with the target audience.
- Power is the source’s perceived ability to “instil compliance on the part of the target audience” (ibid.).

In influencer marketing, the four components of the model can easily be applied to evaluate the appropriateness of the influencer (source) for the target audience and the intended brand communication objectives. Visibility of the influencer is important to facilitate brand awareness. A well-known influencer will help the brand to be more visible and gain awareness. Credibility is similarly important in influencer marketing. The influencer should be an expert in the product category advertised and especially for high involvement products, trustworthiness of the influencer will reinforce brand attitude. In influencer marketing, especially lifestyle, beauty/fashion, and travel related product categories are popular among consumers (Connolly, 2017). Therefore, to be credible in these product types, influencers should have gained expert status for example as bloggers or leading participants in the respective online communities.

*Table 1. VisCAP model of characteristics to look for in selecting influencers to match communication objectives*

Communication Objective	Characteristic	Description
<b>Brand Awareness</b>	<b>Visibility</b>	How recognizable is the influencer?
<b>Brand Attitude</b>	<b>Credibility</b> Expertise	Influencer’s perceived knowledge of the product category
	Objectivity	Sincerity or trustworthiness of the influencer in talking about the product category
	<b>Attractiveness</b> Likeability	Influencer is seen as personable or attractive
	Similarity	Follower consider influencer as personable and similar to them
<b>Brand Purchase Intention</b>	<b>Power</b>	Perceived ability of the influencer to instill compliance with the message

Source: adapted from Percy and Elliott, 2016

The attractiveness component is particularly relevant in influencer marketing, where a perceived similarity of the source with the target audience can be much easier achieved. It is the strength of the discipline that emphasizes the peer-to-peer aspect in communication. In general, influencers are “just” normal people and do not yet have gained celebrity status. Attractiveness also counts for emotional advertising appeals (Percy and Elliott, 2016). Brand attitudes can be enhanced when the influencer is a likeable and appealing personality. Lastly, power can facilitate brand purchase intention (ibid.). Especially in an over-communicated world where the effectiveness of traditional advertising is constantly under question, influencer marketing is bound to be an alternative tactic in brand communication. It is the ability of constant measurement and accountability that characterizes digital marketing tools (Ryan, 2014). With social media, and therefore influencer marketing, sales conversions can easily be traced from origin to final purchase (Tuten and Solomon, 2013). In a recent consumer study on influencer marketing, 31% of the respondents claimed to have purchased a product/service after seeing the product/service in an influencer’s post (Connolly, 2017). Complementary to the brand owner’s perspective, it is imminent to understand, what aspects are distinctive for an influencer to be successful and how these aspects correspond with the brand’s perspective. The following section will examine such characteristics of influencers.

### 3.2 The Influencer Perspective

It was established above, that influencers make product and service related posts to their followership on social media channels. Quantitatively, influencers gain prominence by the amount of followers they have. The more followers the better, as posts receive a higher reach and have more potential for further engagement (e.g. likes, retweets, comments). Although there are no set criteria on the amount of followership, 50.000 followers on one channel (e.g. Instagram) can be seen as a minimum. Prominent social media platform influencers have over 20 million followers such as makeup artist and beauty blogger Huda Kattan (24.3 million followers on Instagram) (CBS, 2018). However such ‘macro-influencers’ are not necessarily as effective as the so-called ‘micro-influencers’ who have a smaller fan-base but are able to connect with target audiences more precisely (Neuendorf, 2018).

Other criteria can be taken to determine the quality of the influencer’s followership. Among them is the ‘growth rate’ (monthly gain in followers) and the ‘qualityscore’ (Rondinella, 2018). The former is valuable as long as the influencer’s followership grows on a monthly basis. The qualityscore on the other hand measures how active the followers are (engagement) and this metric also aims at determining overlaps in followership with other social media platforms. Followers from different channels cannot simply be added to calculate reach (overlap). Qualitative measurements are further important to determine the effectiveness of influencers. For the influencer herself, both quantitative and qualitative metrics are important for her own market value. In recent literature, both quantitative and qualitative criteria have been subsumed into the ‘4 R’s’ of *reach*, *relevance*, *resonance*, and *reputation* (Deges, 2018, Nirschl and Steinberg, 2018).

Reach is the main quantitative metric that has been discussed above. The amount of followers is key for this metric. For relevance, the influencer has to ‘fit’ to several components, such as personality, brand, content, and target audience. This highly relates to the criteria that are important from the brand owner’s perspective. Resonance corresponds with several more general and qualitative social media metrics that were introduced in chapter 2 of this paper. Therefore, resonance is mainly concerned with the average interaction that an influencer is able to elicit among her followership. Criteria such as ‘like follower rate’, ‘comments per post’ (sentiment rate), ‘topic distribution’, and ‘topic engagement rate’ are metrics that the influencer can put forward in her favour (Deges, 2018). Lastly, reputation is closely connected to the

influencer's standing among her own followership and more importantly the intended target audience. How can the influencer's personality be characterized and in the brand's interest, are the personalities of the brand and the influencer congruent? The reputation can further be projected towards the target audience as well. Is the influencer an expert in her field and can she be trusted? This relates back to the credibility component of the VisCAP model where expertise and objectivity are paramount in selecting a brand's spokesperson. Sincerity and trustworthiness are similarly important in the reputation metric (ibid.).

In summary, both quantitative and qualitative aspects play a role in the "market value" of an influencer. On the one hand, influencers have to obey to the measurability of accessible digital marketing metrics but at the same time, they also have to choose the right brands and companies to not sell out too easily risking their own credibility and trustworthiness.

### **3.3 Consumer perspective**

As discussed above, consumer decision making is dependent on the product category. Furthermore, five decision participants take on roles in the decision making and use of the product or service. Influencers are part of this decision making process and their main role is to encourage a purchase. Consumers are particularly bound to follow influencers in product categories that deal with fashion and beauty, lifestyle products, and travel related products and services (Connolly, 2017). But consumers are continuously interested in other domains such as finance, automobiles, and photography to name a few (Neuendorf, 2018).

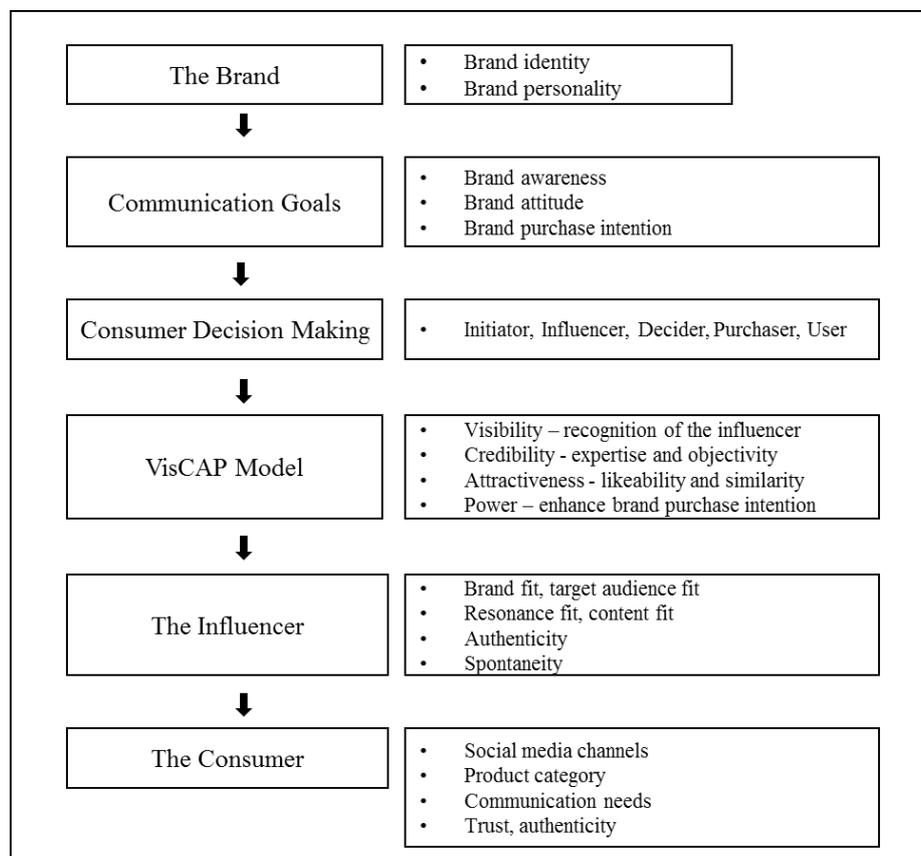
Followers can be found predominantly in the young age groups. 19-24 year olds are more likely to follow an influencer than older generations (G+J, 2017). The age and gender also predefines the social media channel that followers use. Overall, Instagram is preferred by the younger age groups (19-24) whereas Facebook is more popular among 25-34 year-olds (Connolly, 2017). Men choose YouTube most whereas woman prefer Instagram (Connolly, 2017, Janotta, 2018). Overall, YouTube and Instagram are the biggest social influencer platforms. Influencers generate more than half of their incomes through these channels followed by Facebook, individual blogs, Snapchat, and Twitter (Rondinella, 2018).

Users tend to acknowledge the fact that influencer marketing is paid advertising (G+J, 2017). However, credibility and trust in the influencer are important factors for consumers. When influencer posts look like advertising, digital natives have learned to turn away from ads or skip them altogether (Wakabayashi, 2018). Consumers expect genuine and creative posts from their influencers. Posts should be authentic and remain spontaneous (Ceyp and Kurbjewei, 2017). In a multi-national study with a sample of 4000 active social media users in the USA, UK, France, and Germany, 'authenticity' was the main reason those surveyed chose when trusting influencers online (Connolly, 2017). In the same study, 'relevancy' of an influencer's content was cited by 66% of the respondents as critical (ibid.).

### **4. Summary, Conclusion, Limitations and Further Research**

Influencer marketing is growing globally and receives much attention in the marketing community. In an over-communicated world, authentic content from influencers can break through the clutter and help brands to build meaningful relationships with their target audiences. The academic literature is scarce in this domain especially in finding suitable theoretical foundations for relevant aspects of influencer marketing. Especially the brand perspective requires a structural approach to professionalise the application of influencer marketing. Brand managers need to understand consumer decision making and how influencer marketing is located in this construct. A critical role plays the influencer who should speak freely on a brand's behalf. The VisCAP model is proposed as suitable for brand managers when

selecting an influencer to ensure foremost a brand- and target audience-fit. Figure 1 summarizes the conceptualisation of influencer marketing as proposed in this paper.



*Figure 1. Conceptualisation of influencer marketing*

Source: own

Overall the taken perspectives in this paper from the brand-, influencer-, and consumer's point of view show coherence in several aspects. For brands, influencer marketing depicts parallels to traditional branding tactics. Brands continuously need to build trust among their stakeholders. When done right, influencers can help in building this trust for the endorsed brands. Brand communication can better break through when it does not look and feel like advertising. Influencers are most popular and successful, when they stay authentic and spontaneous. And authenticity and trust in the influencer are the key aspects that consumers see in their favourite influencers they like to follow. Figure 2 illustrates the dependencies from brand to consumer that follow suit the brand to fit with the influencer's characteristics and user needs.

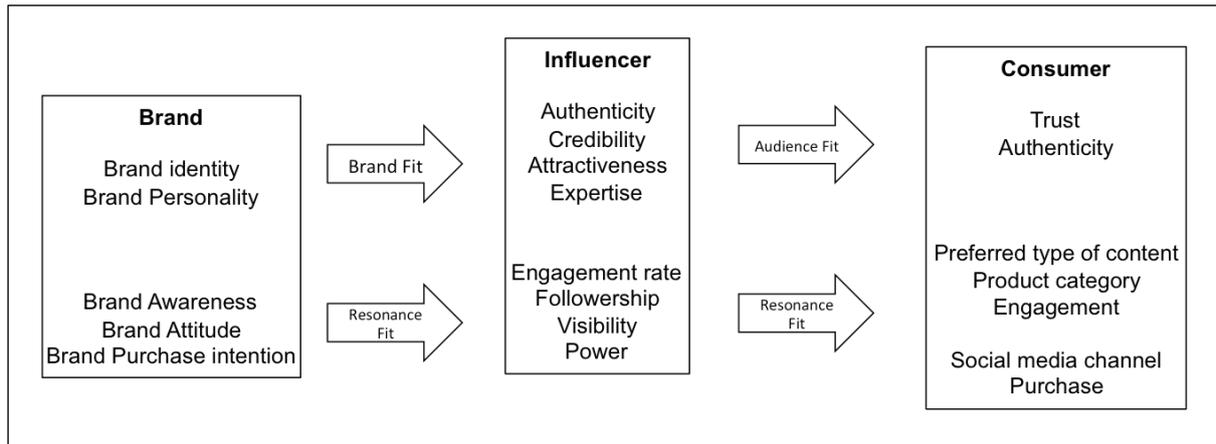


Figure 2. Brand-resonance- and audience fit

Source: own

Influencer marketing is projected to grow to a multi-million dollar business. The managerial implications are manifold. A macro-perspective will likely divert to a likely micro-perspective in the years to come. Managers will have to engage influencers that will help them to reach more fragmented markets. With social media being a medium predominantly used by young users, it can be predicted that also older generations will be turning towards influencer informed decision making in the future. Furthermore, the video trend on social media will continue. Already, the social media channels Snapchat, Facebook, and Instagram account for nearly 20 billion video views per day (Karhoff, 2017) and the video sharing site YouTube is already the favourite social media channel for men. Brand managers will need to take into account that their audiences will expect them to offer more video content (ibid.). This trend will likely transfer as well to influencer marketing. The challenge in video will lie in finding the right balance between a professional production of content and keeping it authentic – the very nature of influencer marketing. At the same time, the risks in influencer marketing should not be underestimated by decision makers. Just like any celebrity spokesperson, influencers bear responsibilities on the brand's behalf. But the companies are unable to control how influencers behave and especially what they post online. Influencer marketing relies on this very spontaneity of its protagonists. Yet brand managers are advised to take control measures that may regulate the influencer's behaviour online in order to protect their brands. 'Morality clauses' in advertising deals with influencers show that the industry is moving in this direction (Wakabayashi, 2018).

This paper bears several limitations. First of all, much of the cited literature derives from the popular business press. Academic studies in this domain are still rare and data sources therefore have to be checked diligently. Furthermore, the proposed theoretical foundations will have to stand the test in the professional field. Especially the VisCAP model derives from the pre-internet age and will have to be tested for its suitability in today's practice. This offers an opportunity for future research.

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## What If the Enterprise Value Doesn't Grow? Evidence from Romanian Steelmaking Companies

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### Abstract

The question investigated in this paper's is what happens to a company that doesn't grow its value? The analysis focuses on Romanian steelmaking companies in insolvency or incurring losses for many years. The basic methodology used is the analysis of the indicators (working capital, total assets, retained earnings, book value, total liabilities, and net sales) from the corporate income and balance sheet and to measure the Z1-score for predicting bankruptcy and for the financial distress status of privately held manufacturing companies. The major findings include the results for the financial health of a Romanian steelmaking company with tradition such as COS TARGOVISTE S.A., in insolvency, suspended from trading on the Bucharest Stock Exchange in 2013. The key quantitative results show high likelihood of bankruptcy in 2018 and how the company value decreased. The discussion raised is how companies can avoid destroying their value? If the companies fail to increase their value, they should find the ways to avoid destroying it, else they will not be able to resist in the actual competitive environment and go bankrupt. In the conclusion, planning for and acting on emerging technologies and trends is the key for the companies' survival.

**Keywords:** capital, assets, earnings, enterprise value, Z1-score.

**JEL classification:** G32, G33, G34, D46.

### 1. Introduction

Businesses are undergoing rapid and multi-dimensional changes, in the context of the emergence of new technologies, Internet, and the globalization of production and consumption and they should be able to capture opportunities and make full use of them by a very good knowledge of the market. However, companies with tradition like COS TARGOVISTE S.A. in insolvency, and ARCELORMITTAL GALAȚI S.A. are facing difficulties because of the obsolete materials, and production techniques and technology, being forced to find the resources for restructuring.

Value management supports value maximization for shareholders and stakeholders. In figure 1, the investments are presented as a necessary step in obtaining growth. With this purpose, the company should analyze its revenue growth (for the growth from new investments) and operating margin (for the improved efficiency). In order to find out how much new capital will the firm have to invest to deliver growth, the return on invested capital should be analyzed. (Damodaran, 2012)

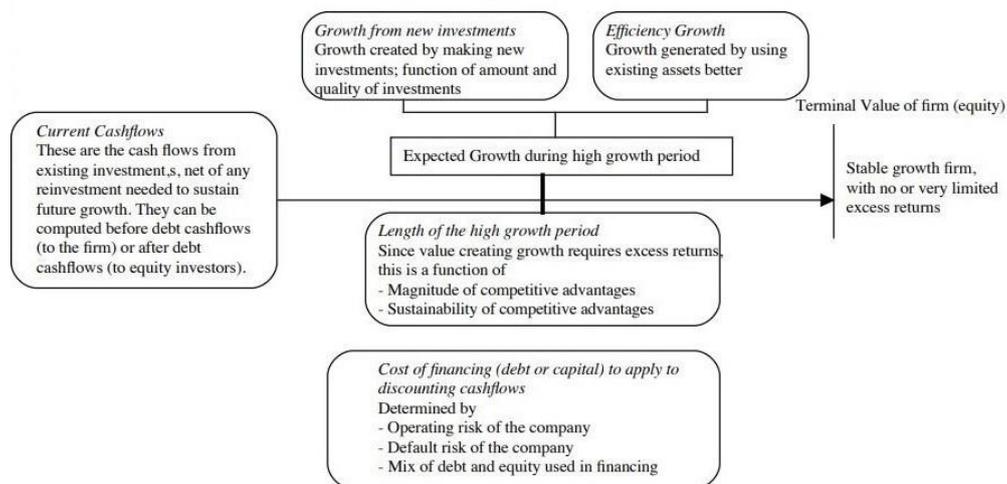


Figure 1. Drivers of company value

Source: (Damodaran, 2012)

Company value can be determined in three ways: (i) intrinsic or DCF valuation (by forecasting out expected cash flows and discounting them); (ii) relative valuation (using a multiple and comparable firms, to make a judgment on value); (iii) Contingent claim valuation (value a business as an option). (Damodaran, 2012)

Fabozzi (2017) argued that financial asset prices are equal to the sum of the discounted values of expected future cash flows, determined as the sum of the risk-free rates and a risk premium; it is exogenous and cannot be determined by purely financial considerations.

Fundamental (intrinsic) value can still be used as an effective tool to outperform the market, but only for investors that have a sufficiently long time horizon, i.e. five years, as the stock price returns may be driven at least as much by factors such as momentum, flow of funds, and investor sentiment within periods of less than five years.

The estimation of the intrinsic value requires research and time. Thus, in order for this process to turn profitable, market prices have to be far from intrinsic values, and this is most likely when large information asymmetries exist and major nonanticipated shocks in supply and demand happen. (Fabozzi, 2017)

Value management supports value maximization for shareholders and stakeholders, providing the appropriate owners / managers with appropriate indicators (EPS), EVA (Economic Value Added), MVA - Market Value Added, TSR - Engl. Total Shareholder Return, CVA - Cash Flow Return on Investment (CFROI), etc. MVA maximization is followed by the growing of the firm's value, yet there are cases when this leads to the reduction of the firm's value, as a result of some inefficient investment projects:

1.  $RIR < C_k$ , where  $RIR$  = rate of internal return,  $C_k$  = capital's cost, or
2.  $NPV < 0$ , where  $NPV$  = net present value.
3. increasing sales through extending distribution networks, appropriate promotion of the products, improving the quality of the products or extending the market quote do not always increase firm's value. So

MVA is majored only if supplementary invested capital generates a higher return than the present cost of the capital. (Vasilescu & et.al., 2018)

## 2. Method

In order to understand the difficulties the Romanian companies are encountering, in figure 2, we can see the situation in comparison with other countries; Romania records an incidence of insolvencies more than 4 times the recorded average in Central and Southeast Europe, where

the local average is 45 insolvencies per 1,000 active companies, the first position from this point of view. (Guda, 2016)

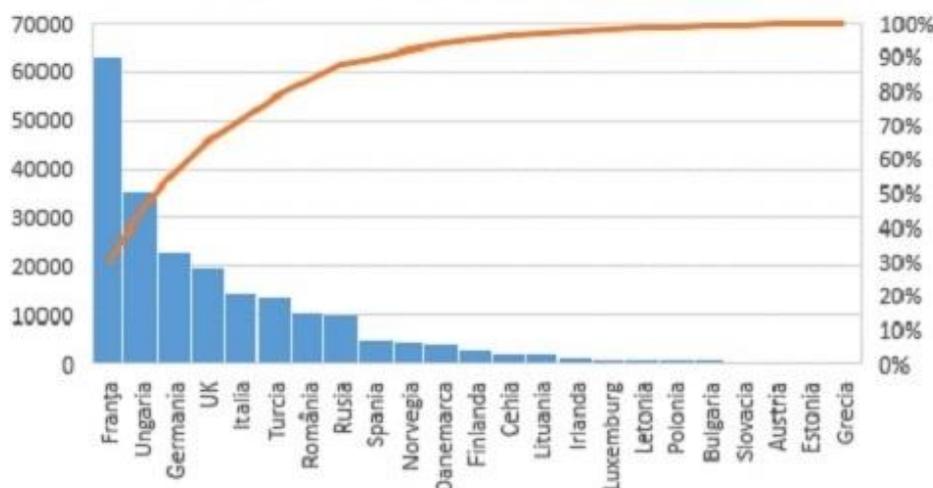


Figure 2. Country-wise status of procedures in 2015

Source: adapted from (GODÎNCA-HERLEA, 2015)

In figure 3, the Pareto (or sorted) histogram chart represents the cumulative total percentage, highlighting the biggest factors in 2018. The number of insolvencies opened in 2015 is down by about 51% over the previous year. (Guda, 2016)

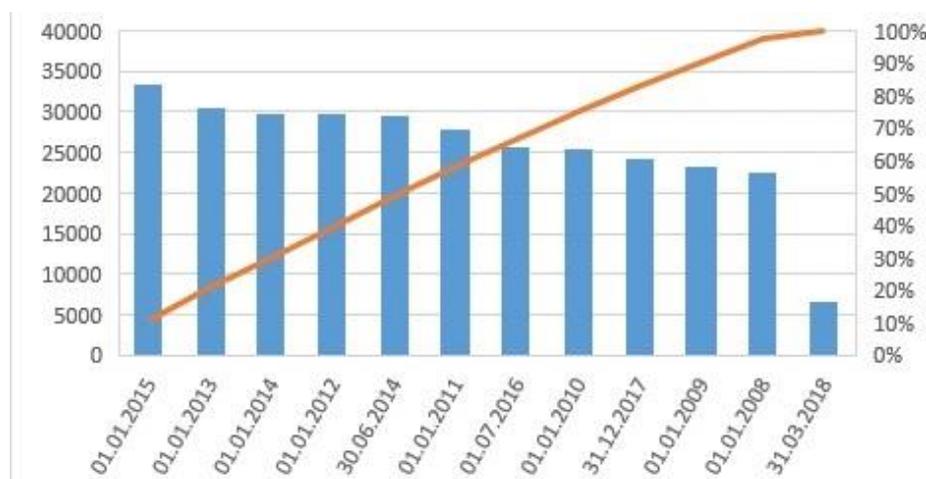


Figure 3. The number of insolvency files between 2015-2018

Source: (BPI, 2018)

With respect to the Romanian steelmaker in difficulty [Another steel producing company, ARCELORMITTAL GALAȚI S.A. is for sale now, as part of a divestment package, according to company's announcements], in table 1 and 2 there are presented the published information.

Table 1. COS economic and financial indicators (IFRS) in mil.lei

Balance sheet items	31-Mar-17	31-Dec-17	30-Mar-18
Total fixed assets	152,402	144,421	144,220
Total current assets	156,006	185,026	215,288
<b>Total assets</b>	<b>308,408</b>	<b>329,447</b>	<b>359,508</b>
<b>Total equity</b>	<b>-336,839</b>	<b>-330,485</b>	<b>-329,259</b>

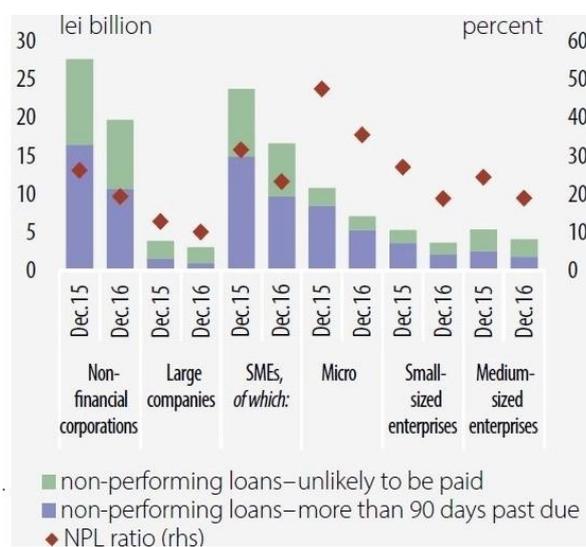
Source: (COS TARGOVISTE S.A., 2018)

**Table 2. COS Financial results**

Financial results	01.01-31.03.2017 (1Q 2017)	01.01-31.03.2018 (1Q 2018)
Turnover	141.568.960	154.182.261
Total revenues	134.142.990	172.144.899
Total expenses	141.441.660	170.919.602
Gross profit (loss)	(7.298.670)	1.225.297
Net profit (loss)	(7.298.670)	1.225.297

Source: (COS TARGOVISTE S.A., 2018)

Companies reported negative net results (32%), with a quarter of these companies incurring losses for the third year in a row according to the semi-annual financial statements. (NBR, 2016). In figure 5, there were 44 % of non-performing loans in local banks' portfolios in December 2016 and 72 % of total loans past due for more than 90 days, and the NPL ratio stood at 19.3 % in December 2016, down from 26.2 percent at end-2015.

**Figure 4. Non-performing loan ratio by company size**

Source: (NBR, 2016)

In Table 1, 75 % of firms with negative equity at end-2015 were in this situation in 3 out of the past 5 years and the persistence of this issue is also revealed by the fact that nearly half of the firms (48.5 %) with negative equity in 2015 were in this circumstance in each of the past 5 years. This indicates that the sector has been facing a chronic problem and the developments in the liability structure of firms are not sustainable. This evolution cannot be solely accounted for by challenges encountered during economic recession, as the resumption of economic growth did not come with a solution to this problem or even help reduce its magnitude. (NBR, 2016)

**Table 3. Persistent structural vulnerabilities in 2015**

Indicators	Value (in 2015)	No. of firms (thousand)	% of firms (of total)
Equity/share capital	<50%	275.5	45
Equity	<0	268.7	75
PD			

Source: (NBR, 2016)

The probability of default [failure to meet the legal obligations (or conditions) of a loan, e.g. the biggest private default in history is Lehman Brothers (over \$600 billion when it filed for bankruptcy in 2008); the biggest sovereign default is Greece (\$138 billion in March 2012)] (PD) - calculated on a 12-month horizon for companies with outstanding bank loans reporting no payments overdue for more than 90 days over the last 12 months - at end-2016 on a 12-month horizon reveals a notable increase in the default rate up to 4.9 percent in 2016. (NBR, 2016)

There are several financial models for analyzing default risk, such as the Jarrow-Turnbull model, Edward Altman's Z-score model, or the structural model of default by Robert C. Merton (Merton Model).

Initially, the Altman Z-Score was found to be 72% accurate in predicting bankruptcy two years before the event, with a Type II error (false negatives) of 6% (Altman, 1968). In a series of subsequent tests covering three periods over the next 31 years (up until 1999), the model was found to be approximately 80%–90% accurate in predicting bankruptcy one year before the event, with a Type II error (classifying the firm as bankrupt when it does not go bankrupt) of approximately 15%–20% (Altman, 2000).[2]

From about 1985 onwards, the Z-scores gained wide acceptance by auditors, management accountants, courts, and database systems used for loan evaluation (Eidleman). The formula's approach has been used in a variety of contexts and countries, although it was designed originally for publicly held manufacturing companies with assets of more than \$1 million. Later variations by Altman were designed to be applicable to privately held companies (the Altman Z'-Score) and non-manufacturing companies (the Altman Z''-Score).

Neither the Altman models nor other balance sheet-based models are recommended for use with financial companies. This is because of the opacity of financial companies' balance sheets and their frequent use of off-balance sheet items. There are market-based formulas used to predict the default of financial firms (such as the Merton Model), but these have limited predictive value because they rely on market data (fluctuations of share and options prices to imply fluctuations in asset values) to predict a market event (default, i.e., the decline in asset values below the value of a firm's liabilities).

Default: a debtor has passed the payment deadline on a debt they were due to pay. and can be of two types: Debt service default occurs when the borrower has not made a scheduled payment of interest or principal; Technical default occurs when an affirmative or a negative covenant is violated.

## Results

The first 100 companies in terms of net profit accounted for 42 percent of total, while companies' involvement in high-tech and knowledge-intensive activities can be enhanced. Other challenges facing the corporate sector in the period ahead stem from pressures on wage costs and from the availability of labor force. (NBR, 2016)

A large number of undercapitalized companies (that pass through the difficulties they are facing to both credit institutions and other trading partners) are responsible for a significant share of banks' non-performing loans and the overdue payments to other economic agents. In addition, the materialization of a potential adverse economic scenario will substantially reduce the survival chances of these firms, given their precarious situation.

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## **Factors Determining the Adoption of Sharing Economy Models in the Travel Context**

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### **Abstract**

Sharing economy options are business models where providers offer certain properties (homes, cars, etc.) or items for rent to others, usually through an intermediary platform. As an alternative to established traditional and digital commercial models, this industry is rapidly developing with plummeting market size, revenue and user numbers. This study aims to investigate the impact of perceived convenience, economic benefits, enjoyment, reputation, community belonging, perceived experience, trust, and sustainability benefits of these models in determining the attitudes toward and intentions to use sharing economy services in the travel industry. Data has been collected from 222 individuals through an online survey. This sample consists of 159 previous users while it also includes 63 non-users of sharing economy solutions. Findings of the study show that perceived convenience, economic benefits, enjoyment, and trust are the main drivers of attitude and intention toward these services. While partial evidence has been found for reputation, the other factors related to the social aspect of these models, namely, community belonging and perceived experience have not been found to be influential in the adoption of sharing economy models in the travel context. Sustainability has been found to have a positive impact in forming attitude, but this collectivistic approach lends its place to more utilitarian and functional benefits and loses its significance in forming intention.

**Keywords:** sharing economy, collaborative consumption, consumer adoption, attitude and intention.

**JEL Classification:** M31.

### **1. Introduction**

Rapid advancements in the digital world in the last two decades have given rise to many novel business models in online and mobile environments. One such development is the emergence of sharing economy models which rest on the idea of collaborative consumption in many realms such as travel, transportation and various other contexts. In 2015, the term “sharing economy” made it into the shortlist for “word of the year” drawn up by the British dictionary service Oxford Dictionaries (Deloitte, 2016). Sharing economy, which is also called peer economy or collaborative consumption, is based on a business model where owners of houses, cars or other items rent them out to unknown peers. The owner provides access to the property or item for a limited period of time for which they directly receive a fee. Such sharing services are often provided through an online platform (Statista, 2018).

Sharing economy activities fall into four broad categories: recirculation of goods, increased utilization of durable assets, exchange of services, and sharing of productive assets (Schor, 2016). The number of successful and profitable businesses employing this model is increasing rapidly. Airbnb is the leading company in this new industry and provides a platform for travelers where they can rent a room or a whole home (Forbes, 2018). The largest two companies in the US ridesharing market are Uber and Lyft, and both of these companies use a smartphone app to match drivers with passengers at short notice for one-off shared rides to an agreed location (Statista, 2018). Another pioneer, Snapgoods, is a site for lending and borrowing high-end household items, such as cameras, kitchenware or musical instruments (Forbes, 2018).

As Matzler, Veider & Kathan (2015) state, consumers are becoming increasingly interested in leasing and sharing products instead of buying or owning them. This actually poses a serious threat to established industries and lead to the emergence of intermediaries as a totally new business model to accommodate these exchange transactions. Taken as a whole, the sharing services market has become increasingly well known in the United States over the last four years, with 83% of people in the US as of May 2018 being familiar with at least one sharing services company, compared to only 47% in 2015 (Statista, 2018). Even though many of the sharing economy companies have emerged from US, China is one of the top players such that the Chinese sharing economy market trade volume topped 3.45 trillion yuan (\$501 billion) in 2016 (China Daily, 2017). Additionally, a recent report published by EU (2018) mentioned that the size of the sharing economy relative to the total EU economy was estimated to be €26.5 billion (0.17% of EU-28 GDP in 2016). The largest sharing economy markets are found in France (€6.56 billion), UK (€4.64 billion), Poland (€2.74 billion) and Spain (€2.52 billion). These top four countries have also offered the largest number of jobs in the sharing economy industry (EU Report, 2018). Ultimately, PriceWaterhouseCoopers (2015) has estimated that the sharing economy industry can reach \$335 billion in worldwide revenue by 2025 (Matzler et al., 2015).

In light of the proliferation of this economic model, this study aims to explore the aspects that play role in current and potential users' adoption of the sharing economy model in the travel context. For this purpose, a comprehensive set of independent variables that can be presumed to have a possible impact on the adoption of sharing economy services have been determined after a thorough review of the literature. Potential antecedents that are most applicable to the travel industry have been compiled as: perceived convenience, perceived experience, community belonging, trust, sustainability, enjoyment, reputation, and economic benefits. Consequently, the impact of these determinants on the formation of attitudes toward and intention to use sharing economy services in the travel context have been investigated both for current users and also for non-users of these systems.

## 2. Literature Review

There is a growing body of literature in recent years about sharing economy, also termed as peer economy or collaborative consumption. Schor (2016) has discussed what is new and not about this sector and how the claims of proponents and critics stack up. This study asserts that new technologies of peer-to-peer economic activity are influential tools for building a social movement centered on legitimate practices of sharing and cooperation in the production and consumption of goods and services (Schor, 2016).

Since this topic is in its growth stage both in the business environment and in academia, studies that cover the impact of numerous factors on the adoption of sharing economy services are essential. A number of such studies that examine various drivers of collaborative consumption have been conducted by researchers. One such comprehensive study is Möhlmann's (2015)

research where the determinants of satisfaction and the likelihood of future usage of sharing economy services have been investigated on the users of a car sharing service (car2go) and an online community accommodation marketplace (Airbnb). Community belonging (aspiration to be part of a group or community with shared practices), cost savings, environmental impact, familiarity with sharing options, service quality (experienced in previous attempts of the user), trend affinity (being fashionable by following innovations), trust, utility, internet capability, and smartphone capability of the users were used as the potential determinants of satisfaction and repeat usage. The most important determinants have been found to be utility, trust, cost savings and familiarity. Möhlmann (2015) has interpreted his findings as a depiction of the fact that factors serving users' self-benefit were predominant in explaining satisfaction and loyalty. Very similarly, Barbu et al. (2018) have found that ease of use, trust, savings, and the utility of the products are the determinants of satisfaction; whereas environmental aspects and trend are not significant in terms of the impact on satisfaction with the products/services of the sharing economy.

According to Hamari et al. (2015), participation in sharing economy is driven by many factors such as its sustainability, enjoyment of the activity, reputation of using these services and economic gains. Their study has shown that although sustainability is an important determinant of forming a positive attitude toward these services, it is not directly associated with intention to use them. Another interesting finding of this study is that while enjoyment affects both attitude and intention, reputation does not have an impact on any of the two. Finally, economic benefits directly drive intention but is not necessarily an important input of attitude. This study shows that the factors forming a positive inclination toward the sharing economy model and the intentions to use these options are not necessarily consistent.

In another study, Cho & Bokyeong (2016) have examined the impact of perceived price advantages, perceived trust, and perceived unique experiences gained by using P2P services. Additionally, they have also looked for the effect of three dimensions of justice on usage intention. Their findings show that procedural justice (perceived clarity and organization of the procedures regarding these services), interactional justice (perceived respect and positive treatment of service providers), and distributive justice (perceived fairness and cost-effectiveness of these services) have all been found to have strong impact on the formation of intention to use accommodation-based sharing economy services.

Yang et al. (2017) have also demonstrated the importance of confidence benefits, social benefits, and safety benefits in creating commitment and loyalty to sharing economy services which strengthens the fact that these options are also dependent on social and trust-based factors. Tussyadiah and Pesonen's (2016) study has also shown that both social and economic appeals of peer-to-peer accommodation result in an expansion in destination selection, increase in travel frequency, length of stay, and range of activities participated in by tourists in the travel industry. While economic appeal is mostly about saving money by reducing travel costs, social appeal is about getting to know local people and neighborhoods and building a closer relationship with local residents. In another study including a more extended set of input variables, Tussyadiah (2016) has shown that enjoyment, economic benefits and amenities of the property are more important than social benefits, sustainability and location-based advantages. This demonstrates that tangible or more concrete outcomes are valued more than the social outcomes of sharing economy services.

From a methodological perspective, most of the studies about adoption of sharing economy models are based on surveys while qualitative studies or experimental designs are very few. In one rare experimental example, Lamberton & Rose (2012) have shown the importance of the expected scarcity of the shared offering and the perceptions of personal vs. sharing partners' usage patterns of the offering in determining the attractiveness of a sharing system. In a

qualitative study involving participant observation and in-depth interviews, Albinsson & Perera (2012) have examined the motivations and insights of participants in a collaborative consumption, exchange and sharing event organization marketplace called Really Really Free Markets (RRFM). Findings of the study show the importance of the community idea, collaboration, exchange and reciprocity as alternative values to the current economic environment. As Belk (2007) has discussed earlier, individuals share more easily when sharing does not necessarily make them lose possession (i.e. in the case of digital sharing) or when they feel a moral obligation to belong to a shared identity group. On the other hand, materialism and the idea of possessions turning into parts of the extended self are important impediments to sharing. On the other hand

To sum up, it is seen that while studies in the literature have some common findings, they have also led to inconsistent results at certain points. Therefore, it is evident that more exploratory studies are necessary to understand the current and potential state of user adoption of sharing economy services until a better comprehension of this volatile market is grasped.

### 3. Theoretical Model

Based on the large number of variables examined in previous studies, an exploratory theoretical model has been formed by integrating the determinants that might be most relevant and likely to affect user attitudes and intention toward sharing economy services in a travel context. First of all, although it was not used in previous studies, it was conjectured by the authors that *perceived convenience* of sharing economy services can act as an important determinant of attitude and intention. Another very tangible effect that has also been used in the main sharing economy acceptance studies adopted in this research (Cho & Bokyeong, 2016; Hamari et al., 2015; Möhlmann, 2015; Tussyadiah & Pesonen, 2016) is the *economic benefits* consumers expect to attain by using these relatively lower costs systems. In addition to these tangible benefits, the *enjoyment* derived from using these services and the *reputation* and social image users expect to gain by adopting them can also be important input factors (Hamari et al., 2015). This reputation effect has also been mentioned as trend affinity in Möhlmann's (2015) study where users expect to maintain an innovative, fashionable- and up-to-date image by using these services. Möhlmann (2015) has also included *community belonging* in his study with the expectation that people can use such services in order to have a shared identity with similar others. Another close incentive can be the local *experience* people might expect to gain by using sharing economy models. Individuals expect to gain a more insider perspective and a sense of the local culture by using service providers that are a part of the local life in the destination. Following Cho & Bokyeong (2016) and Tussyadiah & Pesonen (2016) this variable has been included in our model as well. At a broader level, an inherent *trust* in users and providers of such a system can also play an important role in its adoption (Cho & Bokyeong, 2016; Möhlmann, 2015). Proponents of the system can be expected to trust the parties taking part in it. With a slightly different wording, Yang et al. (2017) have also touched upon this concept under the terms confidence and safety benefits. Finally, at a more impersonal level, current and potential users can be expected to assume a positive attitude and intention toward sharing economy models because of the *sustainability* and resource efficiency advantage (Hamari et al., 2015; Möhlmann, 2015; Tussyadiah, 2016). The sustainability dimension and the economic and environmental efficiency brought about by these models has been discussed in a variety of studies (Heinrichs, 2013; Midgett et al., 2017; Nica & Potcovaru, 2015). Thus, this potential determinant has also been included in the model. Ultimately, the integrated model employed in this study is shown in Figure 1.

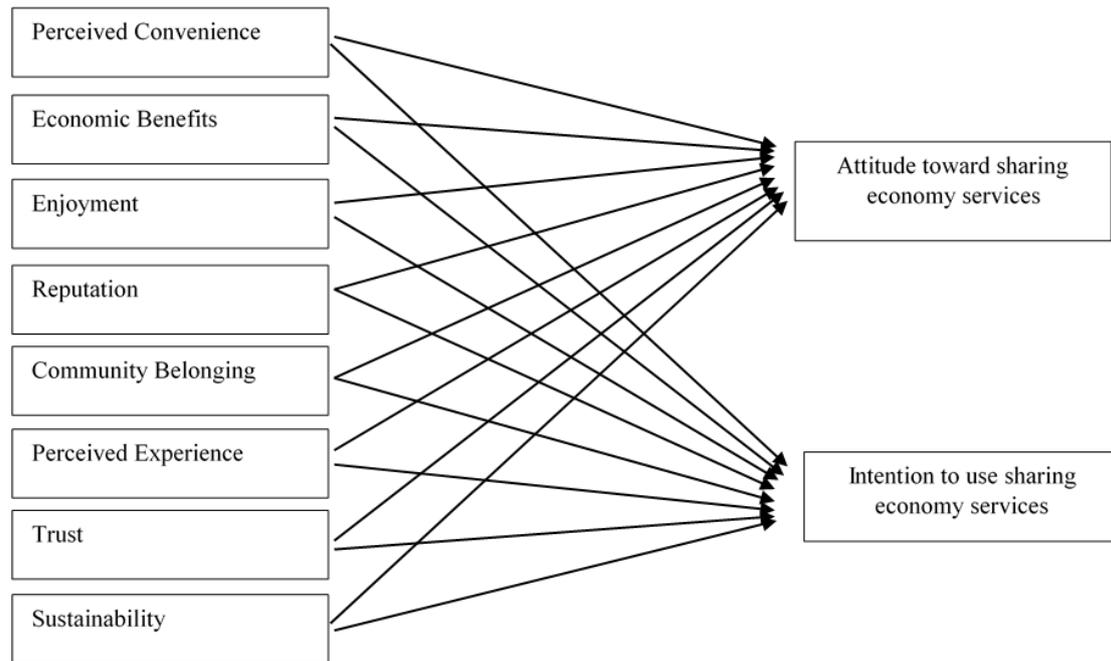


Figure 1. Theoretical Model of the Study

## 4. Methodology

### 4.1 Sampling and Data Collection

Data for the study has been collected through an online questionnaire distributed over the authors' social media accounts at Facebook, LinkedIn and Twitter and displayed on their personal web pages. Since this is an exploratory study with a potentially wide and dispersed population, convenience sampling was employed and the data came mainly from the direct contacts of the authors. A small part of the data was also collected from two graduate courses at the Management Information Systems Department. No explanations were provided in class during data collection in order to provide the same conditions with the online environment and avoid instrumentation error.

Overall, a total of 222 fully completed questionnaires was collected. At the beginning of the questionnaire, a brief definition of sharing economy services was provided and some well-known examples were given to clarify the context of the study and make sure that all respondents have the same understanding of what sharing economy models are. The first question of the survey was how many times the respondent used a sharing economy service within the last year which included a "none" option as well. This was intentional since, different from previous studies, this study aimed to gather the opinions of both user and non-user groups and make a comparison between them. The distribution of usage frequency and the demographic profile of the sample can be seen in Table 1.

Table 1. Sample Profile

Sharing Economy Travel Service Usage					
Usage frequency within last year	None	1-2 times	3-5 times	6-8 times	>8 times
	63 (28.4%)	54 (24.3%)	44 (19.8%)	13 (5.9%)	48 (21.6%)
Demographics					
Gender	Male	Female			
	93 (41.9%)	129 (58.1%)			
Age	18-25	26-35	≥36		
	138 (62.2%)	69 (31.1%)	15 (6.8%)		

<b>Education</b>	<i>High school degree</i>	<i>University student</i>	<i>University graduate</i>	<i>Postgraduate degree</i>
	4 (1.8%)	74 (33.3%)	94 (42.3)	50 (22.5%)
<b>Monthly Income</b>	<\$1000	\$1000-\$2000	>\$2000	
	128 (57.7%)	54 (24.3%)	40 (18%)	
<b>Nationality</b>	<i>Turkish</i>	<i>International</i>		
	113 (50.9%)	107 (48.2%)		

As seen in Table 1, the sample consists of a slightly higher number of females compared to males, however, the gap between the two gender groups is at an acceptable level. Since the immediate contacts of the authors include a large number of university and postgraduate students and newly graduated early adults, the age distribution is skewed toward the younger part of the population. Most of the sample lies in the 18-35 range with a very low percent above 35, therefore, the results of this study represent findings for the young and early adult group. The education level is high with nearly all of the sample distributed into the university and postgraduate education levels with a few exceptions having a high school degree. The sample has a medium monthly income level and the relatively higher income group has the lowest percentage. Finally, it is important to note that although the study has been conducted by authors affiliated to a university in Turkey, the respondents are from many different countries, thus, the study includes the opinions of a wider variety of nationalities and is not restricted to a one-country sample.

#### 4.2 Measurement of Constructs

In this study, an extensive number of variables expected to affect attitude and intention toward sharing economy services have been employed. As stated in the theoretical model part, these variables have been compiled from three main studies in the prevalent literature about sharing economy adoption (Cho & Bokyeong, 2016; Hamari et al., 2015; Möhlmann, 2015). As an exception, the perceived convenience variable has been contributed by the authors. For the other variables, the sources used have been given in Table 2.

**Table 2. Survey Items, Sources and Reliabilities**

<i>Perceived Convenience</i> ( $\alpha = 0.756$ )	<b>Source:</b> created by the authors
I think SETS are easy to use. SETS are more practical than traditional methods of transportation or accommodation. SETS can help me use my time more efficiently while traveling.	
<i>Economic Benefits</i> ( $\alpha = 0.807$ )	<b>Source:</b> Hamari et al. (2015)
I can save money if I use SETS. My participation in SETS benefits me financially. My participation in SETS can improve my economic situation.	
<i>Enjoyment</i> ( $\alpha = 0.913$ )	<b>Source:</b> Hamari et al. (2015)
I think sharing economy is enjoyable. I think sharing economy is exciting. I think sharing economy is fun. I think sharing economy is interesting.	
<i>Reputation</i> ( $\alpha = 0.891$ )	<b>Source:</b> Hamari et al. (2015)
Contributing to my sharing economy community improves my image within the community. I gain recognition from contributing to my sharing economy community. I would earn respect from others by sharing with other people in my sharing economy community.	
<i>Community Belonging</i> ( $\alpha_1=0.605 \rightarrow \alpha_2=0.805$ )	<b>Source:</b> Möhlmann (2015)
The use of SETS allows me to be part of a group of likeminded people. The use of SETS allows me to belong to a group of people with similar interests. My friends would approve of the sharing option in travel services. ( <i>excluded in analyses</i> )	
<i>Perceived Experience</i> ( $\alpha = 0.860$ )	<b>Source:</b> Cho & Bokyeong (2016)
By using SETS, I can gain more cultural experience in other countries.	

By using SETS, I can have a more unique experience compared to a traditional vacation. By using SETS, I could gain deeper local experience in other countries.	
<i>Trust</i> ( $\alpha = 0.846$ )	<b>Source:</b> Möhlmann (2015)
I believe that users of SETS are generally truthful in dealing with one another. I believe that users of SETS will not take advantage of me. I trust that the SETS provider provides enough safeguards to protect me when necessary. Sharing economy environments are generally robust and safe to use. Overall, SETS are trustworthy.	
<i>Sustainability</i> ( $\alpha = 0.805$ )	<b>Source:</b> Hamari et al. (2015)
Sharing economy helps scave natural resources. Sharing economy is a sustainable mode of consumption. Sharing economy is efficient in terms of using en energy.	
<i>Attitude</i> ( $\alpha = 0.885$ )	<b>Source:</b> Hamari et al. (2015)
All things considered, I find participating in sharing economy to be a wise move. All things considered, I think sharing economy is a positive thing. Overall, sharing goods and service within a sharing economy community makes sense. Sharing economy is a better mode of consumption than selling and buying individually.	
<i>Behavioral Intention</i> ( $\alpha = 0.949$ )	<b>Source:</b> Hamari et al. (2015)
I am likely to shoose a similar sharing option the next time. In the future, I would prefer a sharing option like AirBnb/Uber to a traditional car/hotel service. I can see myself engaging in sharing economy more frequently in the future. I can see myself increasing my sharing economy activities if possible. It is likely that I will frequently participate in sharing economy communities in the future.	

*(The SETS abbreviation used in these statements is the shortened form of Sharing Economy Travel Services.)*

The sources these scales are taken from have also given references to previous studies used to create or adopt these statements. However, since we have taken the scales in their adapted from form these three studies, we have referenced them as our main sources.

Reliability analyses have been conducted for all of the multi-item scales. The resulting Cronbach's alpha values are also provided in the table. With the exception of community belonging, all of the multi-item scales have produced high reliability scores exceeding the generally accepted threshold of 0.70. For community belonging, one item had to be excluded from analyses to improve reliability to the desired level.

## 5. Findings and Implications of the Study

In order to determine the impact of various factors on determining people's attitudes toward and intentions to use sharing economy travel services, the eight input variables included in the model have been assessed through multi-item scales. After computing the average scores of respondents for these variables as well as the two dependent variables, attitude and intention, six multiple linear regression analyses have been run. The first two regressions aim to investigate the impact of the eight independent variables on attitude and intention for all respondents. Consequently, the same analyses have been done first for the group who have had no prior experience using such services ( $n_{nu}=63$ ), and then for those who have had some level of experience with them ( $n_u=159$ ). Stepwise regression has been preferred in order to extract the pure effect of each significant input variable on the dependent variables.

There are alternative calculations offered for the minimum sample size for multiple linear regression. A commonly used approach is Green's (1991) computation where it is suggested that the sample size should be 50 more than eight times the number of input variables. In our case, this corresponds to 114 respondents. This shows that the regressions run for all respondents ( $n_{all}=222$ ) and for the user group ( $n_u=159$ ) have satisfactory sample sizes but the non-user group ( $n_{nu}=63$ ) fails to meet this threshold. Another approach is offered by Knofczynski & Mundfrom (2008) which considers sample size requirements according to the

R<sup>2</sup> level in the analysis. The relevant part of the sample size recommendation table from this work is as follows:

**Table 3. Selected Part of Sample Size Recommendations for Different R<sup>2</sup> Levels and Number of Predictors**

Good prediction level		
R <sup>2</sup>	# of predictor variables: 7	# of predictor variables: 9
.50	85	100
.70	40	50
Excellent prediction level		
R <sup>2</sup>	# of predictor variables: 7	# of predictor variables: 9
.50	320	400
.70	140	170

Source: Knofczynski & Mundfrom, 2014, p.438.

According to this approach, the sample size for all respondents meets the excellent and good prediction levels criteria for the attitude and intention regressions in the all respondents group respectively. The sample size for the user group meets the good prediction level criterion for both attitude and intention regressions. Finally, the sample size for the non-user group meets the good prediction level criterion for attitude but falls slightly below that for the intention regression. Still, since this is an exploratory study, all regressions have been run and comparative findings have been presented, noting that larger sample sizes are desirable for triangulation attempts in future studies. The outputs of the six regression analyses can be seen in Table 4.

**Table 4. R<sup>2</sup> Values and Beta Coefficients for the Predictor Variables in Regression Analyses**

	(n <sub>all</sub> =222)		(n <sub>nu</sub> = 63)		(n <sub>u</sub> = 159)	
	Attitude	Intention	Attitude	Intention	Attitude	Intention
R <sup>2</sup>	<b>0.638</b>	<b>0.545</b>	<b>0.670</b>	<b>0.542</b>	<b>0.603</b>	<b>0.503</b>
Perceived Convenience (β)	0.211	0.401			0.212	0.390
Economic Benefits (β)	0.180	0.118			0.215	0.162
Enjoyment (β)	0.286	0.257	0.243	0.409	0.323	0.187
Reputation (β)	0.081	0.162	0.313	0.464		
Community Belonging (β)						
Perceived Experience (β)						0.137
Trust (β)	0.111	0.218				0.182
Sustainability (β)	0.180		0.312		0.171	

As seen in Table 4, all six regressions have produced high overall R<sup>2</sup> values ranging between 0.503 and 0.670. This leads to the opportunity to examine the individual effects of predictor variables by examining their beta coefficients. These coefficients have been shown only for the predictor variables that have been found to have significant effects on the dependent variables. An examination of the influences of the independent variables on attitude for all respondents shows that enjoyment has the largest impact followed by convenience, economic benefits and sustainability. Trust and reputation have relatively lower determining effects although they have significant impact as well. In other words, people tend to think that these options are enjoyable and have utility-based benefits like convenience and economy but attitude is not shaped strongly by the more intangible input variables such as reputation, experience and community belonging. However, for intention, prominent differences can be observed. The importance of convenience and trust increase greatly while enjoyment keeps maintaining its

driving impact but, interestingly, less importance is attributed to economic benefits. This indicates that while cost savings create a positive attitude initially, when individuals come closer to using these services, practicality and convenience exceed the savings drive.

These findings are quite parallel to previous studies which have shown that factors serving users' self-benefit are more essential in explaining satisfaction and loyalty (Barbu, 2018; Möhlmann, 2015) and that economic appeal is more important than social appeal in this industry (Tussyadiah, 2016).

Another conspicuous finding is that while sustainability plays a role in the formation of a positive attitude, it loses its significance for intention, which is a finding that can consistently be seen for the user and non-user groups as well. This is exactly what has previously been found in Hamari et al.'s (2015) study. Thus, this idealistic and collectivistic benefit acts in forming a positive attitude but people become more oriented on their individual gains when they begin to consider using these services. This implies the need for sharing economy businesses to stress the importance of both personal and social benefits of using these options at large more extensively.

The differences between the outputs for the user and non-user groups also pose remarkable findings. While perceived convenience and economic benefits play significantly important part in creating both attitude and intention for the user group, they have no significant effect on neither of the dependent variables for the non-user group. This is actually a very good explanation of why the non-users have not experienced these services yet. Obviously, their perception of the utilitarian benefits of sharing economy options have not been formed. Instead, their attitudes and intentions are affected mainly from the enjoyment and reputation benefits of these services. Sustainability, as mentioned before, also enters the picture for attitude. This is a fascinating finding showing how clueless non-users are about the functionality of sharing economy services. They seem to perceive it mostly as a trendy business model individuals adopt to enjoy and build reputation with by following such an innovation.

One other important finding of the study is the strong impact of enjoyment for all respondents which is also equally important for both users and non-users. This finding is also parallel to Hamari et al.'s (2015) which has shown that enjoyment, economic benefits and reputation are very important determinants of sharing economy usage. This indicates that these models excite and motivate individuals hedonistically by offering an alternative solution to established commercial conduct in this industry. It is almost an indication of achieving an optimum solution with their own skilled usage of these services which thrills them.

Another interesting finding of this study is that community belonging does not play a role in determining users' adoption to sharing economy services in the context of travel industry. This may be attributable to the fact that almost all of the respondents of this research are young people, and most of them can be assumed as millennials. Young people have some unique characteristics and sense of belonging is supposed to be low for this group of people. Therefore, the respondents may not form community belonging against these sharing economy services. Our finding can be also justified by the novelty and immaturity of these services, that is to say, the sharing economy has not been widely used in the society and has not penetrated to the mainstream market yet. Hence people using these services do not express their feelings by forming communities. Similarly, perceived experience which is the local cultural gains people expect to receive by using these services has not had a significant impact in most of the regressions. This implies that in order to perceive such deeper benefits, more experience and maturity is needed in this industry. Such a benefit can be grasped only after repetitive experiences which is probably why the only significant impact was observed for the users-intention option.

Finally, findings about the trust issue show that trustworthiness of the participants in the system is important for individuals but this is reflected especially in the formation of intentions rather than attitudes and, further, has a significantly differential role in the formation of intentions for the user group. This also implies that users are much more aware of the importance of utilitarian issues surrounding the sharing economy model in addition to the more intangible factors, which is not the case for the non-user group.

Overall, these findings imply a very positive picture for the future of the sharing economy industry. Even slight experiences can enlarge the portfolio of benefits perceived by individuals greatly. As users gain more experience, this array of benefits can even be expected to expand further. Thus, as all markets in the growth period typically do, sharing economy businesses must also strive heavily to build presence, continuously position their services as equivalent, maybe even more beneficial alternatives to existing business models, educate the market about these benefits, advertise heavily in various media, work hard for brand recognition and develop user-friendly, operable and enjoyable user interfaces to build repeat business.

### 6. Limitations and Suggestions for Future Research

One limitation of this study is the uneven sample sizes for the user and non-user groups although the overall sample size is adequate for analysis. Especially, the slightly below-threshold sample size for the non-user group can be improved in further studies in order to build more robust findings regarding user/non-user differences.

Another limitation is that newly constructed or suggested variables are not abundant in this research. Except perceived convenience which has been contributed by the authors, the other seven independent variables in the model are gathered from previous studies and existing measurement scales have been adopted from them. In future research attempts, more diverse variables can be added and expanded models can be tested. Alternatively, more explicit studies focusing on one or two specific variables but employing less-used research methods, particularly experimental designs, can be performed. As stated in the literature review of this study, there is also a great need to design and implement qualitative studies with users and non-users and understand the deeper dynamics and motives for adoption, satisfaction, and loyalty in this area.

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## **Organizational Culture – Values and Practices, Evidence from Manufacturing Industry in Northeastern Bulgaria**

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### **Abstract**

Organizational culture is a complicated topic to deal with. From one hand it keeps researchers and practitioners busy from a fairly long period of time. However, due to its rich content and broad scope it is still in the focus of the academics with blank areas for exploration. The study in hand refers to two levels of culture: a) inherent values as a core of the culture; and b) practices which are imposed from the organization. These levels are examined in 3 leader manufacturing organizations, located in Northeastern Bulgaria. The study is derived from few reasons: 1) it investigates features of the subject in the manufacturing organizations. It is agreed that the sector of operation influence organizational culture. 2) The subjects of the study are flagman manufacturer in light industry. Revealing values and practices of the “biggest” would expose “soft” aspects of their operations. 3) That kind of study is conducted for the first time in Bulgaria, according to the best knowledge of the author, thus provides ground for future researches and discussions. 4) The organizations at hand are located in the Northeastern Bulgaria, which is less developed part of the country in terms of infrastructure and investment per capita. It is agreed in the literature that the access to resources is a part of the business environment which influence organizational culture as well. The objective of the paper is to examine dimensions of organizational culture, which corresponds to values and practices. Hofstede's five dimensional cross-cultural model (Hofstede 2001) is employed to examine values. Revised profile of organizational culture (Sarros, Gray, Densten & Cooper 2005) is in use to reveal the practices. Subject of the survey are first line managers (n=58), more specifically their perspective of values and common practices of organizational culture. Statistical analysis are performed to obtain common tendencies and to explore correlation.

**Keywords:** Organizational culture, Hofstede's cross – cross cultural model, revised profile of organizational culture, values, and organizational practices.

**JEL classification:** D23, D22, L69.

### **1. Introduction**

Organizational culture is an explored concept, especially in business environment. It is in scope of either academics or practicing managers. Organizational culture is quite broad concept. This study is based on an idea of culture fit (Aycañ et al., 1999) along with a system approach (Ghinea et al., 2015), i.e. envisioning culture as a consistency of different layers.

A number of scholars (Ehtesham et al., 2011; Piercy et al., 2004) have questioned the applicability of western approaches in nonwestern setting thus, it has been accepted that culture is a main source of difference in performance management practices. This determines the need to test the theoretical postulates in environment in hand. What is more, organizational culture is envisioned as a critical success factor (Jobbour et al., 2018) for operating in Industry 4.0.

Previous research on organizational culture fit (e.g. Aycañ et al., 1999; Aycañ et al., 2000; Pencheva, 2005) suggest that culture is closely related to two major groups of factors, i.e. socio-cultural environment and enterprise environment. Socio-cultural environment is consistent with cultural dimensions. Thus, concept employed in this part of the model is popular and widely explored. The enterprise environment consists of market characteristics, nature of industry – manufacturing/services, ownership – private/public and resources availability. The notion of influence of the enterprise environment is not as popular as the socio-cultural one. However, manufacturing poses informal but strong stereotypes (e.g. Payne, J. 2018) which have an impact over organizational culture.

The aim of this research is to reveal some characteristics of organizational culture in manufacturing entities located in Northeastern Bulgaria. A gap in the literature in Bulgaria is a lack of solid foundation of research on the topic outside capital of the country, thus the current survey is a modest attempt to fill in.

In terms of culture components, most authors give preference to two constituents i.e. values and norms (Ilieva, 2006). According to Hofstede (2003) and its followers, the important elements in cultural researches are values and practices. Herewith, main constructs of the organizational culture are the values and the practices (norms).

The purpose of this study is to explore the organizational culture, i.e. common values and practices of first line managers in leading manufacturing organizations, located in Northeastern Bulgaria.

The study is derived from few reasons: 1) It investigates structures of the organizational culture in manufacturing organizations. 2) The subjects of the study are flagman manufacturers in light industry. Revealing values and practices of the “biggest” would expose “soft” aspects of their operations, thus implications for management practices can be drawn out. 3) That kind of study - outside the capital are lagging behind, thus provides ground for future researches and discussions. 4) The organizations at hand are located in the Northeastern Bulgaria, which is less developed part of the country in terms of infrastructure and investment per capita. At the same time, two of the companies in hand (out of three) are located in Shumen city, which is an emerging industry center. According to the best knowledge of the author, features of organizational culture have not been researched.

A qualitative method for establishing facts and interrelations was chosen to achieve the objectives of the study. The survey has been conducted in 2017. Subject of survey is a perception of the first line managers towards values and adopted practices in organization they are employed. First line managers are in the focus for a following reasons: a) their perspective is consistent with the organizational culture, since they have been promoted to managerial position; b) they are not in a position of CEO or owner of the company, thus their point of view is more likely to depict the “real picture” opposed to the “desired one”; c) they are responsible for the manufacturing itself, thus their viewpoint would reflect immediate implementation of the cultural practices. As a prerequisite of research selection, the companies are flagman in the sectors they operate. First one operates in knitting socks, the second one is in electrical supplies manufacturing, the third one is in food and household chemical supplies. All their first line managers have been involved in the survey.

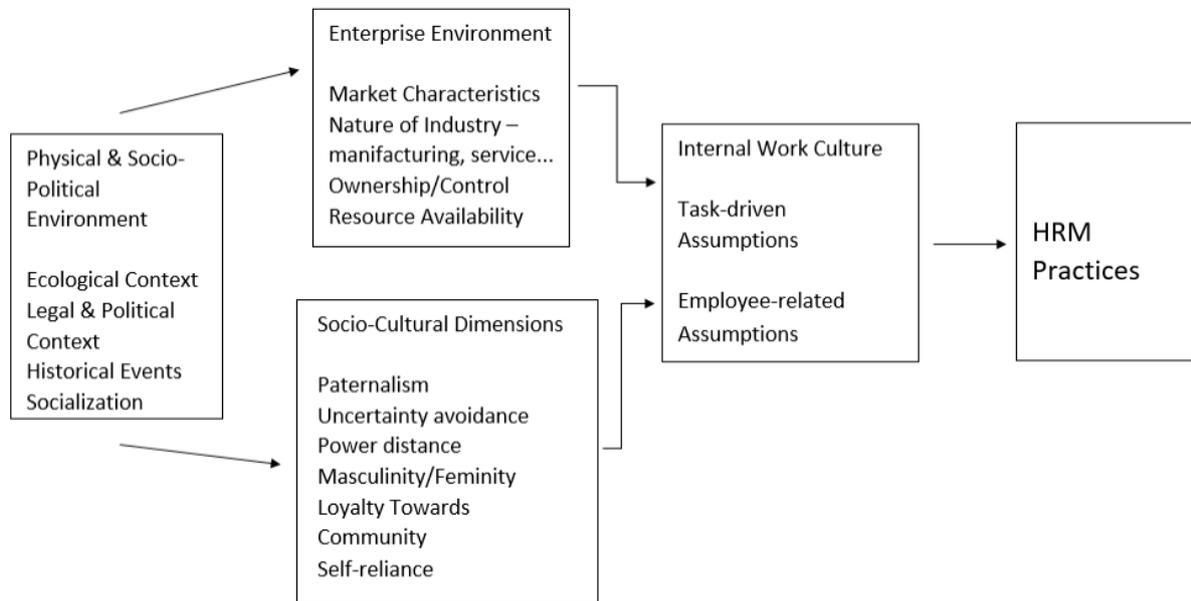
In that survey are examined both values and practices with respect to the organizational culture, along with the relationship between dimensions of both of them. Two values dimensions occur to very high in their scores in comparison with previous researches. From the side of cultural practices, surprisingly Social Responsibility occur as positively, strongly correlated dimension with other values dimensions, oppose to Performance, for example, which is logical to assume when it comes to manufacturing. Long Term orientation is scored, which is almost a blank space in cultural surveys in Bulgaria. Some implications are derived out from these results.

## **2. Literature Review**

### **2.1. The Model of Culture Fit**

Organizations are complex systems operating in dynamically interacting environmental forces. The internal environment of the organization is represented by its internal work culture (Aycaan et al., 1999). The external environment consists of enterprise environment and socio-cultural environment. Both of them are influenced by physical and socio-political context (Figure 1). Aycaan et al. (1999) delineate sociocultural environment as shared value orientation among people in a given society. Internal work culture is constructed in terms of prevailing managerial

assumption and believes upon two fundamental organizational elements i.e. task and employees. According to the Model of Culture Fit, enterprise environment influence task driven assumption, while sociocultural context is closely related to employee – related assumption.



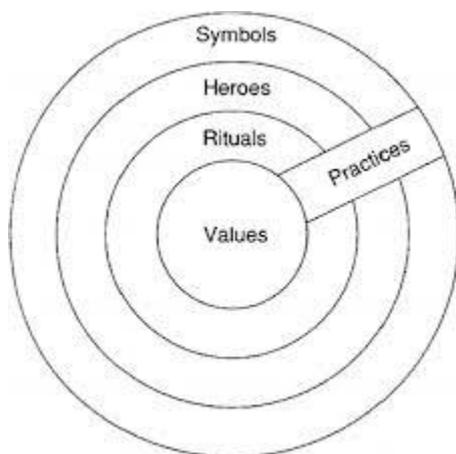
*Figure 1. The Model of Culture Fit*

Source: Aycan et al., 1999, p. 503

A shortage of this model is a lack of notion of relationship between enterprise environment and employee– related assumption and vice versa, absence of connection between sociocultural contexts and task-driven assumption. Another criticism of that concept is that Internal Work Culture is depicted as a sum of two components. Organizational culture is a complex phenomenon consists of multiple layers and levels.

## 2.2. Organizational Culture

As it was already mentioned, culture comprises of different layers. Deepest level consists of values which determine the implicit preference of members of the organization, their aspirations and the ways they pursue them (De Long & Fahey, 2000.). The practices are observable and able to model, while the values are hidden and almost unchangeable.



*Figure 2. Culture as an Onion Diagram*

Source: Hofstede, 2001, p. 49

Hofstede (Hofstede, 2003. Hofstede, 2001.) conceptualize cultural levels from a cross-cultural and organizational perspective. Cross-cultural aspect of culture manifests in four depth levels: values –core and practices - rituals, characters and symbols (Figure 2).

In terms of organizational culture, Hofstede asserts that it is expressed only in practices, due to the fact that employees include at any workplaces mature individuals with complete mindset. He is in favor of an employee is likely to change the behavior if the organization pursue so. However, this does not lead to a change in the inherent values of the employee.

However, the majority of researchers, focus on the adopted organizational practices. This study is focused either on values of the first line managers, or on common practices agreed in the organizations.

### **2.3. Cultural Dimensions**

#### **2.3.1. Values based dimensions**

Hofstede marks a distinction between two types of dimensions: based on values and based on practices. Dimensions based on values are also known as cross-cultural model often employed to explore national cultures and comparisons. Practice dimensions are less popular and accessible. Cross-cultural dimensions (Hofstede, 1984. Hofstede & Bond, 1988., Hofstede, 2001., Hofstede, 2003.) are as follows: Individualism / collectivism (I), Power distance (PD), Uncertainty avoidance (UA), Masculinity / femininity (M), and Long-term orientation (LO).

Hofstede's model is popular and wide employed in surveys for its simplicity, comprehensiveness and distinction between dimensions. These dimensions are particularly suited to the study organizational behavior. Hofstede himself emphasizes that his research depicts job-related values (Yeganeh et al., 2009.). Thus, Hofstede's cross-cultural, five dimensional model is employed for the present value-finding study.

#### **2.3.2. Practice based dimensions**

##### **2.3.2.1. Organization Culture Profile**

The organizational culture profile is an instrument initially developed by O'Reilly, Chatman, and Caldwell (1991) to assess person-organization fit. This profile is considered an important instrument to measure the fit between individual's preferences and organizational cultures. Here, attention is paid not only to the "central values" embraced in the organization but also to the extent to which they manifest themselves in the actions of employees, and the extent to which these employees approve or reject them. The initial version of Organizational Culture Profile composes of the following factors: innovation; stability; people orientation; outcome orientation; aggressive; detail orientation; and team orientation. This concept become one of the most widely used over the ocean, mainly for its reliability and validity. However, it is not that popular in Europe. A shortage of this instrument is a usage of Q-sorting methodology which poses an implications. What is more, this tool (as majority of others) reflect the mindset of its authors, which might suits one environment better than other.

##### **2.3.2.2. Revisited and Revised Organization Culture Profile**

Sarros et al. (2005) had validated an updated new version of the Organization Culture Profile. They preserved the concept but updated the tool. They developed a new questionnaire with Likert scale, and changed the factor structure towards more universal dimensions, i.e. competitiveness, social responsibility, team support, innovation, prize orientation, achievement orientation, stability. This model is employed for the present practice-finding study for its simplicity, user friendliness and potential consistency of other instruments similar in their form.

### **2.4. Research question**

What are the characteristic of organizational culture, e.g. cross-cultural indexes (values level), organizational culture practices and how strong is the relationship between them in the manufacturing organization employed in the survey?

### 3. Research Method, Results and Discussion

#### 3.1. Sample

There were 58 respondents in this survey, comprise of three companies, leaders in the sector they operate in. First one operates in knitting socks, the second one is in electrical supplies manufacturing, the third one is in food and household chemical supplies. All their first line managers have been involved in the survey. The respondents have been enrolled in Management training programs.

#### 3.2. Questionnaire

The questionnaire composed of three modules, i.e. cross-cultural questionnaire – VSM 82 (Hofstede, 2003.); revised organizational culture profile (Sarros et al. 2005); and background (descriptive) one.

The Cross-cultural module contains 23 statements demonstrating cultural dimensions representing values. The set of questions included in this questionnaire is limited to those who have a direct relationship with values dimensions. Statements concerning Future orientation were added, since they are not a part of the VSM 82. Respondents are asked to state the extent to which an item is important to them. Five point Likert scale is employed to mark the statements. The coding requires an explanation here. The original VSM82 coding (1=strongly agree; 5=strongly disagree) is applied to keep the original formulas and to calculate the cross-cultural scores. However, with respect to consistency with the organizational culture profile statements reverse coding (1=strongly disagree; 5=strongly agree) is used for further calculations, e.g. average values, correlation analysis, etc. In 5 statements, respondents are asked to pick: a time interval (how long they are going to work for their current employer); a description of a manager they are working with and they would like to work with; and how often they are afraid or nerves on their workplace.

Revised organizational culture profile contains 28 statements corresponding to organizational culture practices. Again, respondents are asked to choose the extent to which they agree or disagree with the statements. Five point Likert scale is employed to mark the statements (1=strongly disagree; 5=strongly agree). Questionnaires were administered in Bulgarian language. It takes about 15 minutes (average) to fill in. The questionnaires are filled anonymously.

Background module consists of 5 statements i.e. sex, age, years within organization, occupation, education.

#### 3.3. Background information

On the table below are presented outcomes of the background module. They provide general information about the sample.

*Table 1. Background information about the sample*

	Number	%
Sex		
Females	28	50
Males	28	48.30
Missing	1	1.7
Age		
20-29 years	8	13.8
30-39 years	15	25.9
40-49 years	18	31
50-59 years	14	24.1
Missing	3	5.2
Years within organization		

Less than 1 year	3	5.2
1 to 3 years	3	5.2
3 to 7 years	3	5.2
7 to 15 years	12	20.7
More than 15 years	30	51.7
Missing	7	12.1
Occupation		
Director	21	36.2
Middle manager	11	19
First line manager	20	34.5
Missing	6	10.3
Education		
Hi school	28	48.3
University degree	26	44.8
Missing	4	6.9
Organization (manufacturing type)		
Knitting socks	11	19
Electrical supplies manufacturing	26	45
Food and household chemical supplies	21	36

Source: own research results.

As shown on a Table 1, the majority (72%) of the respondents in the sample work for their current employer more than 7 years, thus their statements are supposed to depict the real situation in the company. With respect to gender, man and women are almost equally represented.

There are missing responses on every background statement. The missing answers could be interpreted as a concern of respondents towards their anonymity.

### 3.4. Calculation and Statistical analyses

Cross-cultural scores are calculated according to the VSM 82 instruments, thus they could be interpret with in comparison with results gained via same methodology. Further data manipulation are done with reverse scoring, i.e. 1=strongly disagree; 5=strongly agree for consistency with items for organizational culture – practices. Calculation and statistical techniques are performed via SPSS (19) – Statistical Package for Social Sciences.

#### 3.4.1. Descriptives

##### 3.4.1.1. Trend, based on average values

Average value of the cross-cultural items are in range of 3.1 to 4.53. This scores illustrate that majority of responds have stated high importance of this items. The lowest score is attached to the statement “How often you feel nerves on your workplace?”. However, it reflects often as “average” answer. The highest score is attached to the statement “To what extend an opportunity to work with people who cooperate well is important to you?”. It occurs to be the most important item of the value corresponding statements, both for men and women in the sample. Mean scores of Revised Profile of Organizational Culture Items (RPOC) ranges in 2.87 to 4.33. This scores show that respondents stated high importance of this items, either. The lowest score is involved to the statement “To what extend the company you work for is characterized by a lag of conflicts?”. The highest score is attached to the statement “To what extend the company you work for is characterized by innovation implementations?”.

### 3.4.1.2. Normality

The scientific standard for normality assessment is to use the Kolmogorov-Smirnov test. However, for very small samples, this test may not be adequately powered, thus failing to reject non-normality.

Mean and 5% trimmed mean

Mean and the 5% trimmed mean of each item are compared to see whether some of the extreme scores have a strong influence on the mean (Pallant, 2005.). Both cross-cultural and RPOC scores differentiate at maximum far less than 0.2 in difference between the two means, thus the extreme scores are considered as non-influential. There aren't significant differences in terms of gender differing comparison of responses.

Skewness and kurtosis

Skewness and kurtosis are explored with respect to check a normal distribution. Indices of acceptable limits of  $\pm 2$  are considered as adequate (Trochim & Donnelly, 2006; Field, 2000 & 2009; Gravetter & Wallnau, 2014).

*Table 2. Cross-cultural and RPOC Items exceeding  $\pm 2$  of skewness and kurtosis*

Item	Skewness	Kurtosis
Cross-cultural Items (values)		
V2 – importance of challenges on the job	-1.865	4.581
V4 - importance of hi income	-2.263	6.837
V10 - importance of certainty of employment	-1.501	3.695
Revised Profile of Organizational Culture Items (practices)		
RPOC 2 –importance of quality of work	1.699	5.407
RPOC 6 – importance of good reputation	-.664	2.093
RPOC 21 – importance of high performance expectation	-.993	2.099
RPOC 23 – importance of achieving results	1.664	3.874

Source: own research results.

Kurtosis, shown on Table 2 are all positive, which indicate peaked distribution of responses (clustered in the center). According to Pallant (2005) peaked distribution is common case for behavioral studies. Kurtosis can result in an underestimate of variance (Tabachnik & Fidell, 2001, p.75), especially with small samples like in this case. Thus, assumptions for parametrical statistics could be violated. However, in common studies such a distribution often indicates another structure of the data, e.g. hidden dimensions (Pencheva, 2018) which could be revealed via performing an Exploratory Factor Analysis. Factor Analysis are “data hungry” analysis. Sample composed of 58 respondents would be insufficient to feed Exploratory Factor Analysis. Thus, further examination of relationship between both groups of organizational culture will be accomplished by non-parametrical tools.

### 3.4.2. Measures

Cross-cultural scores are gained via established and well-validated scale, thus reliability of VSM 82 could be taken by default even for small samples ( $N > 50$ ) (Hofstede, 2001). In the current study the Cronbach alpha coefficient is .76. According to Pallant (2005) value above .7 can be considered reliable with the sample.

According to Sarros et al. (2005) the Revised Profile of Organizational Culture scale has good internal consistency, with a Cronbach alpha coefficient reported of .75. In the current study the Cronbach alpha coefficient is .915.

### 3.4.3. Relationship (correlation)

Non-parametric techniques do not have strict requirements and do not make assumptions about the underlying population distribution. However, they tend to be less sensitive compared to

their parametric counterparts (Pallant, 2005.). Despite that, they could be useful for small samples. Spearman Rank Order Correlation is employed to approach the answer of how strong is the relationship between dimensions of organizational culture – values and organizational culture – practices.

**Table 3. Spearman Rank Order Correlation between VSM dimensions and RPOC dimensions**

	Competitive-ness	Social Responsibility	Supportive-ness	Innovation	Rewards	Performance	Stability
<b>I</b>	.210	.857**	-.085	.082	-.022	.047	-.027
<b>PD</b>	.142	.138	.426**	.413**	.386**	.201	.327*
<b>M</b>	.122	.730**	.280	.222	.082	.380	.061
<b>UA</b>	.303*	.086	.279*	.240	.312*	.280*	.433**
<b>LO</b>	.159	.442**	.012	.118	.082	.010	-.035

Source: own research results.

\*\*Correlation is significant at 0.01 level, (2 tails)

\* Correlation is significant at 0.05 level, (2 tails).

As shown on the Table 3, two values dimensions predominantly, significantly, positively correlate with RPOC dimensions, i.e. Uncertainty avoidance and Power distance. UA correlate significantly with the Competitiveness, Supportiveness, Emphasis on Rewards, and Stability. PD is in significant correlation with Supportiveness, Innovation, Emphasis on Rewards, and Stability (the strongest relationship). Individualism/ Collectivism dimension is in significant, positive, strong correlation with Social Responsibility as well as Masculinity/ Femininity dimension. Long Term orientation correlates significantly, positively with Social Responsibility. Among RPOC dimensions, Social Responsibility is the most correlated dimension in positive relationship with I/C, M/F and LO. Insufficient, but negative relationship is captured between I/C and Supportiveness, Emphasis on Rewards, and Stability, as well as between LO and Stability.

### 3.5. Cross-cultural indexes

**Table 4. Cross-cultural indexes**

Source	Cross-cultural dimensions (values)				
	Ii	IPD	IM	IUA	ILO
Hofstede (2001) based on assumptions, no empirical data	30	70	40	85	-
Sotirova & Davidkov (2005)	51	75	50	68	-
Davidkov (2015)	54,69	75,67	53,62	69,49	-
Current study in manufacturing companies	<b>60.25</b>	<b>125.85</b>	<b>85.68</b>	<b>76.36</b>	<b>61.10</b>

Source: Hofstede (2001), Sotirova and Davidkov (2005), Davidkov (2015), and own research results.

With regards to cross-cultural scores Davidkov (2015) suggest that difference of 5 points is significant. In the sample of manufacturing companies here, two outstanding indexes (far exceeding 5 points) are captured, i.e. Power Distance - extremely high, compared to previous cores, and Masculinity - rather high, compared to previous ones. Individualism and Uncertainty Avoidance are a bit higher, but in normal range. Long term orientation is not commonly examined, thus incomparable.

## 4. Conclusions and implications

The Power Distance dimension is the construct which outstandingly demonstrates importance. That extremely high score could be explained with the authoritarian leadership style adopted in the manufacturing entities. It means that subordinates accept demanding and controlling management as normal. Keeping in mind the positive and relatively strong correlations of this

dimension with Supportiveness, Innovation, Emphasis on Rewards, and Stability could be concluded that recruiting and promoting a middle level manager with a right portion of authorities could be an efficient alternative of financial incentives and other compensatory packages. According to this results, most likely, people would accept his/her decisions, even if they are unpopular. It puts a personal traits of the middle and senior management into the spot. The other highly scored value index is Masculinity index. Thus, the importance of doing job properly, developing one's own potential opposed to maintain good relationship, for example, is envisioned as important for the first level managers in the sample. It is consistent with the nature of manufacturing.

Regarding the dimensions of organizational culture practices, Social Responsibility is in strong positive correlation with Individualism and Masculinism, and in moderate link with LO. It could be interpret as follows: the respondents take the good reputation of the company personally with understanding that it could gain long term benefits.

In summary, Power distance and Msculinism are highly scored in the examined sample of first line managers, working in manufacturing companies. Power distance and Uncertainty Avoidance predominantly are linked with the practices dimensions, e.g. Supportiveness, Innovation, Emphasis on Rewards, and Stability for the first one and Competitiveness, Supportiveness, Emphasis on Rewards, and Stability for the latter.

### Acknowledgments

The study was supported by contract of University of Ruse "Angel Kanchev", №BG05M2OP001-2.009-0011-C01, "Support for the development of human resources for research and innovation at the University of Ruse "Angel Kanchev". The project is funded with support from the Operational Program "Science and Education for Smart Growth 2014 - 2020" financed by the European Social Fund of the European Union.

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## **The Concept of Stakeholders in the Context of CSR (A Survey of Industrial Enterprises in Bulgaria)**

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### **Abstract**

The Stakeholder concept is one of the most widely used scientific tools related to the corporate social responsibility (CSR) issues and a basis of the strategic management firm's Stakeholder Theory. Following the classifications of Friedman (1962, 2002) and Freeman (1984), as well as Philips (2011) and Jenkins et al. (2016), researches on the core objectives of the corporate social responsibility we can refer to them "... any group or individual who can affect or is affected by the achievement of the organization's objectives". Following the logic of CSR models, three important stakeholders' roles can be formulated according to whether they are: (1) a source of expectations that determine the desirable or unwanted actions of the company; (2) perceiving the results of the corporate behavior of the firm, i.e. addressees of corporate actions and their results; (3) assessing how well the company meets expectations and (or) how the corporate behavior influences groups and organizations in a given environment. The survey was conducted among owners, managers, employees and consumers of Bulgarian industrial enterprises. Three types of questionnaires, composed with the main involvement of a team of prof. Ivan Mihajlović from University of Belgrade - Technical Faculty in Bor, Serbia have been used. The aim is to establish the understanding of the CSR aspects of the industrial enterprises in Bulgaria and the roles of the stakeholders in this process. The data collected in these questionnaires have been processed via appropriate statistical methods by using software packages SPSS v.18. In the section Dimension of CSR are presented some of the results as expected by the stakeholders, stakeholders and stakekeepers. The received recommendations and opinions can be used to improve the strategic decisions of the top managers of industrial enterprises, concerning the understanding of CSR as well as for a comparative analysis of a parallel study (Stojanović et al.) committed in Serbia in 2016.

**Keywords:** Strategic management firm's stakeholder theory, Stakeholders, Stakekeepers, CSR.

**JEL classification:** M10, M14, Q01.

### **1. Introduction**

The Stakeholder concept is one of the most widespread scientific and practical tools related to CSR issues. It forms the basis of the firm's Stakeholder Theory as an independent direction of a general and strategic management and is a conceptual basis for CSR. The beginning was put by R. Edward Freeman in the monograph "Strategic Management: A Stakeholder Approach - the locus classicus" (1984). In 1988 at the University of Toronto, Max Clarkson, a pioneer in business ethics and the Stakeholder theory, has founded the Clarkson Center for Business Ethics and Board Effectiveness (CCBE) with the belief that, since the business and societal ties

are sophisticated, the ethical issues have become critically important for consideration. During the 1980s and 1990s, CCBE was instrumental in the development of codes of ethics and codes of conduct for many of Canada's largest corporations (<http://www.rotman.utoronto.ca/>). According to the founders of the theory, the objects of socially responsible corporations are "... any group or individual who can affect or is affected by the achievement of the organization's objectives" (Freeman, 1984). As previously stated in M. Friedman (1962, 2002), and then in Carroll (1991); Philips *Edd.* (2011) and Jenkins et al. (2016), key stakeholders and potential users of corporate benefits are: the owners of companies; consumers of their produce; resource providers; workers and employees; local communities; various broad social groups; the state and others.

Accordingly, the management of the company, which seeks to prove its social responsibility and to win (or consolidate) its legitimacy, must conduct its policies so that the interests of the stakeholders not only are not violated but also realized through the actions of the corporation. Freeman himself views his Concept not as a significant theory but as an important prerequisite for practical work, for a more efficient management of the organization.

## 2. Previous works

A particular importance the Stakeholder concept acquired in the early 21<sup>st</sup> century, following the publication of the Stakeholder Theory: The State of the Art (R. Edward Freeman et al., 2010), which demonstrates the need for a transition to a new management thinking based on the idea of the stakeholders, i.e. all interested groups.

Following the rational logic of shaping the corporation's priorities from the point of view of their importance, the stakeholders are divided into two groups.

The *primary stakeholder group* (stakeholders) refers to those without whose permanent involvement the corporation cannot exist. In a broad sense, they are shareholders and investors, employees, consumers, suppliers, and public interest groups - state institutions and local communities building the infrastructure and the market, creating laws and other normative acts. In the narrow sense, these are all individuals or organizations whose contribution (work, capital, resources, purchasing power, and dissemination of company information) is the basis for its success (Clarkson, 2000).

The *secondary stakeholders* are different "interested groups" not related to contractual relationships or other transactions with corporations that are not essential to the existence of these organizations.

There are other approaches to the classification of stakeholders, the basis of which is not the attention of the corporation to the stakeholders, but their own desire to influence its activities. Stakeholders can be seen as groups/individuals that can influence the company's achievements by fulfilling their private goals or by working for the organization as a whole (Dunfee & Donaldson, 1995).

In the model of Mendelow (1991), the stakeholders are grouped according to their interests and authority. In doing so: 1) the *power* of the stakeholder is determined by his ability to influence the organization; 2) the stakeholder's *interest* in his desire to influence the organization; 3) the *influence* of the stakeholder can be determined by the formula "power multiplied by interest". Newbould and Luffman (1988) have offered a mixed classification: 1) groups with an impact on the financing of the enterprise (including shareholders); 2) managers who manage them; 3) employees working in the enterprise; 4) economic partners.

Wood (1991), following the logic of the corporate business model, presents three important roles for the stakeholders: (1) a source of expectations that determine the desirable or unwanted actions of the company; (2) perceiving the results of the corporate behavior of the firm, i.e. addressees of corporate actions and their results; (3) assessing how well the company meets

expectations and (or) how the corporate behavior influences groups and organizations in a given environment.

Following the analysis of the classical stakeholders' concept, the authors (Stoycheva & Antonova, 2016; Antonova, 2017; Kostadinova & Antonova, 2018) offer a peculiar approach to grouping stakeholders: 1) *Real stakeholders* (really interested groups) with real positive and loyal interests in the company's activities - owners, workers, consumers and local communities. Their relationship with the firm is in terms of strength/influence and, in general, is equilibrium; 2) *Stakewatchers* - without private interests in the company's activities, acting as advocates of the actual stakeholders - such as trade unions, consumer organizations, environmental associations, etc. They have a certain impact on the company until it can influence them seriously; 3) *Stakekeepers*, who, as future independent regulators, do not have a self-interest in the company's business but are capable of seriously influencing it. These are the state, as "complex security guards", judicial authorities, certifying organizations and others. The balance of forces gravitates in their direction.

In our opinion, the corporation should only be socially responsible to the actual stakeholders. (Kunev et al., 2017) Thus, there is a certain narrowing of their circle without relieving the company's actions, as there are no commonly accepted criteria for priorities, both among the actual stakeholders and among the other groups. It is important to select the most effective forms of interaction between them, taking into account that the expectations, interests and influence of the participants in the different groups may be the opposite.

On the other hand, depending on their belonging, the stakeholders can be *internal* and *external* (McWilliams & Siegell, 2001; Pencheva, 2018). The owners, managers, staff and trade unions are among the *internal*. Their common characteristic is the sense of corporate affiliation, although this does not rule out a mismatch of interests. For example, the managers' desire for greater autonomy opposes the need of the shareholders to exercise greater control over managers' actions; staff wishes for higher wages contravene managers' plans to reduce actual HR support. Overcoming the contradictions can be at the expense of bringing together the interests of different groups by building a motivation system that focuses on the company's final results. Here is the art and professionalism of management.

*The external* stakeholders are the authorities of the state; local self-governments; potential investors and shareholders; customers and suppliers; product users; competitors; partners; associations, unions, self-regulatory organizations; research institutes, educational structures; local communities (including families of employees in companies), community organizations. Corporations generally use two methods to build their relationships with external stakeholders. The first is to establish a partnership relationship. The aim is to prove to the stakeholders that it is more profitable to act in favour of the company, thus reaching their own interests. In this case, the short-term interactions are important for the companies. The second method is an attempt to protect the organization from uncertainty by using stabilization and prognostic approaches. These can be: marketing research; creating special departments to control the areas of interest of the most important external stakeholders (compliance with legislation, environmental safety controls); efforts to ensure coordination procedures, advertising and PR. Carroll (1991) has offered a matrix to personalize the role of the stakeholders. It takes into account the type (level) of social responsibility and illustrates the multilevel CSR of each interested party, correlating its expectations to the rankings of the stakeholders' structure and the impact of the contradictions in their interests.

An alternative tool for the stakeholder concept is the *supply and demand model of CSR* (McWilliams & Siegel, 2001), which is based on the treatment that social responsibility is an *investment form* with correspondingly *expected results*. According to the authors of the model, there are two main sources of CSR - the demands of the users of the company's production and

the interests of the other stakeholders (investors, workers, local communities). By acquiring certain benefits and satisfying their expectations of the proven high quality of the results of the socially responsible company (a producer of goods and services), the stakeholders motivate the CSR's inclusion of the corporation.

The stakeholder's natural desire to develop relationships with trusted legitimate companies has been the foundation for developing approaches that would allow to a certain extent the use of elements of unification of requirements when entering into voluntary partnership agreements. This range of issues can be addressed by developing some international and national standards governing the company's CSR. The development of the need and the appropriateness of using the standardization tools in the issues related to the identification of the company with the principles of CSR is presented in Table 1.

*Table 1. Developing the Stakeholder Concept*

Years	Source	Contribution to the development of terminology
1984	R. Edward Freeman	One of the first to define the concept of <i>stakeholder</i> .
1997	SA 8000	A standard, developed by the International Labour Organization, ILO. It serves as a basis for creating an adequate social policy, not only for employees in the organization, but also for customers, suppliers and society. It is applied as an auditing scheme from a second-party – client.
2002	ISO/IEC Guide 73:2002	The guidance aims to promote a coherent approach to the description of risk management activities and the use of risk management terminology and to contribute to a common understanding of risk management among CSR companies that apply risk management to the needs of stakeholders.
2003	AA1000 SES	Preliminary version of the AA1000 Assurance Standard for Non-Financial Audit, created by the Account Ability Institute, London, UK. Separating the term <i>stakeholder</i> from <i>taking part</i> , explained in the document's Guide.
2005	ISO 9000:2005	Official term <i>stakeholder</i> is introduced for: a) those concerned with a mutual understanding of the terminology used in quality management (e.g. suppliers, customers, regulators); b) those internal or external to the organization who assess the quality management system or audit it for conformity with the requirements of ISO 9001 (e.g. auditors, regulators, certification/registration bodies); c) developers of related standards.
2010	ISO 26000:2010 Guidance on social responsibility (reviewed and confirmed in 2014)	It is intended to provide organizations with guidance concerning social responsibility and can be used as part of public policy activities. <i>It is not intended</i> to be interpreted as an “ <i>international standard</i> ”, “ <i>guideline</i> ” or “ <i>recommendation</i> ”. It responds to a request from industry or other stakeholders such as consumer groups. <b>ISO 26000 are developed through a multi-stakeholder process:</b> experts from the relevant industry, consumer associations, academia, NGOs and government. It's <b>based on a consensus</b> .
2015	AA1000 Stakeholder Engagement Standard (SES) 2015	"Stakeholder Engagement Standard" establishes the benchmark for good-quality engagement. AA 1000 SES was developed using a broad-based, consultative multi-stakeholder process. The version of AA1000SES (2015) is a generally applicable framework for the assessment, design, implementation and communication of quality stakeholder engagement.

Years	Source	Contribution to the development of terminology
2017	IWA 26:2017	IWA 26:2017 provides guidance on using ISO 26000:2010 to organizations that have implemented one or more ISO management system standards (MSS). It also provides guidance on how to apply a management system approach when using ISO 26000. It can be used in full or in part by an organization that has implemented a management system and/or that is using ISO 26000.

Source: authors

### 3. Methodology

Based on the Freeman Stakeholder Concept and applying the Wood model (1991) to the importance of the three significant roles of the stakeholders to achieve competitive advantages and prosperity of the organizations through the development of CSR, a study was conducted in the Bulgarian industrial enterprises.

The studies that have been conducted in other developing countries (Serbia, Russia, Albania) have raised the interest of the researchers who, on the basis of the tools, used by the team from the University of Belgrade, Serbia (Stojanović et al., 2016), carried out a study that allowed an analysis of the status and trends in the formation and maintenance of sustainable competitive advantages of organizations that have been achieved through active interaction with multiple stakeholder groups. For the first time in the Bulgarian study, *Real stakeholders* have been included with real positive and loyal interests in the company's activities. The study was conducted for the period of April to October 2017 by a team of University of Ruse.

The **aim of the study** is to establish the understanding of the aspects of CSR in industrial enterprises in Bulgaria and the roles of stakeholders in this process. The data collected through the questionnaires was processed using appropriate statistical methods with the features of the SPSS v.18 software package. In Section (3) "Assessment of Impact of Stakeholders on CSR", some of the expected results from *real stakeholders* are presented.

The **tasks set out in the study** are related to tracking the dependency between stakeholders' influence and companies' actions in CSR, such as: (1) a source of expectations that determine the desired or unwanted actions of the company; (2) perceiving the results of the company's corporate behaviour, i.e. the addressees of corporate actions and their results; (3) assessing whether the company meets the expectations and (or) how the corporate behaviour of the industrial enterprise influences the other stakeholders.

#### Basic design of the survey

The **subject of the survey** of Bulgarian industrial enterprises is related to the analysis of: (1) The level of knowledge of the important aspects of CSR: ecological, social, economic, shareholder and volunteer dimensions; (2) Level of knowledge of CSR activities carried out by the industrial plant; (3) Assessment of stakeholders' impact on CSR (current situation in the industrial enterprise); (4) Barriers faced by the industrial plant to be even more socially responsible.

The **object of the survey** is medium and large enterprises (number of staff criterion), which according to the National Classification of Economic Activities (NACE.BG-2008) are registered as follows: 22.2% - infrastructure; 15.6% - IT/media; 15.6% - electronics; 22.2% - professional services and engineering; 8.9% - chemical industry; 8.9% - Retail and 6.7% Finance.

In selecting the sites to perform the analysis and the size of the organizations surveyed, a parallel is sought with studies conducted in Serbia, Russia, Albania to achieve compatibility and comparability of the results obtained.

The **general population** of enterprises consists of 695 organizations, information provided by the NSI (National Statistical Institute in Bulgaria). The survey was conducted among owners, managers, employees and consumers of Bulgarian industrial enterprises. To check the statistical significance, the Raosoft calculator (Sample size calculator) is used to calculate the sample size (n). The default statistic error is  $p = 5\%$ , with confidence probability  $\gamma = 0.95$ .

**The respondents** of the actual survey are 359 organizations with direct contact based on in-depth interviews. Representatives of *real stakeholders* were interviewed: 45 owners and managers; 114 employees and 214 consumers. The results can be considered statistically significant for the general population. The activity level outlined is 51%.

Three types of questionnaires were used, composed mainly by the team of Prof. Ivan Mihailovic from Belgrade University, Serbia (Arsić et al. 2016).

**The expected results are:** the recommendations and opinions received can be used to improve the strategic decisions of the top managers of the Bulgarian industrial enterprises on the understanding of CSR and the three important roles of the stakeholders in achieving competitive advantages and prosperity of the organizations by developing CSR.

#### 4. Findings including key quantitative results

##### 4.1. Level of knowledge of important aspects of CSR: ecological, social, economic

86.7% of the surveyed managers are of the opinion that CSR is necessary in order to realize the social market economy. For the remaining 13.3% of the respondents, we can conclude that their opinion is due to a misunderstanding of the nature of CSR. 96.5% of employees and 80.4% of consumers are of the opinion that CSR is an asset to organizations. Regarding the awareness of employees and consumers with the concept of CSR we can conclude that over 50% of both groups have not heard about CSR or do not know what it is about. Less than 5% of respondents are interested and actively involved in activities related to it. The data are presented in Table 2.

*Table 2. Common level of knowledge of important aspects of CSR*

Level of knowledge of the Concept	Employees		Consumers	
	Number	Percentage	Number	Percentage
I had never heard of CSR before the present study	31	24.7	50	23.4
I have heard about the concept of CSR, but I do not understand what it is about	30	26.5	86	40.2
I know what CSR is and I can explain its importance	47	41.6	75	35
I am interested in CSR and actively participate in activities related to it of the organization I work in	5	4.4	3	1.4
Total	113	100	214	100

Source: own survey results

*Respondents are asked to assess the environmental, social, and economic aspects of CSR by using a 5-degree Likert scale reflecting the degree of agreement with the role of the research factor.*

##### Ecological dimensions of CSR

*The data obtained for consumers show that 61.7% of them consider the reduction of environmental impact to be extremely important through the use of environmentally friendly products. More than half of the consumer opinions believe it is extremely important to invest in energy-saving programs (54.2%) and advise companies to reduce the consumption of natural*

resources (50.9%). Extremely important for the consumers are the reduction of air and water emissions (64%), the participation of companies in environmental protection and improvement activities (59.3%), the use of recyclable containers and packaging (55.6%), as well as the responsible management of the production waste from the raw material phase through its production, distribution and destruction (58.9%).

*The opinions of employees* in organizations have been distributed in a dual way that environmental aspects are extremely important for organizations ("agree": just over 50.3%). Nevertheless, the own staff of the Bulgarian industrial companies ignores the importance of this aspect: 27.5% of the organizations do not participate in activities related to preservation and improvement of the natural environment (see Table 3), with 53.1% not accepting the importance of investment planning in this area (Table 4). A little over half of the employees (54.9%) are of the opinion that their companies are positive about the use and purchase of environmentally friendly goods (Table 5), with half of respondents (49.5 %) confirming their businesses using recyclable containers and packaging (see Table 6).

**Table 3. Employee involvement in environmental protection and improvement activities**

Grading scale	Frequency of responses	Percentage
1 – completely agree	35	31.0
2 – rather agree	14	12.4
3 – neither agree nor disagree	33	29.2
4 – rather disagree	15	13.3
5 – completely disagree	16	14.2
Total	113	100.0

Source: own survey results

**Table 4. Planning investments to reduce the environmental impact the company is causing**

Grading scale	Frequency of responses	Percentage
1 – completely agree	26	23
2 – rather agree	27	23.9
3 – neither agree nor disagree	31	27.4
4 – rather disagree	18	15.9
5 – completely disagree	11	9.7
Total	113	100.0

Source: own survey results

**Table 5. Use and purchase of ecological goods**

Grading scale	Frequency of responses	Percentage
1 – completely agree	34	30.1
2 – rather agree	28	24.8
3 – neither agree nor disagree	19	16.8
4 – rather disagree	19	16.8
5 – completely disagree	13	11.5
Total	113	100.0

Source: authors

**Table 6. Use of recyclable containers and packaging**

Grading scale	Frequency of responses	Percentage
1 – completely agree	26	23
2 – rather agree	30	26.5
3 – neither agree nor disagree	25	22.1
4 – rather disagree	10	8.8
5 – completely disagree	22	19.5
Total	113	100.0

Source: own survey results

*The resulting data for managers shows that: 40% of them do not believe that they could implement policies to minimize the impacts of their own companies on the environment by using environmentally clean products; 44.5% of owners and managers do not invest in energy saving programs; and 51.1% of them do not participate in programs targeting the use of renewable energy sources. Accordingly, 46.7% of the managers, share that their businesses are not involved in activities related to the conservation and improvement of the natural environment, with 42.2% of them not supporting the reduction of gas emissions, the production of waste materials and the recycling of materials. Only 20% of respondents-managers are positive about the use, purchase or production of environmentally friendly goods, and appreciate the use of recyclable containers and packaging. A small part (8.9%) of managers appreciate the importance of an investment policy to reduce the impact of their companies on the environment; with only 24.4% of them defining ecological dimensions as being of utmost importance for their organization.*

*The results for CSR's environmental dimensions show that this aspect is extremely important for consumers and employees. This is not the assessment of the factor on the part of the managers. The managers of the industrial companies should be aware of the importance of the dimension in order to better satisfy the real stakeholders.*

### **Social Dimensions of CSR**

*The received data for consumers shows that: 79.5% consider it important to support the employment of disadvantaged people and people at risk of social exclusion. 85.1% believe that education and professional development of employees is extremely important. For 59.3%, it is extremely important to comply with standards related to occupational risks, health and safety at work. The commitment to job creations has been highly important for 77.1% of respondents as well as, the commitment to improving the quality of life of employees (78.5%), the preparation of employee retirement plans (71.5%) and participation in social projects of the community (sponsorship, charity, etc.) (64%). The opinion of 76.1% of the respondents is that the organizations should offer wages above average for the industry, while for 78.5% of the respondents the equal treatment of workers is extremely important. Respondents believe that industrial companies should not operate in countries or cooperate with companies that violate human rights (81.8%), and it is extremely important not to work with organizations suspected of using child labor (84.3%).*

*The employee responses are more moderate: 43.4% of them consider the support for the employment of disadvantaged people and people at risk of social exclusion as important. 53.1% believe that the training and professional development of employees is extremely important. For 46.9% of employees it is extremely important to comply with the standards related to occupational risks, health and safety at work. 44.1% of them estimate human resource management policy as an important factor in facilitating the reconciliation of the professional and private life of the employed. For 40.7% of respondents, it is important to employees to be included in managerial decisions and to be able to suggest initiatives. For 43.4% of respondents,*

commitment to improving the quality of life of staff, lifestyle of employees (39.8%), and employee pension plans (38.9%) is extremely important. 39% of employees' views are that organizations should pay wages above the industry average, while for 48.7% the importance of extra pay related to skills and performance is also high. 41.6% of respondents define the social dimensions of CSR as important.

*Managers' opinions are the most polarized:* for 35.6% of them, it is less important to support the employment of disadvantaged and those at risk of social exclusion, and more than half - even do not have an opinion on the issue (51.1%). Counterbalanced are the opinions (51.1%) that do not encourage the training and professional development of the employees; and who do not consider it important to comply with standards relating to occupational risks, health and safety at work. 41.3% of respondents are of the opinion that they should not have a commitment to job creation. 55.5% of managers disagree that they should be committed to improving the quality of life of employees, as well as being concerned about them. For 46.7% of managers, employee pension plans are not relevant. The participation in social projects for society (sponsorship, charity, etc.) is not important for 46.7% of the respondents.

46.6% of the managers do not consider the availability and implementation of human resources management policy as an important factor in facilitating the reconciliation of the professional and private life of employees. For 53.4% of the respondents, decision making is not influenced by employee initiatives, with 42.2% of managers not even considering having in mind such facts. 53.3% of respondents do not agree that opportunities for all employees should be equal, with 42.2% of managers not considering having the feedback of their employees. Only 17.8% of managers are of the opinion that the wages they form should be above average for the industry. Only 21% of executives bind employees' additional rewards with their skills and achievements. Contrary to initial expectations, 55.6% of the surveyed managers do not determine the social dimensions of CSR as important.

*The results show a significant discrepancy between the views of the managers and those of the consumers and employees about the social aspects of CSR. In this respect, in order to increase the level of satisfaction and employee engagement, managers should pay attention to and focus their efforts on delegating rights to their subordinates and measuring their performance according to their achievements and initiative.*

### **Economic dimensions of CSR**

*The consumers' results show that:* for 78.1% of them, organizations must offer consistently high quality products/services at reasonable prices. For 79.9% of the respondents, it is important products and/or services to meet national and international quality standards (ISO, GRI Initiative, Eco-Management Audit Scheme (EMAS), and Corporate Financial Performance (CFP). The organizations must offer a higher than average market guarantee for products and/or services, according to 75.2% of respondents. For 82.7% of respondents, it is critical for companies to provide their customers with accurate and complete information about their products and / or services, and 85% of respondents consider product labeling to include warranty obligations. Especially important for 87.8% of respondents is the respect for all consumer rights, with 85% of them holding effective procedures for dealing with customer complaints. The facts show that the economic dimensions of CSR are a very high priority for consumers.

*The employee engagement is quite low:* Only for 48.1% of them it is important the guarantee of the products and/or services offered by the organization to be longer than the average for the market. For 54.9% of the respondents, it is important for the organization to provide customers with an accurate and complete information about their products and / or services, but only 28.3% of them believe that social responsibility programs increase the cost of the organization.

The general opinion of 38.1% of the employees is that the economic dimension is important to the organization and it should improve or increase its actions and efforts in that direction.

*From the managers' responses it becomes clear that:* only 22.3% of them have evidence that their customers feel confident that the company is particularly concerned with offering high quality products and/or services. 17.8% of the respondents say that their products and / or services meet national and international quality standards. Only 15.5% of them believe they offer the best value for money to their customers. Only 17.8% of the respondents have evidence that the warranty of their products and/or services is longer than the average for the market, with only 20% of the respondents providing their customers with accurate and complete information about the products they offer and/or services, and in particular information about their warranty obligations. Surprisingly, with only 17.7% of the respondents, a respect for consumer rights is a priority in managing their organization, with only 17.8% promoting business relationships with suppliers in their region. Contrary to initial expectations, only 20% of respondents apply an effective client complaint handling procedure by applying a documented set of interaction and dialogue with customers, suppliers and other stakeholders of the industrial enterprise. On the other hand, only 17.8% of surveyed managers believe that CSR programs increase the cost of the organization.

In our opinion, the reasons for the weak application of the analyzed economic aspects are not financial. The underlying reason is the poor knowledge of the concept of CSR, existing barriers on the part of the state and insufficient pressure from employees and clients. The overall assessment is for a limited implementation of the economic dimensions of CSR in organizations. At the same time, users and employees are particularly sensitive to the indicators surveyed. In order to better meet the expectations of the stakeholders, managers should take action in this direction even more so that they themselves do not take financial barriers to their implementation.

#### **4.2. Assessment of the impact of stakeholders on CSR (current situation in the industrial enterprise)**

*According to the data from consumers' responses:* 70.5% of them believe that organizations should develop and implement ethical advertising programs. 56.1% of the respondents say they know employees who, when they are outside their workplace, speak of the organizations where they work with pleasure and pride. The consumers are of the opinion (78.3%) that industrial enterprises need to develop skills and processes for managing their brands. Contrary to initial expectations, almost half of the respondents (48.2%) believe that CSR makes it more difficult for organizations to serve their clients better, and 32.2% do not address this issue. Less than half of respondents (46.7%) are familiar with companies involved in social public projects.

*The employees show less interest from consumers:* Only 30.9% of them are of the opinion that their business should develop and run advertising programs. Less than half (47.8%) of them speak of the organization they are employed with pleasure and pride outside their workplace. Only 25.7% of the respondents believe that CSR makes it harder for the company to serve its clients better, with 43.4% saying that their companies are involved in social projects in society. Overall, the result, representing employee opinions, that the influence of stakeholders is important for the organization, is quite low (34.6%).

*The resulting data for managers is as follows:* only 20% of them believe that their organization has strong links with distributors and adds value to their business, with only 17.8% claiming that their company attracts and retains the best distributors and provides high levels of service support. Only 22.3% of respondents say their organization is developing and running advertising programs. The smallest is the share of owners and managers (17.7%), who can boast that their employees talk about the organization with pleasure and pride outside their

workplace. Only 15.6% of industrial enterprises are implementing image management programs for their brands. Analogous in weight (15.6%) is the answer that CSR does not make it difficult for the organization to serve its clients better. 22.2% of the respondents are seeking to understand the needs of stakeholders, with 24.5% using stakeholder feedback information and 20% of respondents looking at requirements and providing special stakeholder service. There is a discrepancy with the views of employees, with only 17.7% of managers claiming to be involved in social projects of society.

*The stakeholder assessment as an influential factor shows their importance to consumers and employees and proves their extremely limited application by owners and managers. The organizational leaders need to strengthen the use of this tool.*

### **4.3. Barriers faced by the industrial enterprise to be even more socially responsible**

This section assesses the impact of voluntary activities on CSR.

*According to consumers' data:* 59.9% of respondents believe that industrial companies should help resolve problems in society, while for 65.4% of people the organizations should encourage their employees to participate in voluntary activities or to cooperate with NGOs as well as devoting some of their resources for charity activities (65.9%).

It is important for consumers (66.4%) that companies have a role in society that goes beyond simply gaining profit, and it is extremely important for 83.2% of the respondents, organizations to implement all laws and regulations.

*The employee opinions are as follows:* The percentage (31.8%) among those who believe that their company is helping them to solve social problems and that it is sensitive to CSR is low. According to 44.2% of them, the organization in which they work contributes to the local community, with almost half of the employees (48.7%) believing that their company allocates some of their resources to charity. 47.8% of the respondents believe that their organization has a public role rather than simply gaining profits from its functioning. 38.9% of them say, that in their enterprises the employees are encouraged to participate in volunteer activities and 37.2% of the respondents believe that cooperation with NGOs is encouraged. 38.9% of the interviewed have shared the opinion, that employee ethics training programs are being conducted in the enterprises they work for. Overall, 40.7% of the employees identify as important the impact of volunteering on the organization in which they are employed.

*The data of managers and owners are again polarized on this dimension:* only 15.5% of them claim that their enterprise helps solve social problems and almost as many (15.8%) are particularly sensitive to CSR. 17.7% of the organizations have contributed to the local community, and only 8.9% of them allocate part of their organization's resources to charity. 15.6% of the companies have a role in the society, not just gaining profits from their operations. 15.6% of the respondents encourage their employees to participate in volunteer activities, and 13.3% encourage them to cooperate with NGOs. Only 15.6% of surveyed managers say they are organizing training programs for their employees on an ethical behavior.

The results obtained by managers related to the volunteer aspects of CSR are again counter to the importance that consumers and employees define. The managers should take actions not only to seek profits from the functioning of their businesses but to be more publicly beneficial.

## **5. Discussion and Conclusions**

- *Generally speaking.* As confirmed in the triple empirical survey, the Bulgarian industrial companies that carry out CSR activities can have significant benefits from this way of applying a business policy that directly affects the improvement of reputation, increased consumer satisfaction and competitive advantages and has an indirect impact on sales growth, profits and

other economic indicators. It is therefore important for the companies themselves and for the environment to assess the CSR activity as well as the impact the company has on it.

- *Environmental dimension.* The results confirm that the ability of the Bulgarian industrial companies to increase their competitive position through socially responsible activities in the field of environmental protection depends on the available resources, the management capacities, the industrial sector and the regulations. The strong reputation of the company in protecting the environment can reduce the social and political pressure on the company.

- *Social dimension.* Adding responsibility to society alongside existing financial responsibilities brings benefits to both Bulgarian industrial companies and communities. Targeting company resources to address social issues reduces tensions and conflicts between businesses and the environment. Firstly, by improving social well-being, the company provides support for its business and operations. Also, through the positive image of its responsible engagement and day-to-day operations, a competitive position oriented towards social achievement is built and provides better economic results and a valuable basis for a long-term business sustainability in Bulgaria.

- *The economic dimension.* Its implementation in the Bulgarian organizations is limited. At the same time, the consumers and employees are particularly sensitive to the indicators surveyed. The economic dimension provides return on investment for owners and shareholders, but also creates jobs and fair compensation for employees of the Bulgarian industrial companies that apply CSR. Within this dimension are the initiation of technological progress and innovation. The aim is to create a new value, while at the same time achieving economic unity of society. In order to better meet the requirements of users and employees, managers should take action in this direction even more, given the fact that the results obtained from the survey do not point to financial barriers to implement actions.

- *Stakeholder dimension.* The management of Bulgarian industrial companies based on the principles of the stakeholders' concept for implementing CSR implies a search for solutions that do not require a compromise between group interests but rather satisfaction for everyone and this is an opportunity for companies to develop sustainably. The success of this business concept requires communication and commitment to building positive relationships with all stakeholders and continually adapting to the changing environment. The Stakeholder Theory is still leading in academic and corporate circles, as the way companies conduct and monitor stakeholder management is beneficial to business and non-business sides.

- *Voluntariness.* The results obtained for managers related to the volunteer aspects of CSR are again diametrically opposed to those of consumers and employees. Bulgarian industrial companies operating today feel more pressure from stakeholders to include voluntarily additional activities in the business to operate in a socially, economically, environmentally and sustainably-based manner. While the prescribed rules and standards regulate only a part of the relevant activities related to the mentioned areas, a large part of the company's activities are carried out on its own initiative and without any regulation with rules. Therefore, the verification of CSR implementation results is still insufficiently clearly defined, performance indicators are diverse and the reliability of measuring voluntary engagement is very low.

## Acknowledgments

This work was supported under the procedure "Support for the development of PhD students, postgraduates' students and young scientists - Phase 1" by no. BG05M20P001-2.009-0011 Support for the Development of Human Resources in the Field of Research and Innovation at the University of Ruse "Angel Kanchev".

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## **Instruments Used for Marketing Experiments**

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### **Abstract**

What can normally be observed on the market, is often considered like the premises of developing marketing as a science, but what is seen, is it always true? It remains to be investigate. It is possible to study what is really happening without any intervention, but in order to obtain different and significant results, there can be manipulated certain independent variables for analyzing their influence, by measuring the effect on dependent variables reflected in consumer's behavior. Marketing experiments have proven to be highly effective in identifying relevant results over time, representing a method of research into the different phenomena encountered on the market for various products and services. In fact, marketing experiment method measures the cause and effect relationship. This paper proposes to contribute to the development of the specialized literature by presenting the tools used for a marketing experiment. It has been used as a method of investigation, analysis of the secondary databases. Against the backdrop of technology development, an inventory of new tools used in applying such a research method is needed to highlight scientific researches as a modern and current tool in marketing research.

**Keywords:** marketing experiment, instruments, eye tracking, facial analysis.

**JEL classification:** C93, M31.

### **1. Introduction**

Marketing experiment is a method of researching a cause-effect relationship among variables (Freedman et al, 2007). Marketing experiments have proven to be highly effective in identifying relevant results over time into the different phenomena encountered on the market for various products and services.

The specific elements of a marketing experiment are: independent variables, dependent variables, participants and treatment condition. By their help, the researcher attempts to discover the cause-effect relationship between two or more variables by manipulation of the independent variable over the dependent one. If differences are registered on the dependent variable, the researcher concludes there is a cause-effect relationship.

The present paper proposes to contribute to the development of the specialized literature by presenting the tools used in marketing experiments. It has been paid attention and realized a main chronology of marketing experiments studies, and observing the subject and instruments trending.

### **2. Starting from classic to modern marketing experiments**

The first marketing experiment dates from 1931, when Farnsworth and Misumi investigated the effect of reputation and recognition on artwork's quality (Khan, 2011).

Festinger (1953) receives recognition for using the systematic manipulation treatment to an experiment involving abstract concepts, in order to obtain better results.

Campbell and Fiske (1959) developed measurement instruments in order to capture unobservable constructs by manipulation and blended variables in order to establish construct validity (Khan, 2011).

Later, Cardozo (1965), studied about effort and expectation of both product and shopping experience by using a catalog.

Also, in 1967, Robert Holloway, built an experiment based on consumer decision which involved four dissonant producing factors: inducements, anticipated dissonance, information and cognitive overlap (Holloway, 1967).

[Perdue and Summers \(1986\)](#) suggest ways to design marketing experiments that limit the chance of non-valid inferences and experiments that generalize. They discussed about the 'timing, construction, and analysis of manipulation and confounding variables in marketing experiments and provide approaches to assessing the construct validity of experimental manipulations'.

In the last 25 years in the marketing research literature, the number of scientific papers reporting findings from field experiments has increased because of using Internet tools. However, it has also registered an increase in field experiments in physical stores and other non-Internet tools. Many of these papers focus on pricing and advertising topics, but several papers that used field experiments attend model-free validation of optimization model's subject (Simester, 2017).

For example, Lodish et al. (1995) investigated long-term ads effect by using 55 field experiments. The researchers compared the extra sales in the test year with the extra sales in the next two years. The results relate that, extra sales on second and third year, registered almost the same sales as those in the test year (first year), although only half of the brands analyzed had a long-term effect. The conclusions were that, on average, an investment in advertising can pay back for two times as much as people thought, based on a one-year evaluation. Lodish et al. (1995) found that a long-term effect does not occur when there is no short-term response to the advertising; a second possible explanation for no long-term effect is that sales effects are often cancelled out by competitive advertising. One feature of the experimental test of hypotheses is that sometimes predicted findings represent a stronger result than one that is observed, but not predicted (East and Ang, 2017).

In 2008, another experiment was developed (Teerling and Pieterse, 2010) in order to empirically investigate the effectiveness of communication as a tool to lead citizens to the electronic channels they chose to conduct an experiment. In the experiment, they compared a service delivery process in which citizens are steered via communication to the electronic channel (the experimental group), with a condition in which they are not specifically led towards the website (the control group). The researchers designed the experiment in cooperation with the national Dutch government agency responsible for pensions and child allowances. The experiment focuses on the first time a citizen submits a claim for child benefit. Dutch child allowance is paid per child, per quarter, and this system is automated in such a way that after the child benefit has been awarded for the first child, parents automatically receive the child venue for each subsequent child that is born. They used as example before, a field experiment (Teerling and Pieterse, 2010).

Recently, experiment studies have taken a new face, combining basic procedures with modern techniques and instruments used, in order to get faster and accurate data.

An experiment based on neuromarketing method was conducted in order to determine if brain event related potentials, provoked by seeing photos with some destinations, can be used to evaluate the tourist destination's efficacy of marketing insights from movies. Brain reactions tried to identify if marketing stimuli of tourist destination marketing, manipulated the consumers perception, otherwise difficult to measure. The participants were split in two groups

and, have been shown pictures from the cities of Bruges and Kyoto. Before viewing the pictures, one group saw a part from the movie *In Bruges*, which positively describes Bruges' main tourist attractions. The other group saw a movie excerpt that did not feature Bruges. The emotional responses were captured in the Bruges pictures, for the Bruges group only; In Kyoto case was not found between-group differences regarding event related potentials. This marketing experiment has used as a tool for data collection, EEG-based neuromarketing, which is a valuable tool for estimating the effectiveness of tourist destination marketing, where it can be found that popular films can positively influence the affective destination image (Bastiaansen et al., 2018).

### **3. Instruments used for marketing experiments**

With the development of technology and the constant changes of consumer behavior, the methods used in marketing research also have had to adapt to present. For example the questionnaire and the observation sheets, balance sheet or other accounting notes, were frequently used for advertising and sales experiment topics. Furthermore, the present paper describes new tools used in marketing experiments designed to facilitate the consumer behavior' studies for various products and services such as eye tracking, or facial analysis.

#### **3.1. Eye Tracking**

Eye tracking is the process of measuring the movement of eyes. An eye tracking device is used to measure the position and movement of eyes and is applied for researching in psychology, marketing, and human-computer interaction. (Kotani et al., 2017).

Eye tracking is the process of identifying the place where a person searches and how, generating a particular interest in user experience at the beginning of the 21st century, when technology has become more accessible. Eye tracking is now commonly used to evaluate and improve designs (from websites to packaging) at different stages of the development cycle. Eye tracking is a technique of reading research. Researchers at the end of the 1800s realized that people's eyes did not move so easily through text, as always. This observation has led scientists to develop a technology to measure eye movements in order to get a better understanding of how people read (Duchowski, 2007).

The earliest eye tracker appeared in the 1900s. These eye tracking tools were invasive because they were based on electrodes mounted on the skin around the eyes, or uncomfortable contact lenses that participants of different studies were supposed to wear. Non-intrusive eye tracking techniques developed shortly thereafter. These involved the recording of light that was reflected on the eye, or direct eye filming. The advancement of eye tracking technology has since focused on reducing the constraints experienced by the specialists in interpreting the results, on the participants of research, while increasing the precision of these devices and, by implication, facilitating the analysis of the data. At the same time, eye tracking has focused on the researchers' understanding about the relationship between different aspects of eye movements and human cognitive processes (Bojko, 2013).

The first eye tracking application dates from 1947 when it was investigated how pilots used the cabin instrument information to land an airplane. At that time, however, eye tracking was still mainly used by academic and medical researchers. In the early 2000s, technology became more widespread among practitioners, especially thanks to its improved accessibility and use (Fitts, Jones & Milton, 1950).

As this subchapter presented before, eye tracking is the process of determining where someone is looking. It can also measure the characteristics of the movements of the eyes and the eye itself. To perform eye tracking, a special device called eye tracker is needed (Duchowski, 2007).

Eye tracking systems are used to investigate the position of the eyes and eye models assumed as visual contact in humans.

Eye tracking is a new emerging way in human computer interfaces. With better access to devices that are capable of measuring eye movements, it becomes accessible even in common environments. However, the first problem faced by researchers when they are working with eye movements, is correct mapping of subject's view - the place where the user looks at the screen (Adiseshiah, 2017).

Pupilometer is a device that attaches to the head of a person and determines interest and attention by measuring the level of pupil eye dilatation. In theory, the pupil of a person widens more when it sees an interesting picture than when it looks at a less attractive image. For example, eye tracking records on which parts of an ad moves the eye of the consumer. In the beginning, companies have used eye tracking along with the in-depth interview to understand how customers interact with its customer service site (Bojko, 2013).

In technical terms, eye tracking is an "eye detector"; more precisely, a piece of hardware that records eye movements when a person looks at a computer screen, a physical object, or even the environment in general. Some eye trackers are a pair of glasses, or a special hat that can be worn by the subject. Others can be placed in front of it, such as those attached to computer monitors.

The retina is positioned in the back side of the eye and this component, is becoming very sensitive at light contact. The pupil is a small black circle that let the light enter the retina. Cornea is another element of the eye, this time transparent. When a subject looks at a fix point, the location of the pupil center is identified, in relation to the corneal reflection. And if that subject moves his head for few moments, the eye tracker register that he looks at the same place, the relationship between the pupil's center and the corneal reflection remains the same. The human eyes, without rotation, cover a field of vision about 180 degrees horizontally (90 degrees to the left and 90 degrees to the right) and 90 degrees to the vertical. Whenever the eyes are open, the visualized image is projected onto the retina. Cells from retina convert the image into signals, which are then transmitted to the brain. The cells responsible for high visual acuity are grouped into the center of the retina, which is called the fovea (Bojko, 2013).

Many researchers have established that, where the people look is usually associated with what is drawing their attention. This is called the eye-mind hypothesis. However, there are some skeptics, who do not believe in knowing where people look at something, and who cannot understand in any way. The argument is usually that a person can look at someone's face, but at the same time, he / she can see a sweater color. It means that, her attention can cover the periphery vision.

People prefer to straighten their eyes when they change their visual focus, focusing on what they are trying to see. However, when people do not look at something directly, one cannot say that they certainly did not see it. Eye tracking captures only foveal vision without providing information about what was observed peripherally. This is one of the limitations of eye tracking. Another argument against eye tracking might be the following: people can look at something, but not necessarily to see it. It is possible when a human can look at an object, or another without recording data about it.

Visual behavior is influenced by everything that causes them to look from bottom to top as well as the voluntary intention to look from top to bottom. The attention is influenced by stimuli and it is moved involuntarily to objects that contract in some way with their surroundings. For example, bright colors and movements, or new and unexpected things can cause the subjects to look in there. If the bottom-up factors are the only ones that influence people's attention, everyone would look around in the same way.

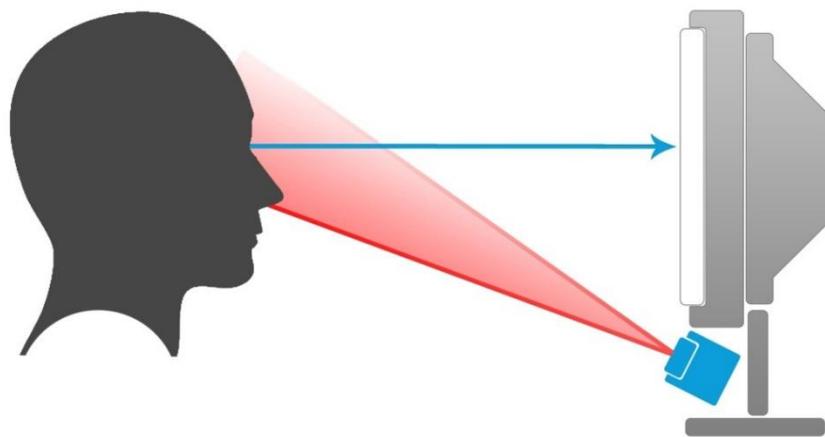
There are two main applications for eye tracking: as a research technique and as a recording device. As a recording device, movements at their eyeballs become control signals for an information system instead of a mouse and a keyboard. People with disabilities use such applications for helping them to communicate. Interaction is also used in entertainment (for example, gambling) and moves to mass mobile applications (Boyko, 2013).

Each eye tracking device is accompanied by a detailed manual, and additional training is often provided by the manufacturer. Method information, on the other hand, is not as easily accessible.

The way of testing stimuli, combines perfectly with experimental models. For example, when a researcher decides to build an experiment, he has to decide whether to use between or within-subjects approach. In a between subject design, each participant is exposed to only one of the tested interfaces or products. If there are two interfaces to test, half of the participants will interact with interface A and half will interact with interface B (Bojko, 2013).

One of the reasons for using eye tracking is to obtain, both qualitative and quantitative perspective on the cognitive processes of users during formative research; a qualitative outlook can be obtained after data collection. The qualitative analysis highlights the user experience that occurs during events, such as mouse movements and clicks, physical object manipulations, and participants' comments. Eye movements help to discover the often inconsistent processes that led to these results. Furthermore, the information can be used to detect and explain usage problems. On the other hand, a quantitative perspective generated by eye tracking can be obtained; this is the most useful in summative studies evaluating products or alternate interfaces (for example, different types of ads). For example, ads influence marketing decisions, such as which design version should be selected for the future product. Quantitative results are often illustrated with aggregated data representations, such as focus maps. Quantitative analysis of the eye tracking technique refers to comparisons between models or design and a reference point. The collected data are extracted from the software. Inferential statistics, such as the Chi-Square Test, the T Test and the ANOVA Test, are used to determine whether any numerical differences observed in the study can be generalized to the entire population from the sample tested. Graphs are effective instruments for delivering quantitative results in reports and presentations. Graphs give information faster and make the results more accessible and attractive, usually in the form of bar graphs.

However, eye tracking technique has a limit regarding the interpretation difficulties, but still is used to allow researchers to know exactly on what consumers react, associating brain activity with the right stimulus.



**Figure 1. Eye tracking device**

Source: Geiger, 2014, <http://www.makinggames.biz/feature/use-your-eyes-interaction-through-eye-tracking,7117.html>

### **3.2. Facial analysis**

Facial expression is a research method used to understand the displaying of human emotions. Facial expression analysis (FEA) has been extensively studied over the last decades. In daily lives, some of the facial expressions are just one of the predefined emotional states, but they are blends of a few basic expressions. Even though the concept of "mixed emotions" was proposed many years ago, most researchers have not yet dealt with the FEA.

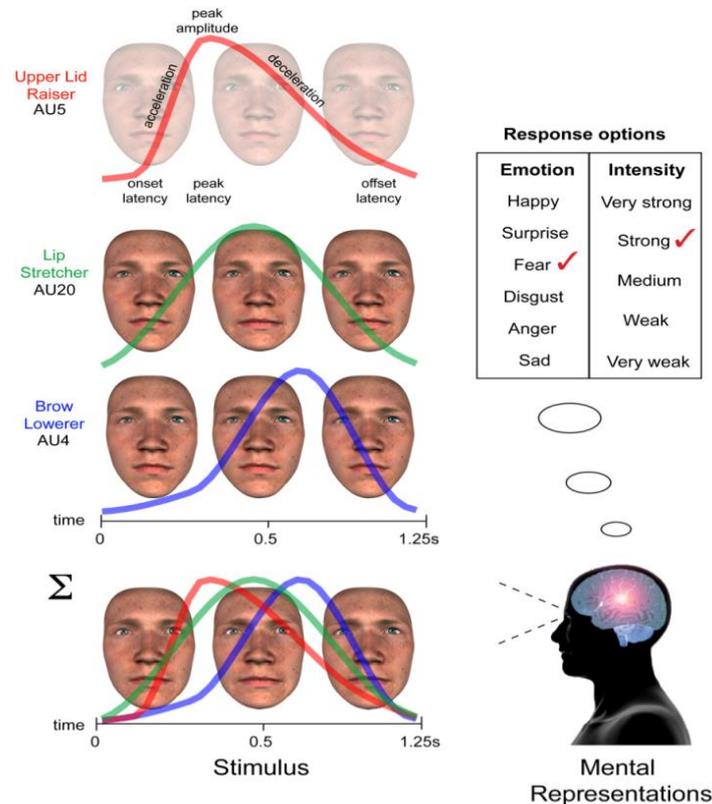
Recognition of automatic facial expression is used to help for interpreting emotions. Face recognition software compiles hundreds and even thousands of facial expressions to recognize the consumer's expression. The algorithms used in these software programs can be extremely complex, which corresponds to the exact emotion expressed by the consumer according to the size, location and relative position of the consumer's cheeks, eyes, nose and jaw (Zhao et al., 2015).

In recent years, there has been an increasing interest in improving all aspects of human-computer interaction. As an essential means for human communication, facial expressions provide rich information about human emotions. Facial expressions are most commonly used in human-to-human daily communication, such as a smile to show greeting, frown when someone is confused, and opening mouth when a person is surprised. Researchers have tried to analyze facial expressions through an attempt to understand and classify these expressions. However, most previous attempts describe each facial image with one of the predefined affective labels, such as six affective states of happiness, sadness, surprise, fear, anger and disgust. They assume that each facial image is linked to a single affective label that tends to be more simplified. Normally, people can express mixed emotions. For example, when someone receives an unexpected birthday gift from his best friend, he would be both happy and surprised. Few of the expressions show only one predefined affective state (for example, 100% happiness).

A particular attention has been paid to the facial expression analysis (FEA), as it plays a very important role in human interaction. There are some exciting applications such as virtual reality, videoconferencing, customer satisfaction surveys for web and broadcast services, and some intelligent environments that require an effective analysis of facial expression.

According to psychology research, the main approach to emotion modeling is the category-based method. Six basic emotions (happiness, sadness, surprise, fear, anger and disgust) are confirmed in this method and these labels become the most universal targets of the FEA (Zhao et al., 2015).

The human face is able to show a combination of emotions at the same time, called mixtures. In conclusion, facial analysis represents a great tool used in marketing experiments that analyzes the consumer's behavior through facial expression typologies at different moments before, during and after the purchase, or other actions undertaken by the individual, and identifying its profile.



**Figure 2. Facial analysis representations**

Source: Jack, 2015, <http://emotionresearcher.com/face-as-dynamic-communication-tool/>

### 3. Conclusions

This paper proposes to contribute to the development of the specialized literature by presenting the tools used for a marketing experiment. It has been used as a method of investigation, analysis of the secondary databases. Against the backdrop of technology development, an inventory of new tools used in applying such a research method is needed to highlight scientific researchers as a modern and current tool in marketing research.

Furthermore, the present paper described two of the new tools used in marketing experiments designed to facilitate the consumer behavior' studies for various products and services such as eye tracking or facial analysis. Eye tracking is the process of measuring the movement of eyes. Eye tracking is an "eye detector"; more precisely, a piece of hardware that records eye movements when a person looks at a computer screen, a physical object, or even the environment in general. Facial expression is a marketing research method used to understand the displaying of human emotions.

However, eye tracking technique has a limit regarding the interpretation difficulties, but it is still used to allow researchers to know exactly on what consumers react, associating brain activity with the right stimulus.

Facial analysis represents a great tool used in marketing experiments that analyzes the consumer's behavior through facial expression typologies at different moments before, during and after the purchase, or other actions undertaken by the individual, and identifying its profile.

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## **Exploring Millennials' Decision-Making Behavior of Higher Education Institution: The Implication of University Social Media Marketing**

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### **Abstract**

As the technology usage by teenagers increase, prospective students going to look on the Web and involve with social media to obtain information and perform business with tertiary education institutions. The increasing usage of social media by students allows universities to communicate with them as a millennial generation in a voice that they familiar with. In terms of university admission, a few research has thoroughly researched the prominence of using internet as a strategic choice. In order to compete for qualified students, university needs to understand their student choice process and the information source used. This study reports an exploration and evaluation of Indonesian students' experiences regarding the power of social media on their choice of university. By using the same cohort of first-year undergraduate students, semi-structured and focus-groups interviews were employed in five Indonesian public universities. The findings indicate the use of social media amongst students is growing in importance, especially for university search and selection. This research also found that the common social media platform used by students, the valuable information for them, the influential person during the college search process via social media, the reason for using social media before making a decision to choose particular university as well as the impact of social media on students' choice of university. Overall, this research contributes to the understanding university decision-making amongst students using social media. It also provides ideas for universities to formulate strategies for social media participation and students' recruitment.

**Keywords:** University, social media, decision-making behaviour, student, Indonesia.

**JEL classification:** M31.

### **1. Introduction**

Increasing global competition among higher education as well as declining funds and changing demand patterns require higher education to transform in order to meet their market need (Gibbs, 2001; Jarvis, 2000; 1995; Veloutsou, Lewis, & Paton, 2004). Several methods were used by university to attract domestic and international students in order to survive and remain competitive as service providers. Going online to market their institution for reaching global students is one of the opportunity taken by university as the result of recognizing the current technological habits of prospective students (Poock and Lefond, (2001). the use of internet becoming rapidly apparent by universities for understanding and influencing students' decision-making process of university choice (Briggs & Wilson, 2007; Maringe, 2006). In such situation, there is a call for higher education institution to involve in a current new marketing approach (Simões & Soares, 2010).

One of the new marketing approach that university try to employ is digital marketing through the social media. Valuing the potential power and implication of social media, most of university around the world are starting to adopt and use it as part of their marketing strategy. Previous research by Thompson (2007) noticed that there are two social networking sites which possess an extremely strong power on the lives of millions of students, MySpace and Facebook. Therefore, this paper will further explore the potential use of social media by university to market themselves among prospective students, along with in what way social media utilized by prospective students in their decision-making process of choosing a university. Particularly, this paper examines the power of social media to assist students' information search and decision-making in the higher education context. This understanding of promotional tools that

are fit and commonly utilized by prospective students for searching and selecting a university is required in order successfully recruit students.

## **2. Social Media and Higher Education Marketing**

Many scholars explained related social media definitions. Communication experts and marketing specialists has been described the term ‘social media’ as ‘a wide range of a new generation internet applications’ (Constantinides & Stagno, 2012, p44). Popular social media, such as Facebook and Twitter, brings individuals to connect each other with a larger community who share a common interest through a convenience platform interactively. Individuals, groups, organizations, or communities could establish such relationship. Katz et.al. (2004) had classified those powers of bonds established through online as strong bonds (family and friends) and weak bonds (acquaintances). Boyd and Ellison (2007, p211) claimed that social media has beneficial in enabling the information diffusion among individuals beside maintaining and/or strengthening the existing offline social networks.

Previous studies have examined the variety used of social media especially for educational purposes. For instance, Hewitt and Forte (2006) who studied privacy on social media, Charnigo and Barnett-Ellis (2007) related regarding the potential of the social media for facilitating the interaction between student with professors and Selwyn (2007) on questioning the outcomes articulated by universities toward the students’ use of social media, Young (2008) who examined the Facebook use academic purposes among educators. In addition, some of previous studies also highlighted the appropriateness of social media as an ideal choice in the university classroom (Lampe, Ellison, & Steinfield, 2006) and some found that Facebook usage rates for college students posses rapid adoption (i.e. 80-90%) (Arrington, 2005; Educause, 2007).

In college admission, Hossler (1999) has thoroughly researched the prominence of using internet as a strategic choice. He argued university recruitment management could obtain the value of online information because “Institutions can give students more timely and more detailed information online than would be feasible with print media or even individual counselling sessions” (Don Hossler, 1999, p14). Frazier (1999) also maintained regarding university admission that as the technology usage by teenagers increase, prospective students going to look on the Web to obtain information and conduct business with higher education institutions. Currently, the number of the universities utilizing the internet along with promoting their institutions was increasing along with the increasing number of college students who going online. This internet medium is used increasingly as an instrument to search for a university by prospective students. Hartmen (1998, p54) highlighted the implications and opportunities on using internet for college admissions, that “prospective students are increasingly accessing and relying on the Internet as a primary source for both ‘official’ and ‘unofficial’ information about colleges and universities” (p54). by Anderson and Reid (1999) has shown the evidence that more than 80% of students in high school were using the Internet to search universities. Furthermore, Anderson and Reid (1999, p54) asserted that “visiting university Web sites seems to have become a norm –with many people considering their visit to a university Web site as their first visit to the university itself”. The research by Abrahamson (2000, p9) put forward that, the Web ranks second as the most valuable source for searching universities among online users after campus visits. Therefore, in order to help prospective students make an accurate decision in choosing a university, the accessibility of online information associated to the tertiary education institutions becomes obvious.

## **3. Research Methodology**

This research endeavors to understand the social media impact on students choice of a public university. For this purpose, an exploratory research was employed as a logical and justifiable

approach (Aaker, Kumar, & Day, 2007). Similar cohort of 48 first-year students in five Indonesian Public Universities in Java and Sumatera were selected as participants for both semi-structured interviews and focus-group discussions. First-year undergraduate students were selected to minimize the ‘contamination effect’ of students responses with current experience (Arambewela, Hall, & Zuhair, 2006). In addition, they have a more comprehensive knowledge of the university than high-school students since they are very close to the choice of university selected to study (Gallifa, 2009). The semi-structured interviews were designed to have more open-ended semi-structured questions and conducted prior to the beginning of focus-group discussions. This method allowing the participants to explain whatever they want on those questions being asked (Bryman & Bell, 2007; Zikmund & Babin, 2007). Semi-structured interviews were employed to gather the information related to the social media frequently used by the students as well as the valuable information acquired from the social media. While focus-group discussion were used to obtain information regarding the decision-making process followed by students to choose a university which involving social media as source of information. Focus-group discussion in this study was formed by seven up to fifteen students for each focus group to think about a series of questions as suggested by Fraenkel and Wallen (2006).

As suggested by Zikmund (2003), qualitative instruments in this study were pretested using content validity (face validity) through discussing and gaining approval from experts in the research area. During or after the first interview, reliability was checked by modifying current questions and/or to generate new questions (Silverman, 2005). In order to ensure the accuracy of the information provided by the participants, an audiotape was used to record during the discussion session with participants’ permission beforehand. Researcher transcribed verbatim all the discussion results and initially recorded as specific themes and indicators that are related. Thematic analysis was conducted to analyze the data (Boyatzis, 1998; Silverman, 2005), and addressed the guide provided by Creswell (2007). The data was coded by hand based on conversation theme and organized as well as sorted into categories based on their properties and similarities. The code and retrieve technique was employed to collapse and merge certain categories. This classifying process involved “...sorting units into provisional categories on the basis of ‘look-alike’ characteristics” (Lincoln & Guba, 1985, p203). This type of data reduction technique involves labeling the data based on the content. The combination of categories entails a unique specification for each theme and each theme had to be exhaustive. Thematic categories were employed to develop the survey for a subsequent phase of the research.

#### **4. Findings and Discussion**

The prominence of information gathering on the choice of a university required many scholars to examine this process in greater detail. Most of the previous research focused on specific aspects related to service in higher education Ham (Alves & Raposo, 2009; Douglas, McClelland, & Davies, 2008; Ham, 2003; Mao & Oppewal, 2010; Moller, 2006; Nasser, Khoury, & Abouchdid, 2008; Petruzzellis, D’Uggento, & Romanazzi, 2006), and some focused on the institutions’ services generic student-choice models (Punj & Staelin, 1978; Vrontis, Thrassou, & Melanthiou, 2007) and factors influencing students’ decisions (Briggs & Wilson, 2007; Menon, 2004; Mihai-Florin, Dorel, & Alexandra-Maria, 2006; Simões & Soares, 2010). Not many explored the information sources and requirements (Veloutsou et al., 2004) or preferred information source (Goff, Patino, & Jackson, 2004). Yet, empirical studies concentrating detailed aspects of the student decision-making process are limited, and among those that do exist only discuss to explicit fields of study (West, Newell, & Titus, 2001).

Therefore, this research endeavors to fill the gap assumed the sources of information are important dimensions when referring information-seeking behaviour (Kiel & Layton, 1981).

Based on the result of this research, it presents the socio-demographic profile of the participants. Out of 48 students' participants, a large percentage of the participants were 19 years old followed by 18 years old, which correlated with a typical population of first-year undergraduate students. More female students participated in this research due to a generally larger class attendance by female students and there are more female students enrolled in five public universities selected in Indonesia. When classified by the city from where participants originated, it was found that the biggest proportion of respondents originated from inside the region where the university resided. The greatest proportion of participants graduated from their high schools one year ago and the majority of them graduated from public high schools rather than private high schools.

Regarding the social media used to search universities that they considered attending, of 48 participants, most of them responded that they use Facebook and Twitter, while Google+ and Pinterest become the lowest site to view. Majority of participants indicated that they viewed those sites at least once per week. Interestingly, Instagram was growing popularity sites among students which especially were invited to participate in Instagram platforms when they were searching for a particular university. Most of the student who viewed the sites were reported that they did "follow or like" universities they considered attending on any social media platform. This finding supports Hartmen's (1998, p54) point of view who highlighted that "prospective students are increasingly accessing and relying on the Internet as a primary source for both 'official' and 'unofficial' information about colleges and universities".

**Table 1. Summary of the Research Findings regarding social media impact on students' choice of university**

<b>Finding</b>	<b>Description</b>
Social Media used	They used social media to research universities that they considered attending.
Dominant sites	Facebook and Twitter
Lowest site viewed	Google+and Pinterest
Growing popularity sites	Instagram
Commonly visit	At least once per week Facebook and Twitter
Commonly type of participation	mostly reported that they did "follow or like" universities they considered attending on any social media platform
Most influential person during the college search process via social media	interacting with currently enrolled students
Least influential person	other admitted students (however they indicate that students do not want to interact with other students until they have been admitted)
Type of information or impressions gathered	read the comments by students at specific universities as the thing that make them interested view notes or blogs to see what people are telling regarding the university see photos of students at specific universities or search profiles of students at specific universities view to see if I was familiar with anyone currently joining the universities I'm attracted in Searched profiles of students at specific universities
The reason of using social media before making a decision to choose particular university	to gather information about university considered attending to gather impression about university considered attending to make sure they choose the right university
The impact of social media on students' choice of university	sense of the social life knowledge concerning the varieties of students enrolled attending

sense of the community within the university considered attending  
sense of how they will fit in  
sense of university spirit  
sense of university reputation (academic quality and prestige)

Social media information provides beneficial information to the students. More than a half of those 48 participants in this study answered that they find valuable information from social media sites during their college search process. Student life was revealed to be the most valuable information by participants, followed by school information valuable, photos valuable, and the rest found information related to activities valuable. Based on participant opinion, the least valuable information was information that remained unchanged and could be found in printed materials or websites. This information including the categories of courses offered, tuition and scholarships, admissions deadlines, and career services. While the student participants identified that those information as the least valuable on the list, they still indicated as an important value to an enormous population of those researched. Findings of this research supports Bonnema and Van der Walddt's thought (2008) who revealed that each subgroup chooses to ask when looking for information about higher education institutions with a specific categories of information sources. The study has also highlighted that social sources, word of mouth or direct sources from the university are sometimes preferred rather than other media or advertising in addition to the real description of the university social life.

Regarding the most influential person during the college search process via social media, of 48 participants, most of them responded that interacting with currently enrolled students via social media was important. However, of those on the category indicates that students do not want to interact with other students while waiting for they have been admitted. Regarding type of information or impressions gathered, majority students participant mentioned that read the comments by students at specific universities as the thing that make them interested, besides view notes or blogs to see what people are telling regarding the university, see photos of students at specific universities or search profiles of students at specific universities. Another type of information impressed students is "view to see if I was familiar with anyone currently joining the universities I'm attracted in". It seems that student wants to obtain the trusted information from others in order to reduce the risk level of deciding an inappropriate university to attend. This finding in line with Gomes and Murphy's (2003) point of view who emphasized that in online enrolment, trusted information is a key issue. Indeed, it has been recognized that for goods and services there is a different in process information searching followed by customers' as well as different in consumption situations (Choi & Lee, 2003; Mitra, Reiss, & Capella, 1999; Newman & Lockeman, 1975). McColl-Kennedy & Fetter Jr, (1999) and Murray, (1991) emphasize that comparing to tangible product, commonly consumers look for more information when encountered with a service purchase decision. Involving in such situation, the consumer has aware about the risky nature of service provision in order to reduce risk (McColl-Kennedy & Fetter Jr, 1999, p242-243). Therefore, in a service marketing context, comprehending consumer search behaviour might be critical.

On responding the question of the reason for using social media before making a decision to choose particular university, the majority of students participant in this study explained that to gather information about university considered attending as well as to gather impression about university considered attending as the most common reasons. However, those students also mentioned that they used social media before making a decision because they want to make sure that they choose the right university to attend. Indeed, information searches signify a key phase of consumer decision models in service areas which associate to a higher level of perceived risk such as tertiary institutions (Beatty & Smith, 1987; Mourali, Laroche, & Pons, 2005).

Students explicitly answered that social media has impact of on their choice of university. Most of the students mentioned that they got a sense of the social life after reviewing information through social media. Some of them found information concerning the varieties of students' enrolled attending as well as a sense of the community within the university considered attending. In such situation, students explained that the social media could give them a sense of how they will fit in and a sense of university spirit although they do not enrol yet. In addition, a sense of university reputation (academic quality and prestige) was felt by a few of students as leading them to the increasing confident level of their decision. As highlighted by Murray (1991) and Choi and Lee (2003) that if the level of perceived risk is higher, the tendency to search for information is greater.

Based on preceding questions responded, it was confirmed that students followed the common steps of all decision making process from problem recognition, information search, evaluation alternatives, and finally purchase decision as explained by Engel, Blackwell, and Miniard (2006; 1995), Kotler & Keller (2009), Perreault and McCarthy (2005), Schiffman and Kanuk (2007) as well as the specific student choice model suggested by Kotler and Fox (1995), Hossler and Gallager's (1987), Chapman's (1981), Jackson (1982), and Hanson and Litten (1982). The summary of this process according to the student participants' information was explained in Table 2.

*Table 2. Summary of the Research Findings regarding the process of students' choice of university*

<b>Students' decision making process</b>	<b>Description</b>
<b>Problem recognition</b>	"I would rather talk with my parents, family, teachers in high school and some of my friends who about going to university"
<b>Information search</b>	"I use social media to see how the university really is and suit with my needs"
<b>Evaluation alternatives</b>	"I do take into account of other comments or testimonials and it makes me confident before making a choice"
<b>Purchase decision</b>	"Yes, social media is useful for me but I still consider my parents', families, and my teachers in high school's opinions. I did not just rely on the social media"
<b>Post-purchase decision</b>	"I think social media is more about feelings and share them to others to gain their supports such as 'like' or other reactions"

In the problem recognition process, initially students look for other reliable sources of information for about choices to attend a university. Seeking advice from their reference group such as parents', families, peers and high school teachers' become the most common way student chose. In this step, reference groups such as family, friends, peers and teachers in high school serve as influential person. This finding support previous research, which discovered that reference groups serve a significant role in affecting Thai students' selections of vocational education (Pimpa & Suwannapirom, 2008) and there is a significant correlation among family, friends, peers' influence and the students' motive to study at a university in Malaysia (Wagner & Fard, 2009).

In information search process, students revealed that social media was used by them to see how the university really is and suit with their needs. Opinions shared and recommendations made by other especially from those reliable person on social media become one of the sources of information considered as a powerful force and part of word-of-mouth marketing. This result confirmed Gomes and Murphy's (2003) opinion that reliable information is a crucial matter with online enrolment. For some students, looking for other comments or testimonials before making a choice was encourage them that would make a correct decision. Students asserted that they need other opinion or review related to the university selected in order to convince them that they did not make a wrong decision. On commenting the question regarding the

common strategies employed by them in evaluation alternatives step, one student mentioned “I do take into account of other comments or testimonials and it makes me confident before making a choice”. This activity was serving as part of evaluation alternatives step which is become the features of mostly social media platform. It seems that students considered social media as valuable tool to shape their university choosen.

Students highlighted that social media is useful tools for them to shape their decision regarding the university choice. However, most of the students claimed that although social media could give some advantageous, they still looking for another reliable sources such as university official website or other sources from offline media such advertising, brochure and other people comments through word of mouth communications. As part of purchase decision step, one student confirmed that, “Yes, social media is useful for me but I still consider my parents', families, and my teachers in high school's opinions. I did not just rely on the social media”. This comment indicates that besides social media, there are other sources of information used by the students and supplies the information needed in order to make a decision regarding which university to attend. Research conducted by Mateos et al. (2001) confirmed that there was a high relationship between the number of students enrolled in Spanish universities and the growing popularity of their Web sites as information source for university search.

Regarding post-purchase decision as the last step of decision making process, students in majority explained that two way communications provided by social media platform allowing them to receive as well as supply information for others. After making the decision, immediately they could express their response such as feelings and thought regarding their decision made apart from the university chosen. On responding this step, students commented, “I think social media is more about feelings and share them to others to gain their supports such as ‘like’ or other reactions”. This finding validates prior research, which found that “consumers today use social media to talk about their own good or bad experiences and thus share feedback and opinions with peers” (Jaffe, 2010, p.8).

The helpfulness of social media for students’ decision making process became obvious along with the growing attractiveness of these media among millennial or prospective students. Recognising the potential of social media and the teen behavior for choosing tertiary education, university turns to go online for promoting their institution, communicating with the millenials, and other marketing purposes especially for students’ recruitment. Roblyer et al. (2010) underscored that universities are also using social media for university marketing campaigns. Previous research by Ashburn (2007) confirmed that more that 50% of the college bound students who were participated in the study began on-line at college search process. Indeed, this finding also confirmed that social media seems to be more influential in the information search and evaluation alternatives step rather than other steps. In conclusion, this research findings verified Vollmer and Precourt’s (2008) view who maintained that consumers are turning more frequently to numerous types of social media to conduct their information searches and evaluation of alternatives.

## 5. Conclusion

This research validated that social media information provides beneficial information to the students. According to the respondent social media plays a significant role in the decision making process among millenials in which they familiar with the kind of technologies. Two platforms mostly used by students are Facebook and Twitter. Those social media application play a dominant role in students’ lives. The information regarding student life, school information, photos, and university activities accounted to be the valuable information by participants. Whilst courses offered, tuition and scholarships, admissions deadlines, and career services perceived as the least valuable information and could be found in printed materials or

websites. However, there is no ideal mix of online communication or offline communication strategies for recruiting prospective students. The use of social media can benefit for both university and students by strengthening the relationships between university-student and student-student. This media could be adjusted appropriately in addition to traditional way such as campus visits, university fair, university brochure as part of the promotion mix.

Based on the result of this study, information search and evaluation alternatives are two key components of student decision making models. In this situation, social media serve as sources of information and evaluation alternatives helping millenials' information seeking behavior of a particular university. Therefore, university should provide a proper and reliable information source to assist students in making the right decision of a university for study. As point out by Will and Callison (2006) that there is still many opportunities for improvement whilst efforts were being made to contact students online. Therefore, universities requisite to welcome that such kinds of social media as an important tool for communication and information gathering. Further research should address more on growing popular of this new technologies for university marketing in line with the changing aspirations of entire stakeholders involving prospective and current students, parents, and alumni.

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## **Green IT: The Perspective of IT Professionals**

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### **Abstract**

Public awareness about environmental issues has risen as a result of scientific research and reports published in the field. Discussions are ongoing mostly on global warming, greenhouse gas emissions and increasing energy consumption. Information Technology (IT) plays a key role among these discussions due to its negative impact on environment. Within this context, Green IT becomes essential to return these negative impacts into positive by focusing on hardware, software and process dimensions of the challenge. Producing with renewable energy and less harmful materials, utilizing green data centers and smart management of disposal processes will directly reduce total carbon footprint of an organization. In recent years, organizations' consciousness on environmental problems has increased steadily, besides, IT professionals' role on environmental sustainability, through Green Transformation, gains importance. In this study, our concentration is primarily on the investigation of Green IT from the perspective of IT professionals. The awareness level and beliefs of IT professionals about Green IT were examined via an online survey. We have collected data from 257 IT professionals, who work at different sectors of an emerging market. The initial findings reveal that IT professionals have low levels of awareness. Furthermore, they suggest that green IT/IS usage is associated with eco-friendly devices & systems, and believe that green IT/IS usage reduces electronic waste and hazardous materials. The great majority of the respondents also assume that companies' green IT/IS device and application usage improves their corporate images. In addition, IT professionals indicate that green IT/IS can be used to reduce a business's total carbon footprint. It has been also declared that green IT/IS involves making efficient use of natural and company resources in order to reduce negative environmental impacts. Moreover, it is believed that companies utilize green IT/IS in order to improve corporate sustainability & social responsibility.

**Keywords:** sustainability, environment, green IT, IT professionals, beliefs, awareness level.

**JEL classification:** Q56.

### **1. Introduction**

In recent years, there has been an increasing emphasis on sustainability and particularly greening of information technology (IT) in the business world. According to Time (2015), Apple declared that it would spend 1.7 billion euros (\$1.9 billion) to build two data centers in Europe that would be entirely powered by renewable energy. Reportedly, the new centers are intended to meet what is expected to be a massive rise in demand for remote data storage in the medium-term, as both consumers and businesses come to depend more and more on Cloud-based technology (Time, 2015). Another technology giant Google stated that it's been using renewable energy to power 35% of its operations, and it's made agreements to fund over \$2 billion in renewable energy projects (GoogleGreen, 2015). Likewise, global IT company Microsoft announced carbon neutrality through which it will offset emissions from all its direct operations by running up a multi-million dollar bill in the process (Murray, 2012). According to the report of Thinkprogress (2015), Apple, Google, and Microsoft are among the thirteen of the world's biggest and most powerful companies committed \$140 billion in low-carbon investments and joined the U.S. Administration's "Act on Climate" initiative. Allegedly, Apple will build 140 MW of renewable energy whereas Google will continue on its path to 100 %

renewable energy (Thinkprogress, 2015). All these news and reports literally demonstrate that the big players of the IT industry take heed of the IT's impact on environment and human health. Admittedly, the IT industry does not consist of only these companies, and the efforts of these leading IT companies for a better environment is merely a small step for the welfare of future generations. Despite the increased importance of green IT from the governmental and practitioner perspectives, there is still scarcity of research in the academic world. Therefore, in this study it is aimed to have a comprehensive understanding of IT professionals' perspective about green IT. Hence, this research aims to shed light to the following questions:

- a) What is the awareness level of IT professionals about green IT?
- b) What are the beliefs of IT professionals about green IT?

## 2. Literature Review

Today, the business world has witnessed to the fast-paced evolution of technology, particularly information technology. Nevertheless, IT's impact has a yin-yang characteristic by nature; that is to say, on the one hand it inspires many industries and even changes our daily lives in an unpredictable way. On the other hand, it is accused of its negative consequences both on the environment and social life. IT has been criticized because of creating alienation and de-humanization, loss of privacy, leading to unemployment, and threatening human health and damaging environment. The scope of our study is limited to the IT's impact on environmental sustainability. At this point, it will be beneficial to refer to the study of Chow and Chen (2009), in which the authors claimed that the sustainability of a green environment can be accomplished through three main approaches; social responsibility, environmental protection, and economic progress. Chow and Chen (2009) considered green computing as a crucial contributing factor to green environment. In his prominent study, Murugesan (2008, p. 25) defined green IT as "the study and practice of designing, manufacturing, using, and disposing of computers, servers, and associated subsystems-such as monitors, printers, storage devices, and networking and communications systems-efficiently and effectively with minimal or no impact on the environment". Bose and Luo (2012) agreed with Murugesan's (2008) green IT definition and asserted that this definition of green IT includes hardware assets, software assets, tools, strategies, and practices that help improve and enrich environmental sustainability. According to Murugesan (2008), green IT is composed of environmental sustainability, the economics of energy efficiency, and the total cost of ownership, which includes the cost of disposal and recycling.

Former studies including both exploratory and empirical, looked into Green IT/IS awareness level and beliefs from different perspectives. One of the investigation areas of Green IT/IS is beliefs, attitudes, motivations and behaviors of individuals to achieve a more sustaining environment. Molla, Abareshi and Cooper (2014) focused on IT professionals in their study and found that their Green IT beliefs, attitudes, information acquisition capabilities and organizations fields influence their behavior. The authors concluded that the majority of the IT professionals are concerned about climate change and Green IT belief is a strong predictor of attitude toward Green IT, which can lead to pro-environmental IT practice (Molla, Abareshi and Cooper, 2014). Widjaja, Mariani, and Imam (2011) looked into the awareness level of IT professionals in Indonesia in order to fulfill the lack of research about Green IT in stated region. They mentioned that IT professionals in Indonesia have already some concerns about climate change and power consumption of IT however; there is still a lack of implementation and action dimensions (Widjaja, Mariani, and Imam, 2011). Another study conducted by Chou and Chou (2012) identifies the components that influence how organizations evaluates the value of Green IT and proposes a Green IT value model. The authors suggested three components that contribute to Green IT value process, including awareness, translation, and comprehension.

This value model clearly presents the dynamics of green value configuration in the IT industry (Chou and Chou, 2012). In another research, Chow and Chen (2009) examined the belief and behavior of IT users in green computing in Hong Kong. The authors concluded that the attitude toward Green IT is the main factor to practice and perceived behavior control has the most influence on IT users to actual green IT behavior (Chow and Chen, 2009).

Coffey, Tate and Toland (2013) utilized institutional theory to frame a study of the factors which influence small and medium sized businesses (SMEs) to adopt Green IS/IT practices. The authors found a diversity of viewpoints that suggest that adopting a “one size fits all” approach for encouraging organizations to adopt Green IT/IS is unlikely to be successful. Since SMEs are the dominant form of business around the world and they are estimated to have total contribution of around 70% in terms of global pollution, understanding the issues affecting the adoption of Green IS/IT by SMEs has widespread significance for the global environment. It is suggested that a clear message is needed to be sent to SMEs by governments, larger players in the market-place, societies and consumers in order to express the expectation about Green IT/IS adoption (Coffey, Tate and Toland, 2013). In their recent study, Bisoyi and Das (2018) stated that green computing aims in attaining sustainable future by implementation of practices that uses computing resources economically and eco-friendly manner. According to Bisoyi and Das (2018), rise in usage of Internet, mounting power density of equipments, escalation in requirement of energy for maintenance of data center, precincts of power supply and access, low rate of server utilization, emerging consciousness about impact of it on atmosphere were among the factors motivating to adopt green computing. In another research, Leung et al. (2018) have investigated the Green IT (GIT) behavior of young consumers including their day-to-day GIT practices, and buying behavior of computer devices and streaming services. The findings of their study demonstrate that: understanding of GIT knowledge has a positive influence on PBC.

### **3. Research Methodology**

Since Green IT/IS has a role to revert the negative impacts of technology, transforming business and adopting green IT/IS becomes essential. During this transformation, IT professionals play a key role, hence this paper mainly concentrated on the awareness level and beliefs of IT professionals about Green IT/S. As stated above in the introduction part, we attempted to explore the awareness level of IT professionals about Green IT/IS, and the beliefs of IT professionals about Green IT/IS. In this research, the data were collected from 257 participants who were working at the IT departments of both national and international corporates. Both an online and paper based questionnaires were generated and they're either delivered to the IT departments via e-mail or in-person. The online version of the survey was formed through Google Forms application, and the survey was displayed for three weeks and was distributed to online groups, and invitations for filling the form were sent to email addresses of IT departments of companies. The survey link was also shared on Facebook and LinkedIn accounts of the authors and displayed at some IT related web pages as well. The survey consisted of different questions which were intended to measure the IT professionals' awareness level of and beliefs about Green IT. At the end, we've reached to 257 usable and fulfilled questionnaires. The participants were from companies in distinct sectors including telecommunications, banking, consumer electronics, retailing, health, and etc. The respondents had different levels of experience in their occupations so that some were senior level IT professionals whereas some were junior. On top of the questionnaire, a brief description of Green IT was given by referring to the study of Murugesan (2008) as follows: “the practice of designing, manufacturing, using, and disposing of computers, servers, related devices and

software & processes running on these hardware products and practices with minimal or no impact on the environment”.

### 3.1. Research constructs and measurement

The first part of the questionnaire included questions that are aimed to measure the awareness level of respondents, six items were utilized in this section from different sources (Widjaja, Mariani, and Imam 2011; Molla, Abareshi and Cooper 2014; Murugesan 2008). Second part of the survey contained questions regarding respondents’ beliefs about Green IT, and we’ve used 28 belief items, which were generated or adapted from several sources in the literature (Koo, Chung and Nam 2015; Molla, Abareshi and Cooper 2014; Elliot and Binney 2008). Both awareness and belief scales were measured by using five-point Likert Scale (5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree). Last part of the survey was composed of demographic questions that profile the respondents in terms of age, gender, education, and experience.

## 4. Results

The demographic profile of the respondents in terms of gender, age, education and experience in IT sector is illustrated in Table 1. As it is seen, 57% of the sample is composed of males, and 67% of the respondents belongs to the age group of 25-34. In terms of education, 57% of the participants has at least university degree. Finally, in terms of work experience, it can be asserted that the majority of the respondents have somewhat experience in the field.

*Table 1. Demographic profile of the respondents*

Demographics (n: 257)				
Gender	Male	Female		
	146 (57%)	111 (43%)		
Age	18-24	25-34	≥35	
	26 (10%)	173 (67%)	58 (23%)	
Education	Univ. Students	University Degree	Graduate Level (MA/MS/PhD)	
	13 (5%)	147 (57%)	97 (33%)	
Experience	< 2 years	2-5 years	6-10 years	> 11 years
	65 (25%)	72 (28%)	70 (27%)	50 (20%)

### 4.1. IT professionals’ green IT awareness level

IT professionals’ green IT awareness level was measured by asking them to indicate their agreement or disagreement with a total of 6 statements on a 5-point Likert scale (1=strongly disagree, 5=strongly agree). The Cronbach’s  $\alpha$  value of awareness scale is 0,890 which is above the prevalently accepted threshold level of 0,70. As seen in Table 2, “I know exact meaning of “Green IT/IS”.” statement received the highest mean value among six awareness statements. However, the statement about subscribing to Green IT/IS e-mail distribution lists got the lowest mean value. This result can be inferred that the IT professionals have somewhat knowledge about green IT, however, they were not active in following the trends or improving their opinions on this topic.

*Table 2. IT professionals’ green IT awareness level*

	Mean ( $\bar{x}$ )	Std. Dev. ( $\sigma$ )
I know exact meaning of "Green IT/IS".	2,97	1,385
I purposely attend seminars/events about Green IT/IS.	1,90	1,089
I follow product announcements about Green IT/IS.	2,05	1,145
I regularly read articles/news about Green IT/IS.	1,76	1,005
I participate in Green IT/IS discussion forums.	1,51	,853
I subscribe to Green IT/IS e-mail distribution lists.	1,47	,862

#### 4.2. IT professionals' beliefs about green IT

IT professionals' beliefs about green IT was measured by asking them to indicate their agreement or disagreement with a total of 28 statements on a 5-point Likert scale (1=strongly disagree, 5=strongly agree). As it can be seen from Table 3, among the 28 statements, "senior management commitment is necessary for prevalence of Green IT/IS" has the highest mean value (4,19) and it is followed by "green IT/IS usage is associated with eco-friendly devices & systems" (4,18). The statement referring to exaggeration of Green IT benefits for building a positive image got the lowest mean value (2,55). Actually, this means that IT professionals have a strong belief in the role of senior IT managers' dedication for the adoption of green IT/IS in their organizations. In addition, what they understand from green IT/IS usage is related to eco-friendly devices and systems. In this sense, they may overlooked their personal consumption patterns, such as printing to both sides of the paper or turning off their computers.

*Table 3. IT professionals' beliefs about green IT*

	Mean ( $\bar{X}$ )	Std. Dev. ( $\sigma$ )
companies' green IT usage is highly related with governments' energy efficiency regulations.	3,51	1,166
green IT/IS penetration needs enforcement from industry associations	3,85	1,029
companies' green IT/IS usage is related with universal greenhouse gas regulations.	3,44	1,137
green IT/IS adoption is dependent on regulations on discarding e-waste.	3,46	1,057
government incentives are necessary for green IT/IS adoption.	4,14	1,016
green IT/IS can be used to reduce a business's total carbon foot print.	4,11	1,031
green IT/IS usage reduces electronic waste and hazardous materials.	4,14	,976
green IT/IS usage is associated with eco-friendly devices & systems.	<b>4,18</b>	,908
green IT/IS involves making efficient use of natural and company resources in order to reduce negative environmental impacts.	4,07	,935
economic value of using Green IT/IS is unclear for the companies.	3,30	1,098
green IT/IS solutions and products are expensive to purchase.	3,21	,937
green IT/IS solutions leads to energy cost reduction.	3,75	,923
cost of server energy consumption decreases through green IT/IS usage.	3,62	,973
green IT/IS products & solutions increases efficiency of powering IT/IS infrastructure.	3,76	,938
having sustainability strategy within the company helps the Green IT/IS penetration.	3,90	,907
senior management commitment is necessary for prevalence of Green IT/IS.	<b>4,19</b>	,947
IT management's role is very important for reducing IT's greenhouse gas emission.	3,92	,981
IT professionals play significant roles in helping businesses tackle their carbon foot print.	3,67	,981
green IT/IS adoption in a company is influenced by the actions of competitors.	3,79	,976
pressure or marketing from ICT vendors has an impact on green IT/IS usage in a company.	3,66	,984
clients' demand and pressure has an impact on applying Green IT/IS products & practices in a company.	3,86	,961
companies' green IT/IS device and application usage improves corporate image.	4,14	,958
benefits of green IT/IS are exaggerated for the purpose of building a positive image.	<b>2,55</b>	1,142
companies making investment in green IT/IS are more credible and trustworthy.	3,41	1,000
environmental leadership is obtained by companies making investment in green IT/IS.	3,86	,928
media (newspaper, TV, news) exposure about being green influences people about Green IT/IS usage.	3,75	1,028
what people have heard and seen in the Media (newspaper, TV, news) have an impact on green IT/IS usage.	3,85	,912
companies utilize green IT/IS in order to corporate sustainability and social responsibility.	4,01	,919

#### 5. Conclusions and Managerial Implications

In the last decade, green IT has become one of the most essential issue for the businesses and governments around the world as computing becomes progressively pervasive. Green IT, which is also called as green computing, is assumed as the practice and study of environmentally sustainable computing. In this study, we particularly focused on the

perspective IT professionals since mostly they either demand an adoption to green IT/IS if they've less experience in their profession or decide to transform the whole system into green computing due to their seniority in their occupation.

The results of this study have pointed out that IT professionals mostly know the meaning of green IT, however, when other statements are examined it is found that IT professionals' awareness level is quite low. It's also seen that there's a high tendency among the IT professionals in terms of senior managers' commitment to convert the business system into the green computing. It is also believed that green IT usage is associated with eco-friendly devices & systems. Findings have highlighted that benefits of Green IT, such as its impact on reducing electronic waste and hazardous materials or decreasing a business's total carbon foot print, have been recognized by IT professionals. Furthermore, IT professionals believe that government incentives are necessary for prevalence of green IT. On the other hand, the statement of "benefits of green IT/IS are exaggerated for the purpose of building a positive image" has received the lowest mean value. Actually, this is something exciting, since this means that professionals really believe in the benefits of green IT and they are not inclined to think that all the attempts are just for green-washing. Similarly, the second lowest mean value belongs to the statement of "green IT/IS solutions and products are expensive to purchase". IT professionals may perceive that although green products have relatively higher prices than traditional IT products, it really worth to choose the green option, since in the long run not only the company but also the society as a whole may take advantage of this choice.

## 6. Limitations and Suggestions for Future Research

This study is limited to understand the general motives of IT professionals from different sectors and different seniority levels. In the upcoming papers, we plan to group these motives under major factors by utilizing factor analysis, however, to do this we expect to increase the sample size of the current study. In addition, further research is needed to explore the effect of beliefs to determine the attitudes toward Green IT, and behaviors that are related to the attitudes need to be studied. Moreover, relationship between experience level and beliefs can also be examined. That is to say, we try to analyze whether seniority of the professionals has an impact on their attitudes towards green IT. In addition, it is equally crucial to investigate the personality traits of IT professionals who have tendency to actualize the transformation of green computing.

Since this study is the preliminary part of our research, we plan to increase the number of respondents to our survey and utilize detailed multivariate analysis techniques in order to group the factors that identify the motives of IT professionals about green IT. We'll also examine whether there's a relation between experience level of IT professionals and their attitude toward green IT/IS. In addition, willingness to pay more for green IT devices and systems will be also explored. Finally, it will be beneficial to inspect whether there're differences between IT professionals who adopt and who do not adopt green computing in their organizations in terms of their personality traits.

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## **Exploring Artificial Intelligence Techniques' Applicability in Social Media Marketing**

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### **Abstract**

The increasing interest in Artificial Intelligence (AI)'s impact on Social Media Marketing (SMM) creates new opportunities to be captured by software developers. Marketers become aware of AI powerful tools role in leveraging competitive advantage in social media campaigns. This study aims to test correlations between the experience in the field of SMM and the level of knowledge regarding the applicability of Machine Learning (ML) in SMM and the frequency of using of ML algorithms in SMM campaigns and to identify the perceptions of the potential users of an Artificial Intelligence (AI)-based software, which will embed deep learning algorithms and convolutional neural networks to recognize logos of brands or companies involved in social media content, regarding its proposed capabilities. The AI Media software capabilities were embedded into three clusters (audience analysis, image analysis and sentiment analysis), being assessed through a 3 points scale, revealing necessary vs. expected functionalities in the eyes of digital agencies' representatives of freelancers. The results outline a high interest and trust of potential users of AI Media software on its value proposition.

**Keywords:** Social Media Marketing, machine learning, deep learning, image analysis, audience analysis, sentiment analysis.

**JEL classification:** M31, C12.

### **1. Introduction**

In the digital transformation age, companies have access to more information than ever about their customer behavior. One of the main challenges of social media marketing relates to anticipative capabilities regarding targeting people with content that they are interested in. Fortunately, machine learning (ML) algorithms has been developed to respond to online comments immediately using natural language, which enable online marketing to focus on strategy.

Based on machine learning algorithms, a computer can be trained by a Social Media Marketing specialist to recognize patterns in posts that match targeted posts within social networks, opening avenues for customized analysis categories.

As members of a research team, we are interested in designing and developing an Artificial Intelligence (AI)-based software, which will embed deep learning algorithms and convolutional neural networks to recognize logos of brands or companies involved in social media content.

The goal of this paper is to examine the correlations between the experience in social media marketing (SMM), the level of knowledge regarding the applicability of ML in SMM, the frequency of using of ML algorithms in SMM campaigns and the perceptions of the potential

users of an Artificial Intelligence (AI)-based software on three pillars (audience analysis, sentiment analysis and image analysis) in the case of a sample of 100 respondents from worldwide digital agencies.

## **2. Theoretical background**

Artificial Intelligence emerging technologies deal with consumer-generated content, being capable to provide compelling evidence of brand perceptions and attributes. The brand owner, therefore, has opportunities to adopt an Artificial Intelligence (AI)-based software to navigate the consumer-generated content to ensure that the fans remain as close as possible to the brand owner's desired promise (Singh and Sonnenburg, 2012). Knowing the content shared by people on a brand page can be a valuable input for machine learning algorithms involved in social media marketing (Cvijikj and Michahelles, 2011).

As consumers increasingly ignore conventional online marketing, emerging IT infrastructures based on machine learning algorithms contribute to social media predictive analytics development. Given these trends and the high potential of Artificial Intelligence tools for social media marketing, the key question for marketing managers became how to take full advantage of machine learning algorithms and find ways to train them for their specific objectives (Tsimonis and Dimitriadis, 2014). Using these tools, innovative managers are finding new ways of automatically collecting, combining, and analyzing data from social media to better understand customer behavior and effectively manage online marketing campaigns (Lee, 2018).

Machine Learning technologies, endowed with the capability to learn from social media data, identify patterns and make decisions with minimal human intervention, are frequently used to increase brand awareness and online reputation, promote customer engagement and loyalty, enable word-of-mouth communication about the brand, and drive traffic to a brand (Ashley and Tuten, 2015). Using the Machine Learning technologies as Marketing Intelligence tool could conceivably benefit both customers, who might receive social media content that better matches their preferences and companies, as they might be able to generate higher levels of customer satisfaction and loyalty (Lamberton and Stephen, 2016).

Deep learning algorithms and convolutional neural networks dealing with social media information allows the highly involved consumers to be identified and targeted using brand recognition based promotional methods, such as broadcast advertising, sales promotions, and events, in order to initiate communication (Kilgour et al., 2015).

Researchers analyze various textual feature representations of social media contents, coupled with machine learning algorithms and artificial neural networks applications, to explore in-depth the relationships between features of the contents and the opinions expressed by the persons engaged in social conversations related to a brand (Ghiassi et al., 2013).

Since the rise of social media marketing analytics, powerful tools have been built provided opportunities for marketers to track their brands on Facebook and Twitter. Most of these social media analytics dashboards simply aggregate text data from tweets and Facebook posts. In the past years, image recognition tools for Instagram and Pinterest have been adopted by digital agencies and online marketers, as logo recognition became a key pillar to brand analytics (Iandola et al., 2015).

Building upon the idea that social commerce led to an increased presence within social networks, AI-based analytics tools evolved to facilitate the social experiences of consumers, enabling alliances between e-retailers and social networking sites (Zhou et al., 2013).

Sentic Computing has been also developed as an approach to social media opinion mining and sentiment analysis that interrelates both computer and social sciences to better recognize and interpret opinions and sentiments over the social networks (Cambria et al., 2012).

Comparing to text information, the image related to a logo can be treated as a more reliable information during brand tracking in social media. In the case of images retrieved from microblogging sites, in addition to visual angle, marketers can analyze contextual information, which makes the problem different from the traditional logo detection/recognition task (Wang et al., 2016).

Logo or brand image recognition should be analyzed through brand post characteristics (e.g., vividness, interactivity), content of the brand post, tailored to the audience needs (e.g., information, entertainment), position of the brand post, and the valence of comments (sentiment analysis) on the brand post (De Vries et al., 2012).

### 3. Research methodology and hypotheses development

In line with the ambition of our future research, to an Artificial Intelligence based software, which will embed deep learning algorithms and convolutional neural networks to recognize logos of brands or companies involved in social media content, Yoo et al. (2018) proposed and implemented a system that analyze social media contents in real time to analyze and predict users' sentimental paths.

Machine Learning is perfectly adapted to unstructured data as social media posts, usually a mix of text, images, sounds, and video. The level of knowledge regarding the applicability of ML in SMM and the frequency of using of ML algorithms in SMM campaigns have been designed as dependent variables in the current research, while the experience in the field of SMM has been set as independent variable. Moreover, three clusters of analyses based on the future AI Media software (audience, image and sentiment) are considered target variables in the research conceptual model (Figure 1).

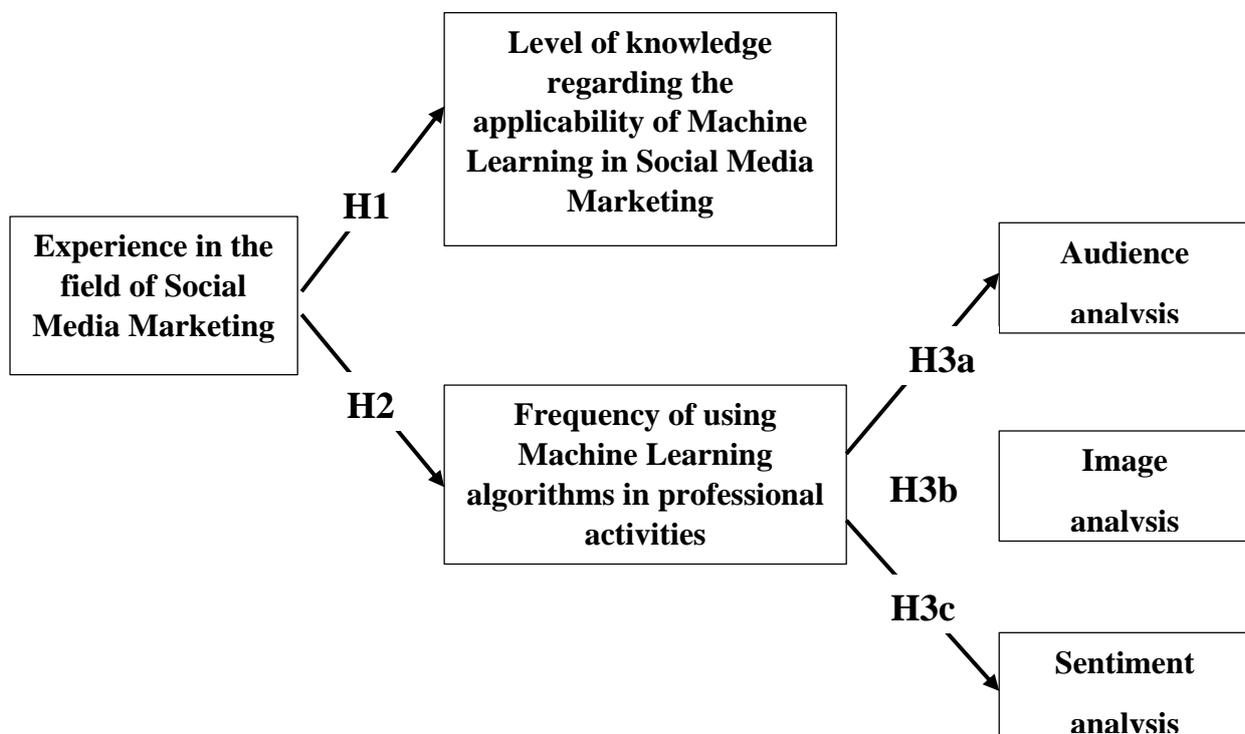


Figure 1 – Conceptual model of the research

We have designed and applied an online questionnaire on a convenience sample of 100 respondents (owners of digital agencies, social media marketers and freelancers from all

continents – Figure 2) in order to assess their perceptions regarding the ranking process of the forthcoming AI Media software capabilities on a pre-defined scale from 1 to 3: 1 (necessary) - 2 (great to have) - 3 (expected/by default).

The AI Media software capabilities have been distributed in three clusters, as follows:

- **Audience analysis** (capability to categorize social media posts by their stage in the customer buying cycle, capability to make recurrent decisions on which content to publish at what time in order to get the maximum reach, capability to provide instant customer recommendation of the right product to purchase and guide him/her to the store with the lowest price and capability to track affinities and interests in a social network and to generate a visual report grouping people with similar interests);
- **Image analysis** (deep learning algorithms trained capabilities to recognize images/detect objects for custom categories, capability recognition deep learning algorithms' capability to identify places and moments of product consumption, capability to correlate sales forecasting with the frequency a brand appears in social media photos and capability to correlate image recognition with contextual intelligence);
- **Sentiment analysis** (capability to classify each user-generated content based on variables such as tone, sentiment, or topic, while reviewing a product/service, capability to track social media sentiments related to competing brands in order to enable Competitive Intelligence mechanisms, capability to anticipate potential image crisis by assessing the sentiments related to social mentions and capability to track the reaction to new products launched on the market and promoted on social networks).

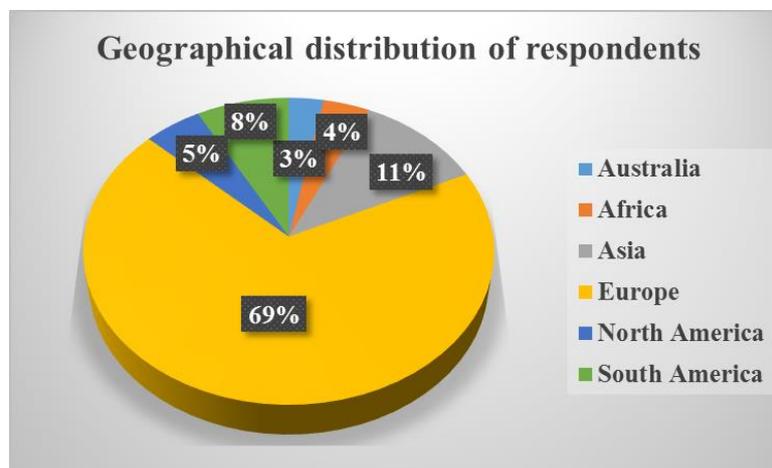


Figure 2 - Geographical distribution of respondents

Three hypotheses have been designed:

**H1: The experience in the field of SMM influences in a larger extent the level of knowledge regarding the applicability of ML in SMM**

**H2: The experience in the field of SMM influences in a larger extent the frequency of using of ML algorithms in SMM campaigns**

**H3: The frequency of using of ML algorithms in SMM campaigns positively relates with respondents' perceptions on future capabilities of the AI Media Software (at the level of audience analysis – H3a; image analysis – H3B and sentiment analysis – H3c).**

The statistical methods employed to test the hypotheses are chi-square, Pearson's R and Spearman coefficients of correlation. Chi-square test has been applied in the case of H1 and

H2 to test significant differences between the expected and observed frequencies of the datasets. The correlation coefficient Pearson's R is a useful descriptor of the degree of linear association between two variables, having two key properties of magnitude and direction. When it is near zero, there is no correlation, but as it approaches -1 or +1 there is a strong negative, respectively positive relationship between the variables. The sign of the Spearman correlation indicates the direction of association between the independent variable and the dependent variable. If the dependent variable tends to increase when the independent variable increases, the Spearman correlation coefficient is positive; otherwise, the Spearman correlation coefficient is negative. Pearson R and Spearman have been used in the H3a, H3b and H3c.

The process of performing analyses on the three key pillars included in the conceptual model (experience in the field of Social Media Marketing, level of knowledge regarding the applicability of Machine Learning in Social Media Marketing and frequency of using Machine Learning algorithms in professional activities) reveals that Cronbach's Alpha value is **0.834**, which indicates a high level of internal consistency for the scales (Table 1).

*Table 1 - Reliability Statistics*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
<b>,834</b>	,845	3

The correlation between a particular item and the sum of the rest of the items outlines that the best item included in the conceptual model appears to be the second (level of knowledge regarding the applicability of Machine Learning in Social Media Marketing), with an item-total correlation of  $r = .857$ . The item with the lowest item-total correlation is the first one (experience in the field of Social Media Marketing) ( $r = .551$ ). Analyzing "Cronbach's Alpha if item deleted" column, we observe that none of the values is greater than the current alpha of the whole scale: .834. This means that no item has to be removed from the conceptual model (Table 2).

*Table 2 - Item-Total Statistics*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Experience in the field of Social Media Marketing	5,21	5,440	,551	,309	,824
Level of knowledge regarding the applicability of Machine Learning in Social Media Marketing	4,68	2,947	,857	,764	,592
Frequency of using Machine Learning algorithms in professional activities	4,73	2,543	,829	,752	,647

#### 4. Findings

The experience in the field of Social Media Marketing has been related to the period of time respondents have been involved in SMM activities (less than 1 year, 1 to 3 years, more than 3 years), while the level of knowledge regarding the applicability of Machine Learning in SMM has been measured on a five item scale: needs considerable improvement, needs improvement, adequate, very good, excellent.

The distribution of research results corresponding to the first hypothesis involves the design of a contingency table with double entry, which allows the classification of the observed frequencies (Table 3).

*Table 3 – Contingency table related to H1*

		Level of knowledge regarding the applicability of Machine Learning in Social Media Marketing					Total
		needs considerable improvement	needs improvement	adequate	very good	excellent	
Experience in the field of Social Media Marketing	less than 1 year	8	8	1	0	0	17
	1 to 5 years	9	23	10	13	1	56
	more than 5 years	0	5	5	16	1	27
Total		17	36	16	29	2	100

The results corresponding to the test of the first hypothesis, based on respondents' answers, exported into a SPSS database, are revealed in Table 4.

*Table 4 - Chi-Square Tests (H1)*

	Value	Degrees of freedom	Asymptotic Significance (2-sided)
Pearson Chi-Square	33,085	8	0,000059
Likelihood Ratio	38,726	8	0,000006
Linear-by-Linear Association	29,957	1	,000
N of Valid Cases	100		

In this case, the value associated to the Asymptotic significance (0,000059) is under the level of significance (0,05) and the Pearson Chi-Square value (33,085) is superior to the Chi-Square value reflected by Chi Square Distribution Table for eight degrees of freedom (15,51), so we can state that there is a strong correlation between **the experience in the field of SMM and the level of knowledge regarding the applicability of ML in SMM (H1 supported)**.

The second hypothesis emphasizes the cross-tabulation between the experience in the field of Social Media Marketing and the frequency of using Machine Learning algorithms in professional activities, assessed by the respondents on the following scale (Never; Rarely; Sometimes; Often; Usually/Most of the time) – Table 5.

*Table 5 - Contingency table related to H2*

		Frequency of using Machine Learning algorithms in professional activities					Total
		never	rarely	sometimes	often	usually/most of the time	
Experience in the field of Social Media Marketing	less than 1 year	11	5	1	0	0	17
	1 to 5 years	14	19	7	12	4	56
	more than 5 years	1	4	5	16	1	27
Total		26	28	13	28	5	100

The results corresponding to the test of the second hypothesis, based on respondents' answers, exported into a SPSS database, are revealed in Table 6.

*Table 6 - Chi-Square Tests (H2)*

	Value	Degrees of freedom	Asymptotic Significance (2-sided)
<b>Pearson Chi-Square</b>	35,178	8	0,000025
<b>Likelihood Ratio</b>	38,988	8	0,000005
<b>Linear-by-Linear Association</b>	26,464	1	,000
<b>N of Valid Cases</b>	100		

In this case, the value associated to the Asymptotic significance (0, 000025) is also under the level of significance (0,05) and the Pearson Chi-Square value (35,178) is superior to the Chi-Square value reflected by Chi Square Distribution Table for eight degrees of freedom (15,51), so we can state that there is a strong correlation between **the experience in the field of SMM and the frequency of using Machine Learning algorithms in professional activities (H2 supported)**.

The cross-tabulation between the frequency of using Machine Learning algorithms in professional activities and respondents' perceptions on the capability of a future AI Media software to categorize social media posts by their stage in the customer buying cycle led to the design of the contingency table related to H3a (Table 7).

*Table 7 - Contingency table related to H3a*

		Perception on the capability of a future AI Media software to categorize social media posts by their stage in the customer buying cycle			Total
		necessary	great to have	expected/by default	
Frequency of using Machine Learning algorithms in professional activities	never	9	4	13	<b>26</b>
	rarely	10	6	12	<b>28</b>
	sometimes	4	4	5	<b>13</b>
	often	10	5	13	<b>28</b>
	usually/most of the time	2	1	2	<b>5</b>
Total		<b>35</b>	<b>20</b>	<b>45</b>	<b>100</b>

The results of the H3a hypothesis testing process are revealed by Pearson's R and Spearman correlation coefficients: their values (-0,025, respectively -0,027 – Table 8) are negative, but situated near zero, emphasizing the lack of correlation between the independent variable (the frequency of using Machine Learning algorithms in professional activities) and dependent variable (respondents' perceptions on the capability of a future AI Media software to categorize social media posts by their stage in the customer buying cycle) – Table 8.

*Table 8 - Symmetric Measures (H3a)*

		Value	Asymptotic Standard Error	Approximate T	Approximate Significance
Interval by Interval	<b>Pearson's R</b>	<b>-,025</b>	,101	-,245	,807
Ordinal by Ordinal	<b>Spearman Correlation</b>	<b>-,027</b>	,101	-,269	,789
N of Valid Cases		100			

Another cross-tabulation between the frequency of using Machine Learning algorithms in professional activities and respondents' perceptions on the capability of a future AI Media

software to recognize images/detect objects for custom categories led to the design of the contingency table related to H3b (Table 9).

*Table 9 - Contingency table related to H3b*

		Perception on the capability of a future AI Media software to recognize images/detect objects for custom categories			Total
		necessary	great to have	expected/by default	
Frequency of using Machine Learning algorithms in professional activities	never	12	5	9	26
	rarely	13	5	10	28
	sometimes	6	1	6	13
	often	7	10	11	28
	usually/most of the time	1	1	3	5
Total		39	22	39	100

The values of Pearson's R and Spearman correlation coefficients (0,151, respectively 0,146 – Table 10) are positive, but also situated near zero, outline the lack of correlation between the independent variable (the frequency of using Machine Learning algorithms in professional activities) and dependent variable (respondents' perceptions on the capability of a future AI Media software to recognize images/detect objects for custom categories) – Table 10.

*Table 10 - Symmetric Measures (H3b)*

		Value	Asymptotic Standard Error	Approximate T	Approximate Significance
Interval by Interval	<b>Pearson's R</b>	<b>,151</b>	,096	1,513	,134
Ordinal by Ordinal	<b>Spearman Correlation</b>	<b>,146</b>	,097	1,460	,147
N of Valid Cases		100			

The last cross-tabulation between the frequency of using Machine Learning algorithms in professional activities and respondents' perceptions on the capability of a future AI Media software to classify each user-generated content based on variables such as tone, sentiment, or topic, while reviewing a product/service led to the design of the contingency table related to H3c (Table 11).

*Table 11 - Contingency table related to H3c*

		Perception on the capability of a future AI Media software to classify each user-generated content based on variables such as tone, sentiment, or topic, while reviewing a product/service			Total
		necessary	great to have	expected/by default	
Frequency of using Machine Learning algorithms in professional activities	never	8	7	11	26
	rarely	11	7	10	28
	sometimes	6	2	5	13
	often	14	5	9	28
	usually/most of the time	1	1	3	5
Total		40	22	38	100

The values of Pearson's R and Spearman correlation coefficients (-0,061, respectively -0,070) are negative, but also situated near zero, outline the lack of correlation between the independent variable (the frequency of using Machine Learning algorithms in professional activities) and dependent variable (respondents' perceptions on the capability of a future AI Media software to classify each user-generated content based on variables such as tone, sentiment, or topic, while reviewing a product/service) – Table 12.

*Table 12 - Symmetric Measures (H3c)*

		Value	Asymptotic Standard Error <sup>a</sup>	Approximate T <sup>b</sup>	Approximate Significance
Interval by Interval	<b>Pearson's R</b>	<b>-,061</b>	,100	-,603	,548 <sup>c</sup>
Ordinal by Ordinal	<b>Spearman Correlation</b>	<b>-,070</b>	,100	-,697	,487 <sup>c</sup>
N of Valid Cases		100			
a. Not assuming the null hypothesis.					
b. Using the asymptotic standard error assuming the null hypothesis.					
c. Based on normal approximation.					

The H3a, H3b and H3c hypotheses have been rejected, outlining different opinions on the ML applicability at the level of audience, image and sentiment analyses.

## 5. Conclusions, implications, limitation and further research

As social media has been widely adopted by customers, it became imperative for Social Media Marketing experts to leverage AI tools tailored to social media platforms to boost competitiveness in the global economy. Machine learning relies on trained algorithms for audience, image and sentiment analyses, so Social Media Marketing experts are able to capture opportunities to analyze and categorize posts and conduct thorough analyses of consumer opinions on products and services they are promoting on social networks.

This article presented the results of an exploratory research on Social Media Marketing experts (digital agencies' owners, marketers and freelancers) that assessed some of the forthcoming AI Media software capabilities, based on social media analytics reflecting audience, image and sentiment analyses. The goal of this paper was not to analyze the ranking of the future AI Media software capabilities, as they were perceived by the target public, but to test correlations between the experience in the field of SMM and the level of knowledge regarding the applicability of ML in SMM, on the one hand, and the frequency of using of ML algorithms in SMM campaigns, on the other hand.

Since engagement of Social Media Marketing experts in learning how to adopt AI technologies is a key benefit for their companies or projects they are working for, decision-makers should encourage investments in technologies such the future AI Media software, in a way that leads not only to more short-term tangible benefits in terms of profits, but on long term, on behalf a better understanding of online customer experiences.

This study is just a preliminary attempt to understand how potential users of the AI media software, an outcome of the FutureWeb research project, expect to benefit from its capabilities. Given the quantitative nature of the present study and the fact that the distribution of respondents in countries from worldwide is random, findings should be considered as exploratory.

As further research, we intend to integrate the ranking results of the future AI Media software capabilities in a paper considered for the 4th International Conference on Marketing, Business and Trade (ICMBT 2019), which will be held in Tokyo, Japan, in January 2019. We have also in mind the opportunity to test causal recipes for audience, image and sentiment analysis in a

research paper, tailored to a Journal of Business Research special issue: Artificial Intelligence and the Shaping of Business Contexts.

### Acknowledgement

This work was supported by a grant of the Romanian Ministry of Research and Innovation, CCCDI – UEFISCDI, project number PN-III-P1-1.2-PCCDI-2017-0800 / 86PCCDI/2018 - FutureWeb, within PNCDI III.

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## **Brand Extension Acceptability in Food and Beverage Product Categories**

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### **Abstract**

Brand extension is a powerful marketing strategy that allows firms to offer new product categories, taking advantage from the original brand name and its positive associations (Evangeline and Ragel, 2016). It helps firms to launch new products without the risks connected to the introduction of a new brand in the market. Firms have repeatedly adopted this marketing strategy, not always with success (De Chernatony *et al.*, 2003). Moreover, a bad brand extension performance might have negative consequences on the original brand/product, both in terms of brand reputation and market positioning. Indeed, consumers perceived fit, namely the perceived similarity between the core brand product and its extension, has a crucial impact on brand extension acceptability by the market (Aaker and Keller, 1990; Bottomley and Doyle, 1996). Because of the important role of consumers' judgment, the identification of constructs that might support a good similarity perception can help firms to choose appropriate brand extension strategies. This paper presents an exploratory study focused on three products hypothetically introduced on the market by Coca Cola with the same core brand, in order to investigate the role trust might have to foster consumer perceived brand extension acceptability. The experimental set is based on an energy drink, that can be considered as part of the same product category, chips and a chocolate bar, belonging to food category. For each product, consumers acceptability depends on product category fit and brand level fit, both these last two constructs depending in turn on brand trust (Martini *et al.*, 2016; Tedeschi *et al.*, 2017). The results show that cognitive brand trust can sustain a high product category perceived fit, whereas affective brand trust supports high brand level fit.

**Keywords:** Brand trust, Brand extension, Food and beverage, Structural equation models.

**JEL classification:** M31.

### **1. Introduction**

Brand extension is a popular and frequently adopted marketing strategy that uses an established brand name to launch a new product (Aaker, 1990; Aaker and Keller, 1990). Extending brands both within and beyond the original product category is considered to be successful, since the new product can take advantage from the image and reputation of the parent brand. Nonetheless, the risk of failure is high: about 80% of brand extensions in many fast-moving consumer good product categories come to a bad end (Ernst & Young and ACNielsen, 1999), which may lead the parent brand to a loss of reputation. For this reason, several researches have focused on consumers' acceptance of brand extensions and brand extensions' success drivers (see, e.g., Aaker and Keller, 1990; Sunde and Brodie, 1992; Bottomley and Doyle, 1996). Most of the research is based on the assumption that consumer perceived fit plays an important role in the brand extension acceptability (Boush et al., 1987; Aaker and Keller, 1990; Boush and Loken, 1991; Bottomley and Doyle, 1996); brand loyalty has also been incorporated as an

important driver of brand extension success (Bloemer and Kasper, 1995; Hem and Iversen, 2009).

The role of brand trust has been investigated for several years only in a partial and indirect way (McWilliam, 1993; Smith and Andrews, 1995; Hem *et al.*, 2000). In more recent years the relationship between brand trust and brand extension acceptance has been examined (Reast, 2005; Anwar *et al.*, 2011; Das *et al.*, 2014), but rarely assuming a multidimensional structure of brand trust.

In this paper, we focus on the role of brand trust, defined as a multidimensional construct, in the relationship between brand extension acceptability and its drivers, namely perceived fit and brand loyalty. First, we validate a multidimensional measurement scale for brand trust, and we test a sequential order among its sub-dimensions; then, we assess the direct and mediated influence of brand trust sub-dimensions on brand extension acceptability. Three different types of brand extensions for a popular parent brand are hypothesized, with different levels of acceptability and perceived fit, and the models concerning each of them compared.

## 2. Theoretical framework

There is a wide literature on brand extension success factors, that Reast (2005) suggests to group into three typologies: brand extension characteristics, parent brand characteristics, and consumer characteristics.

Brand extension characteristics are centered on the extent to which the brand extension fits the parent brand. The meaning of this fit can be similarity, consonance, consistency, replaceability, but also complementarity (Aaker, 1990; Aaker and Keller, 1990, Boush and Loken, 1991).

Parent brand characteristics measure the quality of the relationship between the consumer and the brand: the loyalty (Bloemer and Kasper, 1995; Hem and Iversen, 2009), the level of affect (Boush and Loken, 1991; Yeung and Wyer, 2005; Anwar *et al.*, 2011), the perceived credibility (Keller and Aaker, 1992), but also the appearance of the brand: its quality (Smith and Park, 1992), prestige (Park *et al.*, 1991), experience (Swaminathan *et al.*, 2001), conviction (Kirmani *et al.*, 1999), image (Vazifedost *et al.*, 2009), associations (Park *et al.*, 1991; Rangaswamy *et al.*, 1993).

In the following, we will consider the effect on brand extension acceptability of the perceived fit and the quality of the loyalty relationship between consumer and brand, while we will omit consumer's characteristics. These, in fact, are mainly focused on the consumer's knowledge, expertise and involvement with the product category of the extension (Murphy and Medin, 1985; Broniarczyk and Alba, 1994; Klink and Smith, 2001), and are not completely relevant for our experimental extensions.

Brand trust has been only marginally considered in researches on brand extension success, as related to "brand credibility" (Keller and Aaker, 1992), as a driver of loyalty (Berry, 1993; Reicheld and Scheffer, 2000), as a component of brand equity (Dyson *et al.*, 1996). Recent studies have examined the relationship between brand trust and brand extension acceptance, but, in spite of a general agreement on the relevance of the brand trust construct in consumer behavior, there are still different approaches to its measurement, both unidimensional and multidimensional. Laforet (2008) includes a unidimensional measure of trust in studying retail brand extension; Wu and Yen (2007) and Anwar *et al.* (2011) also employ a unidimensional measure of brand trust, while Das *et al.* (2014) point out the problem of integrating a multidimensional trust measurement into brand extension studies, but only analyze the affective component. Reast (2005) proposes a two-dimensional trust construct ("credibility" and "performance satisfaction"), and finds associations of both dimensions with brand extension acceptability.

The predominant conceptualizations of trust across literature suggest that trust is multidimensional, made of cognitive and affective components (Geyskens *et al.*, 1998; McAllister, 1995; Williams, 2001). The dimensions involved in brand trust are not always simultaneously present and they do not have always the same intensity (Li *et al.*, 2008). Moreover, we can hypothesize that the involved dimensions be causally related to each other: arguably, cognitive dimensions, likely at the beginning of the brand relationship, are progressively replaced by those more emotionally rooted (Gronroos, 1994, 2000; Gummesson, 1994, 1998; Harris and Goode, 2004; Oliver, 1997, 1999). Competence should precede, and partially shape, the consumer perception of a sincere respect of his/her interest and wellness (Delgado-Ballester *et al.*, 2003).

According to the literature, in this research we assume brand trust as a multi-dimensional construct based on four factors: competence, honesty, empathy and benevolence.

Competence is an indicator of experience, professional quality and ability to respond to buyer needs. Honesty describes brand sincerity (Morgan and Hunt, 1994, Geyskens *et al.*, 1996, Kumar *et al.*, 1995), while empathy (Sheppard and Sherman, 1998) represents the brand ability to systematically interact and communicate with its buyers. Benevolence is the sincere willingness of brand to help its buyers.

However, unlike previous studies pointing out a direct relationship between brand trust and brand extension acceptability (see, e.g., Das *et al.*, 2014; Reast, 2005; Wu and Yen, 2007), we expect the effect of trust to be mediated by loyalty and perceived fit.

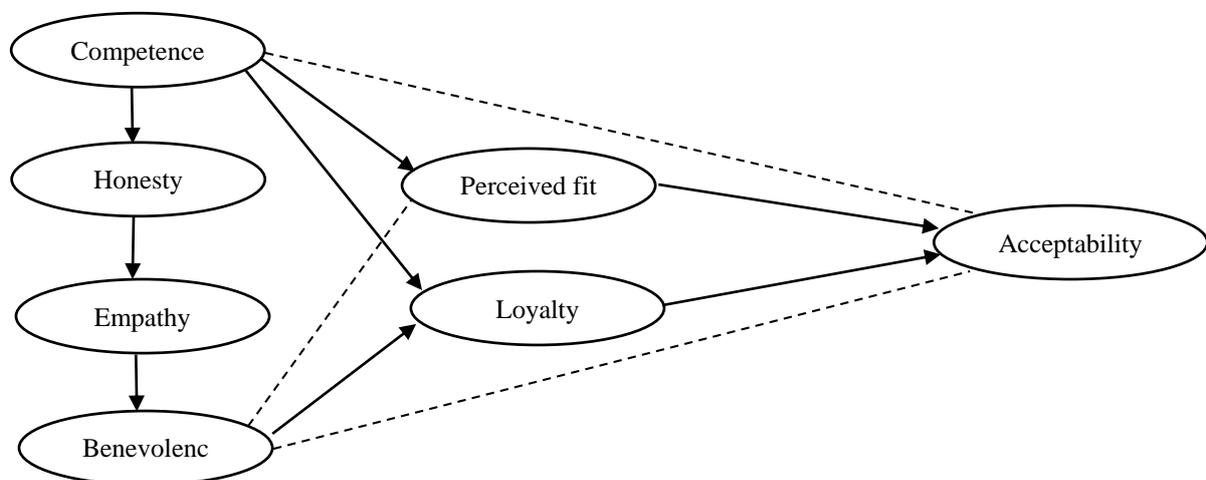
Our hypotheses are:

*H1: Brand trust influences brand extension acceptability through perceived fit and brand loyalty.*

*H2: The roles of affective and cognitive dimensions of brand trust support brand loyalty and perceived fit with different intensities.*

*H3: The role of affective trust changes according to the level of perceived fit*

The hypothesized structural model is shown in Figure 1: brand extension acceptability is determined by brand extension perceived fit and brand loyalty. Brand trust affects brand extension acceptability through perceived fit and loyalty, but we also test for direct effects. We hypothesize a multi-dimensional sequential structure of brand trust, where the most functional dimension, competence, influences honesty that, in turn, impacts on empathy, which enforces the most affective component, benevolence. For simplicity, and in order to focus on the effects of the most divergent sub-dimensions, we only assess the influence of competence and benevolence on perceived fit, brand loyalty and acceptability.



*Figure 1. The structural model*

### 3. Method

In order to study the relationship among trust, loyalty, perceived fit and acceptability under a set of different conditions implied by the characteristics of the specific extension, we imagined to introduce three different products under the popular brand Coca-Cola: a chocolate bar, an energy drink and some chips. The three extensions are quite far from the parent brand, especially compared to the brand extensions launched by Coca-Cola in the past: with the (partial) exception of the energy drink, they are not even in the same product class as the parent brand. This choice derives from the need to challenge respondents, since a core brand like Coca-Cola, with a high level of perceived quality, might not be expected to encounter problems in consumer acceptance due to a lack of similarity when less extreme extensions are proposed (Keller and Aaker, 1992)

The three extensions were randomly assigned to respondents.

The indicators that we surveyed to represent the involved constructs are presented in Sect. 3.1, while the survey sample is described in Sect. 3.2. Sect. 3.3 introduces the statistical analyses performed in the following.

#### 3.1. Construct measurement

##### *Brand trust*

On the basis of previous analyses (Martini *et al.*, 2016; Tedeschi *et al.*, 2017) we hypothesize the existence of four sub-dimensions of trust: competence, honesty, empathy and benevolence.

##### *Brand trust – Competence:*

We used the following 3 items to measure competence: “Coca-Cola is competent”, “Coca-Cola is experienced”, “Coca-Cola is qualified”. Cronbach’s Alpha is 0.856, item-to-total correlations vary between 0.701 and 0.756.

##### *Brand trust – Honesty:*

The 3 items to measure honesty are: “Coca-Cola is sincere”, “Coca-Cola is fair”, “Coca-Cola is honest”. Cronbach’s Alpha is 0.893, item-to-total correlations vary between 0.776 and 0.798.

##### *Brand trust – Empathy:*

Empathy is measured by “Coca-Cola understands me”, “Coca-Cola is interested in me”, “Coca-Cola would help solve problems”. Cronbach’s Alpha is 0.772, item-to-total correlations vary between 0.544 and 0.653.

##### *Brand trust – Benevolence:*

The items to measure benevolence are the following 4: “Coca-Cola is willing to run into difficulty for me”, “Coca-Cola helps me in tough choices”, “Coca-Cola does all it can for me”, “Coca-Cola takes care of me”. Cronbach’s Alpha is 0.872, item-to-total correlations vary between 0.671 and 0.789.

##### *Attitudinal loyalty*

Attitudinal loyalty is measured through 3 items: “I often speak well of Coca-Cola”, “I would go to another shop if Coca-Cola be unavailable”, “I’m willing to pay more in order to buy Coca-Cola”. Cronbach’s Alpha is 0.798, item-to-total correlations vary between 0.621 and 0.678.

##### *Extension acceptability*

Acceptability is measured by the 3 items “I feel this Coca-Cola extension would fulfill my expectations”, “I’d like to find in the market this Coca-Cola extension”, “I’d buy this Coca-Cola extension if available”. Cronbach’s Alpha is 0.789, item-to-total correlations range from 0.536 to 0.684.

##### *Perceived fit*

Perceived fit is measured by 5 items: “I feel this Coca-Cola extension would fit with the other brand products”, “I feel this Coca-Cola extension would fit with the consumers’ way of life”, “I feel this Coca-Cola extension would have the same quality as the other brand products”, “I feel this Coca-Cola extension would taste good as the other brand products”, “I feel the brand image could be reflected on this Coca-Cola extension”. Cronbach’s Alpha is 0.792, item-to-total correlations range from 0.541 to 0.628.

All the items are measured on 7-point self-anchored quantitative scales.

### **3.2. Survey and sample**

The survey was carried out in Italy in September and October 2016 through an online questionnaire administered via the SurveyMonkey survey tool. The questionnaire included the socio-demographic profile of the respondents, some questions about their consumption of Coca-Cola, and the items to measure brand trust and brand loyalty, as described above. The respondents were randomly assigned one of the three extensions, and answered the items on acceptability and perceived fit with reference to the assigned extension. 186 respondents answered questions on the chocolate bar, 152 on the energy drink, and 153 on the chips.

The sample size amounts to 491 respondents; the average age is 26.

The acceptability averages score 3.01 (on the 7-point scale) for the chocolate bar, 3.21 for the energy drink, and 3.79 for the chips.

The average fit scores are 3.71 for the chocolate bar, 4.21 for the energy drink, and 4.41 for the chips.

### **3.3. Statistical analyses**

Preparatory, descriptive analyses and exploratory factor analysis are carried out with SPSS. The measurement model and the structural model are validated through structural equation modeling (SEM, see Jöreskog and Sorbom, 1979). Parameter estimates are obtained with Lisrel 8.7 (Jöreskog and Sörbom, 2004); since the items are measured on a 1-7 quantitative scale with a non-normal distribution, we applied robust maximum likelihood (Browne, 1987), with an adjusted Chi-squared test (Jöreskog *et al.*, 2001; Satorra and Bentler, 1988). In order to calculate a large set of fit indices, we removed partial nonresponses from the dataset, reducing the sample size to 487.

## **4. Results**

### **4.1. Measurement model of trust**

The 4-dimension hypothesized measurement model for brand trust is shown in Figure 2. The RMSEA index is 0.047, showing an adequate fit; all the other indices are also adequate (SRMR = 0.040; GFI = 0.95, CFI = 0.99, NFI = 0.99) [An RMSEA below 0.06 and SRMR below 0.08, as well as an NFI and CFI above 0.95, indicate a good fit (Hu and Bentler, 1999); for the GFI, values of 0.90 or greater are recommended (Hooper *et al.*, 2008)]. We found that the four dimensions were significantly intercorrelated. We assessed the discriminant validity by testing whether the 95% confidence interval did not include the value 1 and by comparing the nested models with and without restrictions on single correlations (Anderson and Gerbing, 1988). Both procedures confirmed discriminant validity.

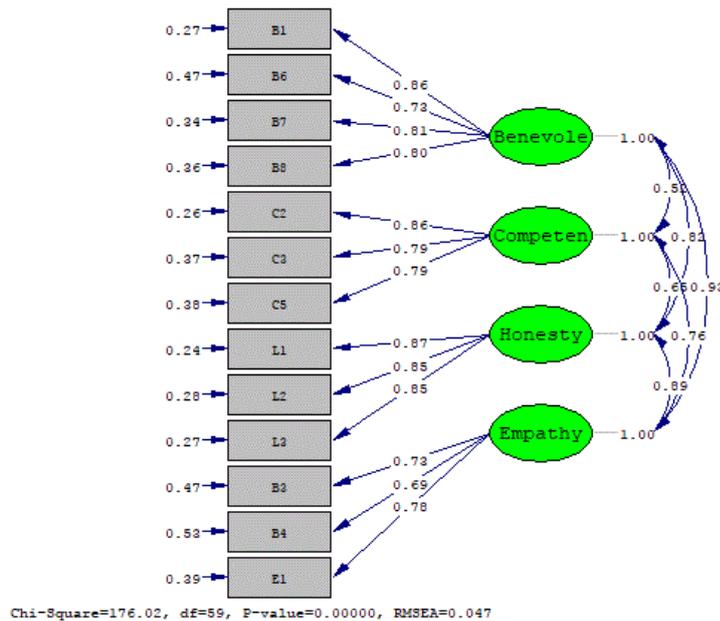


Figure 2. Measurement model for the four dimensions of brand trust

The second-order model also show an adequate fit, confirming the existence of an underlying common trait, namely brand trust [The RMSEA was 0.058, SRMR = 0.048, GFI = 0.93, CFI = 0.99, NFI = 0.99].

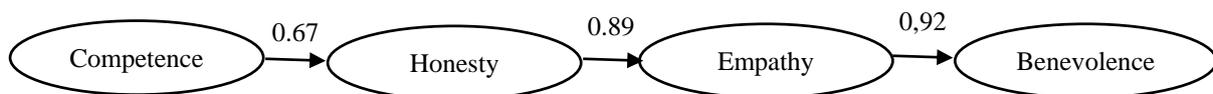


Figure 3. Sequential pattern among the sub-dimensions of trust

Finally, we validated the sequential order of the sub-dimensions, with competence influencing honesty that, in turn, supports empathy, which enforces benevolence (Figure 3); again, this model showed an adequate fit [The RMSEA was 0.059, SRMR = 0.050, GFI = 0.93, CFI = 0.99, NFI = 0.99].

#### 4.2. Structural model

The structural model depicted in Figure 1 was estimated for the whole sample and, separately, for the three sub-samples answering questions on the three different brand extensions. Parameter estimates for the four models are provided in Table 1.

The effect of brand loyalty and perceived fit on brand extension acceptability is confirmed for the four models, as far as the role of brand trust, that affects brand extension acceptability solely through loyalty and perceived fit; direct effects were not significant in all the models.

Affective brand trust (the “benevolence” component) exclusively sustains brand loyalty: in all of the four models, the influence on the perceived fit is not significant.

Conversely, cognitive brand trust (the “competence component”) mainly sustains perceived fit: the effect on loyalty is not significant for the chocolate bar model, and definitely weaker than the effect on perceived fit for the energy drink; only in the chips model cognitive brand trust is able to affect perceived fit and loyalty alike. Since chips are the extension with the highest perceived fit, while the chocolate bar has the lowest, this seems to indicate that the importance of cognitive trust in affecting loyalty grows when the perceived fit is higher. This is consistent with the idea of a rational trust that can generate loyalty only if its functional adequacy can be induced by the similarity to the past experiences.

**Table 1. Parameters of the structural model for each extension and in total.**

<i>Relationship</i>	<i>Chocolate bar</i>	<i>Energy drink</i>	<i>Chips</i>	<i>General model</i>
Competence→Honesty	0.68	0.66	0.67	0.67
Honesty→Empathy	0.87	0.92	0.90	0.89
Empathy→Benevolence	0.89	0.93	0.96	0.93
Competence→Fit	0.25	0.52	0.31	0.35
Competence→Loyalty	n.s.	0.25	0.31	0.18
Competence→Acceptability	n.s.	n.s.	n.s.	n.s.
Benevolence→Fit	n.s.	n.s.	n.s.	n.s.
Benevolence→Loyalty	0.53	0.52	0.49	0.54
Benevolence→Acceptability	n.s.	n.s.	n.s.	n.s.
Fit→Acceptability	0.74	0.56	0.79	0.72
Loyalty→Acceptability	0.23	0.38	0.29	0.29
<i>RMSEA</i>	<i>0.046</i>	<i>0.049</i>	<i>0.049</i>	<i>0.046</i>

Affective trust, on the other side, has a stronger effect on brand loyalty when perceived fit is low: if the brand is entering a brand-new adventure, competence is not guaranteed, and only benevolence can sustain loyalty.

### 5. Limits, further research and implications

This research was carried out on a limited number of respondents; the sample size in itself is not particularly small, but only few more than 150 questionnaires were collected on each of the brand extensions. Therefore, the study should be extended to a larger sample. Moreover, the participation in the survey was proposed on a voluntary basis, with a risk of self-selection for categories of respondents interested in the theme, or in the Coca-Cola brand. A further weakness of the sampling design is the use of a web survey, that could induce a self-selection of people accustomed to use the computer, i.e. younger and more educated than average. A further study carried out on a larger, less biased and more representative sample of respondents could help overcome the weaknesses of the present study.

A second possible limit is the choice of the three brand extensions; as already stressed, in order to avoid automatic acceptance due to the prominence and the perceived quality of the brand, we chose three product categories quite far from the parent brand; in a future research the alternative brand extensions could be more differentiated, ranging from a similar product, to a totally different one.

Moreover, in this paper we compare the models applied to the three extensions sub-groups by simply describing their differences, while testing for the model invariance across groups would have been more appropriate.

Even with the described limits, some implications are relevant. A unidimensional scale for trust would have hidden the differences in how affective and cognitive trust intervene in the relationship between perceived fit and loyalty, and acceptability. Equally relevant, brand trust does not directly affect brand extension acceptability, but it intervenes in the relationship by influencing perceived fit and loyalty. Cognitive trust is a good driver for loyalty when perceived fit is high, but with low levels of fit only affective trust can generate loyalty.

Given the sequential structure of the four trust dimensions, a firm willing to launch a new brand extension needs to confirm his competence, experience and ability to match customers' expectations, but this is not enough to support strong relationship when the new product is perceived as weakly consistent with the parent brand; if what is asked to the consumer is a leap in the dark, only affective trust can help.

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## **Collective Brands and Intention to Buy: A Preliminary Study on Wine Consumption**

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### **Abstract**

Agri-food collective brands are the outcome of long institutional and normative certification paths and aim to guarantee the preservation of tradition and to assert the unicity of products, depending on the area where they are produced or on the origin of their components. Because of their nature, they can be considered as institutional guarantee of goods' quality standard or of country/region of origin and, more important, they can be considered as instruments to reinforce and better communicate local and traditional products. Because of their potential ability to enhance product uniqueness perception, collective brands could be a powerful tool to preserve and reinforce firm market positioning: indeed, strong positive associations between products and places can highly support marketing success. This paper aims to test how awareness about collective brands impact on consumer intention to buy. More specifically, an empirical study has been carried out on 198 Italian wine consumers, that has been asked to describe their knowledge about wine, their wine consumption patterns, their attitude towards wine consumption, their commitment with the product and their intention to buy collective branded or generic branded wine. Respondents have also been distinguished on the basis of weak, medium or strong associations they were able to elicit about collective brands. Preliminary results show collective brands are preferred in social consumption contexts, as they probably guarantee good product performance and therefore social approval. Moreover, buying intention of consumers with strong associations are mainly driven by emotional judgment, whereas cognitive judgment prevail when consumers show weak collective brands associations.

**Keywords:** Collective brands, Purchase Intention, Involvement, Product Knowledge, Attitude toward wine drinkers

**JEL classification:** M31.

### **1. Introduction**

In agri-food industry PDO and PGI are collective brands that can help consumers to judge and choose among different products, making, in specific choice contexts, individual brand a less relevant attribute in buying decision making. Indeed, these brands can support consumers to recognize country or region of origin of goods and also play an informative role about quality standard and product performances. Fishman (2018) asserts that collective brands may have a positive impact on firms' strategic orientation: their membership to PDO (Protected by Designation of Origin) or PGI (Protected by Geographical Indication) consortia often motivates their intentions to contribute to high quality standards in order to protect and reinforce the reputation of the collective brand they are part of. Because of the frequently high commitment of producers with collective brands communication, these brands may become one of the first drivers in consumers' choice of experience goods. Indeed, consumers are often able to recall,

even if in an inaccurate way, description of collective brands but they aren't able, at least in part, to distinguish among the different individual brands sharing the same collective one. Parmesan cheese is, for example, produced by many small-medium producers that consumers hardly know and recognize; the same can happen with other products as ham, cheese and wine. With reference to wine, specifically, its nature of experience good make it difficult to correct identify its real value before consumption and signals and symbols from environment do have a crucial role in driving consumers choice. In these contexts, collective brands should have an important role to direct or re-direct buying intentions. In order to better understand their role, intention to buy generic branded and collective branded wines have been measured and compared, as final output of a model where involvement with the product class, product category knowledge, attitude toward wine drinkers and consumption model impact on buying intention in a direct or mediated way. These variables have been chosen as determinants of intention to buy because of the nature of wine. It is an experience good: its value cannot be completely appreciated before consumption and therefore may only be estimated throughout personal knowledge about the product class, acquired through previous experience, interpersonal and planned communication, involvement with the product category and attitude towards product consumption. Consumption models have been considered as mediators that can modify intention to buy generic and/or collective branded wines. Finally, to test the impact of PDO (Protected by Designation of Origin) or PGI (Protected by Geographical Indication) awareness on buying intention, respondents have been split into three groups, depending on their ability to correctly identify features that distinguish different collective brand labels (Aaker, 1991; Keller, 1993). If strong awareness of collective brand labels direct people to prefer them, collective brands should be considered a crucial driver in consumer choice.

## 2. Theoretical framework

As with the Country of Origin Effect (Amine et al. 2005), collective brands can be considered extrinsic cues that help, together with intrinsic ones, consumers to evaluate and choose among different products belonging to the same category. Even if the role of collective brands in consumers buying behavior has not still deeply studied, they can play a role similar to COE (Brodie, Benson Rea, 2016), which has been considered as a surrogate of product quality ... and other characteristics that cannot be evaluated directly" (Manray et. Al, 1998). If so, the preference to buy PDO (Protected by Designation of Origin) or PGI (Protected by Geographical Indication) labelled product instead of generic/ only individual labelled ones might be due to high quality standards and performances the collective brands can guarantee in consumers perception. Following main results from COE literature (Aboulnasr, 2007; Magnusson et al., 2011) and in order to better understand when and how collective brands can be considered a driver in consumer judgement and choice, the present research aims to test a model including major variables able to influence intention to buy generic or collective branded wine, under different strength of associations people show about collective brands. Previous researches on CO effect state that country of origin is context dependent and used to evaluate product when people don't deeply know features and attributes of the product category or when they have only limited product information. Moreover, the numerous contributes about COE assert its effect depends on a multitude of factors of both social and individual nature; among these studies Aboulnasr (2007) confirms the decreasing importance of CO effect on product evaluation when product class involvement increases, because of the natural attitude of involved consumers to refine search on product attributes and features. Because of these research findings, intention to buy generic labelled or collective brand labelled wine has been considered as depending on product knowledge and attitude towards wine drinkers, which, in turn, are conditioned by permanent product involvement. Moreover, in the model, product

knowledge and attitude towards drinkers are mediated by usage situations. As stated by, and especially in food and beverages experience, usage situation has a crucial role in determining which product attributes and features people retrieve from memory and use to evaluate choice alternatives and to decide their appropriateness. Attitude towards drinkers has been represented in the model because of attitude and beliefs relevance claimed by several authors in food choice. As asserted by Koster (2003) food choice depends on a multitude of variables; he identified extrinsic and intrinsic product characteristics, psychological factors, situational and socio-cultural factors among which he identified changing beliefs, norms habits and attitudes. Indeed, in order to represent the main dimensions that impact on of food and beverage intention to buy and to test collective brands effect on the track of last COE research findings, key variables cited by Koster (2003) in food choice have been retained – and represented in the model.

Product knowledge may be both objective or subjective: in the first case, it is measured referring to the ability of respondents to clear distinguish among different product attributes, features and brands and in the second case, only to the individual perception of his/her product knowledge. According to Brucks (1985), experiential knowledge, a third type of product knowledge based on previous experience, has only marginal impact on consumer buying behavior. Researches on relationship between subjective and objective knowledge and how they impact consumer decisions have not yet achieved conclusive results. Nevertheless, Park et al. (1994) results show as subjective knowledge is only partially determined by product information stored in memory and several authors outlined a negative correlation between subjective knowledge and amount of information acquired in consumers buying decisions. Anyway, since people perceptions mainly guide decision making process, subjective knowledge may be considered as the most relevant construct in this research context and it has been measured recurring to 3 four items Likert scale.

Product involvement has been defined as ‘an internal state variable that indicates the amount of arousal, interest or drive evoked by a product class’ (Dholakia 2000) and a measurement scale was first tested by Zaichkowsky (1985) who, in her article, suggested that high involvement with a product leads to a better ability of consumers to perceive differences among features and attributes of different brands of the product category. She developed a bipolar adjective scale (PII) based on twenty items. This scale has been adjusted and reduced over time by other research contributions (Couter et al, 2003; Micu et al. 2009) and an option has been retained, maintaining only items referring to image and auto-image traits of product class involvement. Product class involvement is therefore considered as construct that impacts on product knowledge which, in turn, shapes the adoption of specific wine consumption models. In food and beverage context, use situations can deeply shape consumers’ product perception and enjoyment and, because of the high impact of context on consumption experience, consumers choice of food and beverage products is considered highly use-situation dependent. Several literature contributions, even if with different research objectives, assert the key role usage situations have in product consumer choice, preferences and, thereby, intention to buy. Indeed, products belonging to different categories may be considered more or less appropriate for a specific use (Piqueras-Fiszman, Jaeger 2014; GIACALONE, Jaeger, 2016). Extending the reasoning, different attributes and features of products belonging to the same category may better suit some usage situations than others and therefore consumer choice can highly be conditioned by perceived fit of specific product traits to specific consumption situations. So, an alternative, among competing ones, is chosen also, and sometimes exclusively, because it’s well fitting with the consumption circumstances. For the purposes of this paper, the identification of different usage situations is amply partial, in particular if compared to analytic results obtained with in depth researches on this subject. In order to depict the potential impact

of collective brands on buying intentions, it's particularly relevant to distinguish between two opposite consumption experience, the 'individual' one, where people drink wine in their ordinary life, and the 'social' one, where people drink wine in 'special, public or celebration' contexts, as parties, events and, in any case, together with relatives, friends or colleagues. This distinction can help to profile situations where different products attributes and traits are evoked and evaluated in order to make a choice or elicit intention to buy. Specifically, in the individual situation a more 'technical/functional' evaluation of the alternatives should emerge, whereas in public context people should be guided both by functional and emotional dimensions. For example, wine type and brand chosen for a social happening could lead to approval or disapproval by other dining companions or event participants. So, situation usage can lead to elicit buying intention towards generic or, in contrast, collective branded wine, on the basis of a different appropriateness of use consumers perceive.

Familiarity with the product has been proved to support consumers in their product-usage matching process and it has been conceived as composed by three different constructs: objective product knowledge, subjective knowledge and experience. On the basis of evaluations based on knowledge and previous experience people should be able to better evaluate appropriateness of use (Piqueras-Fizman, Jaeger 2014; GIACALONE, Jaeger, 2016). Wine consumption, both in individual and social contexts, often creates and consolidates in people minds strong beliefs about drinkers: they might be represented as attractive or boring or smart and so on. The individual image consumers have about wine consumption can therefore forge their willingness to experience this good both in an individual or social context. Together with subjective knowledge, which has a more rational/cognitive nature, attitude towards drinkers, with its more affective connotation, is the second constructs that might influence consumption model adoption.

### 3. Methodology, data analysis and results

The questionnaire contained constructs measures derived from literature and partially adapted to the research questions of this paper and hypothesized to be antecedents and, therefore, possible causes of intention to by generic branded and/or collective branded wines. In particular, involvement with the product category was measured through 4 items, attitude towards wine consumption 4 items, knowledge of product category 4 items, individual and social consumption models through 5 items each, generic labelled wine intention to buy 3 items and collective branded wine intention 5 items (tab.2) Questionnaires also included other measures individual involvement with product category not further used for this investigation and, in the last section, demographics. Questionnaires were submitted online to 198 people in January and February 2018 and respondents met first items corresponding to consumption model, involvement, attitude, knowledge and then they had to declare their agreement with statements referring to main features of PDO and PGI wines. All collected questionnaires were divided into 3 groups representing increasing awareness about PDO and PGI labels.

The collected data were analysed using descriptive statistics, exploratory factor analysis and regression. Descriptive statistics helped to distinguish different levels of perceived risk and complexity and purchase intention in the three sets submitted to respondents (low awareness; medium awareness; high awareness) (table 1).

*Table 1. Involvement, Knowledge, Attitude, individual and social consumption means at low, medium and high awareness*

Measures	LOW Awareness	Medium Awareness	High Awareness	F (sig)
INV (Involvement)	2,43	2,62	3,12	3,96 (0,021)
ATT (Attitude)	2,25	2,95	3,51	12,42 (0,00)

KNOW (Knowledge)	3,86	4,33	4,82	13,12 (0,00)
IN_MOD (Individual consumption model)	3,38	4,21	4,94	9,69 (0,00)
SOC_MOD (Social consumption model)	4,70	4,83	5,70	26,71 (0,00)
GEN_INT (Intention to buy generic-labelled wine)	3,04	3,31	4,38	10,77 (0,00)
COLL_INT (Intention to buy collective-labelled wine)	2,71	3,50	4,60	6,56 (0,002)

The three sets show significantly different levels of involvement, attitude, intention to buy generic- and collective-branded wine and different individual and social consumption models. In particular high-aware people show also the highest involvement, knowledge and intention to buy both generic and collective-branded wine. Moreover, they are frequent wine consumer both in individual and social context.

Structural equation model was then employed to estimate the relationships among model constructs, according to the main advantage SEM has in estimating and testing causal relationships among constructs (Weston and Gore, 2006). According to Anderson and Gerbing (1988) a two-step path was adopted and first the measurement model was estimated. The measurement model contained 24 items and 7 factors and yielded an adequate fit (Chi-squared=581,38; df=231; CFI=0,97; RMSEA=0,066); all items loading on their constructs were significant with the lowest T-value being 8,78 and the average variance captured by each construct always greater than 0,50 (except for social consumption model = 0,49) (Fornell & Larcker, 1981) (table 2).

**Table 2. Measurement model (total sample, n=198)**

Latent factors	Std. coeff.	Ave. Var.
<b>Individual consumption model (IN_MOD)</b>		0,69
I drink wine when I am with my family	0,86	
I drink wine at lunch and/or at dinner	0,80	
<b>Social consumption model (SOC_MOD)</b>		0,49
I drink wine when I am with my friends	0,71	
Wine is my favourite drink during meeting and/or special events	0,69	
<b>Involvement with the product category (INV)</b>		0,63
wine is part of my self-image	0,75	
wine portrays an image of me to others	0,79	
wine tells others about me	0,89	
wine tells me about other people	0,74	
<b>Knowledge of the product class (KNOW)</b>		0,73
I think to have a good knowledge about wine	0,91	
I have a good knowledge about all important things to consider when buying wine	0,81	
I have a better knowledge about wine than my friends	0,84	
<b>Attitude toward wine drinkers (ATT)</b>		0,60
I think people who drink wine are uncool/cool	0,74	
I think people who drink wine are traditional/trendy	0,49	
I think people who drink wine are unappealing/appealing	0,89	
I think people who drink wine are dumb/smart	0,93	
I think people who drink wine are incompetent/competent	0,74	
<b>Buying intention - Generic labelled wine (GEN_INT)</b>		0,72
Next time I go shopping, I'll buy a bottle of wine	0,81	
I will buy a bottle of wine within the next 15 days	0,87	

Shortly I will buy a bottle of wine	0,86	
<b>Buying intention - PDO/PGI labelled wine</b> (COLL_INT)		0,66
I will buy a bottle of wine within the next 15 days only if it's PDO labelled	0,68	
Shortly I want to buy a PDO labelled bottle of wine	0,76	
Next time I go shopping, I'll buy a PGI labelled bottle of wine	0,80	
I will buy a bottle of wine within the next 15 days only if it's PGI labelled	0,89	
Shortly I want to buy a PGI labelled bottle of wine	0,91	

For discriminant validity (Anderson & Gerbing, 1988; Bagozzi, 1981) the unconstrained models were statistically better than the constrained ones, on the basis of the chi-squared difference tests between each pair of scales correlation unconstrained and constrained to 1. Figure 1 depicts the structural model with involvement impacting both on knowledge and attitude, that, in turn, affect intention to buy generic labelled and collective-labelled wine.

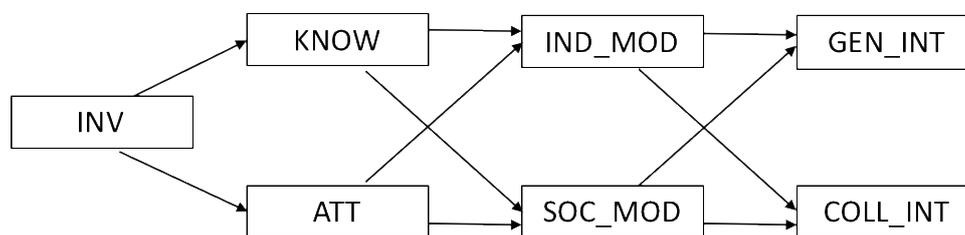


Figure 1. General model

The model was first tested with the inclusion of all cases (Low, medium and High Awareness set and 198 respondents) and then separately for each set, with results showed in table 3.

Table 3. The structural models – Results – (t-value)

	General model	Low_Awareness	Medium_Awareness	High Awareness
Inv→Know	0,54 (7.12)	0,42 (3.42)	0,49 (4.27)	0,54 (4.39)
Inv→Att	0,31 (3.12)	0,22 (1.40)	0,26 (1.41)	0,47 (3.11)
Know→Ind_Mod	0,36 (4.41)	0,39 (2.37)	0,39 (2.79)	0,11 (0.83)
Know→Soc_Mod	0,49 (5.47)	0,52 (3.14)	0,59 (3.59)	0,26 (1.84)
Att→Ind_Mod	0,27 (3.37)	0,11 (0.86)	0,04 (0.30)	0,51 (4.29)
Att→Soc_Mod	0,43 (5.64)	0,39 (3.19)	0,35 (2.11)	0,59 (3.54)
Ind_Mod →Gen_Int	0,26 (3.67)	0,28 (2.48)	0,12 (0.92)	0,31 (2.55)
Ind_Mod →Coll_Int	0,11 (1.25)	0,02 (0.12)	-0,12 (-0.71)	-0,04 (-0.24)
Soc_Mod →Gen_Int	0,67 (7.13)	0,76 (4.78)	0,73 (3.98)	0,55 (3.23)
Soc_Mod →Coll_Int	0,47 (5.03)	0,27 (1.72)	0,52 (3.32)	0,53 (3.05)
<i>Fit indices</i>				
Chi.-squared	568,11	453,51	440,83	445,44
df	242	242	242	242
RMSEA	0,069	0,086	0,073	0,077
CFI	0,97	0,93	0,94	0,95

In the general model, involvement with the product category impacts both on knowledge of product class and attitude toward wine drinkers. The cognitive (knowledge) and emotional (attitude) dimensions have significant relationships with individual and social consumption models: when competence and positive attitude increase people appreciate wine both in private and public situations. Nevertheless, individual consumption impacts only on generic-labelled wine intention to buy while the appreciation of wine also in social contexts lead people to increase their intention to buy collective-branded products.

In the low-awareness set, involvement still affects knowledge that has a major role in defining both individual and social consumption models. Attitude has a more marginal role and it impacts only on social consumption model. More important, when people show low awareness, increasing knowledge and attitude only impact on intention to buy generic labelled wine. In the medium-awareness set, involvement still affects knowledge, which forges both individual and social consumption models, but it doesn't impact on attitude, which, in turn, plays a role in co-defining social consumption model. The most important result is that only social consumption model affect intention to buy both generic-branded and collective-branded wines. In the high-awareness set, involvement affects both knowledge and attitude, but knowledge loses its ability to forge individual and social consumption models. Indeed, only attitude affects consumption models. In turn, individual consumption model impacts on intention to buy both generic-labelled and collective-labelled wines while social consumption model impacts only on intention to buy collective-branded wines.

#### **4. Limits, further research and implications**

This study has been conducted on a limited number of cases and needs to be extended to different food and beverages categories to be opportunely corroborated. Moreover, the number of respondents belonging to low, medium and high-awareness subset are really limited and these partial results must be interpreted only as explorative ones. Individual and social consumption models have been depicted only through two variables and a more variegated and complete representation of them is needed in order to reach more complete and strong results. Differently from what expected, there isn't a gradual increase of perceived risk and complexity moving from the official online store to the online multi-brand retailer. To correctly test the model, there should be significant differences among the different sets. Anyway, online buying behaviour is confirmed to be riskier and more complex than offline one. To complete the model, also trust toward retailer, that is store trust, should be measured to evaluate its interaction with brand trust, perceived risk and complexity.

Even with the limits described, some results could be considered interesting. First of all, as stated in literature, when involvement with product category increases, knowledge of product class increases. But involvement doesn't only impact on knowledge but also on attitude toward wine drinkers, that can be considered a more emotional dimension able to affect intention to buy, even if moderated by individual and social consumption models. This first conclusion has an important implication: involvement, even if in different ways, is able to activate both cognitive and emotional evaluations that, in turn, forge consumption model selection. Again, as stated in literature, preferences in food and beverages are strongly conditioned by the adoption of specific and, sometimes, contingent consumption models: knowledge and attitude do not impact directly on intention to buy both generic-branded and collective-branded wines. Finally, because of a lack of in-depth study on collective brands, an analogous role of collective brands and COE could be hypothesized but these first results seem to disconfirm preceding conclusions reached in COE studies. According to them, CO effect importance decreases when involvement with product category and therefore knowledge of product class increase. First findings of this paper seem to suggest that knowledge, and in this model also attitude, are always mediated by consumption model selection and therefore they can't directly impact on consumer preferences. Moreover, collective brands, especially in high awareness set, are considered as guarantees of social success. When people want to drink wine in social context they prefer to buy collective-brands that attest quality levels of products that aren't been experienced yet.

So, even if people show high involvement and high knowledge, they still continue to use collective brands as drivers in their decision-making process and generic- or collective-labelled

wines choice.

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## **The Frame Effect Revisited: Is Trust able to Transform People from Risk Averse to Risk Taker?**

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### **Abstract**

When people have to choose between two equivalent options, they prefer the certain one in gain domain and probabilistic one in loss domain: this is the main statement of Tversky and Kahneman (1981) Frame effect. It has been explained through rational choice theory, according to which people tend to underestimate large probabilities and therefore to under-evaluate the expected value of a probabilistic choice (Tversky, Kahneman (1981, 1986). Nevertheless, different literature contributions assert trust is able to reduce risk perception and therefore can drive people towards decisions they wouldn't have taken with high risk perception (Galli, Nardin, 1997; Tedeschi, Galli, Martini, 2017). If this assertion is generally valid, trust should have impact also on frame effect, at least reducing risk aversion in gain domain. Three preliminary tests have been conducted to measure the impact of trust on risk perception in binary choices. Frame effect has been reproduced in three different scenarios, people having to choose between two alternatives with the same expected value, both in gain and loss domain. Each scenario was first tested in its original formulation and then with the introduction of a more detailed description of the context or alternatives, introducing items able to represent cognitive and emotional dimensions of trust. Results confirm risk aversion reduction in gain domain with a 'magnitudo' of the effect depending on the trust construct adopted to enrich alternatives.

**Keywords:** Frame Effect, Brand Trust, Interpersonal Trust.

**JEL classification:** M31.

### **1. Theoretical framework**

This paper aims to study the role that trust may have when people face a choice under risk or uncertainty.

We adopt the traditional experimental approach of Kahneman Tversky's framing effect but through two different manipulation, in the scenario's problem or in the available alternatives, we introduce two main trust dimensions that is competence and benevolence.

It happens, even in everyday life, we have to face decisions with some degree of risk. According to a classic economic approach to decision making under risk, we should analyse the problem in a strictly rational mode, that is, we should select that alternatives with the highest expected value weighting each alternative value by its probability. Unfortunately, quite rarely we select these strategies because off the effort they need to be developed. More reasonably, we evaluate risky alternatives adopting some less demanding strategies based on both individual and contextual factor. Indeed risk perception may depends on several factors that look more or less relevant in each choice context.

For instance, people tend to evaluate an event as more or less risky, that is probable, if images

of such event can be retrieved, rapidly or slowly, from memory or, again, if they are able to classify that event into a broader representative category. From the seminal work of Kahnemann and Tversky (1979) until today, a big amount of researches have highlighted how risk can be perceived. Kahneman and Tversky (1981, 1986) reveal that people exhibit a regular gap between stated probabilities of an event and the perception they have of the same result. They have the predisposition to overweight small probabilities and underweight large probabilities. Moreover, it seems that underweighting of stated probabilities increases when uncertainty about possible outcomes increases (Einhorn, Hogarth, 1988). In choice contexts risk attitude can be influenced by problem description or feelings and, accordingly, preferences can emerge from adaptive decision making processes (Blavatsky, 2009; Lichtenstein, Slovic, 2006; Payne, Bettman, Johnson 1988, 1993; Tversky, Slovic, Kahneman 1990; Loewenstein, et al., 2001). One of the most interesting axioms of Prospect Theory, perhaps also the most disruptive behavioral hypothesis against the paradigm of Expected Utility theory, asserts people is often risk averse when the decision problem is set up in the domain of gain or in a positive frame and, on the contrary, they tend to be more risk prone when the decision problem is framed in terms of losses or in the negative domains. This hypothesis highlights the effects of a changing from the reference point, or status quo, and the different sensitivity people show for gains or losses.

Nonetheless, even if prospect theory and its related analysis of risk can be considered a cornerstone in the behavioral approach, there are other perspectives in the studies of economic behavior that shed light on different variables able to alter individual risk perception or the way people face risky choices.

Trust, among others, has been sponsored as a variable able to modify individual perception of risk and uncertainty through cognitive and/or emotional intervening processes (Galli, Nardin, 1997; Tedeschi, Galli, Martini, 2017; Pappas 2016). If this assertion is generally valid, trust should have impact also on frame effect, at least reducing risk aversion in gain domain (Lewicki, Bunker, 1996; Sheppard, Sherman, 1998).

Trust, in interpersonal relations, can be represented as the reliability on a subject's non-opportunistic behavior and on his/her honesty and care assistance or, also, as the willingness of a person to depend on the actions of another one. Even if the relationship between risk and trust has been analyzed deeply and supported in different research fields (Lin 2003; Fairley et al. 2016; Delbufalo 2015) a large part of the literature on this topic considers trust both a mono-dimensional construct and a multi-dimensional one with each dimension influencing in different ways relevant and related marketing constructs.

Adopting in-depth investigated key features on interpersonal trust, Delgado (2003, 2004), suggests the existence of two main dimensions, competence and benevolence, which define the whole construct in a more complete way. Other authors have underlined the existence of more than two dimensions.

About the relationship between trust and risk, several authors have argued perceived risk affects trust, whereas the causal relationship between the two constructs can be reversed: trust could mitigate risk perception, which in turn directly affects choice or intention. Moreover, risk grows when uncertainty grows, so that this last variable needs to be considered to completely evaluate the interdependent role of risk and trust.

This paper focuses on the relation between trust and risk attitude. In particular, we assume that trust affects risk perception and consequently individual risk attitude. To achieve this object, four experiments have been conducted to measure the impact of trust on risk perception in binary choices. Frame effect has been reproduced in three different scenarios, people having to choose between two alternatives with the same expected value, both in gain and loss domain. Each scenario was first tested in its original formulation and then with the introduction of a more

detailed description of the context or of the alternatives, introducing items able to represent cognitive and emotional dimensions of trust such as competence and benevolence

## 2. Methodology, data analysis and results

Three different scenario (mobile phone, financial investmet, sea aquarium) have been developed to test the classical Kahneman and Tvesky?s framing effects.

To test the effects of trust on risk attitude two different manipulation of trust traits are adopted. In two scenarios (mobile phone, financial investment) respondents chose between alternatives (sure gain/loss vs probabilistic gain/loss) offered by a neutral, competent o benevolent assistant described in the scenario.

In other two scenarios (financial investment, aquarium) a neutral, benevolent or competent traits are described in the alternatives available.

In the first manipulation, respondents face two alternatives presented in the same neutral, benevolent or competent scenario.

In the second manipulation respondent face two alternatives each characterized by a neutral, benevolent or competent description. In particular the traits of benevolence and competence are set against each other both in positive and negative frame

Therefore our hypothesis are:

According to Kahneman and Tversky’s prospect theory we expect sure gain be preferred to probabilistic one in positive frame and the opposite in negative frame. This should apply in all conditions, that is with neutral benevolent and competent description. Moreover since choice in positive domain are less cognitive demanding than choice in negative domain (Gonzales et al. 2005) benevolence trust description should alter respondents risk attitude. When both competence and benevolence are compared between alternaives they will affect risk attitude with a different degree.

Experiments were submitted online to 591 students from january to june. Overall 24 different binary choices were presented and each respondet were randomly assigned to three different choice conditions conveniently separated by other filler.

The collected data were analysed using descriptive statistics, and T-test.

Respondents of the first scenario (mobile phone) deal with a problem described as follows:

### MOBILE PHONE

Unfortunately, some days ago, your new mobile phone of your beloved brand broke and you sent it to the official authorized repair shop to be fixed in guarantee. The repair shop calls and informs you that about 20 gigabytes of your photos could be lost. Unfortunately, you did not save them in other safer place. The repair shop of your beloved brand (...) asks you to choose among the followings two alternatives

(...)\* (*Benevolence description: ... always helpful in difficult choices and willing to face difficulties for you*)  
(*Competence description: ... with great knowledge and experience*)

Positive frame	Negative frame
<b>Option A:</b> 7gigabytes will be saved <b>Option B:</b> 35% probability to save 20 gigabytes and 65% probability to save nothing€	<b>Option A:</b> 13 gigabytes will be lost <b>Option B:</b> 65% probability to lose 20gigabytes and 35% lose nothing

Results in the mobile phone scenario (trust described in the scenario) show a significative frame effect (Table 1). Since framing effect appear when preferences for the sure positive alternative are higher (not simply different) than preferences for sure negative alternative results in competent condition are retained too.

In this scenario there are no evidence that benevolence or competence affect risk attitude

(aversion or propensity) of respondents.

**Table. 1 Mobile phone**

		Neutral		Benevolent		Competent	
		N	%	N	%	N	%
<b>Positive frame</b>	Sure Alternative	46	<b>63,89</b>	25	<b>56,82</b>	27	<b>51,92</b>
	Probable Alternative	26	36,11	19	43,18	25	48,08
<b>Negative frame</b>	Sure Alternative	13	<b>28,26</b>	15	<b>33,33</b>	12	<b>32,43</b>
	Probable Alternative	33	71,74	30	66,67	25	67,57
	<i>t</i> -test	P= 0,000		P= 0,026		P= 0,068	

The second scenario consist of two choices between returns on shares recommended by a neutral, benevolent or competent financial advisor. Similarly to the previous case, trust was described in the problem scenario as follows.

FINANCIAL INVESTMENT (trust described in the scenario)

You have always used a financial consultant and, with his help, you have invested part of your savings in a portfolio of shares. Your consultant calls and informs you that, due to the high price volatility, the expected returns for this year are at risk of approximately € 2000. The consultant, (...)\*, asks you to choose between two different strategies A and B to operate on your portfolio with the following expected results:

(...)\* (*Benevolence description: ... always helpful in difficult choices and willing to face difficulties for you*)  
(*Competence description: ... with great knowledge and experience*)

Positive frame	Negative frame
<b>Option A:</b> 700€ will be saved <b>Option B:</b> 35% probability to save 2000€ and 65% probability to save 0 €	<b>Option A:</b> 1300€ will be lost <b>Option B:</b> 65% probability to lose 2000€ and 35% lose 0€

Also in this experiments significant framing effect occur in each condition (neutral, benevolent, competent). However the role of a benevolent financial advisor play, in this case, a significant effect reducing preferences for the sure positive alternative from 73% to 52,2% ( $p = 0,051$ ). In other words benevolence reduce risk aversion and push respondents to prefer the riskier alternative (Table 2).

**Table. 2 Financial investments**

		Neutral		Benevolent		Competent	
		N	%	N	%	N	%
<b>Positive frame</b>	Sure Alternative	27	<b>73,0</b>	24	<b>52,2</b>	29	<b>64,4</b>
	Probable Alternative	10	27,0	22	47,8	16	35,6
<b>Negative frame</b>	Sure Alternative	19	<b>36,5</b>	19	<b>26,4</b>	13	<b>29,5</b>
	Probable Alternative	33	63,5	53	73,6	31	70,5
	<i>t</i> -test	P= 0,001		P= 0,004		P= 0,001	

In the following experiments the benevolent and competent traits of trust have been moved from problem text to alternatives. In particular benevolence and competence have been described in each binary choice and assigned alternatively to sure alternatives or to probable alternatives, both in positive and negative frame. This manipulation should give respondents a better understandings of these two traits since they can appreciate them in contraposition.

## FINANCIAL INVESTMENT (trust described in the alternatives)

In the last months, you invested 2.000 € in shares and now, because of the high volatility of the markets and the consequently price reduction, you find yourself in a very risky situation. To decide what to do you ask to two different financial consultants that you have known for a long time. They suggest the following solutions. Which do you choose?

Positive frame	Negative frame
<b>Consultant A, (...)*</b> suggests a strategy with the following expected result: <i>700€ will be saved</i>	<b>Consultant A, (...)*</b> suggests a strategy with the following expected result: <i>1300 € will be lost</i>
<b>Consultant B, (...)*</b> suggests a strategy with the following expected result: <i>35% probability to save 2000€ and 65% probability to save 0 €</i>	<b>Consultant B, (...)*</b> suggests a strategy with the following expected result: <i>65% probability to lose 2000 € and 35% lose 0 €</i>

(...)\* (Benevolence description: ... that you have always believed helpful in difficult choices and willing to face difficulties for you)

(Competence description: ... that you have always believed with great knowledge and experience)

Results shows that framing effects hold only in those conditions in which trust was clearly described in the alternatives but not in the neutral condition, that is, without trust involved (Table 3)

In the positive frame, trust traits do affect risk aversion of the respondent. However, even if preferences for sure alternative increase, significantly, when it is characterized by benevolence ( $p = 0,047$ ) they grow even more when sure alternative is characterized by competence ( $p = 0, 01$ )

**Table 3 Financial investment (trust described in the alternatives)**

		Neutral		Benevolent		Competent	
		Neutral		Competent		Benevolent	
		N	%	N	%	N	%
<b>Positive frame</b>	Sure Alternative	26	<b>49,06</b>	27	<b>61,36</b>	40	<b>80,0</b>
	Probable Alternative	27	50,94	17	38,64	10	20,0
<b>Negative frame</b>	Sure Alternative	21	<b>37,50</b>	21	<b>42,86</b>	18	<b>41,86</b>
	Probable Alternative	35	62,50	28	57,14	25	58,14
	<i>t</i> -test	P= 0,223		<b>P= 0,075</b>		<b>P= 0,000</b>	

The last experiment follows the same format of financial investment with trust described in the alternatives. In this case the scenario describe a situation really close to the famous Asian Disease of Kahneman and Tversky. Respondents had to choose between alternatives that involved the life of very rare fishes in a sea aquarium.

## SEA AQUARIUM (trust described in the alternatives)

Imagine you have a sea aquarium with 20 fishes of rare beauty. Unfortunately, in the last days, the aquarium has been infected by a bacterium and all fishes are at risk of contamination and death. You turned to your usual aquarium shop that proposed you two alternative brand medicine with these expected results. Which do you choose?

Positive frame	Negative frame
<b>Brand medicine A: (...)*</b> expected result: 7 fishes will be saved	<b>Brand medicine A: (...)*</b> expected result: 13 fishes will die
<b>Brand Medicine B: (...)*</b> 35% probability 20 fish will be saved and 65 % probability no fish will be saved	<b>Brand Medicine B: (...)*</b> 65% probability 20 fish will die and 35 % probability no fish will die

(...)\* (Benevolence description: ... that you have always believed to be a brand helpful in difficult choices and willing to face difficulties for you)

(Competence description: ... that you have always believed to be a brand with great knowledge and experience)

Also in the last experiment, the framing effect holds in every condition, that is, with alternatives described with or without trust traits.

Trust description do not modify significantly risk attitude, in particular the risk aversion, of the respondents in the positive frame (Table 4) Contrary to our hypothesis trust play a role in negative frame and increase risk propensity when the probable results is characterized by the benevolent form of trust ( $p = 0,074$ )

**Table 4 Sea aquarium**

		Neutral		Benevolent		Competent	
		Neutral	Neutral	Competent	Competent	Benevolent	Benevolent
		N	%	N	%	N	%
<b>Positive frame</b>	Sure Alternative	39	<b>79,59</b>	29	<b>67,44</b>	40	<b>71,43</b>
	Probable Alternative	10	20,41	14	32,56	16	28,57
<b>Negative frame</b>	Sure Alternative	25	<b>50</b>	21	<b>39,62</b>	14	<b>31,82</b>
	Probable Alternative	25	50	32	60,38	30	68,18
	<i>t</i> -test	P= 0,002		P= 0,007		P= 0,000	

### 3. Discussion

According to Prospect Theory people are more likely to choose a sure gain instead of a probable higher value, when the decision problem is framed in positive manner, while they prefer a larger probable loss to a sure one if the same problem is framed in negative terms.

In other words, changing in a different but logically equivalent way the description of a problem, can give to decision maker a different perception of what he/she is facing.

In order to verify the robustness of this preference reversal we introduced into the decision problem a trust description since it is a relevant factor able to modify individual risk perception. Our results show that such effects is evident in all the conditions except one (third experiment about financial investment). In three experiments over four, trust description, significantly modify risk attitude of the respondents driving them to be more risk seeker. Generally, when people feel they can rely on someone else, that can help them in difficult choice, it is likely they will adopt more extreme decisions. In these cases, attention focus of the decision makers move from probabilities data, difficult to compute, to the more attractive and easier to appreciate, higher payoffs. In particular, in positive domain choice are easier and respondent tend to be more intuitive (Gonzales et al. 2005) and applying fast cognitive processes that reduce the cognitive effort (Payne et al. 1993). Moreover since this process is also emotionally based (Mellers, Schwartz, & Ritov, 1999) benevolence, which is considered an emotional trait of trust, is the best candidate to be responsible for the risk attitude shifting.

When both benevolence and competence are described as part of the alternatives and paired in binary choice (financial investments), risk aversion increase. In these case, presenting the description of the alternatives in an more difficult way, that is quantitative and qualitative information mixed together, affect the fluency of preferences formation. Comparing more complex alternatives push respondents to be more conservative, that is, more risk averse.

In negative domain, where losses looms larger than gain, and displeasure feelings are more relevant, risk propensity increases if the alternative is supported by benevolence.

### 4. Limits, further research and implications

This study has been conducted on a limited number of respondents. Results confirm, overall, the initial hypothesis but some extension should be evaluated to take into account the negative domain of prospect theory.

Even with the limits described, some implications are relevant. Even if trust affect risk a better

understanding of the link between trust and context is needed: trust in the context of money saved/lost or life saved/lost has not the same weight. Equally relevant, use trust description in the scenario or as an attribute of the available alternative can be relevant from an information processing review but some alternative explanation would be interesting in order to understand the framing bias

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## **Leadership Style - Evidence from Manufacturing Industry in Northeastern Bulgaria**

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### **Abstract**

The purpose of that paper is to explore leadership style in manufacturing entities, located in Northeastern Bulgaria. The investigation grounds in Full range leadership model. Individual level of conceptualization is employed (n=58). More specifically, subject of study is managers' perception of transactional and transformational leadership style. Quantitative method of research has been adopted, more specifically 5X questionnaire. The survey targets manufacturing companies for a few reasons: the industry type put mark on the leadership style; that kind of studies are lagging behind in Bulgaria; usually the surveys are centered in the capital, nor in the "periphery". Thus, the survey outcomes would provide ground for better understanding of applied leadership style, either in the sector, or in the country. Moreover, the companies in hand are flagman in light industry, thus, survey outcomes could provide starting point for benchmarking. Statistical analysis are employed in order to reveal tendencies. Some implication with organizational culture are outlined and discussed, since both concepts are in close relationship.

**Keywords:** leadership style, manufacturing, full-range leadership model, organizational culture.

**JEL classification:** M14, M10, M54.

### **1. Introduction**

Transformational and transactional leadership takes special place in contemporary management theory, since they meet the demands of an ever-changing, complex and global world.

Both practitioners and researchers have put the notion leadership under the spot. It has been examined from different perspectives, i.e. from the corner of leader, follower, and situation; on different levels, chronologically, functionally and etc. In latest years transactional and transformational leadership, i.e. Full range leadership model is widely employed in surveys. However, less attention is allocated to the specific the model in terms of industry type. Previous theories suggest that effective leadership behavior is closely connected to the elements of the situation. Manufacturing impose specific encumbrances on the workplace, e.g. precise planning and organizing, pressure to produce specific outcome, sometimes in force major circumstances. Thus, behavior of the leader is closely connected to productivity.

In terms of manufacturing, the constant improvement of production processes, resource base, introduction of module configurations, high logistic level and widely available information about all market players allows shortening of the pre-production period, which result in a strong competition (Kirova, 2010). Manufacturing poses informal but strong stereotypes (Payne, J. 2018) which impact organizational culture. Cultural and subcultural factors have a significant impact on behavior (Todorova et. al, 2018). Organizational culture and leadership are interconnected categories (Pencheva, 2018). Thus, presumably manufacturing postures informal and strong categories upon leadership. The current study is modest attempt to fill in the gap. The goal of the research is to examine transformational and transactional leadership in manufacturing companies located in Northeastern Bulgaria.

The purpose of this study is to explore the Full Range Leadership Model, i.e. transformational and transactional leadership of first line managers in leading manufacturing organizations, located in Northeastern Bulgaria.

The motivation for the study is grounded in following reasons: 1) To put a light on leadership specifics in manufacturing companies. 2) The subjects of the study are flagman manufacturers in light industry, thus examining Full Range Leadership Model could provide ground for benchmarking. 3) The examined organizations are located in the Northeastern Bulgaria, which is a region with a dense concentration of production entities and lagging behind in terms of leadership surveys.

The survey presented here is part of a survey project examining leadership and organizational culture. The organizational culture part is presented in another paper in the same proceedings titled “Organizational Culture – Values and Practices, Evidence from Manufacturing Industry in Northeastern Bulgaria.

The aim of the study is perceived via qualitative method. Subject of survey is a perception of the first line managers towards their leadership behavior in the organization they work for. First line managers are engaged in the study for the following: a) their perspective of “proper” leadership behavior is reliable, since they have been promoted to managerial position; b) they are not in a position of CEO or owner of the company, thus their point of view is more likely to depict the “real picture” opposed to the “desired one”. As a prerequisite of research selection, the companies are flagmans in the sectors they operate. One of the companies in hand operates in knitting socks, the second one is in electrical supplies manufacturing, the third one is in food and household chemical supplies. All their first line managers have been involved in the survey. The survey has been conducted in 2017.

The main findings are: Contingency reward is to some extent inconsistent with Transactional leadership. Leadership styles are not correlated to Power distance and Uncertainty avoidance. Masculinity is the values dimension, which is in a relationship with leadership styles. Form a point of view of organizational culture practices dimensions, Social responsibility in the one connected to the leadership styles.

The findings could be used either for management purposes with manufacturing entities in hand, or in educational process of business administration students with respect to their requirements and expectations towards their future jobs (Yordanova, 2018).

## **2. Literature Review**

### **2.1. Transformational leadership**

Most of the contemporary transformational leadership theories are based on the theory of the transformational leadership of James McGregor Burns (Burns 1978, quoted in Karastoyanov, 2005). They present two opposing leadership styles - the transactional one that motivates followers by appealing to their personal interest, and the transformational one that build on the moral values of the followers, provoking them to consider ethical problems and mobilizing them to reform the entity they work for.

The transformation group of theories explain the way the leader influences the others. According to House and Podsakoff (1994), transformational (neo-charismatic) theories focus attention on emotions, preferences, dedication to work by subordinates, as well as on the structure, culture and performance of organizations. Transformational leadership is described as a process of influence in which leaders change their collaborators' perceptions towards what is meaningful; stimulate them to look inside themselves; perceive the opportunities and challenges of their environment in a new way.

According to Bass, Avolio and Goodheim (1987), transformational leadership motivates followers to pursue conceptual goals and to meet their higher levels needs i.e. self-

actualization, opposed to simply participating in the dual relationships. According to this definition, transformational leaders create a dynamic organizational vision that often requires alignment of cultural values to pursue change. Such leaders demonstrate an idealized influence (charisma), an individual consideration, intellectual stimulation, and inspiring motivation. These four factors represent the main components of transformational leadership (Bass, 1997.) and are defined as follows:

- *Idealized influence (attributive and behavioral)*: Leaders represent a role model for their followers. They are deeply respected, admired and gained the trust of their followers (Northouse, 2001). Such kind of leaders are confident, persistent, very competent and willing to take risks. They usually stand by high standards of ethic and morality, and avoid imposing power and authority (Bass, 1997). The attributive idealized influence is articulated in communicating vision, referring to values, building trust. The behavioral part of the idealized influence consists in sharing risks between the team and the leader, adhering to ethical norms and morals, building integrity.
- *Individual consideration*: Leaders provide an atmosphere of support in which they give personal attention to each employee and their individual particularities. Such leaders listen to and share the doubts of the follower and building confidence in himself / herself (Avolio, Waldman & Yammarino, 1991). Such leaders relate employees' needs to the mission of the organization (Bass 1985, 1990, 1997).
- *Intellectual stimulation*: Leaders inspire followers for creativeness and innovation; question their beliefs and values, as well as their own and those adopted in the organization (Avolio et al., 1991, Northouse, 2001). This type of leadership behavior helps to improve intelligence, rational thinking, problem solving and decision making (Bass, 1990, Northouse, 2001). As a result, employees are encouraged to try new ways and develop innovative solutions to approach the organization's problems.
- *Inspiring motivation*: Leaders inspire and motivate by explaining and providing challenges to their followers using comprehensible language, symbols, and visualization (Bass, 1997). Leaders engage their followers in "outlining" an attractive future for the organization, formulate clear expectations that followers want to meet and show devotion to the common goals and vision (Avolio et al. 1991).

Transformational leadership is in a strong opposition to the status quo. Transformational leaders create a new vision of the organization. In the process of complete change, they build an innovative organizational culture and an atmosphere of satisfaction (Bass & Avolio 1993; Masood, Dani, Burns & Backhouse 2006). Transformational leaders change culture by first understanding it, then "aligning" it with the new vision, and revising common values and norms (Bass, 1985).

Several transformative and inspiring leadership theories are based on Burns' ideas, but the Bernard Bass version gains the most popularity and stimulates many empirical research. Bass creates, and later develops the "Full-range leadership model" together with Avolio. He considers two main leadership styles - transformational and transactional. (Bass, 1985). According to this model, the constituent leadership styles complement each other. In combination, transformational and transactional leadership enlarge leadership effect either on effort or over outcome (Avolio et al. 1991, Bass 1985, 1990, Howell & Avolio 1993, Robbins 2006).

Full range leadership model involves six leadership styles combined in two groups: transactional leadership styles and transformational leadership styles.

## 2.2. Transactional leadership

The notion of transactional leadership is based on the leader style and behavior in interaction with behavior and performance of the subordinates. The leader tailor a unique relationship with each subordinate. These relationships can be good (with mutual trust and support, high performance of work and subordinates satisfaction), medium or bad (limited to performing duties). In general, in the transaction leadership style, the manager motivates the followers, appealing to their personal interest. The leader exchange money, approval, safety, or attention for performance meeting his/her expectation, loyalty or employee dedication (Bass, 1990). In practice, the transaction leaders define and communicate what followers have to do, how to do it, and what reward they will get if they achieve the goals. If they fail to do so, the transaction leader takes corrective action.

According to Bass (1997), there are three types of behaviors that construct transactional leadership, based on constructive and corrective exchanges (Figure 1). The constructive style is titled Contingency reward and the corrective - Management by exceptions. The latter behavior - Laissez-Faire is characterized by quite a lot of freedom and the delegation of authority and responsibility to the subordinates. The functions of the liberal leader are rather limited and focused mainly on relationships with members of the group. These three components of transactional leadership are defined as follows:

- *Contingency reward*: Leader provides a contingent reward for the efforts made and the results achieved, appreciate good performance in order to keep it.
- *Management by exceptions (active and passive)*: Leader maintains the status quo and interferes when employees do not achieve the required level of performance. This leadership behavior involves monitoring employees and taking corrective action. Whether the leader actively seeks for mistakes to prevent, or react to occurred deviations, are distinguished respectively active and passive management by exceptions.
- *Laissez-Faire*: This behavior consists of liberal delegating, avoiding leadership or lack/ abdication of leadership, i.e. no decision-making.

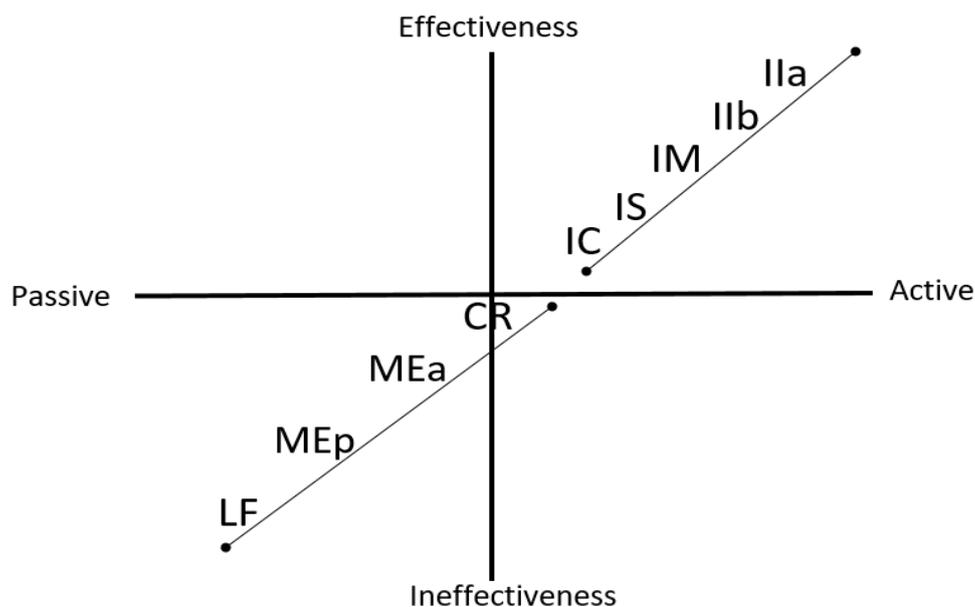


Figure 1. Full Range of leadership model

Source: Bass & Avoilio, 2004

Legend: LF – Laissez-Faire, MEp - Management by exceptions (passive), MEa - Management by exceptions (active), CR – Contingency reward, IC - Individual consideration, IS – Intellectual stimulation, IM - Inspiring motivation, I Ib - Idealized influence behavioral, I Ia - Idealized influence attributive

### 2.3. Leadership and Culture

One distinction between transaction and transformation style is that the first one is associated with tradition, the latter - with of innovation. A significant distinction between those two styles is that the transactional leader operates within current culture, while the transformational one creates change it culture. Transformational style is a developing one. It focuses either on individual growth (not only professional but also personal) or organizational development.

### 2.4. Research question

What are the characteristic of leadership in the manufacturing organizations in the sample? Is there relationship between leadership and organizational culture in the manufacturing organization employed in the survey?

## 3. Research Method, Results and Discussion

### 3.1. Sample

There were 58 respondents in this survey, comprise of tree companies, leaders in the sector they operate in. First one operates in knitting socks, the second one is in electrical supplies manufacturing, the third one is in food and household chemical supplies. All their first line managers have been involved in the survey. The respondents have been enrolled in Management training programs.

### 3.2. Questionnaire

Multi Factor Leadership Questionnaire (5X form) is employed in the study to examine the constructs of Full range of leadership model. 5X form contains 45 items: 36 - represents nine leadership factors (each factor consists of four statements) and 9 statements assess three leadership results. For the purpose of this study, thirty-six statements are used because they represent the key aspects of transformational and transactional leadership. In the preferred version here, they are statements of self-assessment by a first line management respondent.

The questionnaire is based on a five-point Likert scale with scores ranging from 0 to 4, respectively 0 - never and 4 - always. For consistency with the Organizational culture modules of the questionnaire, in order to facilitate the respondent, as well as for unambiguous analysis of the mean values, in the present study they are marked with a scale of 1 to 5, 1 - never, 5 - always.

In terms of reliability, the Full range leadership questionnaire has recognized as a reliable and valid tool (Antonakis et al. 2003, Avolio, Bass & Jung 1999). The reliability of the scales varies from 0.74 to 0.94 for each individual substructure (Avolio et al., 1999).

Background module consists of 5 statements i.e. sex, age, years within organization, occupation, education.

### 3.3. Background information

On the table below are presented outcomes of the background module. They provide general information about the sample.

*Table 1. Background information about the sample*

	Number	%
Sex		
Females	28	50
Males	28	48.30
Missing	1	1.7
Age		
20-29 years	8	13.8
30-39 years	15	25.9

40-49 years	18	31
50-59 years	14	24.1
Missing	3	5.2
Years within organization		
Less than 1 year	3	5.2
1 to 3 years	3	5.2
3 to 7 years	3	5.2
7 to 15 years	12	20.7
More than 15 years	30	51.7
Missing	7	12.1
Occupation		
Director	21	36.2
Middle manager	11	19
First line manager	20	34.5
Missing	6	10.3
Education		
Hi school	28	48.3
University degree	26	44.8
Missing	4	6.9
Organization (manufacturing type)		
Knitting socks	11	19
Electrical supplies manufacturing	26	45
Food and household chemical supplies	21	36

Source: own research results.

As shown on a Table 1, the majority (72%) of the respondents in the sample work for their current employer more than 7 years, thus their statements are supposed to depict the real situation in the company. With respect to gender, man and women are almost equally represented.

### 3.4. Calculation and Statistical analyses

Full range leadership model scores are calculated according to the 5X form. Further data manipulation are done with changed scoring, i.e. 1=strongly disagree; 5=strongly agree for consistency with the items of organizational culture. Calculation and statistical techniques are performed via SPSS (19) – Statistical Package for Social Sciences.

### 3.5. Descriptives

#### 3.5.1. Trend, based on average values

The highest and the lowest average value of the leadership items are shown on Table 2. This scores illustrate that majority of responds have stated high importance of items referring to Contingency reward. The lowest scores are committed to LF.

*Table 2. Highest and lowest average item values*

Item	Mean
L1 – helping subordinates if they put an effort (CR)	4,6552
L5 – avoid major problem solving (LF)	1,7586
L7 – I am busy when team needs me (LF)	1,9483
L12 – wait till things worsen to interfere (MEp)	1,6034
L19 – individual approach (IC)	4,3448
L20 – show that problems needs to get permanent to react (MEp)	1,5690
L21 – gains subordinates' trust (IIa)	4,4655
L28 – avoid decision making process (LF)	1,3793
L33 – postpone urgent matters (LF)	1,7759
L35 – provide positive feedback upon met expectations (CR)	4,5690

Source: own research results.

In terms of aggregated values - depicted on Table 3, the highest scores are attached to CR, which could be interpreted like this, the respondents value CR above all, which is a bit inconsistent with the theoretical model. Individual consideration and Inspiring motivation are also high valued variables with more respect than in the theoretical model.

**Table 3. Average variable values**

Item	Mean
CR – Contingency reward	17,31
IC - Individual consideration	16,67
IM – Inspiring motivation	16,22
Iib – Idealized influence (behavioral)	16
IS – Intellectual stimulation	15,68
Iia – Idealized influence (attributive)	15,47
MEa – Management by exceptions (active)	12,67
MEp – Management by exceptions (passive)	9,12
LF – Laissez - Faire	6,86

Source: own research results.

### 3.5.2. Normality

Widely popular way to assess normality is to run Kolmogorov-Smirnov test. Unfortunately, in this case it is not that appropriate due to the small sample size. Skewness and kurtosis are engaged instead. With respect the normal distribution indices of acceptable limits of  $\pm 2$  are considered as adequate (Trochim & Donnelly, 2006; Field, 2000 & 2009; Gravetter & Wallnau, 2014). On Table 4 are depicted items that deviate from this acceptable limits. Kurtosis indexes definitely indicates non-normal distribution, thus further manipulation would be grounded in non-parametrical techniques, since assumptions for parametrical methods could be violated.

**Table 4. 5X Items exceeding  $\pm 2$  of skewness and kurtosis**

Item	Skewness	Kurtosis
L4 – focus on mistakes (MEa)	1,11594	2,305
L8 – looking for diverse perceptions in problem solving (IS)	1,05562	4,498
L11 – clarify who is responsible for what (CR)	1,01412	5,362
L12 – wait till things worsen to interfere (MEp)	,72402	2,372
L16 – articulate the expected stimuli for achieving the goal (CR)	1,18176	2,411
L19 – individual approach (IC)	1,05218	6,741
L21 – gains subordinates' trust (Iia)	,90254	10,118
L28 – avoid decision making process (LF)	,76840	3,608
L34 – underline the importance of common mission understanding (Iib)	,93400	4,377
L36 – articulate confidence for goal achievement (IM)	,77096	5,269

Source: own research results.

### 3.5.3. Measures

Leadership scores are gained via well-established instrument – Multifactor Leadership Questionnaire (5X form). In the current study the Cronbach alpha coefficient for Transformational leadership is .737. According to Pallant (2005) value above .7 can be considered reliable with the sample.

Cronbach alpha coefficient for Transactional leadership is .497. In this case Cronbach alpha coefficient is low. Thus, Corrected Item-Total Correlation is calculated to give an indication of the degree to which item correlates with the total score. The results are shown on Table 5.

**Table 5. Item-Total Statistics for Transactional leadership variables**

Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Contingency reward	,191	,505
Management by exceptions (active)	,271	,455
Management by exceptions (passive)	,474	,249
Laissez - Faire	,252	,459

Source: own research results.

Low values of Corrected Item-Total Correlation, less than .3 indicate that the variable is measuring something different from the scale as a whole (Pallant, 2005.). The lowest value on Corrected Item-Total Correlation is CR value. This finding is consistent with trend based on average values which states highest preference on CR, as if it were a part of the Transformational continuum. The only one Corrected Item-Total Correlation (above .3) is attached to MEp. Thus, this sub construct depicts the nature of the scale. For the lack of constancy between sub constructs and the scale, future manipulation for relationship would be done by sub constructs.

### 3.6. Relationship (correlation)

The notion of existence of close connection between leadership and organizational culture is very popular and explored. With respect to organizational culture, transformational leaders firstly understand culture, secondly align it with the new vision along with revision of commonly accepted values and norms. Transactional leader works within existing culture, with no attempts to change it (Pencheva, 2018.). For better understanding of leadership, a relationship between leadership sub constructs and organizational culture dimensions both values and practices is explored.

As it was mentioned in the previous paragraph, non-parametric techniques will be used to explore the relationship between leadership sub constructs and organizational culture dimensions. They do not have strict requirements and assumptions for population distribution. What is more, they could be useful for small samples. Spearman Rank Order Correlation is employed here. The results are shown on Table 6.

**Table 6. Spearman Rank Order Correlation between Multifactor Leadership Questionnaire dimensions and cultural dimensions**

	Ia	Ib	IM	IS	PC	CR	MEa	MEp	LF
<b>I</b>	,063	,443**	,241	,423*	,297*	,468**	,081	,018	-,001
<b>PD</b>	,160	,016	,083	-,147	-,079	,061	-,146	-,006	-,074
<b>M</b>	,159	,613**	,348**	,330*	,307*	,535**	,295*	,292**	,124
<b>UA</b>	-,086	,147	,315*	,235	,132	,093	,070	-,073	,057
<b>FO</b>	,123	,344**	,081	,324*	,379**	,451**	,254	,133	-,092
<b>Competitive-ness</b>	-,007	,016	,074	,095	,103	,224	-,092	-,199	-,057
<b>Social Responsibility</b>	,120	,534**	,336*	,452**	,309*	,558**	,116	,095	-,075
<b>Supportive ness</b>	,143	,012	,042	-,003	-,074	-,086	-,052	-,040	-,081
<b>Innovation</b>	,101	,136	,218	,076	,228	,033	,019	,037	-,011
<b>Rewards</b>	,173	,107	,057	,068	-,133	,042	,028	-,006	,149
<b>Performance</b>	,119	,128	,064	,138	-,044	,068	,128	-,062	,013
<b>Stability</b>	,085	-,010	,018	-,119	-,138	-,117	-,108	-,076	,233

Source: own research results.

Contingency reward and Idealized influence (behavioral) are the leadership sub constructs with strong relationship with cultural dimensions. From the values perspective, Masculinity dimension is in relationship with almost each of leadership sub dimensions (except IIa and LF). From the organizational culture practices perspective, Social responsibility dimension is in relationship with IIb, IM, IS, PC and CR.

#### 4. Conclusions and implications

Even though the small sample size impose limitations on the data manipulation, some conclusions could be drawn out. Firstly, Transactional leadership should be explored deeper, with respect to the inconsistencies found. Contingency reward is sub construct which does not fit Transactional leadership as the theoretical model postulates. CR is either recognized as important and desired, or it does not fit the scale. It is an issue for further exploration.

Secondly, the relationship between Transformational leadership and values poses some remarks. Idealized influence (behavioral) is in close relationship with the values dimensions. Surprisingly, Power distance and Uncertainty avoidance are non-correlated dimensions. With PD, it could be interpret as follows: the first line managers accept huge PD (see Organizational Culture – Values and Practices, Evidence from Manufacturing Industry in Northeastern Bulgaria in this Proceedings), but they are not willing to take advantage of it, i.e. they prefer not to be authoritarian bosses. Masculinity dimension is the values dimension mostly involved in relationship with the leadership sub constructs. It is also an issue for further exploration. From the point of view of practices dimension, Social responsibility is the dimension related to 5 leadership sub constructs. It could be suggested those first line managers perceive people orientation. It also raises questions for further investigation.

#### Acknowledgments

The study was supported by contract of University of Ruse “Angel Kanchev”, №BG05M2OP001-2.009-0011-C01, "Support for the development of human resources for research and innovation at the University of Ruse “Angel Kanchev”. The project is funded with support from the Operational Program "Science and Education for Smart Growth 2014 - 2020" financed by the European Social Fund of the European Union.

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## **Extrinsic and Intrinsic Motivations Affecting Information Systems Continuance Intention in Mobile Applications with Gamified Features**

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### **Abstract**

This paper examines individuals' psychological motivations that affect one's intention to continue using information systems. Information systems continuance model establishes the theoretical basis for this study and gamified mobile applications have been used as the type of information systems. This research draws attention to several different extrinsic and intrinsic motivational factors that influence post-adoption behavior of individuals using mobile applications with gamified features. Literature review in this study states the concepts related to post-adoption in a gamified mobile application context and as result, four different motivators have been found which are predicted to influence them. These are; Rewards and Reputation as extrinsic motivators, Social Presence and Perceived Enjoyment as intrinsic motivators. Further research will be conducted in the future to formulate hypotheses related to the constructs explained in this study and the role of extrinsic and intrinsic motivators will be investigated empirically to gain a better understanding in this respect.

**Keywords:** Extrinsic motivations, intrinsic motivations, information systems continuance, mobile applications, gamification.

**JEL classification:** M15.

### **1. Introduction**

The growth of mobile industry is prominent and it is noted that in accessing social platforms, mobile internet takes the lead by 91%, compared to computer based internet consumption 79% (Sukaini et al., 2015). In this rapidly growing industry, companies face serious problems of low profits depending on not just low levels of technology adoption by users but also because of high rates of discontinuation. To survive in this environment, striving to achieve long-term relationships with existing users is crucial, in terms of profitability, since loyalty among users lead to more intensive usage as well as decreased costs related to customer retention (Kim, 2010).

The determinants of technology adoption have been a topic which has been researched thoroughly in the past and technology acceptance model (TAM), theory of reasoned action (TRA) and theory of planned behavior (TPB) have been the basis for these studies. Moreover, not just adoption of a technology but also IS continuance of individuals play a distinctive role for firms such as internet service providers, online retailers and online banks which aim to survive and to understand the difference between initial adoption and continuance, it is important to determine individuals' psychological motivation effects that become apparent after initial adoption (Hong et al., 2008).

In recent available literature, several studies have identified different intrinsic and extrinsic motivators for individuals' adoption of mobile technologies, however there exists some gaps in research related to motivations for individuals' post adoption behaviors in gamified mobile technologies. This research aims to fill this gap by investigating empirically the role of intrinsic and extrinsic motivations in continued use of a mobile technology in a gamified set up.

The remainder of the study will be as follows. First, related work about gamification, information systems (IS) continuance and motivational factors will be reviewed. Then the literature of motivational theories and (IS) continuance model will be presented and concluding remarks will be stated.

## 2. Literature Review

### 2.1 Gamification

The concept of “gamification” has been introduced to our lives not many years ago, however we can't say that we were absolutely unfamiliar with elements of gamification, since we are used to many examples of them in the past. Newspaper and magazine coupons, military badges, marketing loyalty programs with credit points etc. have all been in our lives for many decades. Advancements in digital technologies and introduction of new online platforms have revealed new business opportunities in which gamification can be embedded. By bundling game design elements with complex, IT focused and ever-present services, gamification has established an innovation that enhances the core-offer by offering cognitive, emotional and socially satisfying experiences (Blohm and Leimeister, 2013).

Gamification as the term implies, is similar to games however there is a clear difference between them; gamification is not quite creating a game but transferring some of the positive characteristics of a game to something that is not a game, thus it is called gami-“fy”-ing (Kim, 2015b). It adopts similar motivational techniques that video game designers use to motivate their players, but implements them in a non-game context. Businesses should leverage it to learn a lot from games since they are very powerful in engaging people (Paharia, 2013).

There are many recent examples in which gamification is used to engage users of a certain website or a mobile application. One of these examples is NikeFuel and the Nike+ running app. Users of the Nike+ running app and individuals that own Nike sports shoes, track their athletic performance and gain Nike fuel as they practice. In Nike+ app, users compete with each other, see each others' Nike fuel, track their weekly and monthly athletic progress, earn trophies when they reach milestones, see their rankings among friends and even send challenges to each other. They are also motivated to share their achievements through social media and congratulate each other. Another example of a successful gamification strategy, is a mobile application called Swarm, formerly known as Foursquare. Visiting places and checking in at different locations are the core activities of this mobile application and users are encouraged to check in more, leave comments and browse more to see where their friends went, by earning points and badges. Gamification in Foursquare mobile application even sometimes helped users to earn an offline, tangible reward; active users were able to become the “mayor” of a certain place and they were even able to earn a food or a drink sometimes. Other successful gamified companies include popular web services such as Facebook, Twitter and Ebay which incorporate game elements to increase customer engagement and motivation in their websites and mobile apps. Moreover there is also an increasing trend of online retailers' exploration of the application of game techniques to create reward mechanisms and promote online shopping as an entertainment activity (Insley and Nunan, 2014).

As in the examples of Nike+ and Swarm, companies are leveraging gamification as a strategy to motivate and engage their consumers with interesting game-like mechanisms and incentives for certain reasons such as; promotion, marketing, engagement, and customer loyalty (Kim, 2015b) and it is recommended that companies should embrace and use this powerful tool in their loyalty programs (Paharia, 2013). Because of its benefits, it has already become a major trend and the addition of gamification elements in products and services is increasing rapidly. Gamification has many definitions in the literature; for instance Deterding et al. (2011) defines gamification as; “the use of game elements and game design techniques in a non-game context”. Kapp (2012) defines it as; the delivery of content—for a purpose other than pure entertainment— using game-based thinking and mechanics. On the other hand; Dominguez et al. (2012) defines gamification as incorporating game elements into a non-gaming software application to increase user experience and engagement and Swan (2012) gives a general

definition of gamification as “the process of adding game mechanics to processes, programs and platforms that wouldn’t traditionally use such concepts.”

Even though some people think that gamification is a very old concept, this statement ignores a significant backdrop of gamification, which includes three important aspects: (1) the rapid adoption of the smartphone, (2) the incredible growth of the mobile web, and (3) the increased use of social media (Kim, 2015b). Increased usage of smartphones and social media as well as improved data services resulted in users adopting gamification elements very quickly and getting used to them very easily. Individuals’ positive perceptions of gamified mobile applications and their good reactions to new game-like features made marketers realize an important opportunity for their businesses. The excitement about gamification among them is triggered by the observation that games tend to engage people in a positive way, and that this engagement is maintained over a period of time which can also lead to positive results (Insley and Nunan, 2014).

As Blohm and Leimeister (2013) indicate; gamification depicts behavioral change to positive emotional feedback and in doing so, it enables the introduction of new behavior patterns as well as the modification of habitual behavior. Breaking unwanted habits of customers is made possible with gamified features as well as encouraging them to develop new and beneficial behaviors. Gamification leverages the way humans are genetically designed to store things, to desire social status and socialize, to compete and collaborate and these are some of the reasons why it’s a powerful tool. Moreover, it is a new approach to non-game conditions and up to today it has been proven to be very effective in an incredibly large number of cases (Salcu and Acatrinei, 2013).

IT-based gamified enhancing services are found to motivate individuals to complete certain tasks and these tasks are indicated as; creating optimism; which results from the sense of achievement and experiencing success and positive emotions, increased user satisfaction; which is a consequence of users’ visualization of their own progress and feelings of high individual performance, facilitating social interaction; by being part of a community with similar aims, supporting the learning process; as a result of improving skills by accomplishing certain subtasks of gamification with trial and error and repeating them until the problem is solved and going even further with increased difficulty levels and lastly enabled problem solving; by reaching better rankings and going beyond personal possibilities (Harman et al., 2014).

Gamification enhanced core services by adding additional features and let businesses offer their customers a brand new experience. It is stated that gamification supports and enables the transformation of organizational value creation processes and it’s most frequently used in marketing to increase customer loyalty and brand image (Blohm and Leimeister, 2013). Other goals of gamification include; increasing engagement levels, changing behaviors and stimulating innovation. Moreover, the opportunities for businesses are great – from having more engaged customers, to crowdsourcing innovation and even improving employee performance when it is used in employee programs (Salcu and Acatrinei, 2013).

Gamification needs to be considered carefully and it should be developed and implemented in a way that satisfies the motivations of the target group and its purpose aligns with core business strategies. When designing a gamified application, embedding game dynamics and mechanics that appeal to the target group and providing the type of rewards that are attractive to the motivation of the majority of them is expected to significantly improve the appeal of the gamification (Kim, 2015a). When designing the gamification elements, it is important to remember that gamification itself does not automatically generate motivation or engagement. For any gamification to be successful, it requires people’s buy-in because they should value it enough to play continuously and for this reason the more the goal of gamification is consistent

with the goal of a player, the more it can be expected that the gamification will be successful (Kim, 2015a).

For a company to leverage gamification and improve its profitability by engaging their customers and motivate them for continued use, it is crucial to establish gamified features in the right way. Even though many companies are trying to exploit this new opportunity, if it's implemented insufficiently, they might depart from the core offer and consequently there might be a decrease in customer satisfaction as well as profits. Many gamified applications have failed due to lack of an effective design and fine-tuning. Therefore in designing gamified platforms, it is important to focus on the right motivational factors that will lead to an increase in satisfaction and foster (IS) continuance by individuals.

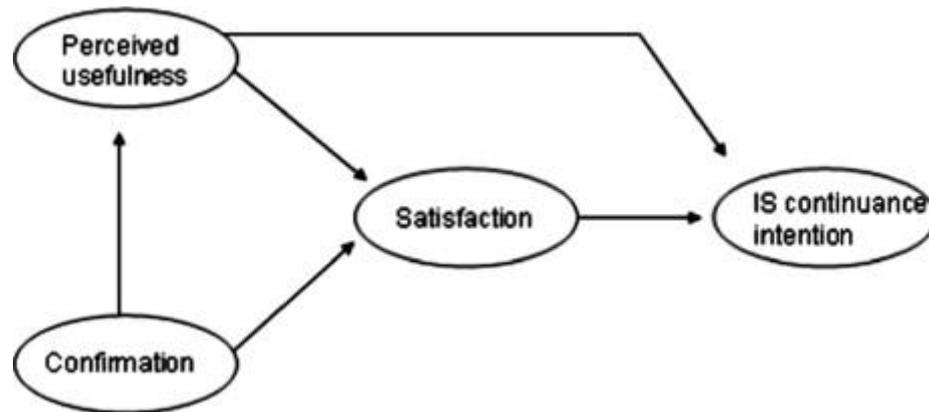
## 2.2 Information Systems Continuance

Mobile services involve various unique characteristics and mobile application providers are facing problematic issues related to inability to maintain a high rate of continuation by its users and as a result their businesses suffer due to low profits. Striving to build long-term relationships with existing users is of great significance since gaining new customers always requires more effort than retaining the users that companies already have. For example Thong et al., (2006) indicate that long-term user relationships has a critical role in increasing profits, not only because loyal users are likely to use the service more intensively and continuously, but also because they are less costly to be maintained. Moreover it is indicated that in the information system (IS) and marketing domains, the eventual success of a product or service depends on continuance usage rather than initial acceptance (Venkatesh and Davis, 2000), as continuance behavior keeps existing users from discontinuance (Bhattacharjee, 2001).

Since maintaining existing users are found to be crucial, body of research related to (IS) continuance is increasing, however initial studies viewed continuance as an extension of adoption and they didn't take into account the post-adoption factors and for this reason they were not able to explain why people discontinued after initial acceptance (Jin et al., 2010).

Even though the initial step of acceptance is a prerequisite for achieving (IS) success, continued use is a must for maintaining that success in the long term. One of the key theories to explain continued (IS) usage is a post-acceptance model proposed by Bhattacharjee (2001) which draws on ECT which is Expectation-Confirmation Theory developed by Oliver (1980). ECT is used in marketing research to understand customer satisfaction and their post-purchase behaviors (Venkatesh et al., 2011). ECT suggests that a user's intention to continue using an IT depends on the extent of the user's satisfaction with the IT, confirmation of the user's expectations and the user's perceived usefulness. According to ECT, consumers form an initial expectation when they encounter with a product or a service, then after they purchase it and use it for a while, they form a perception about the product or service depending on its performance. The next stage is confirmation where they evaluate their initial expectations and perceived performance and compare them to understand the extent to which their expectations are met. According to the degree of their confirmation level, they move on to the satisfaction stage in which their intention to repurchase that product or service is determined.

Bhattacharjee (2001) stated that (IS) continuance and consumer repurchasing are actually portraying similar decisions however (IS) continuance differs from Expectation-Confirmation Theory since it focuses only on the variables that are related to post-acceptance. Bhattacharjee's (2001) study provided a new theoretical framework by converting the initial ECT into an expectation-confirmation model of (IS) continuance. In this model, there are four different variables as shown in Figure 1. These are; perceived usefulness, confirmation, satisfaction and (IS) continuance intention.



*Figure 1. A Post-Acceptance Model of IS Continuance*

Source: Bhattacharjee, 2001, p.356

This model intends to explain post-adoption behaviors of individuals and their intention to continue or discontinue using an information system. After individuals accept and use a technology, they form an idea about whether their initial expectations are met or not in the confirmation stage. At the same time they also form a perception about usefulness of the technology. These two variables; the level of confirmation and perceived usefulness form the basis for the user's satisfaction with the certain information system and in the final stage perceived usefulness and satisfaction determine the degree of (IS) continuance intention of the individual.

## 2.3 Motivations

Motivation is indicated to have two distinct categories: extrinsic and intrinsic. Extrinsic motivation has an aim to reach external goals such as financial compensation, however intrinsic motivation is directly embedded in a given task (Blohm and Leimeister, 2013). When an individual makes an action out of extrinsic motivation, her/his goal in doing that action is not the action itself but something else. On the other hand, when the action itself is the goal of the action, it is related to intrinsic motivation why an individual goes on with that action (Kim, 2015a) In this study, rewards and reputation as types of extrinsic motivations and social presence and perceived enjoyment as types of intrinsic motivation will be analyzed.

### 2.3.1 Extrinsic Motivations

#### 2.3.1.1. Rewards

Game mechanics include diverse elements for gamifying a core offer by embedding reward systems like points or badges and many current frequent flyer programs utilize similar elements such as credit point systems (ex. miles) or status levels (ex. frequent flyer status) (Blohm and Leimeister, 2013). There are also some online fashion retailers such as Asos who gamifies the online shopping experience for their customers by offering contests and competitions to win prizes as well as leaderboards to gain exclusive entrance to flash sales (Insley and Nunan, 2014). These are offered to motivate them to participate in interactive contests as well as to encourage them to continue shopping more. Rewards in the shape of monetary incentives or exclusive deals are expected to satisfy the desire of the individual for winning and feeling valued as well as being recognized by the company as a customer.

Rewards in gamified mobile applications are not meant to be based on the false sense of achievement, instead they should create value and natural involvement since the aim of the platform is to form an engagement medium that would engage the individuals to use its content

more (Kalinauskas, 2014). Users tend to be interested about statistics, value feedback and they also like to gain virtual rewards for doing what they do (Salcu and Acatrinei, 2013). With the aim of engagement, reward mechanisms as an extrinsic motivational factor, are expected to keep individuals being excited about the gamified platform, increase their satisfaction level and ensure their continued use.

### **2.3.1.2 Reputation**

One of the unique aspects of gamification is the implementation of reputation systems into the core service. Reputation systems are built to recognize accomplishments of the users and to act as indicators of status in a community. By keeping track of users' activity, it is possible for mobile application providers to see who the top contributors are and share this information with the rest of the users in a systematic way, such as a leaderboard, status titles etc. For instance, Amazon offers several badges like “#1 Reviewer”, “Top 1000 reviewer” to users who give reviews regularly and “Real Name” title for users who give accurate information in their online reviews (Insley and Nunan, 2014).

Individuals like competition against other people in a community while they also cooperate and socialize with them (Salcu and Acatrinei, 2013). Game mechanics include diverse elements such as scoreboards or rankings and these influence competitive dynamics that relate user activities to a reference group and are expected to satisfy the desire for social recognition (Blohm and Leimeister, 2013). They enjoy trying to achieve a better performance and increase their rankings to gain more reputation among others in a community. Reputation is an important extrinsic motivator that is expected to foster quality user engagement and to encourage individuals to participate continuously.

## **2.3.2 Intrinsic Motivations**

### **2.3.2.1 Social Presence**

Social presence theory was first introduced by Short et al., (1976) and it was defined as “the degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationships.” Gamified mobile applications establish online communities that enable the facilitation of competition as well as social interaction with peers. Social presence is an intrinsic motivational factor that involves social interaction with friends and others in a community (Sukaini et al., 2015).

Social presence is a need that users have in technology based communication environments to perceive each other as real people (Kear et al., 2014). Even though the communication is mediated through a technological platform, users still desire to feel that they are interacting with real people, not just computerized profiles. It is found that users' engagement levels may drop and users might even withdraw from an online environment if they can't satisfy their need for social presence (Wegerif, 1998). Therefore social presence is expected to affect users' satisfaction levels or their continuance intention.

### **2.3.2.2 Perceived Enjoyment**

Perceived enjoyment is identified as an intrinsic motivation which is related to the pleasure of doing an activity itself and satisfying the inner self while doing it. It is defined by Davis et al., (1992) as; apart from any expected performance results, the extent to which using the system is perceived as enjoyable. Moreover in their study, Davis et al., (1992) added perceived enjoyment to the original model and found that individuals' intentions to use computers in the workplace was influenced mainly by the technology's perceived usefulness and secondarily by the level of enjoyment the individuals experienced while using the computers.

Perceived enjoyment is considered as an important factor in the literature affecting consumer behaviors in the technology context and it can also be expected that it might play a significant role in users' satisfaction with a gamified mobile application and their continued use.

### 3. Discussion

Users tend to download many mobile applications, however due to various reasons they quit using most of them which is a major challenge for mobile technology companies to overcome. To be able to survive in the ecosystem and increase their profitability, mobile companies need to find ways to engage their customers and ensure their continued use. Gamification is one of the techniques that mobile technology companies use to achieve this goal, however many of them fail, due to ineffective execution and incorrect design. Therefore during these processes, it is important to focus on the right motivational factors that will lead to an increase in satisfaction and foster (IS) continuance by individuals and for this reason it is very beneficial to explore and understand which extrinsic and intrinsic motivations are more important to increase continued use.

In this study, the aim was to review the literature on gamification, Information Systems Continuance model and identify several different extrinsic and intrinsic motivational factors that might be affecting individuals' post-adoption behaviors. As a result of this research, four different motivational factors have been introduced and explained in detail. These are; rewards and reputation as extrinsic motivators, social presence and perceived enjoyment as intrinsic motivators.

This study is of value and importance as a basis for further research in understanding motivational factors affecting post-adoption behaviors of gamified mobile application users. Future research is advised to be conducted to formulate hypotheses related to the constructs explained in this study and investigating empirically the role of motivators is expected to lead to a better understanding in this respect.

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## Nostalgia of Memorable Experiences and the Revisit to Tourism Locations

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### **Abstract**

Consumers often seek in tourism a means to relive experiences and remarkable moments in their lives. Experiences lived in the past, guarded in memory, can create feelings of nostalgia that stimulate decisions and behaviors. This study identified dimensions through which memorable experiences provoke nostalgia in relation to tourism locations, influencing the intention of revisiting. Reports were collected from fifteen consumers, nominated by travel agents, which had experiences in tourism. In-depth interviews were conducted and analyzed based on phenomenology methods adapted for consumer research. Nostalgia surfaced as an important motivator in travel decisions. Nostalgic aspects can propel the search for sensations previously lived, however location attributes are not essential for that. Although some interviewees assumed that they may not return to the place previously visited, the memories of sensations lived there have an influencing and facilitating role in the intention of pursuing new travel experiences. They will seek to reproduce activities from the past related to the valorization of possessions, or experiences that remind that period, inducing the feeling that the present can reproduce the past. The results also suggest that consumer choices in traveling are not associated to processes generated by purely rational aspects, there being a distinct participation of an emotional component. Affective aspects related to nostalgia, triggered by memories of sensations lived when traveling, motivate the consumer to reproduce experiences and recommend travel destinations through social media and positive evaluations in sites and blogs related to traveling and tourism.

**Keywords:** Tourism, memorable experiences, nostalgia, consumer behavior.

**JEL classification:** M31.

### **1. Introduction**

Seeking differentiation, tourism related services are attempting to generate more opportunities for tourists' engagement and participation, creating genuine experiences that attract and satisfy them, increasing the probability of revisiting.

Movements that inspire consumers are influenced not only by present circumstances, but also by past-related factors (Chen *et al*, 2014). Past experiences, stored in the consumers' memories or in the memories of those who are part of their reference groups, can generate feelings of nostalgia (Hoolbrok, 1993; Holak et al, 2006), affecting the preference structure (Holbrook, 1993), which can stimulate decisions and behaviors (Chen *et al*, 2014; Zhou *et al*, 2012).

Nostalgia mediates personal emotions and remarkable positive experiences and interferes in preferences and consuming decisions (Chen *et al*, 2014; Zhou *et al*, 2012). Consumers seek pleasure and experiences (Russel, 2008), which lead them to live or relive good moments (Havlana & Holak, 1991; Holbrook, 1993).

Memorable experiences are positive ones, recalled subsequently. Although some studies have pointed out antecedents of a memorable experience in the context of tourism (Chandralal & Valenzuela, 2013; Gordon, 2013; Tung & Ritchie, 2011), they have not identified that memorable experiences unleash nostalgia. The results hereby obtained reveal dimensions

through which memorable experiences that provoke nostalgia in relation to tourism locations are manifested. Some definitions are necessary:

**Tourist** is that which stays for more than twenty-four hours in his/her location destination. For the World Tourism Organization, tourists are travelers that stay out of their homes for up to a year. Hence, we consider that tourism is the activity that promotes consumers' spending for a period ranging from one day to a year.

**Tourism locations** are those that are related to the trip, such as restaurants, bars, and diners; means of transport; hotels, inns, hostels, and houses used for hosting; shows, events, festivals, attractions (natural, artificial, cultural landmarks), tourist spots; commerce; and activities performed during the trip.

## 2. Memorable touristic experiences

Experience is a "sensation or acquisition of knowledge, resulting from one's participation in activities" (Gupta & Vajic, 1999, p.35). Two types of experience can be identified, the ordinary and the extraordinary. The ordinary are common situations, frequent and lived daily. The extraordinary ones escape routine; they're uncommon, atypical (Bhattacharjee & Mogilner, 2014), more easily remembered, with the potential to become special (Bhattacharjee & Mogilner, 2014).

In tourism, experience is a "subjective evaluation about events related to touristic activities, that occurs before (in planning and preparation), during (in the destination) and after the trip (memory)" (Tung & Ritchie, 2011, p.1369).

Touristic experiences create memories and impressions about places, products and services consumed at the destination. Tourists share experiences and memories of tourism locations (Gretzel et al, 2006), conveying impressions through narratives, helping disseminate information and form the identity of the teller. The narrative consolidates what the travelers experienced in their memory (Tung & Ritchie, 2011), participating in the process of attributing meaning to traveling experiences (Gretzel et al, 2006).

Affective memories are most likely to be remarkable and remembered (Tung & Ritchie, 2011). Uncommon, atypical or distinct events are most likely to be remembered (Chandralal & Valenzuela, 2013; Tung & Ritchie, 2011). Something that produces unique and intense memories is more likely to trigger memory responses (Holbrook, 1993).

Memorable touristic experiences are, therefore, positive experiences of events that happened during the trip, recalled some time later. The consumer is interested in repeating memorable experiences when key-elements are guaranteed (Zauberman et al, 2008). Each individual remembers experiences in different ways and subjectively attributes to them the characteristic of being "special" (Zauberman et al, 2008).

Services, activities or equivalent events lived by two people can be interpreted in different ways, according to their emotional, physical, spiritual, or intellectual involvement (Tung & Ritchie, 2011). Sensorial elements can influence the creation of memories, stimulating the development of emotions and nostalgic feelings (Sedikides et al, 2004).

Some studies (Chandralal; Valenzuela, 2013; Gordon, 2013) identified factors that are most likely to be remembered, that are most relevant and influential when choosing a destination. For Tung and Ritchie (2011), four dimensions represent aspects through which moments become memorable for tourists: affection, expectations, the consequences, and memory. Affection encloses positive emotions and good feelings connected to the experience. Expectations refer to reactions related to the satisfaction of initial intentions and positive surprises that occurred during the trip. Consequences involve social interactions with travel companions and/or people met at the destination.

New knowledge about culture, language, and local lifestyles, as well as learning and self-knowledge, are part of the experience, when experiences lived change style, beliefs, and life perspective. Memory corresponds to efforts and actions, during and after the trip, to recall what was experienced, such as telling stories, showing pictures, and buying souvenirs. Tung and Ritchie (2011) also consider the desire to relive the experience, in some cases returning to the destination with people that were not part of the first visit.

Chandralal and Valenzuela (2013) identified background elements of a memorable touristic experience: perceived significance, that corresponds to memories of experiences with personally enriching and significant results, such as becoming friends with other travelers or local residents, and the tightening bonds with travel companions; the acquisition of knowledge and intellectual capacity; self-discovery, conducting to personal changes and the promotion of quality of life, fun, and knowledge for the family. They also identified opportunities for interacting with other tourists and local residents, creating bonds that mark the trip, but that don't last in the long-term.

Authentic local experiences are important to create memories, englobing the local language, lifestyle, culinary, and culture. Chandralal and Valenzuela (2013) consider as background the perceived importance of some experiences, in terms of exclusivity and reputation, such as famous attractions, natural beauty, activities that are expensive or difficult to be repeated, and making dreams come true. When there are novelties, the sensation of realizing new, different things, and surprises, or non-planned incidents, it is likely that the fact becomes memorable. Tourists become positively impressed with the perceived hospitality from the locals' help and generosity in welcoming them, as well as the professionalism and the quality of local guides. Positive emotions build the affective part of the memory of a trip, not necessarily leading to the intention of revisiting, but creating disposition to recommend (Chandralal & Valenzuela, 2013).

### 3. Nostalgia

Nostalgia can be interpreted as a predominantly positive emotion (Sedikides et al, 2004), born from the longing reflection of a lived moment and which generates "preferences for people, locations, or things that were more popular or common when one was younger" (Hoolbrook & Schindler, 1991. p.330). It may allude to positive feelings, filling needs of social belonging and increasing the connectivity between members of a group, with common memories of the feeling that they share the same values (Belk, 1990; Zhou et al, 2012). In short, nostalgia is a feeling, experienced by adults (from the age of 18 years), and liked by people (Rutledge, 2016). Nostalgia is positive when the content of memories that generate it, related to remarkable past experiences, promotes meaning in the present. Havlena and Holak (1991) suggest it is the result of a biased or selective memory of past experiences. Holak, Havlena and Matveev (2006) reinforce that even those who have not lived it can produce nostalgia linked to a moment, and it can be socially shared. They propose four classifications: personal nostalgia, related directly to personal experiences and individual memories; interpersonal nostalgia, originated from common memories shared socially; cultural nostalgia, which involves direct experience, but memories cover experiences that mark similarities between members of a group; and virtual nostalgia, originated from knowledge acquired from books, videos and materials that depict memories of the group which the individual has no connection with.

Many studies on tourist motivations discuss about concepts of *push* and *pull*, which are distinct of those associated to them in marketing literature, where *pull* relates to attract the consumer with special features of the product or service and *push* corresponds to presenting the product to the customer with general characteristics, in a effort to sell it.

In tourism literature, “*pull*” reasons are external factors, cognitive (mental representations, such as knowledge and beliefs) and situational, linked to features of the touristic destinations through which they are perceived (beaches, parks, entertainment, cultural and historical attractions, and culinary experiences). “*Push*” reasons are internal forces, such as desires and necessities, associated to emotions (escaping routine; relaxing; seeking prestige, self-knowledge, adventure, and social interaction; novelty; and nostalgic feelings).

Crompton (1979) expanded Dann’s “*push-pull*” typology, better identifying the role of socio-psychological motivations in purchase decisions: tourists would choose based on motivation originated in intrinsic forces, attracted by the destination attributes.

Nostalgia can be an important stimulus in the decision of visiting a location, capable of connecting the individual to the environment and rescuing remarkable memories (Chen et al, 2014). The nostalgic feeling can be classified as: real nostalgia (linked to personal and autobiographical memories, related to individual experiences); simulated nostalgia; and collective nostalgia (not lived by the tourist, but rather spread by fantasies or stories heard) (Baker & Kennedy, 1994).

In this article, nostalgia means a feeling capable of generating preference (taste, positive attitude or favorable emotion) for people, locations, experiences or things that were more popular or common when the consumer was younger, or for moments shared, either by his/her reference groups or by the media. It is an internal force that creates a reaction to an affection stimulus over which the individual has little control and which responses are felt through reactions and alterations on the emotional state (Pieters & Raaij, 1988).

Seeking pleasant experiences, there may be the intention to reproduce activities from the past and the valorization of possessions or experiences that evoke that time (Belk, 1990; Baker & Kennedy, 1994; Holbrook, 1993). As in tourism there is seeking for enjoyment, fun, entertainment and fantasy, nostalgia can motivate choices of destinations or revisiting places (Chen et al, 2014).

#### **4. Method**

An exploratory research was conducted through in-depth interviews. Fifteen people over the age of 30 years were interviewed, their age range having the higher nostalgic tendency because, as they mature, people seek more experiences linked to the past (Russel, 2008). Aside from age, there was no need of a pattern or common element between the interviewees as a condition to participate. The interviewees were chosen based on judgment, with the initial collaboration of employees from travel agencies, which indicated clients.

The interviews were previously scheduled and conducted in a location chosen by the interviewees: homes, workplaces or coffee shops. An initial question was introduced: “Tell me about traveling”. From then on, the conduction of the interview was determined by the interviewee, with total freedom to tell travel experiences in depth. The interviews lasted for about an hour. The recorded reports were transcribed, heard and listened to several times, until they became familiar, then categorized by common themes and classified, to reveal patterns and differences between groups and individuals.

Events, values, rules, beliefs, conflicts, motivations, attitudes, and indicating aspects of possible relations emerged. Common dimensions lead to the identification of patterns of meanings, creating the background of the way memorable experiences that provoke nostalgia manifest themselves. What also emerged: moments of interaction with friends, family, or romantic partners; expectation related to the travel destination; and the realization of dreams. The literature mentions those dimensions as potential generators of memorable moments in the trip, but what emerged here is related to the triggering of nostalgic experiences.

## 5. Results

Memorable experiences that create nostalgic feelings do not seem necessarily related to touristic destinations or locations. The interviewees could forget the exact location and date of visit, but they did not forget the memories and the emotions lived. The experiences, especially the feelings, appear to have an essential role in making a memorable experience nostalgic.

### 5.1. Moments of interaction with friends, family, or romantic partners

Most interviewees consider the strengthening of bonds with travel companions remarkable. Showing connection and moments lived together with friends, family, or romantic partners, they demonstrated spontaneous emotions and revealed nostalgic feeling.

Strengthening the bonds with travel companions precedes a memorable touristic experience (Chandralal & Valenzuela, 2013) and is also capable of creating nostalgia. The nostalgic reflection on trips with good company and the moments of conviviality characterize good memories and positive emotions for thirteen interviewees, related to occasions in which their groups reunited, with no necessary relation to any specific location.

“I think those trips make me want to go back, more because of the people that were there and for the group being reunited, than of the place itself” (Carlos Eduardo).

Nine interviewees reported experiences that involved achievements, learning, and resilience, but only those lived in the company and presence of friends showed nostalgic features. The partnership made them more special because of the strengthening of bonds and for the ability to share the memory, generating a sense of belonging. The sense of protection and mutual caring created light and fun moments, making people more comfortable with each other. The moments in which such emotions were in evidence configured memorable and nostalgic experiences.

Marcela reported that the companionship and the help from friends during a trip to Chapada Diamantina changed her perception on the experience, told with emotion and enthusiasm:

“It’s in times like these that you see how much the people that are with you really support you. (...) And it’s when you see that people were really worried not only in arriving well, but that everybody got there together. (...) It was so beautiful! An overcoming! I had overcome that barrier that I thought I could never pass!”

Symbolic meanings of events or acts are attributed and shared by individuals of a same group and for generations. Its valorization makes people plan those moments and later share them as great achievements. When there are love relationships, traditional rituals involved promote special memories. There were reports of engagement, marriage, romantic, celebrative and honeymoon trips. The engagement ritual makes the proposal a special moment for the couple, creating lasting memories. A tourism location can have its meaning modified after the moment is lived there, but the most nostalgic memory is associated to the nervousness, the emotion, and the demonstration of love that the experience represented. Nostalgia is present in the joy to tell the story and in the memory of the feeling lived.

Marriage experiences during trips (the *destination weddings*) provoke memories full of nostalgic aspects. Although involved indirectly, participating in the celebration as a bridesmaid made Maira show emotion when recalling the event. “It was super special! (...) I will remember these moments a lot, their wedding, how we felt entering the church to be close to them and bless their love, how everybody was enjoying the hotels. (...) Of course, Búzios and Friburgo are no longer the Búzios and Friburgo of before”.

When the interviewee was the bride, the experience seemed even more memorable, and the memories are more intense and nostalgic. Living the celebration of her love in a travel destination and taking special people to share the moment made everything more significant. Olivia reported: “I have no words to describe how I miss that day and the emotion I felt in reuniting the people I love the most, that were important my whole life, in a weekend. (...) Seeing the joy in everyone’s eyes makes me miss it so much it hurts”.

Reports from honeymoons revealed a nostalgic potential, especially when the moments recalled were connected to the feeling of relaxing and celebrating with the romantic partner.

Given the great representativeness of rituals, the dates of the events may generate periodic celebrations, reinforcing the intention to recover aspects and feelings lived. Romantic trips were landmarks in the lives of some interviewees. Out of routine experiences, in different locations, sharing feelings and learning, allowed the couple to come closer and interact more intensely, all important aspects to build the relationship. Olivia goes on: “We are in another country, but, at the same time, we are with each other – we don’t need anything else. It was a trip that stuck with me because it showed me the complicity he and I are going to have for the rest of our lives”.

The company of family was constantly mentioned as significant in trips. Recurring tourism experiences, such as visiting summer houses with the family, triggered nostalgic memories. Emotions there lived created strong and positive memories, with intention to revisit and the wish to reproduce them in the future. When the visits were interrupted, or the property was sold, the longing for it was even stronger, for its impossibility to reproduce such grateful experiences and emotions.

Even though presented in a new family structure (after the loss of a family member or the couple’s separation), the reports show the intent to rescue emotions from past travels. The family experience was the intent of the travel visit in some cases, with no relation to any specific location, but with routines, activities and emotions that the family had lived before.

Nostalgia surfaced as an important motivator of trips. Planning new tours was already wrapped by nostalgic feelings, with decisions based on the intention to relive sensations. Patrícia wanted to unite the family members each time in a different location: “Of course that there is the matter of fun, but the family being together is the most important of all. (...) So this is, for us, what orientates our trip”.

The intention of feeling the emotions of being with the family again, but with no interference that prevented of living it again, was illustrated by Ricardo: “[traveling] I forget all the problems – I forget work, I forget the cellphone, I forget everything. I become totally incommunicable, especially because we like to travel with the four of us. We value to be with each other, the family. We don’t like groups very much, because if the democracy of four people is already complicated, with twelve people the conflict is bigger!”

With the growth of a new generation and the natural independence in adulthood, parents and children interviewed reported to miss reliving family moments, seeing in the trips they do together a way to reproduce experiences and feelings. The relationship, the involvement and reliving sensations common to other family moments were illustrated by Olivia. Her trip with her parents and her sister had as a goal buying her wedding dress. However, it was not the travel experience that was most remarkable to her or created more nostalgia: “And what most impressed me in this trip was that it seemed like I was traveling back in time, it felt like I was on a vacation trip with my parents when I was younger – it was not my wedding dress, but the feeling of the four of us being together, and that being the same thing as twenty something years ago. That is what marked me: we enjoyed each other’s company.”

Carrying the nostalgic characteristic, experiences in traveling with family become more remarkable and end up being more valued as time passes. Long trips were presented as rarer

than before. However, to share the experience, some interviewees searched for alternatives, such as shorter trips, trips to closer and easier to access locations, enabling a quick decision, appropriate for different profiles.

Nostalgia linked to family trips was not manifested only when reporting the experience, or the planning phase, remembering old feelings and making decisions to relive them; or during the trip to a tourism location, remembering shared feelings of the past. Memorable situations in trips that could be recalled based on a stimulus were pointed out. Some daily passages, such as those linked to the environment (smells, tastes, sights), are capable of awakening psychological reactions, such as affection and nostalgic feelings related to tourism locations. Cíntia's comment shows it: "There's a specific deodorant that smells like Araruama. I do not even use it anymore, but, when someone comes close and is using it, I smell the place! It is so funny! It is similar as to what happens with apple puree. I do not eat apple puree, but it was always present there... Mini pizza reminds me of the place!"

From a moment frozen in an image, a nostalgic feeling is produced in relation to a period, location, people, and, mostly, experiences. Barthes (1980) attributed that role to photography, which is capable of carrying meaning and being an important component of emotional attachment to the past, activating memories of nostalgic moments, as reported by Carlos:

"... I take pictures for a specific reason: when I see the Picture, I remember the trip and the good moment of the trip comes. (...) I pass through them and remember those moments I lived ... it is as if I am living the trip again".

## 5.2. Expectation regarding the tourism

Tung and Ritchie (2011) consider the exceeding of expectations as one of the dimensions through which moments become memorable for tourists. There are reactions related to the satisfaction of initial intentions, as well as positive surprises during the trip or in going to a location, that go beyond expectations previous to the planning. The reports revealed that the exceeding of expectations can create memorable experiences, some with nostalgic potential.

Although present in the reports, and being potential influencers in the decisions of future travels, cases in which the initial expectation was not realized provide negative moments and memories and were not considered as memorable touristic experiences. On the other hand, the simple reach of the expectation over the visit to a tourism location can become an unforgettable moment, though non-nostalgic. When the experiences are positive, their memories provoke personal nostalgia.

Chandralal and Valenzuela (2013) state that the feeling of realizing new things, and surprises or unplanned incidents during the trip, it is highly likely that the fact becomes memorable. The unexpected provided special moments, remembered with nostalgia in the reports. Marcela chose a national trip, with no big expectations about the destination. With her boyfriend and her friends, she went to Bahia. After a trail, she faced, unexpectedly, with a waterfall. The feeling of surprise was striking. She became clearly emotional during the interview, saying it was one of the unforgettable trips she has done: "It is so good, because you keep going bit by bit, you go through the canyon and you do not see the waterfall. (...) When you turn, you see that big hole. (...) It is something unreal, it is terrifying! It has a supernatural force! (...) When we saw that, we started to cry of emotion! (...) It was impressive! That monstrous fall makes you feel small in the world for being in that place with that absurd energy from the waterfall". Maíra admires landscapes and in traveling, she seeks places with paradisiac sights. Although in Hawaii she had visited places she described as "amazing", what most marked her, as she told, getting emotional, was the surprise she had when diving in Maui: "... we mostly waited to

see what happened, without much planning. (...) Just as we entered the sea and dived in the water, we saw a turtle that was half my size! That happened in the hotel's backyard! That was something super unexpected that left a great impression on us!"

An inflexible, pre-determined script prevents positive unexpected events from happening. When the interviewees were describing decisions in the trips, they mentioned choices for little explored locations, not known for tourism. Seeking the unpredictable enchanted many of the interviewees, allowing expectations to raise for something unplanned that could surprise. Victor comments: "It is easier to be enchanted and have a really great satisfaction when we have little expectation about the place. I tend not to do much planning to feel freer and more open to have something I have not planned and be surprised by the place".

Visits to little known locations, indicated by locals, create remarkable moments, remembered with nostalgia. Restaurants unknown by tourists were specially remembered with nostalgia, for the service provided beyond the expectation and the unique flavor of the food. What was lived there, out of the traditional scripts, surprised and led to recommendation to other people. Carlos told an experience he had: "And then, you go to a small restaurant, and you expect nothing from it! It happened in Paris, I went to a sort of pub. It was even empty, there were two or three people. (...) And when the dish arrived, it was excellent! Later, we came back twice. 'Dude, it can't be that good!' (...) It was surprising and I generally recommend it. (...) you give recommendations and you are interested, because the place is nice and it will grow so other people can have access to that which you had".

In Carlos' report, we can notice the intention to indicate locations that were pleasing and that exceeded expectations, promoting memorable experiences that are remembered with nostalgia. Mentioned by nine interviewees, social media revealed themselves as a very used means to exchange information about trips, especially through post-purchase evaluations, experiences reports, online reviews, photographs, blogs, and virtual interaction among consumers.

Besides the informing role about little known places that can promote pleasant unexpected experiences, social media seem to influence future decisions, leading the consumer to anticipate or imagine behaviors and sensations, confirming their importance in the stages of communication and information needs in tourism (Gretzel et al., 2006).

The interviews revealed affective responses, such as nostalgia, pleasure, fun, realization, and happiness. Moore (2015) identified that the most useful online reviews, to who seeks information on products with emotional involvement and that promote enjoyment, adopt reactions lived by those who post them as a central point in the evaluations.

### **5.3. Nostalgia in making dreams come true**

Chandralal and Valenzuela (2013) consider as a precedent to a memorable experience the importance the traveler places on exclusive experiences with known reputation, such as famous attractions, locations with known natural beauty, activities that are hard to be reproduced (maybe for being expensive), or making a dream come true.

The trip to Disney represented that dream to many interviewees. The unique feeling of realization stands out in the reports. Although told in many different ways and by many interviewees, it was made clear the emotions lived there provoke nostalgia, not necessarily related to the physical location, but to making the dream come true. In some cases, like Bianca's, even though many years passed by, the memory was vivid, told with emotion and enthusiasm: "Orlando is a great city and all, but what I really remember is the feeling of seeing the castle and watching The Lion King show. When I see things related to The Lion King, I have the scene in my head of when I went to the theater: me, sitting between my mom and my dad. It's special!"

The moment of arriving at Disney seemed to have a strong meaning, marking and making the realization of the dream tangible, as told by Soraia: "... when I got to the Disney park, I cried, because I had only seen Disney in comics and movies. So, when I got to the Cinderella castle, I said: 'I'm crying of emotion. I never thought I would be here!'".

Eventual problems, situations that would make conviviality or the satisfaction in other context hard, did not seem to interfere when it comes to an experience that makes a dream come true. Marcela described: "... Going to Disney was one of the best things I've done in my life! (...) The feeling of entering Magic Kingdom is one of the most exciting things I've ever lived! (...) We were not bothered at all with being in line, with going through some stuff to get into the rides, because we were having so much fun!"

Taking someone to a place that was important in the past can also be a dream. The wish to introduce special places that had been visited to loved ones was recurrent in the reports. While the scenario was the same, the intention of revisiting was not related to the place, but to the reproduction of experiences, sensations and emotions there lived and sharing them with a loved one.

A photograph, stories told, a souvenir or any other form of representing to another one what was felt during the experience revealed to be less important than reliving the same experiences with the beloved company.

"During the phase of our daughter growing up, what was our dream? Taking her to Disney! Of course! (...) All the emotion that I lived by myself, that I lived with my husband, we lived with our daughter! Ah... It was great! We lived some wonderful days. It was amazing, a remarkable trip!" (Cristina).

Nostalgia was not always related to simply making the dream of returning to the location come true. Even if the first visit had not generated unforgettable and nostalgic experiences, revisiting seemed relevant. To Cristina, going to Portugal with her parents created nostalgic memories, because of her parents' emotion and for the satisfaction in being able to provide them with something special: "Visiting Portugal was my parents' dream. I had already gone there and liked it, but I really wish they could participate in this. So we went together two years ago. (...) And I felt so happy! (...) The goal was this: making them go on their dream trip. If they were happy, I was happy. It was special!"

## 6. Conclusions

The strengthening of friendship bonds; the proximity with travel companions, reinforced by the intense conviviality with the group; and experiences of achievements, learning and overcoming shared with friends that highlight feelings of mutual affection and protection, are moments that become nostalgic memories. Moments that reinforce emotions and feelings of family coexistence also promote nostalgia, being more valued by family members over time. Overcoming previous expectations about the location chosen for tourism, the surprises that happen there were considered as nostalgic triggers. Unexpected, uncommon, atypical, or distinct events created special moments, remembered with affection.

Making a dream come true grants the moment strong and memorable emotion. Not only the idea of realizing individual goals, but presenting a much desired location to a dear one, sharing the experience and the emotions, becomes a source of memories full of nostalgia.

Feelings related to the identified dimensions are stored in memory. When the consumer accesses them, intentionally or not, they promote memories that activate nostalgic feelings and create the intention of reproducing the emotions. The action of reliving previous sensations can

be attained by traveling, therefore, the search for the enjoyment of realizing a similar experience acts as a solution for achieving the consumer's goal.

Nostalgia established itself as an important and possible motivator for traveling decisions. The attained results pointed out that nostalgic aspects can propel the search for previously lived sensations, but they didn't expose the location attributes as being essential for that. Although some interviewees assumed they might not return to the location of their trip, the memories of the sensations lived have an influencing and facilitating role for the intention of searching for new touristic experiences that will seek to reproduce activities from the past.

The results reinforce the comprehension that consuming decisions in traveling are not associated to processes generated by purely rational aspects, there being notable participation of an emotional component. Affective aspects related to nostalgia, triggered by memories of sensations lived in trips, motivate consumers to reproduce experiences and recommend destinations through social media and positive reviews in travel and tourism sites and blogs.

Nostalgia also revealed to be influent in planning phases of visiting tourism locations. There are different possible management applications to guarantee that entrepreneurs in the tourism sector adjust their strategies, increasing the chances of influencing the consumer's behavior positively, promoting greater satisfaction and impacting the intention of revisiting, therefore increasing loyalty.

Hotels and restaurants, starting from information about the traveler that include dates of moments experienced in the trip (birthdays, weddings, romantic trips), can, in their customer relationship strategies, suggest the reproduction of emotions there lived. Searching for the unexpected and the surprise, a hotel can offer the same room, or a restaurant can book the same table, stimulating positive memories about the attention and care perceived during the offering of the service. Tourism professionals can encourage the sharing of positive reactions lived in their business, with influencing power over who seeks references to decide. They can also develop unexpected positive actions that mark the moment and enchant the tourist in their first visit to the tourism location. Exposed to stimuli that promote positive memories of the past, it is more likely to awaken nostalgic feelings and positive attitudes, leading to a future decision of revisiting and recommending the place.

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## Industry 4.0 IT: Solutions in the Romanian Food Industry

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### Abstract

The study presents the advantages using IT solutions for the Romanian restaurant industry in the context of industry 4.0. The Romanian government is also concerned about the chances and prospects offered by the industry 4.0 since a few years ago. Secondary research has shown that businesses worldwide plan to invest approximately 5% of their online turnover in IT solutions. Much of the investment will be directed to the acquisition of software, various applications and their deployment within the organizations. The Romanian restaurant industry, like other branches of the economy, faces a special competitive situation. Competition in the food sector does not only refer to the mere competition between the traditional players in this market, but also to the rest of the organizational forms in this field of activity. Players like Metro and Selgros have already resorted to modern solutions and to various forms of IT solutions. The main objective of the study is to determine the main factors that influence the evolution in this field and to choose the solutions for its sustainable development based on the obtained results. One of the main results of the research is concerned with the need to adapt to new market demands, especially in terms of IT solutions. By comparing the success of other countries as a result of IT implementation, the necessary measure is to identify and implement digital management and control tools, ranging from quality assurance, hygiene, to employee relationship and customer satisfaction. Problems identified as follow-up to the research concern the implementation of digital solutions due to the lack of a management vision, the lack of culture in the area or the lack of IT skills of the staff involved. The research is limited to the restaurant sector, and it is necessary to extend it to the next stage of the entire tourism and services industry in Romania.

**Keywords:** IT solutions, food industry, industry research, Romania, marketing strategy.

**JEL classification:** O12, O33.

### 1. Introduction

Until now, humankind has experienced three industrial revolutions, the first being at the beginning of the 17th century, triggered by the discovery of the steam engine. At the beginning of the 20th century, electricity, through its mass production and exploitation triggered the second industrial revolution. Not long afterwards, after World War II, the computer appeared which triggered the third industrial revolution. In 2011 Dr. Henning Kagermann, president of the Academy of Technical Sciences in Germany, used for the first time the term "Industry 4.0" in a project proposal submitted to the German government (GEISSBAUER, et al., 2016). Industry 4.0 is the initial designation of the global industrial digitization project for better general endowment. Fundamentally, this represents the basis for smart interconnected digital systems. With their help, production is largely self-organized, so that direct communication between people, machinery, equipment, logistics activities and products can be made possible. The interconnection of all flows should ensure the optimization not only of a single stage of the production process, but of a whole value chain. This network of interconnectors should also cover all phases of the product life cycle - from the idea of creating a product to development, manufacture, use, service and recycling (SOMMER, 2015).

Meanwhile, the term "Industry 4.0" is more than just a project; it is the combination of several major innovations in digital technology. All of these combinations have matured and are ready to transform the economy, starting with the energy and production sectors. These technologies include advanced robotics and artificial intelligence, sophisticated sensors, cloud computing, Internet of Things, capturing and analyzing data, digital printing (including 3D printing),

software as-a-service, smartphones and other mobile devices, platforms that use algorithms to drive vehicles (including navigation tools, track sharing applications, ride and autonomous vehicles), etc. The goal of "Industry 4.0" is to incorporate all these elements into an interoperable global value chain shared by many companies across multiple countries (GEISSBAUER, et al., 2016).

To all this, there is an increase in the number and complexity of new technologies, which are constantly appearing to meet the challenges of the 21st century. They require the creation of well-documented and structured methodologies. Thus, research must develop real technological maps, both at an industrial level and at a national and international level. Industry 4.0 is expected to have a major impact on six key areas of an economy, namely transport, energy, services, health, industry and infrastructure (SANTOSA, et al., 2017).

The opportunities for implementing the solutions offered by "Industry 4.0" are primarily about increasing national and international competitiveness, achieving a higher level of flexibility in production and workflows in general, adapting to customer needs, and last but not least, safer and easier transaction reporting and reporting obligations within each economic entity and / or institution (Bundesverband Informationswirtschaft, 2015).

In 2015, it is estimated that supply chain digitization can bring positive benefits in the current planning of European manufacturers' sales and operations with a positive impact as follows: reducing response time to unforeseen events affecting orders (about 300 %), order delivery (about 120%) and time to market (about 70%) (T.S.P. Forum, 2015). Additionally, the growing importance of digital platform providers, indispensable in the management of complex production systems, is expected to rise, which entails risks to data security and ownership. These represent challenges for companies' management structures. This co-operation implies a number of risks as company boundaries are blurred in interconnected value networks, transformed into "digital ecosystems" (KAGERMANN, et al., 2016). The digitization of value chains has the potential to boost productivity levels, but this requires companies to be integrated both horizontally and vertically to ensure exchange of information and to decentralize decision-making (HERMANN, et al., 2016).

"Central Europe can become a spearhead in the development of an industrial internet. There are three important goals for Romania: security of supply and energy independence, limiting environmental impact and economic sustainability. In Central and Eastern Europe there is a difficult challenge for two reasons: 52% of the region's energy comes from coal and 70% of plants are more than 30 years old. We want to address these challenges with the help of the industrial internet for a significant improvement of their performance, by analyzing the big data and optimizing the plants," says Cristian Colțeanu in a public article by Forbes in November 2017. The strategy proposed in this article focuses on digitizing all business lines (FORBES, 2017). The Government of Romania promises to support digitization in our country by creating a program to be implemented by several ministries, such as the Ministry of Communications, Interior and Development (PLAYTECH, 2018). Unfortunately, Romania ranks last in the European Union, according to the report assessing the degree of digitization of each member country. DESI stands for Digital Economy and Society Index, and Romania has a score of 33,21%. Denmark ranks first with an aggregate score of 70,68% compared to the EU average of 52,25%. The underlying criteria are Connectivity, Human Capital, Internet Usage, Digital Technology Integration, and Digital Public Services. Despite a high-speed internet at a low cost relative to other EU countries, we have the lowest percentage of internet users (56%). Very few are the Romanians who shop online (18%), and fewer who use online banking (8%). The largest percentage of all Romanian internet users, 74%, use social networks. Much worse is the fact that we are also in the last place regarding the integration of digital technology. Only 7% of businesses sell their products online, accounting for only 4,3% of turnover. Regarding the

use of e-government solutions, we are also at low levels, namely 6% of users are using this solution, and of them only 12% use pre-filled forms. On top of that, only 55% of them solve the problem completely. (MIHAIU, 2018).

Opening up to digital solutions is growing for businesses, according to a study by Valoria Business Solutions SRL. More than 50% of businesses have positioned “digital transformation” as a central element of their business strategy for 2018. More than 60% of companies say they have capitalized on digitization to get a competitive edge. A year before, only 37% capitalized on the benefits of digitization. The simplification of the processes due to digitization solutions is appreciated by more than 50% of the private companies, even though some of them see as an obstacle to digitizing the lack of "digital customers" (VALORIA, 2018). The current questions are about the advantages of implementing digitization solutions in the restaurant industry in Romania, the support offered by governmental measures in this respect, the challenges facing this industry at national level, but also international.

## **2. Restaurant industry in the European Union**

Going out and drinking or eating in a restaurant, bar or coffee shop is one of the most popular leisure activities among Europeans. As a result, the restaurant and food service industry is booming. Food services refer to all services for out-of-home consumption of food and drink, including restaurants, cafés, bars, takeaway, food delivery, contract catering, cafeterias and other food vendors. The Western European consumer foodservice market had a value of 427 billion euros in 2016.

The Eastern European market is only at 45,6 billion euros, meaning a little more than 10% of the Western market (STATISTA, 2017). The foodservice industry is a thriving sector everywhere in the world.

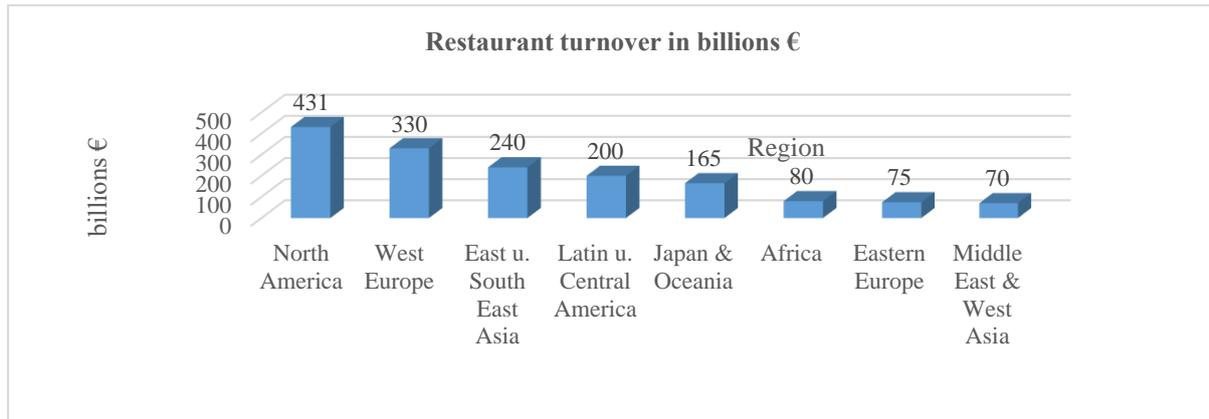
The third largest foodservice market in the world is Europe. The world leader in this market is the Asia Pacific region, accounting for 43% of the market share (GIRA Foodservice, 2018). This position is explained by the rising demand in India and China. The main players on the European foodservice market are: France, Germany, Italy, the UK, and Spain.

Two of the biggest markets in the food and beverage service industry in Europe are the United Kingdom and France, where in 2015 enterprises generated revenues of 87,8 billion euros and respectively 63,2 billion euros. Italy and Spain are also very important, mainly in the number of food service enterprises in the European Union in 2014.

Restaurants are very appreciated by consumers. On the market, we find very different restaurants and eating facilities: from full service 'sit down' restaurants, to limited service and casual dining establishments or company restaurants. The biggest turnover in the restaurant industry is by far in the United States of America, as we can see in the next figure.

The total turnover in the European Union generated by restaurants and mobile vendors was around 237 billion euros in 2015.

The highest number of restaurant enterprises in 2015 were found in France. The number of restaurants has been steadily rising everywhere in Europe. In 2015, the number of restaurants in the UK reached 72,794 (STATISTA, 2017).



**Figure 1. Out-of-home market: Restaurant turnover worldwide by region**

Source: EHI Handelsdaten, 2011 (EHI, 2011)

In the USA, quick service and fast food restaurants are a key segment of the restaurant industry, but this segment developed a lot also in Eastern Europe in the last 20 years. Fast food brands including Subway, McDonalds, Burger King and KFC dominate the landscape for restaurant franchises in USA, Europe and especially Eastern Europe. The U.S. fast food giant McDonalds is present in most European countries. Also often incorporated into big malls, the quick service restaurant market are coffee shops and cafés. In this segment Costa, Starbucks and McCafé are the leading players in Europe. More and more HoReCa suppliers are challenged by Cash & Carry players and Logistics & Transport segments and need to adapt to the new challenges. The foodservice income value worldwide is around € 2,9 trillion in 2017 and shows a good yearly increase (CLAIRFIELD INTERNATIONAL, 2018).

Mintel's expert team of Foodservice analysts have identified four different groups of trends for 2018 in the US Foodservice industry. The trends are related to innovation, customization, and automation onto menus and into restaurant kitchens (MINTEL, 2018).

According to the GIRA Foodservice study of 10 European countries, the Europeans eat 18% of all meals outside their home. The tendency of eating more and more outside is related also to the fact that every day less women cook at home. More and more women are working fulltime and have less time for house activities. Because of this, many traditional recipes disappear together with the feeling of traditional home and family. On the other side, this translates into growing opportunities for producers, distributors, restaurant chains, catering establishments, and other foodservice companies.

Even if we do not cook at home, we are concerned about healthy eating, and interested in eating local, fresh, and sustainable foods. Some of the trends are more country-specific reflecting the eating habits every specific region. However, in most of the countries, customers are interested in the international cuisine.

Even though this is an industry where we talk about tradition and culture, the digital economy is necessary and covers more and more of its areas. The digitalization of this industry includes: e-commerce platforms, delivery and automation technologies, and customer and production process tracking systems.

Customers have higher expectations, and in order to satisfy those, the industry needs a better skilled work force. This means increased labor costs. The labor costs and the high employee turnover is a general problem of the industry. "High competition as well as economies of scale are very noticeable in the industry, which is one of the reasons for consolidation in the industry" (CLAIRFIELD INTERNATIONAL, 2018).

### **3. The Restaurant Market in Romania - Analysis and Results**

The restaurant market has experienced an accelerated growth over the last decade. As part of HORECA, restaurant development depends directly on general economic development.

This sector is very sensitive to general economic fluctuations. In times when the economy shows growth, there is also growth in this sector, but generally at a more accelerated pace. In times of crisis, the restaurant market drops more than other sectors, being more sensitive to these economic fluctuations. This market increased and doubled in 2008-2016, reaching 8.5 billion lei in 2016.

This market has increased at the same time with the increase in consumer spending recorded by our country in the last period. The growth in this sector has been determined by several factors: the reduction of the VAT rate, the general growth of the tourism industry and of the consumers' purchasing power. The number of players in this market increased at a smaller pace than the total turnover of the industry over the same period, this showing a significant increase in the average sales per existing restaurants.

The restaurant market is dominated, as turnover, by three major international chains - McDonald's, KFC and Pizza Hut. The development of the restaurant market has been sustained by the expansion of local and international players as well as the emergence of new names. An example of this is the entry into Romania of two big players from the US - Taco Bell and Sbarro (ROSCA, 2017).

Despite the increases, however, we notice that the restaurant market is a difficult one, with strong competition and a strong staff turnover. Continuing professional training and qualification is the only sustainable solution to address the shortage of qualified staff in the restaurant, bar and cafe industry. In addition, through the right training, weak management in this sector can also be tackled.

This sector faces one of the highest bankruptcy rates, according to the data published by the Romanian Employers and Organizations (HORA), namely almost 60% of newly opened units are bankrupt in the first nine months of existence and up to 80% in the first five years of operation.

HORECA companies must take into account the fact that without a well-structured business plan, a well-trained staff and a strategy tailored to changing conditions in this market, especially under Industry 4.0, they will have no real chance of survival, or in the best case, they will experience less development.

Romania ranks last in the European standings in terms of household spending in restaurants, bars and cafes. These expenditures amount to only 1.1% of the monthly income of a household in Romania. At the top of this ranking is Spain with 14.6% of the monthly income. The European Union average stands at 6.8% of monthly household incomes.

The number of job vacancies almost doubled from 2009 to 2016 (Bellu, 2017).

Digitization can solve a part of the labor force problems in this sector, both by replacing the people with robots, or by simplifying the work and leading to an effective and sustainable increase of labor productivity.

Looking at the Romanian economy as a whole, according to the results of the Deloitte study related to industry 4.0, a general level of digitization could reduce the number of jobs, affecting directly or indirectly about 60% of the existing ones (FEINBERG, 2016).

However, the companies are optimistic about Industry 4.0, but they are skeptical about the ability of each company to influence it (ANGHELUTA, 2018). After the analysis of four domains: social impact, strategy, talents / labor force and technology, the results show that companies are unsure of how they have to react to change so they can benefit from positive results. Regarding the social impact, 87% of companies believe that Industry 4.0 will improve

social equity and quality of life as well as its stability. In addition, companies are convinced that the workforce needs to be trained to face new challenges.

"The survey highlighted the fact that executives around the world are at an early stage in preparing organizations to make the most of Industry 4.0. They will need to use opportunities to strengthen interaction with customers, employees, organizations, communities and society in a broader sense (ANGHELUTA, 2018).

However, companies are planning to invest about 5% of digital revenue from digitalization worldwide at \$ 907 billion, according to a PwC study, according to Agerpress (AGERPRESS, 2016).

In the restaurant industry, companies digitize essential activities within their own chain of business, but also in their relationship with partners, especially on supply floors. In addition, they improve their product portfolio by introducing digital features and innovative data services (ANGHELUTA, 2018).

The main investments will be directed to the development of digital technologies such as sensors or connection devices, software and applications for data processing systems. As a result of implementing digital solutions, companies also expect to reduce costs and increase their competitiveness (PwC, 2016).

Considering the fact that the vast majority of restaurants in our country are small and very small companies, it is understandable that they do not have departments that can thoroughly analyze all the existing solutions in the market. Thus, over 80% of companies expect data analysis methods to have a significant influence on the improvement of decision-making processes. The general issues faced by companies in implementing Industry 4.0 refer to domestic digital specializations as well as the lack of specialists in this field.

For example, some digital solutions for restaurants are:

- a. Inventory tools integrated into the existing POS system;
- b. Sensors for reducing energy costs (both for lighting and coolers). They can additionally provide information on the required maintenance work, which reduces the cost with the equipment;
- c. Digital applications are an important solution for the paper-based monitoring and reporting system, but also for systems required by law such as Hazard Analysis and Critical Control Points (HACCP);
- d. Digital applications to increase customer satisfaction, etc.

Industry 4.0 delivers a more satisfying and rewarding experience to the customers, including a more streamlined process of delivery and day-to-day management for the supplier. This includes also applications on their mobile devices that control the customer experience, for example, loyalty programs, customer preferences, and even light music preferences. (DARRYL, 2018). By improving customer experience, restaurants can increase their competitiveness.

METRO AG supports the digitization of the Horeca sector, launching internationally the "Digital Club" platform dedicated to restaurants, hotels and catering providers (METRO, 2017).

According to the obtained results, it is known that at present most restaurant owners do not use any digital solutions. Even if the digital solutions available can solve a significant part of the problems they face, even concerning the workforce, the digital solutions are missing.

Digital Club offers restaurants: Free digital tools, advice, support and a space that facilitates dialogue, socialization, knowledge sharing, and building a community dedicated to restaurant owners.

Compared to Romania, the HORECA sector in Germany has a high level of digitization, despite the fact that the size of the companies are also very small.

"METRO AG has set up the company HoReCa.digital, which aims to manage its own digital solutions as well as those developed by start-ups. The company started the digitization process in 2015 through METRO Accelerator, supported by Techstars, which promotes start-ups that develop digital solutions for the Horeca industry" (METRO, 2017).

Two Digital Club solutions ready to be used internationally are: a tool that enables businesses to quickly and easily build a personalized website and an online booking tool. The goal of Digital Club is: To create a digital community for the Horeca sector (METRO, 2017).

SELGROS implemented a digitization tool called "Flowtify" for internal monitoring and reporting, but also for law required monitoring, for example HACCP.

This digital instrument, Flowtify, offers:

1. Easy creation, editing and evaluation of checklists on tablets or PCs
2. Live Feedback across all stores\Access to all relevant data, no matter where you are
3. Intuitive operation on the tablet and in the Web Dashboard.

The main advantages of flowtify are:

1. elimination of archiving costs
2. unburden executives through automated plausibility checks
3. easy collaboration with auditors through remote access to all relevant data
4. fast onboarding of new employees
5. established processes stay even with high staff turnover
6. early reminders of maintenance prolongs the service life of your equipment.

The flowtify App includes:

1. upcoming checklists are indicated 60 min prior to start
2. checklists are organized by closing time
3. finished checklists are visible up to 12 h in the past
4. sort checklists by departments
5. deactivate checklists or single tasks when needed
6. Result value fields such as: numbers, dates, yes/no, signatures, etc. to mark tasks done
7. multiple Remeasurements
8. mark tasks as not done – employees have to enter the reason why the task could not be completed accordingly
9. include attachments to tasks, (video, pdf, photo, word, excel, etc.) to guide employees
10. instant messaging in case of irregularities (email / web dashboard / HotelKit)
11. employees can send messages & photos related to a specific tasks
12. generating different types of reports
13. localization: English, German (French, Italian, Romanian in Q2/2018) (VOLLMER, 2018)

#### **4.Conclusions and discussions**

The restaurant industry faces a very strong competitive situation. Strong competition is also encountered in other branches of the Romanian economy, but competition in the restaurant industry does not only refer to the mere competition between traditional players, but also to the competition with the new forms of modern gastronomy. Thus, digitization is a simple, safe and unavoidable solution in this industry.

As we have earlier presented, players such as Metro and Selgros have already resorted to modern solutions and to various forms of digitization.

The sustainable development of the restaurant sector depends on a qualified workforce and especially on customer satisfaction. Both aspects can be improved by using the tools offered by digitization, industry 4.0.

This sector does not have to worry about digitization, as it exists and is widely applied in other countries and has proved to be successful. Among the first applications of digitization needed in this sector are: digital management and control tools, quality assurance, and hygiene; those related to collaboration and communication both vertically and horizontally with the workforce and last but not least, those related to the satisfaction of the clients.

A very important aspect is the choice of the most suitable solutions for each company and its departments. Each digitization solution includes the initial acquisition costs and a number of other implementation and use costs. Therefore, the advantages of the chosen solution need to be carefully analyzed and the users need to be well trained to take advantage of everything that the digital solution offers.

Choosing a digital solution without verifying the possibilities of implementation and/or without training users properly, brings with it a number of material or organizational risks.

In order to have new business opportunities, we must embrace automation and digitalization and develop new markets, new production processes and new products. Industry 4.0 has proven to increase productivity and efficiency, and even though it has reduced the job opportunities in some sectors of the industry, it has created more highly skilled and productive jobs in the IT industry. Restaurants and hotels should adapt to the needs of today's consumer, which are tech-savvy and self-sufficient (the great majority of them do not need a travelling agency anymore) and use user-friendly and updated applications to promote their respective businesses (JASONOS & McCORMICK, 2017).

As a general conclusion, we must mention the experience of other countries, where the restaurant sector continues to position human relations first. So the customer will return to a restaurant only if he was treated well and felt good, liking the atmosphere found in that place. Digitization should be carefully chosen according to the specifics of the location and the age of the clients in order not to lose the personal communication that a customer segment is looking for, but also not to neglect or lose the advantages of digitization. As an example, in fast-food restaurants, customers may, better receive digitizing, even in the case of orders or issuing notes, than in more sophisticated restaurants. Berlin's "Byte-Burger" restaurant is a place where the order is made directly at the table on a tablet, and in Cologne's "Grillrestaurant B. Easy", customers receive the digital bill and have to pay for it at the exit of the restaurant (GEHRING, 2017).

The analysis is limited to the restaurant sector, and it is necessary to extend it to the next stage of the entire tourism and services industry in Romania, with the coverage and analysis of the level of appreciation of the different digital solutions from the point of view of the consumer.

### **Acknowledgments**

The warmest thanks are to the following people, who have spent time discussing the current situation: Christian Macedonschi and Daniel Vollmer. Last but not least, I wish to thank Alexandru Bojin, who supported me in obtaining information and contacting private companies.

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## Evolution of the IT Industry and its Development Potential

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### **Abstract**

The IT & C industry is currently the industry's fastest growing sector, doubling its turnover over the past six to seven years, to 6% of GDP at the end of 2017. The present study is based on secondary research related to the evolution of the IT & C industry in Romania in the last decade, plus a market research based on interviewing some of the players in the IT & C market, what challenges they face in Romania, their development plans and the advantages that Romania offers compared to other countries. The main challenge facing IT & C companies in Romania now, according to the research results, is that of the skilled labor force. IT & C companies have also resorted to in-house staffing solutions to develop further. Thus another result of the research was that hiring is done from college or even from the gray area of the labor force. Despite the fact that the supply of specialized personnel is below the growing demand, IT & C companies appreciate the Romanian staff, especially the young people. They have a very good knowledge of foreign languages, especially English, far above the level of young people in the neighboring countries. This, coupled with very good math skills, as well as creativity and readiness to learn and work, makes them extremely valuable for those companies. The study is limited to making an X-ray of the current situation and needs to be extended to the measures necessary for our country to maintain this advantageous position as a leader in the European Union in terms of the number of IT & C employees per capita.

**Keywords:** IT&C industry, Romania, IT&C personnel skills, IT&C growth in Romania.

**JEL classification:** M15, M54, F23, J24.

### **1. Introduction**

In the context of the global economy, our country, Romania, has a rhythm of growth and development superior to other countries. World economic growth is slow and shows a relatively modest overall pace compared to the pre-crisis period. Taking as an indicator the global GDP, we observe even an annual tendency of a slight decrease in the pace of development. In 2016 the growth was only 3,04% compared to 2015 when the growth was 3,17% or compared to 2014 when it was 3,38% (CHIRITOIU, 2017).

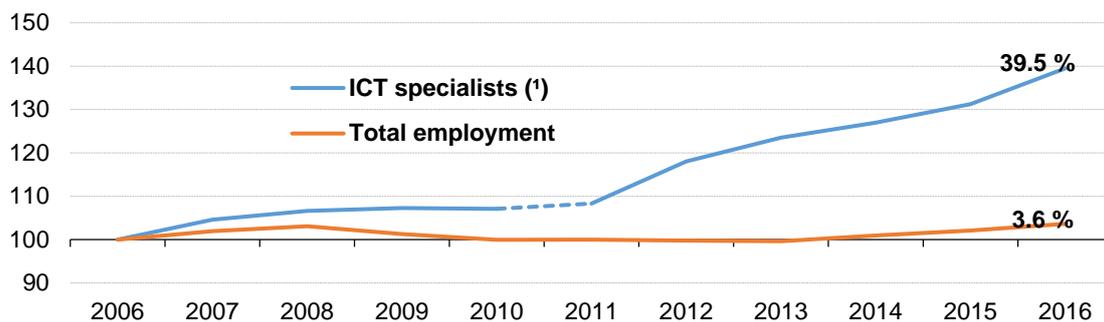
In this global situation, the Romanian economy reached the highest level of growth after 2008, an increase of 4,8% in 2016, which was well above the EU one (1,95%). Romania's economic growth rate surpassed not only the member countries with advanced economies, but also the ones in Bulgaria, Hungary or Poland (CHIRITOIU, 2017). This growth was also supported by government measures to boost consumer spending by raising public wage earnings, raising pensions, and last but not least, by lowering the value added tax since January 1, 2017 to 19%. These measures, as well as the permanent digitization of the economy, proved to be beneficial, with growth in 2017 being even higher than in 2016. In 2017 the Romanian GDP grew by more than 7%. With this GDP growth, Romania was the fastest growing country in the European Union. Based on a strong Eurozone economy exports performed also very well. The expectation for 2018 is a ca. 5% GDP growth, which is at a more sustainable level, determined by limited possibilities for new fiscal stimuli and an expected monetary policy tightening. With this economical development, Romania will keep a top position among European economies (PAUN, 2018).

Our country has an “organic” economic development, demonstrated by general macroeconomic indicators. The IMF (International Monetary Fund) estimated an economic

growth of over 3% for the period 2017-2019. According to the National Institute of Statistics, the IT & C sector recorded an increase in productivity from 40% in the year 2015 to 45% in 2016 (CHIRITOIU, 2017). This data proves the potential of our country to maintain and develop the IT & C sector.

In the present study we carried out a secondary analysis on the evolution of the IT & C sector in Romania and with the help of a questionnaire we analyzed the opportunities and challenges facing the companies in this sector. This analysis aims at performing an X-ray of this sector and to highlight the first possible measures to ensure a favorable position of Romania in this field.

The digitization and the development of the IT&C sector has an accelerated pace throughout the European Union. The following graph presents the evolution of the number of employees in IT&C at European level, where the lack of skilled labor is not different from that in Romania.



**Figure 1. Persons employed as ICT specialists and total employment, EU-28, 2006-2016**

Source: Eurostat (online data codes: isoc\_sks\_itspt and lfsa\_egan)

According to market estimates, the Romanian IT&C industry employs over 100,000 people. Taking into account the upward curve of growth in this industry, only in the next few years the need for professionals will grow to 300,000. There are over 7,000 IT graduates annually from the Romanian schools, but the need for the local market, especially for software programmers, is double. The lack of qualified IT staff is an important topic of discussion throughout the European Union. The European Commission estimates that Europe may face a deficit of up to 825,000 IT professionals by 2020 (RADESCU, 2017).

Because of the talented human capital, Romania is seen as a vibrant entrepreneurial hub focused on tech and innovation. Romania has five polytechnic universities, 59 domain specific universities and 174 private colleges. A large number of talented and intelligent students tend to pick high-tech industries studies. Approximately 5,000 of the 30,000 engineers graduating every year in Romania are trained in high-tech. Another important advantage is the cost of living in Romania, especially in Bucharest. This costs are on average 50% lower than in other important western cities like Vienna, London, Berlin or Paris. The living cost in Bucharest, the most expensive city in Romania, is also at least 12% lower than other capitals from CEE countries, like Prague, Warsaw or Budapest (VRINCEANU, 2017).

The long list of important advantages and their unique combination, placed Romania on the radar of many investors. Based on the improved economic conditions and a high degree of monetary stability, significant transactions and a wealth of opportunities becomes real. An additional advantage is Romania's favourable geographical position, directly at the intersection of major European trade corridors. Therefore, Romania has been recognised as an excellent investment destination for companies who wish to establish themselves on the local market and to build stronger ties with Asian and Middle Eastern partners (STRATULAT, M.; ALBULESCU, E, 2018).

## 2. Secondary analysis of the evolution of the IT & C sector in Romania

The Romanian economy has shown a sustained growth in recent years, and among all sectors of the economy, the IT & C sector is considered to be the one with the most dynamic growth. This sector is also called "the success story of Romania" (ANGERER, 2016). According to data provided by the National Institute of Statistics, the input of the IT & C sector to Romania's GDP was 6,7% in 2015. Comparing this result with other countries in the region, members of the European Union, Romania was at the top of the rankings according to the 2015 Eurostat data (ANGERER, 2016).

The pace of development of the IT & C industry is a very fast one, with an average annual growth of approximately 15% (AUDOIN, 2017). This led to an increase in demand for skilled labor, more than the supply. This industry is very dynamic both in its pace of development and in adapting very quickly to customers' needs.

If in the past one of Romania's main competitors in the field of outsourcing was India, we have seen recently an increase in competition from Latin America, for example: Nicaragua, Panama and Brazil. These "kings" of outsourcing are seen as a safe future source for Business Process Outsourcing corporations (GEORGESCU, 2015).

The IT&C industry also enjoys the advantage that Romania is ranked second in the European Union regarding the average maximum connection speed and sixth in terms of broadband adoption of 4 Mbps in Q1 2017 (COCIRLA, 2018). According to forecasts by Computerworld, once companies show more interest in implementing new technologies, the IT sector budgets will grow by approximately 15% on average. These new technologies refer to: security technologies, cloud computing, business analytics, application development, upgrades and replacement, mobile / wireless devices and mobile device management systems (GEORGESCU, 2015). Another important aspect that has influenced the positive evolution of the IT&C sector in Romania is represented by the tax benefits specific to this sector (GRIGORAS, et al., 2017). In Romania, the level of taxes is low compared to other European countries. These measures to support the business environment are planned by the Romanian Government also for the future (COSTESCU, 2016). Although global taxes for this sector are small, the IT & C sector, being considered an important vector of economic development, has also enjoyed specific tax exemptions in Romania.

Another advantage that attracted foreign investments to the IT&C industry was the low wages compared to other, more advanced economies. This situation was present after 1989 also in other areas of the Romanian economy. For some industries, this advantage turned out to be a short-lived one, and the best example is the textile industry. After a relatively short period of time, the "loan system" did not present itself as an advantage for attracting investors to our country. Labor costs in Romania have increased, and foreign companies have been targeting other low-wage, labor-intensive countries. The major difference between the two sectors is the required skill level of the personnel. Romania enjoys a long tradition of research, development and innovation in the technical field. The technical schools in our country enjoyed appreciation and obtained outstanding results from its highly-qualified graduates abroad. This represented an important advantage, which convinced foreign investors to come to Romania. Initially there were collaborations of foreign companies with teams of experts from our country (AUDOIN, 2017). As a result of the good results of these collaborations, demand has increased and foreign companies have started to invest in Romania. Romanian IT & C specialists are professionally very well trained and also have the advantage of knowing at least one foreign language, usually English, at a higher level than in other countries in Central and Eastern Europe.

The success of this industry depends largely on creativity and innovation (ANDRIESCU, 2018). So the training of young people needs to be adapted to the requirements of the market in order not to lose the favorable position that our country has at the moment. In the study of

the labor market of the IT&C industry in the European Union, Mrs. Burciu also highlights the fact of the professional reconversion of Romanians who go to work abroad to the Romanian IT&C industry (BURCIU, 2017). Support Centers for the most important international brands are present in Romania and offer services to international clients, no matter where these corporations are located. The IT&C sector overcomes agriculture as a share of GDP, even though it has a much lower number of employees than this (GORODCOV, 2018). The IT & C sector has proved to be not only a growth vector, but also an image for our country. It grew in the AT Kearney rankings for 2016 (Global Services Location index rankings) by five spots compared to 2014, now ranking 13<sup>th</sup> (ANGERER, 2016).

The tech sector is expected to grow by 9% per year until 2025, sustained by one of the highest broadband internet speeds in the world (behind only Singapore, Hong Kong, South Korea and Iceland) (PASCA, 2018).

The IT&C industry, which is made up of the communications sector on one hand, a privatized, developed, expanded, and last but not least, modernized sector over the last 15 years, and a strong IT sector. The IT sector includes IT services, software and hardware development, Business Process Outsourcing (BPO), the video game development sector where many start-ups are also being set up, etc.

However, there are a number of issues that need to be addressed, such as:

1. Market demand mainly refers to skilled labor at low cost when intellectual property is owned by foreign beneficiaries;
2. the IT sector is largely a support industry without effective demand from the national market;
3. the demand for labor exceeds the offer especially in Bucharest;
4. Many Romanian IT companies have good ideas but do not have the necessary means to ensure the visibility necessary for their promotion;
5. employers expect employees to have a level of flexibility and adaptability, with the willingness to work according to pre-established rules from the first day of work;
6. Infrastructure and especially real estate development in other cities do not keep pace with the existing demand for faster development of other IT&C centers in the country (GEORGESCU, 2015).

The evolution of the domestic software and IT services market is negative, compared to a 14% increase in the Romanian software and IT services industry for 2017, the SITSI® software (Software and Industry Services) research shows a drop in domestic comparative consumption to 2016. As a result of the drastic slowdown in public investment in software solutions and IT services, the local industry relies primarily on private investment and demand. The government's decrease in demand for IT infrastructure is determined by the implementation problems of already existing projects that were designed to automate and implement effective inter-institutional programs, especially those that target social interaction. Unlocking investment plans for the local and central government, education, healthcare or the defense sector could attract a considerable amount of EU funding. This could potentially revive the local IT industry (COTOVELEA, 2018).

The exports of the IT industry are much higher than of the national sales and they are growing by 25% per year. The exports represent almost 77% of the software industry's total revenue. Romanian developers have a culture driven by innovation and a strong commitment to delivering excellent services across industries. Because of this they are gaining more and more recognition in the UK, Scandinavia and the US (PASCA, 2018).

Internet of Things appears to be one of the next opportunities for the IT industry, and there are major trends in the marketplace that transform technology development, because it can develop applications that take advantage of data and analysis from connected devices and sensors (OLARU, 2018).

Developing the IT&C sector is also an opportunity for the development of some areas in the country that do not have an economic growth at the same level as others, especially Bucharest. Such a region is the northeastern part of our country where IT specialists are trained in university centers such as Iasi and where the necessary infrastructure is being developed and necessary conditions are being created to attract foreign investments. An additional initiative of the Northeast region is to set up the Euronest Innovative Cluster of IT&C Hub in order to position the North East Region as a competitive European provider of IT&C services and technologies and as a priority European destination for projects of large international companies (MACOVEIU, 2016).

### **3. Primary analysis - questioning companies in the IT market**

The questionnaire used in the primary research conducted in the IT sector in general and in the gaming sub-sector, in particular, included besides general questions about the turnover and the number of employees over the last ten years, questions regarding the main challenges and opportunities offered by Romania currently.

When asked about the choice of Romania as a destination of investment, the companies listed the following arguments:

1. Qualified human resource with serious IT knowledge;
2. the level of very high general professional training;
3. a very good cost/quality ratio regarding the workforce;
4. high-speed internet;
5. Romania's membership in the European Union and NATO;
6. the tax incentives granted by the state to the IT&C sector;
7. extremely good foreign language skills;
8. the geographical position of Romania (near the company headquarters and/or the main client).

Four of the main arguments listed by the companies that answered the questionnaire are staff related. The advantages that the state has provided through tax incentives related to employee income taxation for the IT sector has resulted in lower personnel costs and the possibility of providing motivating salaries for employees. This led to the well-trained young people in Romania and the creation of a successful story in our country.

The main development directions planned by companies refer in particular to:

1. diversifying the product portfolio;
2. Diversification of operating platforms;
3. developing the technology used;
4. Training and specialization of personnel.

All planned development plans relate mainly to increasing the quality of the products and services offered to customers and indirectly to increasing their added value. This trend is also evidenced by the permanent and organic growth of the turnover of companies surveyed over the last ten years. This increase in turnover is not comparable to the evolution of the number

of employees over the past ten years. The number of employees has varied over the last five years, generally showing a significant increase over 2007. The plans of the companies in this sector are a slight increase in the number of employees in the medium term and that they are willing to continue to invest and develop in our country, but that they need a skilled workforce. In the short, medium and long term, the lack of skilled labor becomes a very important obstacle, which blocks the chances of attracting and especially of maintaining the investments in this sector. In the 2015 Global Shared Services Survey, 10% of Shared Service Centers worldwide are located in Central and Eastern Europe, compared to 17% in APAC and 16% in Latin America (GHINET, 2015).

Thus, the question related to the main challenges in the Romanian IT & C sector, the companies mainly referred to finding, attracting and maintaining a qualified workforce. Other challenges mentioned by companies globally refer to the permanent changes in this sector and the need for adaptability and flexibility of companies in order to be able to maintain and develop in this market.

Among the global challenges mentioned by companies are:

1. A strong increase in competition for attracting users by using advertisements;
2. the difficulty of accessing certain Asian markets, especially China;
3. Opening customers to free/shareware solutions that erode the profits of licensed technologies;
4. the emergence of startups and disruptive players / competitors.

Turning to the challenges of the IT & C market in our country, they refer to the workforce, as I said earlier, and are mainly the following:

1. competition for the same workforce, especially in Bucharest (but also in the other big cities in Romania), both among the large corporations in the IT sector, as well as with the financial-banking and industry corporations that have service centers IT;
2. the recruitment of qualified staff, which entails large expenses both financially and allocated time;
3. maintaining the qualified personnel in the company in the medium and long term;
4. increase labor mobility and Z-generation typology for which you need to create new types of development programs; managers must adopt a certain leadership style (open, participatory, coaching type); must identify certain types of benefits that provide them with mobility and flexibility;
5. maintaining a high level of involvement and loyalty of staff;
6. an education system that can not cover the need for IT industry specialists;
7. lack of specialization in formal education adapted to the needs and requirements of companies in the field;
8. an education system that can not cover the need for IT industry specialists.

Labor market competition in the IT & C sector is on the rise and this requires employers to adapt to the demands of the workforce and to offer attractive benefits packages on top of the actual wage.

Thus, employees, irrespective of the generation they belong to, are expecting from the employer:

- a. a flexible work schedule
- b. development opportunities

- c. a pleasant work environment, a good team
- d. a good and direct communication with the manager
- e. wage compensation
- f. job stability (COTOVANU, 2018).

In the Romanian IT & C sector, over 78% of employees belong to the Millennials generation (between the ages of 24 and 34). These employees are hard to maintain in a company if they are not satisfied and are willing to leave the company after three or four years, although, in this sector we have the highest average salary in our country, 1.400 € per month (CHIRILEASA, 2018).

The number of female employees in this sector is constantly increasing, and the majority of the employees are graduates of the polytechnic universities in the country, especially of the Polytechnic of Bucharest (CIRMACIU, 2016).

The lack of qualified workforce is an even bigger problem for Romanian small and medium-sized firms, which can not provide employees with all the incentives that large corporations offer. In some cases, employers face employees that are over-skilled in some areas but lack the basic general knowledge. This leads to their lower adaptability and productivity in small companies (DRAGAN, 2018).

The problem of the lack of skilled labor faced by the IT&C sector can be solved in the medium term through close co-operation between educational institutions and private companies. By creating joint programs, it is possible to ensure the specialization of the personnel according to the needs and the requirements of those companies. Also, through a close collaboration, the curricula and the necessary training time of the future staff can be established.

Adoption of projects must be done in different forms and given different levels of importance, so that project management is well adapted to the needs. "Organizations can be centered on a single project that is the focus of their activities, or they can host a set of projects through a matrix structure, where the organizational chart is organized by project managers who manage independent or competing projects in programs and portfolios" (RADU, 2015).

In the beginning, the easiest is to organize short courses to respond to some urgent and punctual problems faced by companies at the moment. This implies the willingness of collaboration both from educational institutions and state institutions, as well as from private companies.

Unfortunately, the companies state that in most cases the curriculum is not tailored to the needs and demands of the market. Because the workforce is an important element for the IT & C sector this proves to be one of the main challenges. The next question addressed to the IT companies was related to the advantages of the Romanian employees.

From the responses received, I point the following:

1. good general training in the field of exact sciences (mathematics, physics, etc.);
2. solid knowledge of IT;
3. good language skills, especially English;
4. creativity and flexibility;
5. Good results in stress and crisis situations.

Knowledge of foreign languages is highly appreciated by international companies as they enable employees to communicate directly with clients from other countries and/or the headquarters of their companies and/or their counterparts from other countries.

The spreading of the English language in Romania is considered to be due both to intensive foreign language studies in schools, but also to the fact that movies and TV shows are subtitled in Romania and not doubled, as is the case in many other countries. Also the menu for computers, tablets and many mobile phones is in English. The last question addressed to

companies refers to the dual training education system and the assessment of the chances of this training model of solving the problems with the workforce.

The companies appreciated on a scale from 1 (insignificant) to 10 (extraordinarily useful) with an average mark of 8.6 this solution to be very useful. Thus, one of the possible solutions accepted by the companies is to organize specialized training and dual courses in order to create the premises for a durable and sustainable development of the IT&C sector in Romania.

#### **4. Conclusions and discussions**

Some of the important trends resulting from the secondary analysis and the questioning of some important players in this market, refer to maintaining the significant growth trend of the number of companies outsourcing certain functions from Western Europe to Romania. Also multifunctional service centers and fewer uni-functional centers are developing, as they used to before. In recent years, outsourcing centers have evolved and are much better structured, with clear elements of collaboration with headquarters, but also between the various corporate departments.

Thus, in a many cases, employees from Romania are detached abroad and vice versa. By increasing wage levels in our country, the workforce is only an asset if it proves to be better prepared and more productive than in other countries from Latin America or Asia, where there are high numbers of young people, and where the salaries are lower than in Romania.

Universities in the United States have raised the issue of adapting education programs, as published in the Harvard Business Review article in April 2016, which states that "hybrid" jobs require "hybrid" education (AOUN, 2016). So, our university programs must be tailored to the needs of the market. A new and important strategy for the tertiary education has been implemented in Romania since 2015. The goal of this strategy is to improve participation in schools, to prepare better study programs and to adapt or to develop for students new skills that are needed by the economy and are able to support and help the development of the IT & C industry (NICULAE, 2018).

Romania enjoys a special advantage, and thus, through the creation of dual-training programs, our economy can enjoy as soon as possible its rewards and thus solve a large part of the IT & C workforce problem. The advantage I am referring to is the Romanian school tradition of learning a lot of math, but also the outstanding ability of our students to process the effectively the information they receive. The extraordinary results obtained by Romanian students at the Olympics and Mathematics and Computer Science competitions place Romania on the third place in the world, after Russia and China, as a number of medals, and of course ranked first in Europe (MOGHIOR, 2018).

As early as 2014, the Romanian Government amended the Education Law by the Emergency Ordinance (OUG 94/2014). This order gives private companies the opportunity to get involved in organizing the educational process, namely in determining the duration, the content of the training programs and, last but not least, the ways of certifying the professional training.

Thus, private companies can determine, according to their own needs, the skills to be assimilated by potential future employees. This form of vocational training can also be one that will allow for the retraining of the labor force in order to decrease the unemployment rate, as well as an increase in labor productivity.

This dual system of education involves providing theoretical training by educational institutions during one, two days of training per week, and by the private companies organizing the practical training (3-4 days a week).

This form of education represents an important support for private companies, the costs of the theoretical training being borne by the Romanian authorities. In addition, students that have completed the compulsory ten-grade education can enter the labor market and, at the same

time, have the opportunity to continue their vocational training, obtaining a higher level of qualification.

Many young people who engage in the training period have difficulties to explain to the employer that they have to miss work to go to school, or to prepare for an exam, or to explain to teachers why they missed classes or have been late.

The dual education system enables young people to prepare themselves exactly as the labor market requires and thus can advance their careers much faster, compared to students who are devoid of practical experience.

A solution for the financing of the training programs and the specialization of the workforce in these sectors could be funded through European Union programs. This solves the problem of financing and can be structured for longer or shorter courses that all interested persons can participate to.

These programs can be accessed, for example, by universities in collaboration with interested private companies. Such a program funded by the European Union and managed by the Ministry of European Funds is the Competitiveness Operational Program 2014-2020.

Other programs available for the advancement of professional qualification projects are: Human Capital Operational Program Priority Axis 6 - Education and Competencies, Objectives Specific; Regional Operational Program 2014-2020 - Priority Axis 10: Improving Educational Infrastructure - Specific Objective, 10.3 Increasing the relevance of university education in relation to the labor market and competitive economic sectors; Human Capital Operational Program - Priority Axis 6 - Education and Competencies - Specific Objective 6.13 Investment Priority: Improving the usefulness of education and training systems for the labor market, facilitating the transition from education to work and strengthening the education and training systems and their quality, including mechanisms for anticipating skills, adapting curricula and creating and developing work-based learning systems, including dual learning and apprenticeship systems; and so on

Besides providing a well-trained workforce, it is also necessary to implement other general measures to maintain the pace of long-term development of the IT&C sector. Some examples of necessary measures would be: the development of several other cities as IT&C centers other than traditional ones such as: Bucharest, Cluj, Iasi, Craiova, Timisoara; creation of high-value IT&C services and research and development centers versus simple outsourcing centers; expanding collaborations between authorities, educational institutions and IT&C businesses; encouraging entrepreneurship in the field in a clear and systematic way; providing private companies with access to specializations and courses, including foreign languages, for their employees and, last but not least, organizing a public-private IT partnership for children and young people.

This study is limited to making a general analysis of the current situation in the IT&C sector in Romania, pointing out some advantages and challenges facing the companies in this sector at the present time. In addition, we highlighted the option of organizing dual system specializations and the acceptance of this option by the companies in this sector.

In the next stage it is necessary to study and define the necessary and accepted measures by the private companies, institutions and authorities for ensuring and maintaining the extraordinary position of our country, the leader in the European Union in terms of the number of IT&C employees per capita, in the long run.

## **5. Acknowledgments**

In the realization of this paper I received the full support from the companies who answered the questionnaire and thank them in this way. The warmest thanks are to the following people, who have spent time discussing the current situation: Grigoriada Stroe, Mihai Catescu, Paul

Friciu, Andrei Lopata. Last but not least, I wish to thank Alexandru Bojin, who supported me in obtaining information, contacting private companies.

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## **Comparative Study in Digital Marketing Trends in Adventure Tourism: Bulgaria, Estonia, Ireland and Scotland**

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### **Abstract**

Adventure tourism is one of the fastest growing segments of the tourism industry and has been recognized as a powerful tool that can promote sustainable development in rural and economically marginal areas, generating smart employment and jobs growth, as well as providing strong incentives for conserving the natural environment. Adventure tourism services are getting more popular in Europe in recent years, and with the abundance of tourism organizations, adventure types and destinations, successful marketing strategy is key for attracting new customers to the niche service. With the worldwide digitalization trend the main channels for information on different and alternative types of tourism in recent years have been the different digital communication platforms (social media, website, e-mail and e-WOM marketing). The balanced online presence of the organization is an extremely valuable tool, especially if the target audience is young and active people looking for new opportunities. Unlike classic media communication tools, digital communications are extremely effective on the basis of much more limited resources. Therefore, for organizations offering a niche service, such as adventure tourism, the need for adopting digital communication channels is key for its market success. The survey, presented in the current paper, has been conducted with stakeholders in four different countries in Europe: Bulgaria, Estonia, Ireland and Scotland, and aims to establish the existing skill levels in digital marketing of adventure tourism organizations, as well as the opportunities for educational courses in the field of digital communication. Results are compared and analysed, in order to outline the current trends and opportunities for the stakeholders currently on the market, but also for those, looking for new tourism service opportunities.

**Keywords:** digital marketing, adventure tourism, digital marketing skills, social media marketing.

**JEL classification:** M31, L83.

### **1. Introduction**

The digital marketing environment is changing rapidly, and, for small and medium enterprises, digital marketing is currently an important opportunity and even a necessity. Attracting new customers, engaging their interest and evoking participation, retaining existing customers and knowing their preferences are key steps towards building strong customer relationships.

Adventure tourism on the other hand is one of the fastest growing sectors of the tourism sector, attracting high value customers, supporting local economies, and encouraging sustainable practices. Thus, the continued growth of this sector creates positive impact not only for tourism, but also for destination economies, their people, and their environment. The industry includes wide variety of services and destinations for specific target groups. When it comes to promotion of such niche services, the traditional marketing tools prove to be ineffective, time consuming and of high financial cost. Presence in the digital world is a definite must for these organizations, considering the main target audience, which tend to be young and active tourists, looking for new experiences, actively using online information sources and also willingly sharing their experience with other like-minded people. The current paper focuses on the expertise and opportunities for implementation of digital marketing tools before such tourism organizations.

### **2. Opportunities and communication tools in the era of digital marketing**

The term “digital marketing” describes targeted, measurable and interactive forms of marketing

communications for both products and services, done using different type of digital technologies. Digital marketing is synonymous with online and internet marketing, and among its main tools are digital and social media, websites, blogs, SEO, SEM ( Search Engine Marketing - promotion of websites by increasing their visibility in search engine results pages, primarily through paid advertising), e-mail, e-WOM(electronic Word-of-mouth - the use of social media platforms and websites to promote a product or service), etc., which are used to engage existing and potential customers in different stages of the decision making process. These tools could easily also be described as inbound marketing techniques, where marketing activities aim to bring in customers by providing them with information and creating awareness by generating stimulating content (Halligan, 2009). Through digital marketing companies aim to promote their brands and generate more sales, but also to develop relationships and engage customers. Customer engagement could be expressed through participation of the customer in the process of creating new products, reference, sharing information about the brand and the company's activity (WOM), and feedback on products and services of the company (Pavlova, 2018), thus proving the importance of a well-balanced marketing strategy for the development and growth of any organization.

In short digital marketing offers the opportunity to promote any type of product or service on the Internet and any other electronic channel, and targets a large number of online users and specific audiences with information about a product or service. Digital marketing tools make it easy for the user to gather free information, review and shop online, whether from a desktop or a mobile device. From the point of view of the organization, the digital marketing tools also offer other advantages to the traditional marketing, most importantly:

- affordable and easy to use, especially in regards to social media;
- lower advertising costs;
- highly targeted audiences;
- easily measurable;
- audiences can be reached in a much shorter period of time, regardless of location
- direct communication with customers at all time.

Currently digital marketing is considered to be the most common way to reach out to a potential customer, with the opportunity for highly personalized and influential advertisements. In fact, according to some researchers, we are currently in a “postdigital” world in marketing, where the concept of a division between “digital” and “traditional” marketing is outdated. Instead, digital marketing is considered just marketing, since almost all marketing activities a firm might consider now have some kind of digital aspect. (Lamberton & Stephen, 2016).

The wide variety of digital marketing tools and platforms at the disposal of any organization makes the selection of the suitable communication channel a challenge. The basic digital marketing tools are summarized in Table 1. As it is shown, each platform has its own specific purpose and consequently the communication strategy for each platform (both from the consumer and from the point of view of the business) should be adapted according to the target audiences. Through digital marketing it's relatively easy to reach out and engage any audience and to spread information even for niche products and services, such as the adventure tourism. With the variety of marketing tools in the digital world and the almost infinite possibilities for their utilization, it's important for every organization to be proactive and evolve according to the marketing trends for the specific industry. The decision making power lies entirely in the hands of the consumer, as usually he initiates the contact, searches for information, shares

comments and opinions with other potential customers, so the presence of the company online is a decisive factor for commercial success.

**Table 1. Basic digital marketing tools**

Tool	Description	Usage
Website	The website is the main source of information about the company, its products, services, history. Could include online store for direct purchase, blog, message boards, etc.	<ul style="list-style-type: none"> <li>- Main information source for consumers; linked from other DM channels</li> <li>- Building brand awareness</li> <li>- Communication with customers and audiences</li> <li>- Increase of purchase intentions</li> <li>- Purchase (online store)</li> </ul>
SEM	Promotion of websites by increasing their visibility in search engine results pages, mostly through paid advertising. Usually incorporates search engine optimization (SEO).	<ul style="list-style-type: none"> <li>- Building brand awareness</li> <li>- Increase purchase intentions</li> <li>- Purchase</li> <li>- Highly targeted audience</li> </ul>
Display Advertising	The company's promotional messages appear on third party sites or search engine results pages such as publishers or social networks; usually through banners or other ad formats made of text, images, flash, video, and audio.	<ul style="list-style-type: none"> <li>- Building brand awareness</li> <li>- Increase purchase intentions</li> <li>- Purchase</li> <li>- Remarketing</li> <li>- Highly targeted audience</li> </ul>
Social Media	An interactive multi-user site whose content is created by network users. This creates an automated social Web environment where large groups of users can communicate with common interests and preferences. The connection between users is via the Web service on internal mail or through instant messaging programs. Includes blogging websites, microblogging, wikis, and livestreaming.	<ul style="list-style-type: none"> <li>- Building brand awareness</li> <li>- Communication with customers and audiences</li> <li>- Distribution of e-WOM</li> <li>- Opportunities for influencer marketing</li> <li>- Increase purchase intentions</li> <li>- Highly targeted audience</li> </ul>
e-mail marketing	Sending commercial message, typically to a group of people (potential or current customer). Usually involves sending advertisements, request business, or solicit sales or donations.	<ul style="list-style-type: none"> <li>- Building brand awareness</li> <li>- Communication with customers and audiences</li> <li>- Increase purchase intentions</li> <li>- Highly targeted audience</li> </ul>
Mobile Applications	A computer program designed to run on a mobile device such as a phone/tablet or watch; usually offer specific information or user interface, depending on the goals of the publisher and the target audience.	<ul style="list-style-type: none"> <li>- Building brand awareness</li> <li>- Communication with customers and audiences</li> <li>- Increase purchase intentions</li> <li>- Highly targeted audience</li> </ul>

### 3. Adventure tourism and communication trends

Tourism as a whole is one of the most rapidly growing sectors in the world, with its different types and forms is capable of satisfying various target consumers. In the globalizing world tourism services are key for protecting and simultaneously evolving a country's natural resources, cultural specifics and history. The counties, subjected to the survey presented in this paper, are no exception, as obvious by the role the tourism sector plays for the nation's GDP (Table 2). The tendency for the surveyed counties is growth, and the importance of the sector

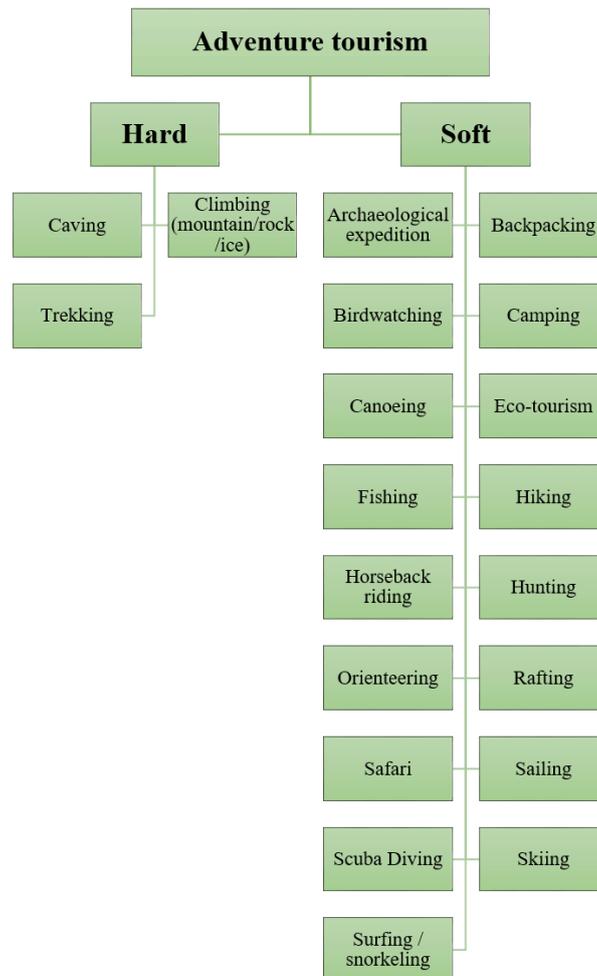
is only expected to raise in the future years. In line with that there are currently many programs, that support the development of different tourism categories, both on a national level and by the EU.

Adventure tourism is one of the fastest growing categories in the tourism industry as a whole. Countries in different stages of economic development are stimulating the development of such services, since they recognize the ecological, cultural, and economic value they provide (<https://skift.com/wp-content/uploads/2014/11/unwto-global-report-on-adventure-tourism.pdf>).

*Table 2. Tourism total contribution to GDP, %*

Country	2015	2016	2017
Bulgaria <a href="https://knoema.com/atlas/Bulgaria/topics/Tourism/Travel-and-Tourism-Total-Contribution-to-GDP/Contribution-of-travel-and-tourism-to-GDP-percent-of-GDP">https://knoema.com/atlas/Bulgaria/topics/Tourism/Travel-and-Tourism-Total-Contribution-to-GDP/Contribution-of-travel-and-tourism-to-GDP-percent-of-GDP</a>	10.8%	11.2%	11.5%
Estonia <a href="https://knoema.com/atlas/Estonia/topics/Tourism/Travel-and-Tourism-Total-Contribution-to-GDP/Contribution-of-travel-and-tourism-to-GDP-percent-of-GDP">https://knoema.com/atlas/Estonia/topics/Tourism/Travel-and-Tourism-Total-Contribution-to-GDP/Contribution-of-travel-and-tourism-to-GDP-percent-of-GDP</a>	15.1%	15.4%	15.4%
Ireland <a href="https://knoema.com/atlas/Ireland/topics/Tourism/Travel-and-Tourism-Total-Contribution-to-GDP/Contribution-of-travel-and-tourism-to-GDP-percent-of-GDP">https://knoema.com/atlas/Ireland/topics/Tourism/Travel-and-Tourism-Total-Contribution-to-GDP/Contribution-of-travel-and-tourism-to-GDP-percent-of-GDP</a>	5.5%	5.7%	5.9%
Scotland <a href="https://www.gov.scot/Topics/Statistics/Browse/Business/SABS/KeyFacts">https://www.gov.scot/Topics/Statistics/Browse/Business/SABS/KeyFacts</a>	5.6%	6.0%	8.4%

Adventure tourism is defined by the Adventure Travel Trade Association as a trip that includes at least two of the following three elements: physical activity, natural environment, and cultural immersion. For the average consumer, adventure touristic services are experience-based vacation, providing them with the opportunity to try out new activities, challenge their skills and knowledge and immerse themselves in the local culture.



*Figure 1. Types of Adventure tourism according to ATTA(Adventure Tourism Trade Association, 2013)*

For companies, that offer such niche services, adventure tourism guarantees visitors outside of peak season, since these activities widely differ from the mass tourism experience (such as summer sea package vacations, cruises, group culture or historical travels, etc.).

The adventure tourism, as a part of the alternative tourism services, shares some aspects of its concept with other types of tourism, such as sustainable tourism, responsible tourism, eco-tourism, volunteer tourism, etc. None of these types of tourism are mutually exclusive and they have their specific target audiences, destinations and activities, and their definition largely depends on the service strategy of the company and the perception of the customer.

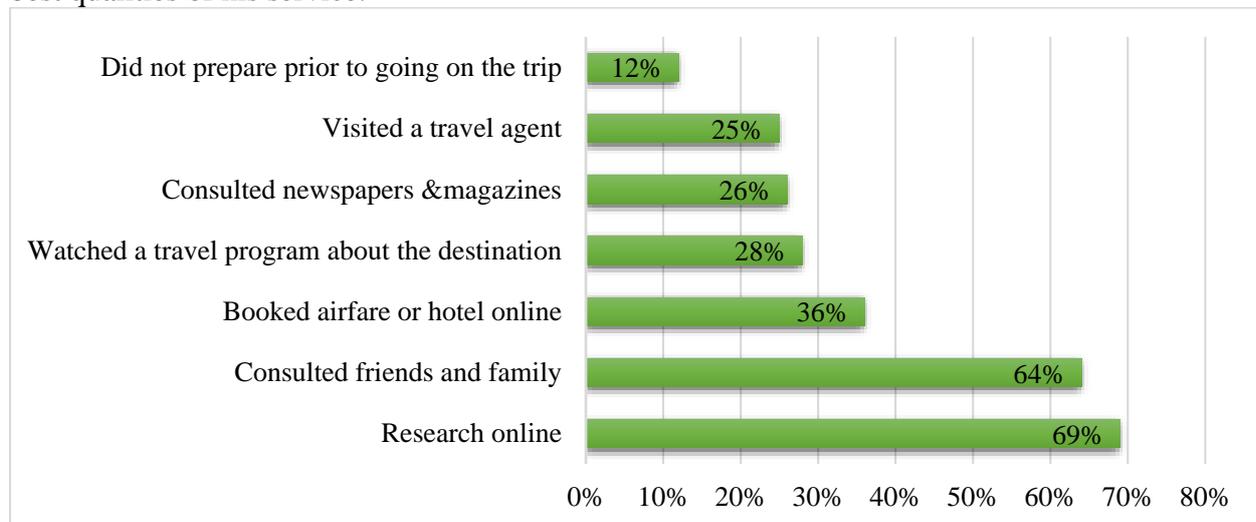
According to most researchers and tourist organizations, there are two main categories of adventure activities, hard adventure and soft adventure. The most widely used classification between hard and soft forms of adventure tourism is visualized in Figure 1. The figure shows, that usually soft tourism services are more easily accessible and require limited or no previous expertise and skills, while hard adventure tourism services are targeted towards more experienced travellers with specific skills and previous experience.

In addition to hard or soft adventure activities, the tourists themselves could also be considered as two different groups. There are the enthusiasts that devote their free time to a specific activity and become increasingly more skilled, tending to pursue the same type of adventure tourism service (even if in different locations). They usually invest in more sophisticated gear and look for more challenging destinations. The other group of adventure tourists are willing to try out

new experiences and tend to switch destinations and activities, without devoting significant resources for one specific type of tourism activity.

Understanding the various types of services and the different target groups for them is the first step towards developing a successful marketing strategy, but is even more important when it comes to the highly targeted digital marketing. Clear understanding of who the consumer is and what he looks for requires open dialogue and flexibility by the company.

The main channels for information on different and alternative types of tourism in recent years have been the different types of social media. Free pages and profiles for organizations and their accompanying options are extremely valuable tools, especially if the target audience is young and active people looking for new opportunities. Unlike classic media communication tools, social media communications are extremely effective on the basis of much more limited resources. For the effective presence of a tourism service organizer, it is necessary to implement a mix of different tools to perform several basic functions - to provide information to users, to enable dialogue and answer questions, to distribute pictures and videos (to visualize the nature of the service), allow them to be shared and distributed and have sales options (if necessary). Through social media platforms the value of WOM communications is ever more evident, as consumers tend to share, distribute, comment and rate all types of products and services. The information provided by friends, relatives and colleagues turns out to be of great importance in the decision-making process in the adventure tourism industry as well, and e-WOM communication is particularly relevant in terms of less known forms of tourism or alternative destinations (Figure 2). As seen by the figure, the online research is usually the first step when planning an adventure tourism activity, so the provider should be present, demonstrating the best qualities of his service.



*Figure 2. How did you prepare for your last trip? (Adventure travellers)*

Source: ATTA, 2013.

This tendency for the use of social media as basic communication tools is particularly relevant in the surveyed countries (as seen by the results, presented in the next paragraphs), especially through Facebook, which has become the most popular and accessible network worldwide, and with the usage of a website and multimedia content such as pictures and video to demonstrate the nature of the proposed activity.

#### **4. Methodology and results**

The survey was conducted over the end of 2017 up to the 15th March 2018, with the same questionnaire being distributed among organizations in Ireland, Scotland, Estonia and

Bulgaria. The survey consisted of 10 questions, regarding digital marketing and product development in the field of adventure tourism. All questions were scaled, but respondents were given the opportunity to provide extra information in the form of free responses. The quantitative data relates to the usage of different digital marketing channels and the perceived skills and desires of the respondents, and were primarily gauged on a 1-5 scale, where 1 is the negative end of the scale, while 5 is the most positive answer. The questionnaire was distributed online via free survey platforms such as LimeSurvey, Google Forms, and SurveyMonkey, and was sent directly to parties identified as relevant to the topic of the survey – adventure tourism organizations and stakeholders. The combined total of all responses is 107. The key results are presented in this paper in a comparative matter for the participating countries.

For the purpose of the survey the respondents were selected as having experience and currently offering services in the field of adventure tourism. Most of the organizations, that took part in the survey, are SMEs with up to 50 employees (Table 3).

*Table 3. Number and type of respondents*

Country	Number of respondents	Types of organizations
Bulgaria	21	SME, NGO
Estonia	34	SME, NGO, Governmental
Ireland	24	SME, NGO
Scotland	28	SME

Respondents were asked to share information regarding the frequency of usage of some of the most popular digital marketing tools, esp. social media platforms, rating them on a scale of 1 (rarely/never used) to 5 (most often used). Average scores were calculated for all represented countries and are shown in Table 4.

*Table 4. Frequency of usage of digital marketing channels (average score)*

DM channel	Bulgaria	Estonia	Ireland	Scotland
Website	<b>5</b>	4.23	3.86	<b>4.38</b>
Facebook	<b>5</b>	<b>4.38</b>	<b>4.29</b>	3.88
Twitter	1.05	1.52	2.41	1.87
Instagram	1.43	3.17	2.95	2.66
Pinterest	2.38	1.57	1.64	1.38
Snapchat	1	1	1.32	1

According to the gathered data, Facebook is without exception the most often used social media platform by respondents in Bulgaria, Estonia, Scotland and Ireland, having a score above 4 on the scale. In Scotland Facebook is ranked second as a digital marketing tool, after the organization's website, which takes second place in the case of Estonia and Ireland. For Bulgarian respondents the website and Facebook are tied with the maximum score, a surprising result, since most of the tourism organizations don't have a developed website (as could be seen in the national Register of tour operators and travel agents: <http://tourism.egov.bg/registers/TORRegister.aspx?AspxAutoDetectCookieSupport=1>).

Instagram proves to be second most often used social media platform, surpassing Twitter and Pinterest. Only exception is Bulgaria, where Pinterest is second most often used SM platform. Most unfavourable in all countries is the score of Snapchat, probably due to the platforms limited range and usage options and specific target audience.

It is interesting to note, that respondents from Scotland state, that they often use conventional marketing channels for promotions, such as newspaper, magazines and radio. They also state, that YouTube and MailChimp (used for e-mail marketing) are used very often as marketing tools, more often than Twitter, Pinterest or Snapchat.

Organizations were asked to grade their own perceived digital marketing proficiency, again on a scale of 1 to 5 (5 being the most favourable score). Respondents from Estonia, Ireland and

Scotland rank themselves as average in their DM skills, with scores around 3 (Table 5), proving a need and desire for learning and improvement.

*Table 5. Proficiency in digital marketing*

Country	Digital marketing proficiency (Average score)
Bulgaria	4.05
Estonia	2.69
Ireland	3
Scotland	2.88

Only exception is the score of Bulgarian enterprises, where the digital marketing proficiency is ranked above 4 on the scale. The confidence, shown by respondents from Bulgaria, could easily be explained by their understanding on what digital marketing means. For Bulgarian enterprises the tools to develop digital marketing campaign are mostly the organizations website, Facebook page and e-mail marketing, since these are the most often used information sources by Bulgarian consumers (Palamarova, P. Social media in business activities of Bulgarian SMEs. International Journal “Knowledge in Practice”, Skopje: Grafoprom Bitola, Vol. 15.2. , 2016).

The organizations were also asked to list the most effective forms of digital marketing according to their experience. Most often mentioned were the website and Facebook account, but also paid forms of online advertising (Google AdWords, Facebook Ads, etc.), as well as e-mail marketing. Some respondents mentioned the usage of mobile application such as TripAdvisor, Booking and Foursquare as an effective way to market their businesses to broader audiences.

In order to determine what forms of digital marketing could be included in the organizations marketing strategy they were asked to rate the importance of various newer or more uncommon DM skills. Highest average score has the Search engine optimization, followed by the usage of specialized platforms for adventure tourism. Relatively lower are the scores for the use of drone technology, augmented reality and wearable devices as marketing tools, as their implementation suggests substantial financial resources and the effects are limited to a small percentage of the consumers (Table 6).

As a whole for Bulgarian respondents the offered skills were highly ranked with average scores over 3, proving, that these types of digital marketing are relatively unknown or currently unused by the organizations. As most important are perceived the location applications and tracking devices, which in the case of tourism services are key aspect of any information campaign, but also for successful realization of the services.

*Table 6. Importance of digital marketing skills (average score)*

Digital marketing skills	Bulgaria	Estonia	Ireland	Scotland
Digital Media Platforms for Adventure Tourism Sales and Marketing	3.95	4.23	4.5	<b>3.5</b>
Search engine optimisation	3.05	<b>4.62</b>	<b>4.68</b>	4
Location-based Mobile Applications	4.43	3.08	4	3.13
Augmented Virtual Reality	3.62	2.77	2.23	2
Accurate Position Tracking and Mobile Apps/Devices	<b>5</b>	3.33	2.90	2.25
3D and 4D personalised site tours	4.24	2.33	3	2.13
Drone technology	3.72	3.33	3.64	2.13
Interactive /responsive wearable devices	4.29	2.42	2.73	2.13

In addition the respondents were asked to share their desire to improve their digital marketing skills, by providing examples for specific topics they wish to learn more on. Most often cited were the promotional video making skills, including storyboarding, scripting, editing, etc., as

well as platforms for sharing said video content. These skills are perceived as key for engaging customers, since the adventure tourism service cannot be shown or described with enough impact without video element. Other skills, that organizations wish to develop, are usage of display advertising, as well as website management and social media profile management.

### **5. Conclusion and further implications**

In the current paper the trends in marketing communications in the tourism industry were analysed, with focus on adventure tourism services and the use of digital marketing tools for their promotion. The desk research outlined the definite trend for incorporation of online advertising and development of serious web presence of the companies that wish to attract new customers, but also retain existing ones. With such niche services the target audience should be considered as international, and the easiest and cost efficient method for reaching out prove to be digital platforms such as social media, websites and mobile applications.

The surveyed countries prove to be in line with the global trend, with the importance of the tourism industry showing definite trend for growth. In this situation it is of high importance for local businesses to maximize their digital marketing skills, in order to achieve their goals.

The results of the conducted survey illustrate the trends in digital marketing in Bulgaria, Estonia, Ireland and Scotland. Currently organizations, offering services in the field of adventure tourism, are mostly utilizing their websites and Facebook profiles (including the paid promotion the social media offers) in order to attract new customers and retain existing ones.

The results however point towards interest in developing other digital marketing skills as well, in order to achieve a more rounded social media presence for more effective marketing. Effective content creation for digital marketing purposes was also mentioned as a desired skill to enhance the digital marketing output. Video making and photography stand out as highly desired skills, as these can be used in a variety of digital marketing instances and are crucial to a professional business. This is also important due to the ways in which video and image posts are the easiest way in which the adventure service could be best demonstrated to immerse the potential customer, and that they are often searched for by said target consumers.

When self-assessing their own digital marketing skills, the majority of respondents rated themselves as average or above average, showing the room for improvement. The skills that were established as most important to learn about centred on SEO and Digital Media Platforms for Sales and Marketing. Other highly anticipated tools include position tracking apps, suggesting an interest in using digital technologies to enhance the in-field experience.

The other digital technologies suggested did not receive as much favour, but were not necessarily rated negatively. There is hesitancy to incorporate additional technologies due to the additional cost they may involve, and the lack of understanding of how these technologies could be incorporated into the business. Nonetheless the respondents show interest and desire to develop the skills necessary for the implementation of said tools.

The results of the survey outline opportunities for further research to determine the ways in which the newer digital marketing tools could be implemented into the business strategies of the adventure tourism companies. The point of view of the consumers should also be a subject of further research, to determine the most easily accessible tools and their desire to communicate using different devices and platforms.

The future of marketing communication strategies in the field of adventure tourism will necessarily be marked by a variety of digital innovations, expanding the opportunities for marketers to implement different strategies and create different communication mix according to the specific target audiences. Incorporating different types of digital communication tools into the mix of the organization proves to be key factor for successful realization of the company's services.

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## Global Marketing Strategies of Innovative Clusters: Creating Self-sustained Ecosystems

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### Abstract

Innovation through creation, diffusion and use of knowledge has become a key driver of economic growth and provides part of the response to many new societal challenges. However, the determinants of innovation performance have changed in a globalizing knowledge-based economy (OECD, 2001). Innovation results from increasingly complex interactions at local, national and global level among various types of stakeholders – business entities, universities, research institutions, public authorities, etc., clusters being an opportunity for its development. This paper examines international marketing strategies of innovative clusters aimed at creating self-sustained ecosystems from systems theory point of view. The evolution of the original concept of ‘business clusters’ proposed by Michael Porter (1990) is presented as theoretical background. The notion of innovative clusters as drivers of national innovation systems is considered focusing on the concept of clusters of innovation. The research examines the development of regional ecosystems (Black Sea Region) and their global marketing strategies. The results of a survey of cluster managers from Black Sea Region counties are presented. The empirical contribution comes from the unique comparative data from innovative clusters in five countries and various industries, but at different stages of economic development and positioning in the global marketplace. The author focuses on the dynamics of innovative clusters and the role of knowledge and technology transfer in self-sustained ecosystems.

**Keywords:** innovative clusters, ecosystem approach, global marketing strategy.

**JEL classification:** M31, L10.

### 1. Introduction

Clusters and networks have recently attracted a growing attention from the policymakers. Various initiatives to support cluster creation and development are nowadays widespread in Europe. In the 1970s and 1980s clusters established a strong position in the world market for both more traditional products and high technology products (Isaksen and Hauge, 2002). During the 1990s clusters were widely recognized as important settings in stimulating the productivity and innovativeness of companies and formation of new ventures. The influential writing of Michael E. Porter first on industrial clusters (Porter, 1990) and then on regional clusters (Porter, 1998a) in particular describes the tight relationships between cluster participation and the competitiveness of firms and industries. The most widely used definition is Porter’s (1990) who describes clusters as “... *geographically close groups of interconnected companies and associated institutions in a particular field, linked by common technologies and skills. They normally exist within a geographic area where ease of communication, logistics and personal interaction is possible.* At this early stage of *cluster concept* development the focus is placed on the powerful role of geography and the benefits gained from the concentration of companies from similar industries. Following this notion, regional clusters refer to geographically bounded concentrations of *interdependent* firms (Rosenfeld, 1997; OECD, 2001), and may be used as a catchword for older concepts like industrial districts, specialised industrial agglomerations and local production systems. The network concept is often applied to characterise the specific forms of governance based on social relations, trust and the sharing of complementary resources that typifies many regional clusters (Vatne & Taylor, 2000). Hence, a regional cluster approach is becoming increasingly recognised as a

valuable tool to foster economic development. However, traditional regional cluster theory emphasizes the physical components of a cluster, identifying the density of players in a common industry as the critical factor in achieving cluster productivity and economic advantage (Engel, 2014). During the past two decades the importance of tangible assets (i.e., the physical elements of a company or a cluster) continuously diminishes. Due to the rapidly developing digital technology and its broad penetration in business practice and our lives, every company is becoming a technology and data company. It's changing the very nature of every business which demands for a revision of the traditional definition of clusters and their key characteristics.

## 2. Clusters and ecosystem approach

“Clusters” are a nebulous concept which covers a variety of different business structures – national, regional, or cross-border clusters, clusters of competence, industrial or production systems, innovation systems, clusters of innovation, etc. Over the last few decades, cluster concepts of various types have been an element of growing importance in the economic research agenda (Andersson et al., 2017; Isaksen & Hauge, 2002; Verbeek, 1999). Clusters are today recognised as an important instrument for promoting industrial development, innovation, competitiveness and growth. Although primarily driven by the efforts made by private companies and individuals, clusters are influenced by various actors, including governments and other public institutions at national and regional levels. The policy dimension in clusters remains controversial, however. No single policy instrument applies in all cases. Cluster policies differ from related and partly overlapping approaches, such as Innovation Systems and Triple Helix. It becomes evident that the policymakers should adopt a comprehensive strategy and approach to this field.

### 2.1. The notion of innovative clusters

According to Isaksen (2001) distinguishing between the three distinct concepts of regional clusters, regional innovation networks and regional innovation systems is especially relevant when discussing how policy-makers can stimulate the competitiveness of cluster firms applying different key drivers depending on the status of the business ecosystem (Table 1).

*Table 1. Evolution of regional clusters*

Concept	Focal point	Key drivers
Regional cluster	Spontaneous phenomenon	<ul style="list-style-type: none"> <li>▪ Local spin-offs</li> <li>▪ Entrepreneurial activity</li> </ul>
Regional innovation network	Organised co-operation	<ul style="list-style-type: none"> <li>▪ Innovation activity</li> <li>▪ Trust, norms and conventions</li> </ul>
Regional innovation system	Planned and systematic phenomenon	<ul style="list-style-type: none"> <li>▪ Inter-firm collaboration</li> <li>▪ Institutional infrastructure</li> </ul>

Source: Adapted by Vassileva, 2004

The main goal of the innovation networks is to stimulate companies' innovation process by the flow of ideas, information and knowledge within clusters. A step further in the evolution process of regional clusters represents the regional innovation system which consists of two sub-systems, namely (1) the knowledge application and exploitation sub-system, principally occupied by firms with vertical supply-chain networks; and (2) the knowledge generation and diffusion sub-system, consisting mainly of public organizations (Cooke et al., 2000). As firms and products are passing through their life cycles, clusters follow a similar pattern of development. They move through a sequence of phases such as emergence, growth, decline or transformation (Pinch & Henry, 1999).

*Table 2. Six stages in the model of cluster development*

Stage	Core characteristics	Life cycle phase	Main drivers
1 <sup>st</sup>	Formation of pioneer firms often based on specific local knowledge, followed by new firm spin-offs	Birth and early growth	Local competition
2 <sup>nd</sup>	Creation of a set of specialized suppliers and service firms, and a specialized labor market	Cumulative growth	External economies Cost savings
3 <sup>rd</sup>	Formation of new organizations that serve cluster firms	Real growth	Specialized competence Professional competence Innovative capability
4 <sup>th</sup>	Attraction of outside firms, skilled workers, and fertile grounds for new local companies	Early maturity	Visibility Prestige Attractiveness
5 <sup>th</sup>	Creation of non-market relational assets that foster local circulation of information and knowledge	Late maturity	Proximity between individuals, firms, and organizations Network of relationships “Rich” communication flows
6 <sup>th</sup>	Decline which often is caused by “lock-in” situations	Decline or transformation	Inflexible obstacle to innovation Rigid specialization Resistance to change

Source: Adapted by Pinch & Henry, 1999; Storper, 1997; Harrison, Kelley & Gant, 1996; Grabher, 1993; Porter, 1998b.

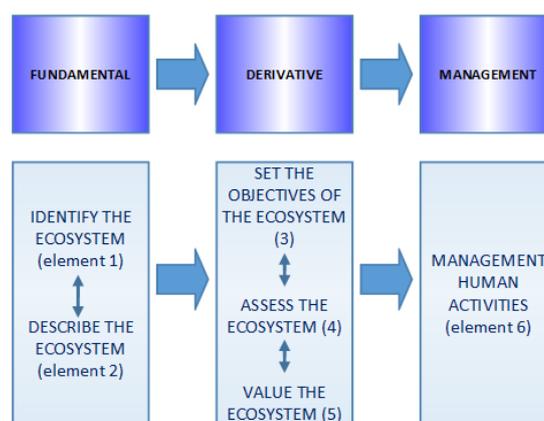
The connection between clustering and innovation is associated with sticky knowledge grounded in social interaction (Von Hippel, 1994, cited in Andersson et al., 2004:33). Innovation may take place in multiple settings, and activities, the nexus represented by clusters can help foster innovation in virtually any industry. The range of the concept of innovative clusters and its diversity can be demonstrated by the results on Google Search with a key term “innovative clusters” yielded no less than 29 700 000 pages (0.54 seconds) that matched the query. According to Engel (2014: 9) a discreet definition of the term ‘cluster of innovation’ (COI) is still lacking and only a vague understanding of the concept as “economic cluster that favored the formation of startups and technology commercialization” prevails. His definition (Engel, 2015:37) about Clusters of Innovation (COI) presents them as global economic “hot spots” where new technologies germinate at an astounding rate and where pools of capital, expertise, and talent foster the development of new industries and new ways of doing business. The key characteristics of COI favour the creation and development of high potential entrepreneurial ventures such as: dynamic mobility of intangible resources (people, capital, and information, incl. IP); increased speed of business development; culture of mobility leading to various patterns of collaboration; development of robust relationships (Engel & del-Palacio, 2009).

Traditional clusters are characterized by industrial concentration. In a COI, industry concentrations certainly may exist, but are not definitive. The industrial concentration is not defined primarily by industry specialization but by the stage of development and innovation of the cluster’s components. The increased focus on the innovative clusters reflects a (re)discovery by many academics and researchers as well as policy makers of the importance of the following two topics: 1/ cluster as drivers of the innovation chain; and 2/ specific local and regional resources in stimulating the innovation capability and competitiveness of firms.

## 2.2. Ecosystem approach to innovative clusters

The ecosystem approach (the term ‘Ecosystem Approach’ was first applied in a policy context at the Earth Summit in Rio in 1992, where it was adopted as an underpinning concept of the Convention on Biological Diversity [Sustainable Environment, n.d.; United Nations, 1992]) is a strategy for the integrated management of land, water, and living resources that promotes conservation and sustainable use in an equitable way (Beaumont et al., 2007:253). Stated broadly, the ecosystem approach requires ensuring the integration of social, economic, and environmental demands and pressures. Ecosystem-based management (EBM) has been developed during the last decade using the principles of the ecosystem approach (EA). The first principle states that the humans are an integral part of the ecosystem. The second principle refers to the target of the EA, i.e. the areas which should be identified by ecological criteria. It means that ecosystem approach is place-based. The EA seeks to balance conservation and sustainable use constitutes the third principle. The fourth principle addresses the cumulative impacts, i.e. the combined and incremental effects of human activities. The EBM has been proposed as a benefit optimization and decision-making strategy that incorporates often conflicting development and conservation uses (McLeod, Lubchenco, Palumbi, & Rosenberg, 2005; Barbier et al., 2008: 321).

Several interrelated elements have to be integrated in a common framework to implement successfully the EBM to clusters (Figure 1). The identification of the ecosystem (element 1, Fundamental stage) should be based on performance criteria instead of cluster boundaries. Following the EA principles mentioned above, the cluster ecosystem should be defined in spatial and geographical terms. The second element (Fundamental stage) requires a deep understanding of how the ecosystem is constructed (i.e. its architecture) and how it works (i.e. its dynamics). Both explicit and tacit knowledge could be used to describe the elements of the cluster ecosystem and their interrelations in details.



*Figure 1. Ecosystem-based approach to clusters*

Source: Author's work

Definition of ecological objectives (element 3, Derivative stage) is a critical and demanding EBM component which requires a scientific and holistic view to the ecosystem dynamics. Clusters of innovation, especially those which are digitally-based, are vibrant ecosystems composed of startups, businesses that support the startup process, and mature enterprises (many of whom evolved rapidly from a startup history). In these ecosystems, resources of people, capital, and know-how are fluidly mobile and the pace of transactions is driven by a relentless pursuit of opportunity, staged financing, and short business model cycles. The integrated assessment of the current state of the cluster ecosystem comprises the fourth element (Derivative stage). The monitoring activities consist an inseparable part of the assessment and

they should be used as a feedback loop to provide updated information on the changing states of ecosystem elements and processes followed by corrective and adaptive managements reactions. Valuation of cluster ecosystem, including its goods and services, comprises the fifth element of the EBM of the ecosystem. The final element is the management decisions to regulate human activities in ways that provide benefits from the productive use of resources while maintaining the integrity of the ecosystem.

Since ecosystems exist beyond geographical places, this approach could be successfully applied especially for digital, hybrid ecosystem. Digital ecosystems are networks of companies and consumers that interact dynamically to create mutual value. According to the BCG analyses (Reeves et al., 2017) there is a trend in shifting from the largely digital ecosystems that dominate today to ones richly exploiting both the digital and physical worlds. It is expected that many clusters will pass through a process of digital transformation during their development (see Table2) and will act as pure digital or digital-physical (hybrid) ecosystems. The orchestrators of these hybrid ecosystem must follow some new principles and adopt a set of behaviours different from those that purely digital ecosystems require. By collaborating with new business partners, including industry incumbents and players in other sectors, companies can form new data ecosystems. These ecosystems give their participants access to valuable collective data assets as well as the capabilities and domain expertise necessary to develop the assets into new data-driven products and services (Russo & Albert, 2018). The metrics which will be used during the stages of the EBM process (see Figure 1) should reflect the following key characteristics of COI, namely: mobility and its scope and speed of reaction; entrepreneurial process; alignment of interests, incentives, goals; global ties and bonds - “brain circulation”, etc. (Engel, 2015).

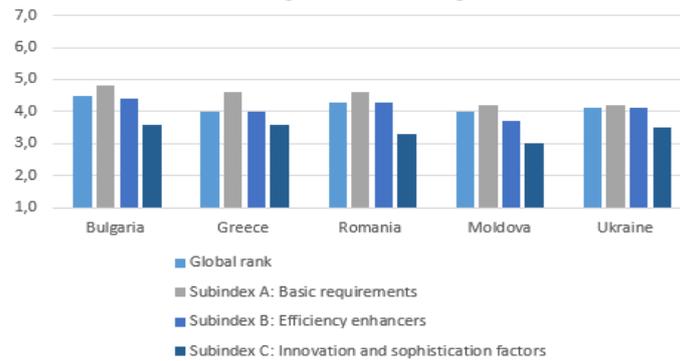
### **3. Black Sea Region and BlasNET members: ecosystem view**

The Black Sea region is a contested neighbourhood and the subject of intense debate. This reflects the changing dynamics of the region, its complex realities, the interests of outsiders and the region’s relations with the rest of the world. Its strategic position, linking North to South and East to West, as well as its oil, gas, transport and trade routes are all important reasons for its increasing relevance (Commission on the Black Sea, 2010). Despite the diversity of the countries in question in terms of size, economic structure and levels of development, a number of challenges and issues concern the region as a whole. Their measurability is made more difficult by the different levels of integration of the countries into the global economy and the EU. Compare, for example, Greece, Romania, Bulgaria and Turkey with the relatively small and sometimes isolated economies of Moldova and the states of the Caucasus. Then we need to consider the challenges of social heterogeneity, the political system and economic structure of Ukraine and the challenges of economic diversification faced by energy exporters, Russia and Azerbaijan.

#### **3.1. BlasNET situational analysis**

Companies are not isolated entities – they exist in a complex network of relationships with suppliers, customers, competitors and public authorities. Successful handling of these relationships can result in a clear competitive advantage. But successful establishment and further rising of the relationships depend on the level of economic development of respective countries. The widely divergent economies of the region make the prospects for economic integration difficult, but deeper and more diversified cooperation is both possible and necessary. Economically, the region was hit by a number of factors including the contraction in global demand, falling commodity prices, a liquidity squeeze and capital outflows. A second round of effects is being currently observed, including increasing unemployment, reduction in

industrial output, declining remittances and other forms of foreign capital inflows, and revelation of institutional deficiencies (Figure 2 and Figure 3).

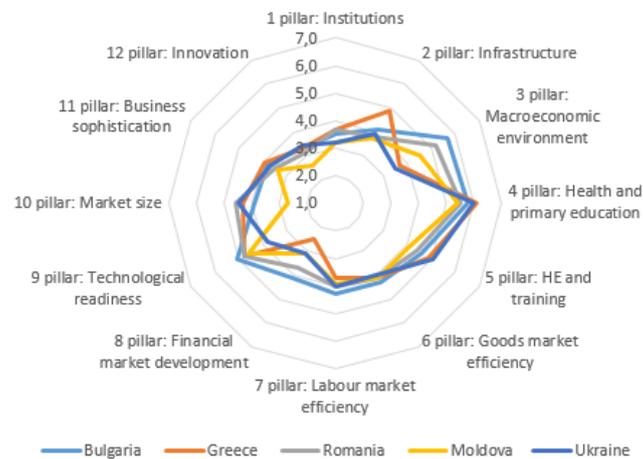


**Figure 2. Comparative analysis of BlasNET countries by Global Competitiveness Index, 2017-2018**

Source: World Economic Forum, Executive Opinion Survey 2017

Note: The score is calculated on a scale from 1 to 7.

The analysed countries are at different stages of their development ranging from the lower to the highest level. Combined with the challenges which these countries face from the external environment (economic crisis, environmental degradation, financial instability, demographic decline). In line with the economic theory of stages of development, the GCI assumes that economies in the first stage are mainly factor-driven and compete based on their factor endowments—primarily low-skilled labor and natural resources. Companies compete on the basis of price and sell basic products or commodities, with their low productivity reflected in low wages. Maintaining competitiveness at this stage of development hinges primarily on well-functioning public and private institutions (pillar 1), a well-developed infrastructure (pillar 2), a stable macroeconomic environment (pillar 3), and a healthy workforce that has received at least a basic education (pillar 4).



**Figure 3. Comparative analysis of BlasNET countries by the pillars of the GCI, 2017-2018**

Source: World Economic Forum, Executive Opinion Survey 2017

Note: The score is calculated on a scale from 1 to 7.

As a country becomes more competitive, productivity will increase and wages will rise with advancing development. Countries will then move into the efficiency-driven stage of development, when they must begin to develop more efficient production processes and increase product quality because wages have risen and they cannot increase prices. At this point, competitiveness is increasingly driven by higher education and training (pillar 5),

efficient goods markets (pillar 6), well-functioning labor markets (pillar 7), developed financial markets (pillar 8), the ability to harness the benefits of existing technologies (pillar 9), and a large domestic or foreign market (pillar 10). Finally, as countries move into the innovation-driven stage, wages will have risen by so much that they are able to sustain those higher wages and the associated standard of living only if their businesses are able to compete with new and/or unique products, services, models, and processes. At this stage, companies must compete by producing new and different goods through new technologies (pillar 12) and/or the most sophisticated production processes or business models (pillar 11).

*Table 3. Top three problematic factors for doing business*

Country	Top 1	Score	Top 2	Score	Top 3	Score
Bulgaria	Corruption	17.8	Inefficient government bureaucracy	12.0	Tax rates	9.3
Greece	Tax rates	20.3	Inefficient government bureaucracy	18.1	Tax regulations	14.1
Romania	Tax rates	13.0	Inefficient government bureaucracy	12.9	Access to financing	11.9
Moldova	Corruption	20.7	Policy instability	13.5	Government instability/coups	9.4
Ukraine	Inflation	16.3	Corruption	13.9	Policy instability	12.1

Source: World Economic Forum, Executive Opinion Survey 2017

Note: From the list of factors, respondents to the World Economic Forum's Executive Opinion Survey were asked to select the five most problematic factors for doing business in their country and to rank them between 1 (most problematic) and 5. The score corresponds to the responses weighted according to their rankings.

The results from situational analysis (Table 4) show that Greece has a leading place among BlasNET members according to the ICT Development Index and Travel and Tourism Competitive Index. Moldova performs worst among the BlasNET country members on GCI and the Networked Readiness Index.

*Table 4. Comparative competitive positions of BlasNET country members*

Country	Rankings						
	Global Competitiveness Index 2017-18		Networked Readiness Index 2016		ICT Development Index 2017		Travel & Tourism Competitive Index 2017
	Value	Rank	Value	Rank	Value	Rank	Global Rank
<b>Bulgaria</b>	4.5	<b>49/137</b>	4.1	69/139	6.86	53/176	45/136
<b>Greece</b>	4.0	87/137	4.1	70/139	<b>7.23</b>	<b>38/176</b>	<b>24/136</b>
<b>Moldova</b>	4.0	89/137	4.0	71/139	6.45	63/176	117/136
<b>Romania</b>	4.3	68/137	4.1	66/139	6.48	61/176	68/136
<b>Ukraine</b>	4.1	81/137	<b>4.2</b>	<b>64/139</b>	5.62	78/176	88/136

Source: World Economic Forum - The Global Competitiveness Report 2017–2018 and Global Information Technology Report 2016; International Telecommunication Union - Measuring the Information Society 2017; World Economic Forum - The Travel & Tourism Competitiveness Report 2017.

BlasNET countries are confronted with different levels of development. It is considered that it will take time to achieve the required level of intra-regional cooperation and trust - a prerequisite for economic stability. That is why, any effort directed toward creation and development of networking activities between the countries in the Black Sea region will stimulate and contribute to economic development of the whole region. Business networks and clusters could serve as good practices from this point of view.

### 3.2. BlasNET global marketing strategy

BlasNET country members (Table 5) provide variety of services to their members and stakeholders with a focus on SMEs development, innovation and entrepreneurship. They provide similar services but their focus is placed on maritime, ICT and tourism.

*Table 5. Distribution of the members of the Black Sea network by countries and by sectors*

Country	Total number	General Business Services	Tourism	Research	Maritime	ICT	Trade
Bulgaria	6	1	3	1	1		
Greece	5	1	-	2	-	1	1
Romania	4	1	1	-	1	1	-
Moldova	3	2	-	-	-	-	-
Ukraine	4	1	2	-	1	-	-

Source: Author's work based on the data collected during the implementation of the project "Black Sea Network for Regional Development" (BlasNET), Joint Operational Programme „Black Sea Region 2007-2013”, Contract No 1.1.3.65714.96-MIS-ETC 234-64832/30.08.2011

Despite the promising data given in Table 6, some core issues facing the SMEs in the region are: i) low level of competitiveness, ii) poor export-oriented policies, iii) inadequate quality public infrastructure that raises transaction costs and discourages exports from the region.

*Table 6. Cluster characteristics in analysed industries*

Industry/ Characteristics	Greece	Bulgaria	Romania	Ukraine*
<b>Size, %:</b>				
▪ IT	0.36	0.72	2.9	0.08
▪ Maritime	5.72	1.00	1.05	0.55
▪ Tourism and hospitality	2.92	1.73	2.11	0.19
▪ Transportation and logistics	2.65	1.48	3.43	1.21
<b>Number of employees:</b>				
▪ IT	5714	11428	46275	23747
▪ Maritime	24942	4343	4569	18683
▪ Tourism and hospitality	85893	50836	62073	48498
▪ Transportation and logistics	126696	70741	164451	660934
<b>Knowledge intensive clusters, number of employees:</b>				
▪ Business services	69546	32561	100482	83792
▪ Education and knowledge creation	53490	41676	19920	65823
▪ Financial services	128128	57854	0	72814

Source: European Cluster Observatory

\* Southeast European Ukraine

According to the UNDP reports the proximity of the region to the EU, the presence of three EU member states represents a major challenge for the private sector in the non-EU countries from the region. Better access to the EU market can offer an opportunity for sustainable economic development. Many countries also face the task of adapting their regulatory environments, for example, to ensure approximation with EU standards. At the same time, exporters face yet another common challenge in adapting their products to meet EU quality standards, notable in the areas of food safety and environmental protection.

Based on results from the analysis the following three propositions for BlasNET global marketing strategy are provided. Proposition 1: BlasNET should grounded its cooperation activities on innovation and upgrading. There is a promising background for successful cooperation in this field since innovation is a priority for more than 30% of BlasNET members. Proposition 2: BlasNET should provide services covering the whole spectrum of economic activity in general. Many SMEs in Black Sea region face a variety of problems. They need a kind of a one-stop business service provider where they can find a solution for their problems

instead of a list with plenty of specific services. BlasNET could be a hub providing business support to the SMEs from the region. Proposition 3: BlasNET should maintain close mutually beneficial relationships with existing clusters.

**Table 7. BlasNET marketing strategy: metrics and milestones**

Objective	Activity	Suggested Metrics and Milestones
Objective #1: Identify a differentiated position and strategy for BlasNET and the creative economy in Black Sea region	<ul style="list-style-type: none"> <li>▪ Develop differentiated positioning for BlasNET, including priority market segments</li> <li>▪ Identify priority segments</li> <li>▪ Create a targeted marketing strategy based on BlasNET market segments</li> <li>▪ Develop action plans to assess / pursue potential opportunities</li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Short-term</i></li> <li>▪ List of current BlasNET assets</li> <li>▪ Identification of target customer segments</li> <li>▪ Identification of target growth figures</li> </ul> <ul style="list-style-type: none"> <li>▪ <i>Long-term</i></li> <li>▪ Growth by target market</li> <li>▪ Growth in employment rate</li> <li>▪ Growth in export orientation</li> <li>▪ Growth in level of innovation</li> </ul>
Objective #2: Communicate to both internal and external stakeholders that Black Sea region has strong potential for growth in maritime industry, tourism and ICT	<ul style="list-style-type: none"> <li>▪ Develop differentiated positioning for Black Sea region clusters</li> <li>▪ Re-brand the region as a nexus for innovative business</li> <li>▪ Improve awareness of positive regional trends through targeted internal publicity efforts (e.g. job employment opportunities publication)</li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Short-term</i></li> <li>▪ Implement marketing / publicity campaign</li> <li>▪ Development and communication of key messages</li> </ul> <ul style="list-style-type: none"> <li>▪ <i>Long-Term</i></li> <li>▪ Direct employment and establishment growth in regional clusters</li> <li>▪ Average wage growth in regional clusters exceeds rate of inflation</li> <li>▪ Awareness rate (% of population who can identify target messages)</li> </ul>
Objective #3: Launch a sophisticated marketing strategy	Develop marketing campaigns to communicate key regional assets	<ul style="list-style-type: none"> <li>▪ <i>Short-term</i></li> <li>▪ Implement marketing / publicity campaign</li> <li>▪ Data-driven prioritization of key issues</li> <li>▪ Alignment of the efforts between the elements of BlasNET organisational structure</li> </ul> <ul style="list-style-type: none"> <li>▪ <i>Long-Term</i></li> <li>▪ Focused marketing campaigns targeting key segments</li> <li>▪ Awareness rate (% of population who can identify target messages)</li> </ul>

Source: Author's work

A summary of the main metrics and milestones of BlasNET marketing strategy is provided in Table 7. The BlasNET marketing strategy aims to boost innovation and competitiveness in the Black Sea Region by upgrading the quality of the business environment and organising companies and institutions to take action and better collaborate on common challenges and opportunities. It focuses on encouraging various stakeholders in the region (private sector, government, academia, economic development organisations) to align their efforts in transforming the Black Sea Basin into innovative and competitive region.

#### 4. Conclusion and implications for future research

Cluster policy should correspond to the contemporary cluster profiles especially for innovative clusters. This is particularly important if it is not at the regional level where the essential knowledge is located or where the important learning takes place. Thus, clusters policy could include encouraging more global sourcing of some components, as well as attracting branches

of multinational enterprises into the clusters, if such initiatives are seen to increase the competitiveness of the cluster.

In a digital environment and gigabyte society the market dynamics requires from policymakers to adopt a comprehensive strategy and approach to this field. Further research in the field of implementation of the ecosystem approach to cluster management is required especially for innovative clusters. Attention should be further paid to the specific situation of large versus small economies; centralised versus decentralised government; economies with primarily large companies versus SMEs; differences between industries and sectors; cluster development in traditional and digital ecosystems.

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## **The Analysis of the Importance of Branding Elements in the Romanian Music Industry**

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### **Abstract**

This paper focuses on the multiple ways of building a brand in the current music industry, with a focus on Romania. The main idea of this paper is to determine the opinions of music consumers toward the brand of a musician, in general, and then to build different models and alternatives to the ones proposed so far, both while taking into account the elements and the characteristics proposed until now, as well as the answers given by the respondents. The research will focus on: the analysis of general attitudes and consumer behavior, with regard to music and the view of the consumers towards native Romanian singers and international ones. Moreover, the brand of a singer, from the perspective of associating the brand itself with the image created and with the primordial characteristics that must be respected by a singer, in order for them to be appreciated by the consumers, will also be discussed.

**Keywords:** brand, music industry, consumer perception.

**JEL classification:** M31.

### **1. Introduction**

This paper focuses on how a music brand is built in the current music industry, with a focus on Romania.

The main idea of this work is to determine the opinions of music consumers towards the brand of a musical performer, and then build alternative models to the ones proposed so far, by taking into account the research which has been done up to this point, but also the answers of the respondents.

The first part of this paper will be an introduction to the branding term, starting from its link to marketing, moving to the its importance as part of the communication mix. We will touch important creative marketing models and adapt them to personal branding strategies. Moreover, we will give on point examples of romanian artists, in order for the readers to understand some good and bad decisions with regards to branding, endorsement and fame (important terms used throughout the entire paper).

The second part will refer to the music industry, focusing on its importance and evolution. The paper continues with the endorsement techniques used to improve the image of the musical personalities and to increase the number of consumers.

The last part refers to the research, following three main ideas: the general attitude and behavior of consumers, in terms of music; the attitude towards native and international singers; and the personal brand of a singer, from the perspective of the features which consumers think are

important in the creation and the association with a brand. This part sums up respondents' answers, aligning them to the dimensions of personality.

The paper ends with a series of conclusions, following the research.

## **2. Brand**

Visual identity has become and continues to become increasingly important in the marketing sector. Viewed from the perspective of aesthetic representation and culture influence, this is an interconnection between art, global branding and consumer behaviors. This connection is, in my opinion, essential. The separation of art and business has become increasingly difficult, and, in this new context, art seems to be of major importance. We assimilate aesthetics in marketing and communication as an innovation, focusing on its potential creativity. Therefore, under this premise, greater creativity can lead to distinct communication, and distinct communication is good (Schroeder, 2006).

Art is a whole individual industry, based on money, status, value, imagination and investment. Under these circumstances, art brings a new dimension to a business by being a commodity, a history of consumer's cultural preferences, and an understanding of the evolution of these market preferences. If in the music industry, the product (business) was viewed separately from the communication (art), at first, because a good artistic product could be promoted on its own, not with special help, now, as mentioned above, the role of promotion plays an important role in visual and verbal culture (ZhiYan & Borgerson, 2008).

The three mega trends that dominate the market: the spectacular evolution of technology, the financial responsibility and the globalization, force companies to adapt to market requirements, both through marketing, as well as through branding (Kotler, 2003). In Romania, a former communist country, just like in the eastern part of Europe, the concept of branding has grown rapidly, but a bit slower than in the west. By definition, the brand requires business education because of intangibility character, hence the differentiation. The Eastern European consumer profile differs from the Western European one. The Romanian client's decisions are based on trust, a feeling that arose after the fall of communism (Bogdan, 2011). Also, the creation process (from choosing names, to visual elements), whilst following the global trend, is many years behind. Although an artistic evolution is being attempted, the target audience is difficult. Online marketing and digital branding attracts more young people, which is a small part of consumer basis.

Very few brands understand that this local competitiveness is closely linked to a global presence, and this global presence is in difficulty due to this communist past. (Bogdan, 2011). When the question "How do we differentiate one brand from another?" appeared, two key concepts emerged: consistency and differentiation. At the beginning, these two elements represented the identification of origin (differentiation) and the preservation of product / service quality (consistency) (Romanuik, Sharp, & Ehrenberg, 2007). After a series of new meanings, emphasis is placed now on other elements, such as the use of internet, the sustainability and the social involvement of companies, because it is intended to remedy the confidence that consumers have lost in companies (Fisher-Buttinger & Vallaster, 2011). Berger talks about how much power consumers have in terms of brand identity. He claims that people are buying products associated with brands that could show others who we are. Following this idea, we understand that our public identity has come to rely on what we consume, not on what we are. Moreover, we, as individuals, build our identity according to others (Berger, 2011).

In the case of the music industry, where we are talking about the musical brand and the personal brand, the AIDA marketing model is slightly different. The first step could be cognition, through awareness of the existence of a musical artist. The second stage is represented by the affection, the interest or the desire to listen to the artist's creations. The third and final stage is

behavior, represented by the very action of listening to the songs. As we can see, the model is modified by fusing interest and desire, including them in the same stage, the stage representing the affection, what the consumer feels for the artist. We can also talk about an added stage, namely satisfaction, measuring the satisfaction of the consumer, in this case by the number of songs played by the same artist, the number of repetitions of the same song, the degree to which the respondent empathizes with the respected artist, etc. Not being part of the initial process, the latter stage is important because it can lead to a change, an improvement of the brand and an improvement to rebranding.

There are certain attributes that create value for the product, or, in other words, capture their attention, from the consumer's point of view. These include: emotion, aesthetics, product identity, impact, technological core and quality (Pamfilie & Procopie, 2013). If we talk about the music artist's brand, emotion can be transformed into lyrics and musical genre (through them the singers can awaken an emotion in the consumer or make them listen to the songs), the aesthetics changes in the artist's aesthetics (clothes, accessories, the way they behave), identity, quality and impact remain common characteristics, and the technological nucleus will signify the entire team behind the artist (from the tools needed to create new ones parts to the recording space and the hired personnel).

The Romanian singer Silent Strike, together with Monooka, associated themselves with the Romanian tourist brand, Explore the Carpathian Garden, the song of the two appearing in the country's official promotion video. Another example is the Subcarpati band that tries to differentiate themselves from others by combining Romanian folklore with hip-hop and electronic insertions, both in lyrics and sounds, as well as in their image, using elements and combinations of traditional colors and motifs.

Of course, many artists use products, other stars or shows to enhance their brand. In this category we have Puya associating himself with Chio Chips, appearing in the Chio commercials; Antonia and Alex Velea, two different brands (with similar target audiences, values and songs) who created a new brand together; Inna was a few years ago the ambassador for Pepsi and Delia started a collaboration with a new band, The Motans, from Chisinau (Delia's popularity benefits the band, and the band's musical capabilities help Delia develop even more on the musical stage). These are just a few examples that have shown that artists can collaborate with other artists, as well as with products, other people or social causes, given that these collaborations can benefit both parties.

This strategy is called brand endorsement and is an increasingly popular advertising strategy in many areas. Using a public figure or an artist can give more credibility to the promoted brand. As mentioned above, this brand endorsement is linked to consumer identity. The consumer's attention is not enough for success, but other features such as: the artist's affinity with the brand, the relationship between the artist and the celebrity of the brand, values, the similar target audience of the two brands, the popularity of the celebrity, his/her credibility, whether the star consumes or not the promoted product (for certain types of products), whether the star claims the cause (for social causes), etc. (Csaszar, 2012).

According to Richard Elliott, this idea is not new. Often, consumers think of a brand that has the characteristics of a person, even if it is a material product. Thus, by using the endorsement strategy, one face, a set of human and real features can be placed on a material product (Elliott & Percy, 2007).

### **3. Music industry**

According to the definition, music is: "1. Art of expressing feelings and ideas, using sounds, combined in a specific manner. 2. The science of sounds considered as melody, rhythm and harmony "(DEX.ro).

With the evolution of marketing and brands, there has been visible change in the music industry. Now music being viewed more as a business, to the detriment of a simple experience. From the point of view of marketing, music becomes a very complex product, distinguished from the classic ones through: the place where it can be consumed (privately or in public), the unlimited number of consumes (it can be consumed as often as necessary), the method of consumption (active or passive), the lack of perishability (does not deteriorate over time), and the appeal only to the auditory sense (O'Reilly & Kerrigan, 2010).

Music is an important business at economic level. The music industry has profits of over \$15 billion on a global scale (Profit.ro, 2016). Technology development has led to an extraordinary expansion of markets, facilitating consumer access to songs, artists, and anything related to the music industry, in a fast, efficient and inexpensive environment (online and offline). People consume music every day, from what they listen to on the radio, on their way to work, to the musical background played shops, or even the jingles present in television commercials.

So, we can say that the music industry has reached a turning point, represented by the moment when it ceased to be an ancillary element, and has begun to become a product itself. In the same note, the role of the artist has also changed, becoming more and more important, to the point where the artist became a brand.

#### **4. Celebrity and brand endorsement**

According to definition, a celebrity is "a person who enjoys great reputation, prestige, fame". Fame and reputation are defining elements in the branding, as well, in the fact that a brand is successful when it differs from those of other competitors' and has come to be known by a significant number of consumers. The personal brand is significantly different from the product brand (it lacks color, logo, slogan), although both have this element of "celebrity" (DEX.ro).

This prestige, especially for musical artists, is ephemeral, changing. Famous people gain this status as easily as they lose it (which is not the case for material products). The singer's brand often suffers major changes and repositioning.

A rebranding comes with many changes, from the type of music being approached (at one point, overlapping with consumers' preferences as part of their external identity), to adding / removing members, changing names, etc. If the differences are, to a large extent, for material products, minor, here, in personal branding, they are major. The name change, almost every time, comes with a removal / addition of new member or a change of the musical repertoire.

#### **5. Research Methodology**

Qualitative research is based on the accumulation of information that has a greater and more in-depth value in marketing research. This adds complex attitudes, explanations and answers to the phenomenon studied, to quantitative research which is based, on the accumulation of as many answers as possible. According to Cătoi, qualitative research "allows a better understanding of the investigated marketing phenomenon, without resorting to quantification or quantitative analysis" (Cătoi, 2009, p.87).

In-depth interviewing is a qualitative research method. Some of the advantages of it are: collecting detailed information on the subject, reporting information to subjective experiences, applying additional questions if the information is incomplete, and a relaxing atmosphere, with only one respondent and an interviewer. Datculescu Petre argues that in order to study a brand, in-depth interviews are the best choice because "in the case of focus groups there is a risk that opinion leaders can influence the collective" (Datculescu, 2006, p. 216).

Since marketing research is necessary for market analysis in any field, in this case I will apply qualitative research to determine the importance of the artist's brand in the music industry. Qualitative research has been chosen because the desired information reaches deeper levels

through a holistic approach. The three levels, cognitive, affective and conative, each bring important information, especially at an unconscious level, impossible to reproduce by using quantitative research. The brand is a complex term, and the addition of the musical industry, along with all its features, will lead to opinions that can not be quantified by quantity.

The *purpose* of this research is to determine the opinions of young consumers about the brand of a musical performer.

The *objectives* were divided in main and secondary, as follows:

❖ Main

- General attitude and consumer behavior in music and the brand of the music artist;
- Determining how consumer perceptions are formed in relation to the image of a brand, in the music industry.

❖ Secondary

- Identifying the respondents' opinion about the values that make up a brand / brand;
- Determining the motivation behind buying a brand;
- Determining the link between a brand and a product.

*Setting the sample and the target audience*

A qualitative research was carried out through a semi-structured in-depth interview. 20 people, 10 men and 10 women were interviewed.

*Selection criteria*

The sample consisted of 18- to 30-year-olds with higher education, living in Bucharest. From a psychographic point of view, the people were open and interested in music. Behaviorally, they had to consume music, at least an hour a day. Moreover, the target audience understood the concept of branding, was aware of the evolution of the music industry, and was more or less concerned about image.

*Segmentation*: 5 women between 18-24 years old; 5 women between 25-30 years old; 5 men between 18-24 years old; 5 men between 25-30 years old.

The data was collected between 3<sup>rd</sup> and 19<sup>th</sup> of April, 2017.

## 6. Research Results

### 6.1. Favorite music

To the question "what kind of music do you prefer?", most of the responses recorded the following predominant genres, in the following order: rock and hip hop, followed by jazz, pop and electronic music. There were also respondents who said they listened to almost any kind of music, but classical music or manele. Responses highlight the fact that respondents realize that their image can be built on the basis of the songs they listen to. Because of this, they delimit themselves by some negative global categories, such as the manele genre.

### 6.2. Music means

For the second question, regarding the significance of music for the interviewees, it was found that music represents, for the majority of the respondents, a way in which they feel at ease. The recorded answers show that music means "a retreat, a refuge, a lifestyle", "a way I can relax and a passion for me", "a way to relax" or "the soundtrack of my life" .

### 6.3. Out in the city music

For outings in the city, emphasis was placed on: where people are going out, the feeling the respondent has at that time and the people who accompanies him/her. Here, hip-hop and commercial music were used as answers. The others had answers like: "I really do not know, it depends on who I go out with", "I do not know, it depends on the club we choose", "at the cafe, classical music" or "any rhythmic song...it is not necessarily about the quality of music, but about the state I'm in".

### 6.4. When do they listen to music?

It is noticed that music is listened to and associated with almost any state. For some respondents, this is a way to focus: "I listen to music at work, before presentations", "I listen to music while I work," "I listen to music when I learn, when I write", or "I listen to music when doing college projects ". Many respondents appeal to it for almost everyday activities, from walking to driving: "I listen to music whenever I can".

### 6.5. If the Romanian music would have a house, how would it look like

For the next question: "If the Romanian music would have a house, how would this house look like?", the recorded answers show that Romanian music is devoid of identity. Some of the respondents described the house of romanian music as "a colorful old house", "a very kitsch palace", "a pink kitsch house...very badly divided", "only walls, naked behind the facade...the color would be neon or very strident" or "very disorganized, with both modern and old architecture...it would look like a house and an apartment building merged in the middle". From these answers, it is understood that our music industry is very disorganized, it does not pursue a global trend, it lacks its own identity, choosing to borrow elements that are found in international music, elements that are not overly coherent.

Other respondents described the house as "a dilapidated, dirty, obsolete house", "a wooden house...made by man's hand" or "a simple white house". These answers describe our music in terms of having its own identity, but being only at the beginning of the road. In these people's eyes, we haven't reached the level of the global industries.

The answers also lead to the conclusion that respondents do not consider this industry to be developed enough to assign a certain interpreter to it, because no one stands out. One respondent replied "no one would answer the door if I ring the doorbell", a sign that she does not yet have a firm opinion about this industry.

### 6.6. Appreciated Romanian singers

For the second part of the research, namely the analyses of the attitude towards the local singers, Smiley followed by Carla's Dreams, Delia and Subcarpați were the most mentioned artists, as answers to the question regarding appreciated singers. Other appreciated musicians were: Versus, CTC, Bean, BUG Mafia, Parazitii, Sișu and Puya, Moonlight Breakfast, Enescu.

*Table 1. Description of the Romanian singers*

Artist	Description
Smiley	„he managed to bring by his side a handful of people to help him...he really tries a lot”
Delia	„she makes really good music” „I like her music, she doesn't appear on the news, she is calm, not fake”
Carla's Dreams	„presents a trend which can't be necessarily fit in a particular style...they came with something new”
Subcarpați	„they are trying to merge lyrics with folklore”

Respondents appreciate, first of all, the artists' attempt to move in another direction, in attitude, through style, or songs. Identifying with them through the characteristics mentioned before, becomes a primordial element in the appreciation of an artist.

Of course, there were also respondents who appreciated a musical artist more as a person, and less as a musical performer. This is the case for Inna, who is seen "a good person for what she has done, but I am not a fan of her music", "Connect-R is a very good man ... I prefer him as a person, not necessarily for his music" or Smiley "I do not listen to him but I appreciate him". These responses show that some respondents, although appreciating certain artists as individuals, are indifferent to their music due to their not being identified with their song, genre or lyrics.

### **6.7. Unappreciated Romanian artists**

As for the unappreciated Romanian singers, they are: Alex Velea, Inna, Feli, Antonia, Pepe, Sore, Anda Adam, Akcent, Andreea Balan, Ruby, Connect-R and Andra. General features, which describe most of them, are: superficiality and too much similarity from one song to another. The lack of depth or even the inexistence of a message behind a repetitive melodic line seem to be disturbing to the respondents. These artists "seem to be false", "they have nothing profound to offer", "they have the same beat that you find in all their songs... they seem to have gone on an opportunistic trend."

### **6.8. Word association to the music artists from Romania and appreciated foreign singers**

Some of the words mentioned are: "smile", "hair", "imperfect", "folklore", "beard", "pink", "green", "liberty", "black".

After an analysis, we notice that some words represent the songs of the respective artists, a sign that the identity comes from their songs (if the same song would have been played by another artist, the latter artist would most likely also be appreciated), and not from the artist as a person, as a brand, (we are referring here to Carla's Dreams). For other artists, the words describe their physical characteristics, the identity rather coming from their appearance, not from their attitude. Here, we mention Delia, through the use of pink and green words describing her, the colors of the wigs she wears, Subcarpati - beard, the physical characteristic of her soloist, Smiley - hair. The other words describe both the attitude of the artists, in general, as well as the feeling they raise in the respondents through their melodies.

Respondents appreciate the following elements found at foreign singers: "individuality", "originality", "song content", "effort" and "spontaneity". For the names of their favorite artists, they mentioned: Eminem, Rihanna, Kanye West, Ed Sheeran, Babylon Circus, The Cat Empire, James Morrison, Years and Years, Pink Martini, or Leonard Cohen.

### **6.9. Unappreciated foreign singers**

For unappreciated international singers, respondents are bothered by the same unattractive features: the superficiality and lack of message, as well as the convenience, by creating simple songs, in order for them to be moved as quickly as possible on the market.

### **6.10. Criticism and advantages to the romanian music industry**

The respondents identified what is missing from the Romanian music industry, when compared to the international scene. The differences between the two industries are presented in the table below:

**Table 2. Criticism and advantages brought to the Romanian music industry**

<b>Advantages</b>	<b>Criticism</b>
„we have nothing to lose...here, anyone can make music, and this represent the liberty of creation”	„attitude...the foreigners are more open minded”
„inclusion of folkloric elements” (having our own identity and history, as a nation, we could promote these core Romanian values, a non-existent possibility on the American market because of the lack of a common identity as a nation)	„many platforms which sustain music can be found abroad, many advanced instruments...the music has already passed through several cycles...we are many years behind”
„we have more talented people”	„opportunities”
„originality...our context is unique...instead of creating an industry for club music, it would be potentially better if it could reach the problems of our society ”	„authenticity”
„different kinds of audience”	„an extreme snobbism is found in our music industry”
„talent which hasn't yet been discovered”	„we are lacking the framework for development”

From these answers, we can say that Romanian music is viewed rather in terms of status and money, not from the perspective of a culture that would like to convey something new, to change thoughts. Regarding the strengths, we can say that attempts (both in terms of approaching a different gender, targeting another audience and assuming the risk) are seen as strong points in our music industry, being appreciated by respondents.

### **6.11. What is branding**

The last part of the research focuses on the brand of a singer. Most of the respondents have associated the brand with the image: "the image that others have about you", "a set of qualities and values that define a company or a man", others have associated the brand with an ideal: "branding is the attempt to change the person / product into an ideal", others, with a way of advertising "the way an artist is being advertised".

### **6.12. Traits which characterize a musical artist**

The important features that characterize an artist seem to be: voice, attitude, perseverance, talent, the ability to adapt to changes, the ability to preserve authenticity, originality, empathy towards problems in society, passion, innovation, independence, sincerity, eccentricity, "liking what he/she does" and respect for the public.

The first words of the respondents to this question were: attitude, adaptability, innovation, authenticity, character and originality. All are characteristics of a person, first of all, not of a singer (a singer is defined by features such as voice and music).

Taking into account these answers, along with the ones discussed above, in the earlier part of the research, we can state that originality appears to be an important feature in both hypostases. Though harder to encounter, it can be found in various forms, from the physical aspect, such as Carla's Dream, to the music (folkloric insertions, by combining completely different styles without altering their essence, which is what Subcarpati are doing). These attempts to be different are well received by the public and are appreciated. By combining the two questions, we come back to the conclusion where respondents, through attributes such as attitudes and behaviors, appreciate the artists, rather as people, and less as musical performers (actors on stage).

### **6.13. Singers who do not identify with the traits**

The artists who are placed at the greatest distance from the above mentioned traits are: Inna: "I do not think she has any talent, just attitude", Ștefan Banică Jr: "although he has a voice, somehow the attitude must come hand in hand, his snobbism is exaggerated", Andra, Sore and

Alexandra Stan, among others: "about everything you can hear on the radio...they all have the same rhythms, the same lyrics".

#### **6.14. Ideal singers**

We give the people taking part in this research the opportunity to create an ideal singer, by completing the sentence "An ideal singer...", the respondents once again mentioned some of the features they appreciate in a musical artist. The answers were varied, from "I do not think there are any ideal singers", to "should have a great voice, stage presence...", "has a good voice and a positive attitude". Contrary to the answers provided so far, it is noted that the voice was mentioned by the majority of the respondents, as the first characteristic of an ideal singer. Unlike the qualities that a singer, as a person, should have (originality and positive attitude, amongst others), a musical artist as a performer (actor on stage) must have a good voice.

#### **6.15. Buying products associated with favourite singers**

As a general rule, most respondents take into account brand associations (endorsements). Asked if they would buy a product advertised by an artist they appreciate, the answered: "yes, to a certain extent", "yes, I tend to buy products promoted by the artists I appreciate". Almost all respondents mentioned that they are also looking at the quality of the product, this being more important than any kind of association with an artist "I'm more interested in the characteristics and the price, and less on who promotes it". The possibility of spending a larger amount of money on the same product: "yes, I would also be willing to pay more for certain products, precisely for them being promoted by my favorite or one of my favorite artists", "If I really think the product is what it should be, I'd spend more on it".

#### **6.16. Buying products associated with artists who are not appreciated**

There were respondents who said they were not influenced by this endorsement technique: "I'm not really influenced by advertisements", "if it does not identify with my values, I do not buy it, no matter who is promoting it or vice versa". Most respondents said they would refuse to purchase a product promoted by an artist that they do not appreciate: "I can change my opinion about a brand that chooses a certain singer to be its image", "if the brand identifies itself with the singer, and if I do not like him/her, yes, I would refuse to purchase such a product". Taking into account the answers given to the last two questions, a brand that is not necessarily appreciated on the market, but associated with a highly appreciated singer, will have no impact on the consumer's buying behaviour. The artist's image, however, could be negatively affected by this kind of collaboration.

### **7. Conclusions**

An important conclusion for this paper, with a deeper understanding of music consumers is the obvious difference the respondents seem to make between the musical performer and the singer. These two references, although intended to represent the same person, are divided into two distinct things: the singer, as a person in the day to day life and the musical performer, as a musical artist, an actor, the one present on the stage. So, the performer must have a voice in order to reach the level of an ideal one and, at the same time, in the backstage he/she must be original and display a pleasant personality through a positive attitude and proper behavior.

A brief analysis of the association between the brand of a music artist and the one of a material product was also sought. While the endorsement theory has been tracked, this analysis highlighted the effects of such partnerships and respondents' actions behind them. Thus, the image of an artist can positively influence a product brand as often as a product brand can negatively influence an artist (depending if the two share or not the same traits and values).

The convenience found in Romanian music, the repetitive sounds and the inspiration from internationally renowned artists, along with the arrogance encountered by some artists, represent a big negative point in the way they are perceived by the public, though this is not a general rule ("generally a good artist can be anyway, there are very good artists who were not good people, for example"). Moreover, respondents associated, to a greater or lesser extent, the success of the Romanian bands with the lack of originality. Thus, they believe that the recipe for a successful career in the music industry comes from appearing on radio or on the T.V: "If you want to be successful, you have to become commercial".

We can conclude that the Romanian music industry has no identity, but is on its way to acquire one, through talented and original singers - referred to as "ideal" (where an ideal singer "is" and "would focus more on quality than quantity").

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## Corporate Image of Banks: Comparative Study in Bulgaria and Romania

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### Abstract

Topics related to corporate brand image and the way customers perceive the brands are widely spread and gain a lot of attention among academics and practitioners as well. All specialists, who are engaged in the area of communication process and who convey messages to the target audiences, often ask themselves questions as follows: “What happens with the brand attitude after the advertisement” and more important: “How does that change influence on the real customer behavior?”. Despite the large number of publications, still the field of corporate image measurement in the banking industry seems less researched. Banking environments are challenging, with increasing competition. In addition to this, bank services are quite specific - they are intangible and require great engagement when the final decision is made. Due to the above mentioned, the present paper examines how two different advertising campaigns for UniCredit Bulbank and Bancpost Romania convey different attitude and form different images in customers’ minds. Brand image perceptual mapping study in the period of 20-31 July, 2018, is conducted. The main purpose was to find out what types of images, related to human characteristics acknowledge people for the tested advertisements. The study also shows how people assess the advertisements and to what extent they change their attitude towards the banks after they saw them. The target audience in the survey includes people, aged between 25-55 y/o, active banking users, urban population, as included are both countries (Bulgaria and Romania). The final purpose of the study is to give suggestions how to improve the advertising messages in the banks when it comes down to image dimensions and attributes from customer perspective. The implications also indicate the level of importance of customer surveys when it comes down to advertising campaigns.

**Keywords:** Corporate brand image, Marketing Research, Corporate image advertising.

**JEL classification:** M31, M37.

### 1. Introduction

The topic related to advertising of financial services is quite crucial and important to be discussed due to the following reasons: (1) financial adverts create awareness of existing and new products; (2) they provide information about the product/service characteristics in terms of conditions for usage and all needed rational characteristics for the customers’ final choice. Last, but not least, the adverts of banks enhance the reputation, educate bank customers, remind customers about the bank, and establish certain corporate brand perception in the customers’ mind.

The objective of the present study was to find out what are the different brand personality features which are recognized in two corporate image bank advertisements. Little empirical research could be outlined for that area, despite the fact it is quite important. From one hand, such research could support the companies to see how the different advertisements develop certain images in customers’ mind which at later stage, influence on their behavior. From other hand, the comparative perspective puts the question about the adverts which are adapted for the different regions in Europe and the success of that activity. As it is obvious from the research data, people recognize different brand personality characteristics for the advertisements. Based on that, they have different attitude towards the banks, which probably influence on their final choice.

Due to the fact that within the paper, prominent part is put for the concepts of corporate brand image with focus on brand personality features, some information about the concept is recommended to be presented. Presented also are the main differences between the

interchangeable concepts for brand image, reputation, and identity, due to the fact the brand personality itself is quite important aspect within the whole model of brand management (see figure 1).

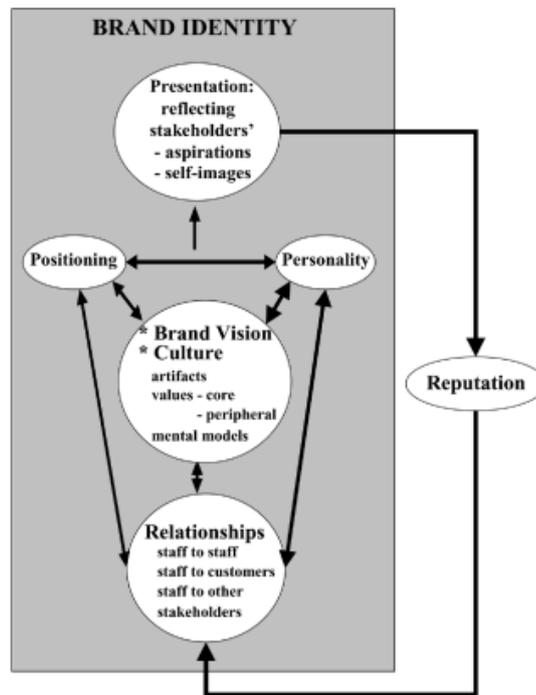


Figure 1. Identity reputation gap model of brand management

Source: De Chernatony, 1999

## 2. Corporate brand image concept

There are various definitions for the corporate brand image as it is important to notice the difference between brand image and corporate brand image. The brand image is related to all perceptions held by customers about company's specific products and services. Corporate brand image as a concept includes the result of the interaction of all experiences, impressions, beliefs, feelings and knowledge people have about a company (Worcester, 1997, p. 147). Both brand and corporate image could be presented from personification perspective and that's the main focus within the following report.

The brand's emotional characteristics are represented by the metaphor of personality, which evolves from the brand's core values. Personality traits are further developed through associations with the "typical user" imagery, endorsers and consumers' contacts with the company's employees (Aaker, 1997).

Brand personality refers to a brand's ability to appeal to consumers based on the human characteristics associated with it (Babin and Harris, 2013). Consumers, to a certain extent have relationships with brands. Namely these personality traits associated with the brand are important in the formation and maintenance of brand/consumer relationships (Babin and Harris, 2013) which is obvious also within the current project.

Managers therefore need to ensure that a brand's personality is conveyed consistently by both its employees and external communications. Another influential source for a brand's personality is its positioning and for it an integrated approach to branding can help reinforce the synergy between these. Effective corporate branding defines a business's personality. Customers who can relate to a company make an emotional attachment. Strong connections lead to high customer loyalty, increased profits and beneficial word-of-mouth advertising.

Based on the empirical data, we could conclude that corporate image itself has two main aspects: related to the rational perspective (these are all elements which people easily recognize) and emotional (all feelings which provoke the brand to the customers' mind). The corporate brand image can be viewed both as independent variable (it influences on the customer's choice) as well as dependent variable (it is based on the customer experience and impressions on the bank). No matter of the differences between both concepts, all research review for that topic show that both play important driving force for the customer choice, satisfaction and loyalty.

### **3. Corporate brand image, identity and reputation**

When we discuss corporate brand image it should be reviewed another two important concepts, namely the brand identity and the brand reputation. The link between the companies, their identity, everything related to the brand (indicators like awareness, loyalty, attitude, associations, and activities) influence on the image as well as the consumer attitude. Each company has its own identity which influences on the brand as whole and key indicators related to it: brand awareness, associations, attitude, loyalty, brand preference.

Based on the literature overview it becomes clear that brand identity is recognized to be the antecedent to brand image. In his book, *The New Strategic Brand Management*, Kapferer (2004) conceptualized brand identity as the brands particular vision, aims, values. Balmer (1998) shared Kapferer's' position but viewed brand identity from a corporate perspective.

According to him, "brand identity articulates the corporate ethos, aims and values and presents a sense of individuality that can help to differentiate the organization within its competitive environment".

According to another definition, corporate identity could be outlined as the sub-set of organizational values with which a company wants to identify itself to all its audiences (Johnson and Zinkhan, 1990; Zinkhan et al., 200 1; Van Riel, 1995). No matters of the definitions laid down are the company values, and they derive from certain company attributes, which could be recognized as company brand personality features.

Brand image, identity, all these concepts are interchangeable to some extent. In addition to identity, comes also the concept for the corporate reputation. In contrast to a brand's image, which reflects current, changing perceptions, a brand's reputation is more stable and represents the distillation of multiple images over time (Fombrun and van Riel, 1997). Gray and Balmer (1998) understand corporate image and corporate reputation, as an equal criterion and give them the same level of importance and link them as similar issues. From their perceptions through corporate communications corporate identity affects the corporate image and reputation in similar way. No matter of the different concepts and interpretations, we could outline that all of them are related to certain feelings and emotions which could be recognized within the communication campaigns of the companies, including the banks as well.

### **4. Research specifics, methodology and main objectives**

In order to best represent how advertising form different brand images and features, a cross-national survey was conducted. The data was gathered through the online panel of two marketing research agencies, located in Bulgaria. A self-administrated structured questionnaire was developed using the online platform Survey Gizmo. All results are calculated using SPSS.19, as descriptive statistics, multiple response and compare means are used for data analysis. The study consisted of bank customers in Bulgaria and Romania; with equally distributed sample size (total numbers of 208 participants are included in the project).

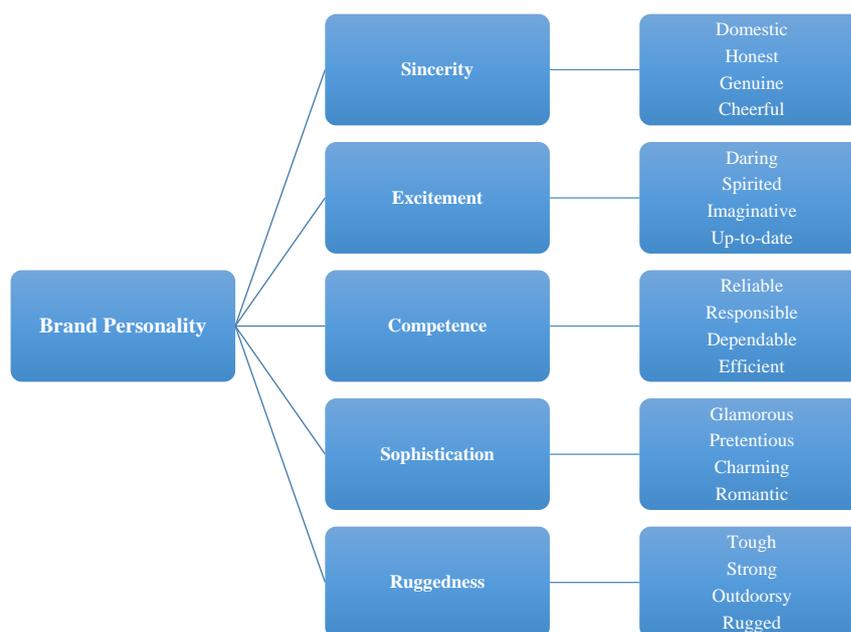
The tested advertisements could be found in the following web addresses:

- Spot 1: UniCredit Bulbank: Banking that matters, available at: <https://www.youtube.com/watch?v=LNfcWWsoFws>
- Spot 2: Bancpost Corporate Movie, equilibrium, available at: <https://www.youtube.com/watch?v=XiIaxcejous>

As specific objectives of the survey, we could outline:

- To find out the important features for the customers when they form their attitude towards the banks in general;
- To reveal how people perceive both brands as a person based on the tested advertisements;
- To research to what extent they recognize Aaker brand personality dimensions for the tested adverts;
- To give recommendations and summary based on the research results;

For the brand personality features, used as a basis is the brand personality model of Jennifer Aaker (see figure 3). Within her model, we could outline the following dimensions where for each of them certain human features could be recognized. For the purpose of the survey and having in mind the present report represents financial adverts, some of the traits are pre-formulated in different way, but keeping the sense for the main dimensions they reflect.



*Figure 2. Brand personality Dimensions model*

Source: Aaker, 1997, pg. 347

## 5. Main results

The first topic presented is the main factors that influence on the customer attitude as a whole towards the banks. As it becomes clear from the numbers, both target groups (Bulgarians and Romanians) form their attitude based on strongly rationale factors like the loan conditions and their transparency (see table 1). What is interesting to notice here is the difference between Bulgarians and Romanians in terms of indicators related to the advertisements and the provided customer experience. Romanians at greater extent declare important for them is the interesting customer experience in comparison with Bulgarians (average score of 3.25 for Bulgarians

versus 4.17 for Romanians). In addition to this, the banks to be advertised as well as the advertisements to be creative seem to be more important for Romanians in comparison with Bulgarians. These numbers put the question about the different psychological profile of both nations which should be taken in mind from all specialists, engaged in advertising. The question is important due to the fact that very often, we observe advertisement creative which is adapted for particular market, but not created having in mind these specifics. As it is obvious from the gathered data, this should not be neglected while making different advertisements.

**Table 1. Factors influencing on the overall attitude towards the banks in general (where 1 is the least important and 5 is the most important factor)**

Indicators	BG	RO
<b>Question: How important for you are each of the following statements, when you form your attitude towards the banks in general? Where 1 is "Not important at all" and 5 is "Very important"</b>	<b>Average scores</b>	
To be aware of the bank ( to have experience with it, not only to know it by name)	4,30	4,04
To recognize the bank products/services among others	3,94	4,21
The bank to be the first that comes to your mind	3,27	3,81
The bank to provide you feeling for credibility	4,28	4,53
The bank to provide interesting customer experience to its clients in the office areas	3,25	4,17
The bank to be, with good positive reputation among your friends/relatives	3,85	4,20
The bank to provide transparent loan conditions	4,57	4,67
Most of your friends to agree that this bank offers best loan conditions and services	3,37	3,64
The advertisements for this bank to be creative	2,72	3,67
The advertisements for this bank to be different from those for competing banks	2,73	3,51
The bank to be intensively advertised	2,46	3,44
The treatment received from the personnel of the bank to be kind and polite	4,51	4,61

Source: Author own research results

As it was discussed above the paper, the brand as a person is interesting indicator to be researched; customers are more likely to choose brands which are close to them as people. The conducted research showed that we observe significant difference within the tested spots in that area among Bulgarians and Romanians. For Romanians, both advertisements represent cool person, but to greater extent the positive features are recognized for UniCredit Bulbank advertisement (see figure 4). UniCredit Bulbank (UCB) brand could be described as energetic, warm, and to some extent modern person, while Bancpost brand seems introverted based on the video. It also makes impression the percentage of people who point out the answer “none of the above mentioned” for Bancpost spot - 11 % versus 2 % for UniCredit Bulbank spot. That shows that Bancpost brand image is not so focused and clear in comparison with UCB in customers’ minds – probably, more difficult they would connect to the brand.

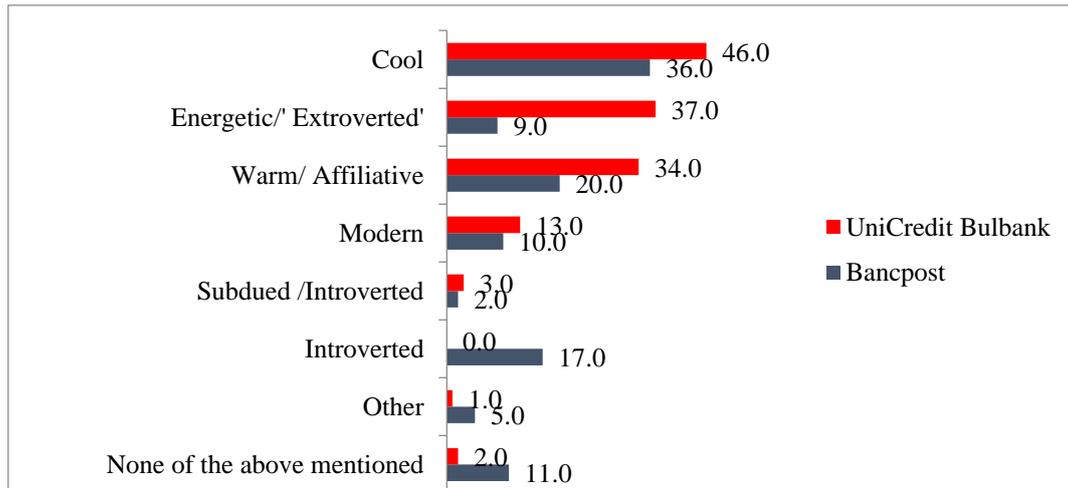


Figure 3. If you have to imagine the brand as a person, what will be the characteristics of that person, having in mind the ad you just saw? (Romanians)

Source: Author own research results

Bulgarians point out the same feature as even more they recognize UCB brand as modern in comparison with Romanians. Among Bulgarians, the percentage of people who declare they did not recognize any of the features is about 23% for Bancpost advertisement in comparison with UniCredit Bulbank.

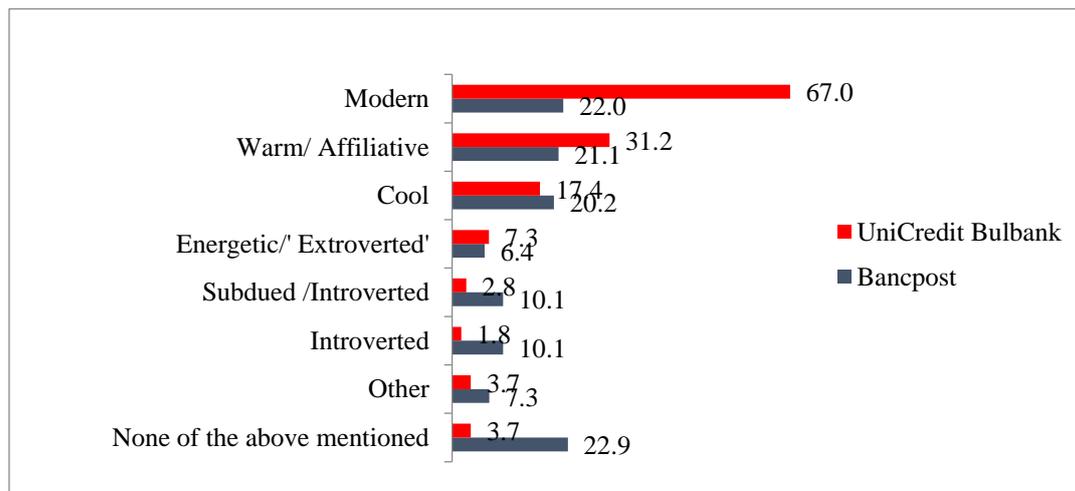


Figure 4. If you have to imagine the brand as a person, what will be the characteristics of that person, having in mind the ad you just saw? (Bulgarians)

Source: Author own research results

If we observe Aaker brand dimensions and see the answers only for Romanians in terms of the tested advertisements, UniCredit Bulbank brand has traits for sincerity and competence, while Bancpost advert seems more sophisticated in comparison with UCB spot. Traits related to ruggedness are also more likely to be recognized for Bancpost spot in comparison with UCB (see figure 5).

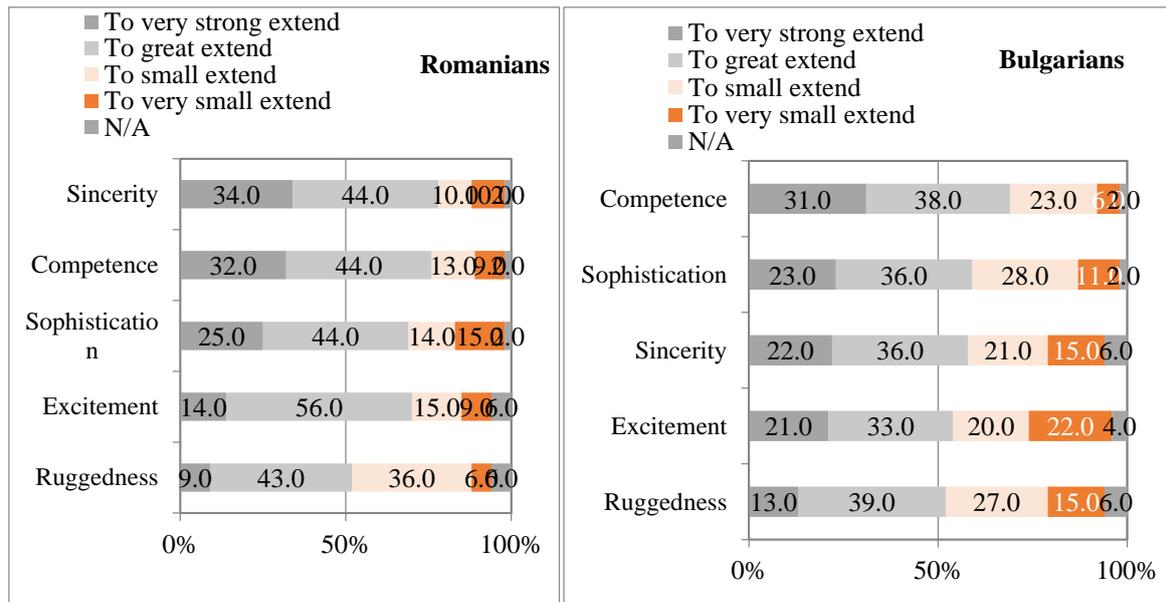


Figure 5. According to you, what are the human characteristics associated with the brand, having in mind the ad you just saw? (UniCredit Bulbank)

Source: Author own research results

In terms of the particular traits, related to the brand, for Romanians, genuine, innovative and distinctive are the main human features which distinguish in positive way UCB spot. For Bancpost brand, the features that are most commonly recognized are traditionalist, as well as pretentious. For Bulgarians, “up- to-date” register the highest average score for UCB brand and that’s the main difference between UCB and Bancpost brand. To a greatest extent for Bulgarians, Bancpost brand in comparison with UCB brand is pretentious (see table 2). In short, if we take in mind Aaker brand personality main dimensions based on that results, we could conclude that for Romanians UCB brand is a person who involves sincerity and to some extent excitement, while for Bancpost that feature is sophistication.

Table 2. For each of the following attributes, please tell us to what extend do you agree, disagree that the advertised brand is: (Where 1 means completely do not agree and 5 completely agree)

Romanians	UniCredit Bulbank ( average)	Bancpost ( average)	Difference between UCB and Bancpost spot
Pretentious	3,12	3,34	-0,22
Up-to date	3,71	3,15	0,56
Genuine	3,91	3,15	0,76
Innovative	3,93	3,17	0,76
Revolutionary	3,62	3,00	0,62
Reliable	3,58	3,21	0,37
Traditional	3,33	3,49	-0,16
Fashionable	3,69	3,03	0,66
With best loan conditions	3,45	3,07	0,38
For all people who need financing	3,71	3,28	0,43
Distinctive	3,70	3,01	0,69
Liberal	3,62	3,02	0,60
Socially responsible	3,78	3,32	0,46
Prestigious	3,81	3,32	0,49
Honest	3,77	3,26	0,51
Bulgarians	UniCredit Bulbank ( average)	Bancpost ( average)	Difference between UCB and Bancpost spot
Pretentious	2,84	3,28	-0,44

Up-to date	4,07	3,12	0,95
Genuine	3,83	3,04	0,80
Innovative	3,92	3,08	0,83
Revolutionary	3,30	2,87	0,43
Reliable	3,77	3,19	0,58
Traditional	3,35	3,31	0,04
With best loan conditions	3,42	2,87	0,55
For all people who need financing	3,69	3,02	0,67
Distinctive	3,57	3,13	0,44
Liberal	3,46	2,97	0,49
Socially responsible	3,50	3,02	0,48
Prestigious	3,81	3,13	0,68
Honest	3,51	3,09	0,42

Source: Author own research results

Different advertisements not only convey different human features to the customers, but they influence on the overall attitude towards the banks. Related to that indicator, Romanians seem even more reflected by the ads, for them we observe the strongest positive change – about 62% percent of the respondents declare they have much better, somewhat better opinion on the bank after they saw the ad. This percentage for Bancpost is 29%. Among Bulgarians that is not so strong as a feeling, but again 44.9% declare positive impact on the overall attitude towards the bank after they saw the advertisement of UCB. For benchmark that percentage is 23.8% when it comes down to Bancpost spot.

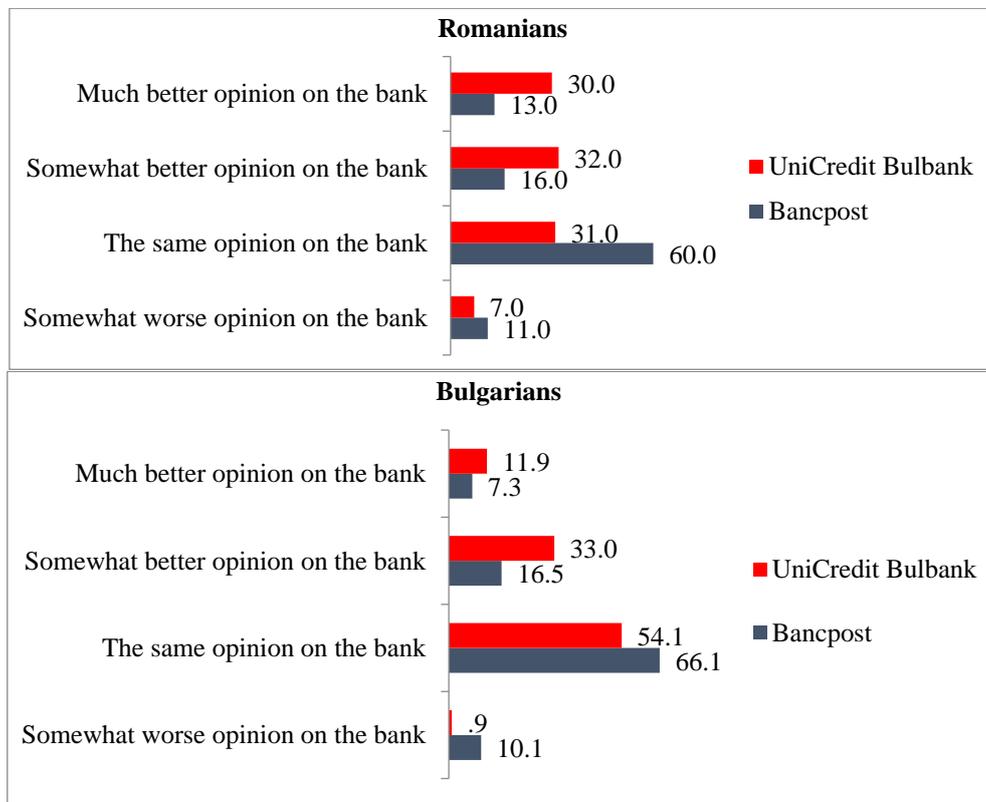


Figure 6. Having seen this clip, would you say you have...?

Source: Marketing research

## 6. Conclusion

Based on the conducted survey we could summarize that the traditional marketing approach will no longer work, customers will become more and more pretentious while choosing and the importance for the advertising will become even more significant. The practice to use one and the same creative within different countries should be very carefully used especially in the area of banking advertising. Banks provide intangible products to their clients, their advertisements should be even more creative, and they should convey traits of positive and sincere brands. The present research has its valuable insights to the financial sector by encouraging them for the improvement of their corporate images campaigns. For further research, it will be quite useful qualitative technique also to be added within the methodology in order to derive customer in-depth insights about brand personal trait and their influence on the attitude and final choice.

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## **Organizational Performance and Digitalization in Industry 4.0**

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### **Abstract**

The aims of the paper are to present the relationship between the concepts of organizational performance and digitalization in Industry 4.0, and to illustrate the case of a globally operating German car and motorcycle manufacturer, the Bayerische Motoren Werke Aktiengesellschaft. In recent years, organizations have increasingly launched, developed and delivered products and services, and interacted with their stakeholders in a digital manner. Social media, mobile and cloud computing, big data and the Internet of Things are among the new drivers of the actual business world and together with other digitally based technologies have a huge impact on today's organizational performance. Digitalization represents a key feature of the fourth industrial revolution or the so-called "Industry 4.0", a new phase in the development of industry all over the world. In Industry 4.0, products, logistics and services are technically and organizationally merged with one another by using cyber-physical systems in such a way that an increased and self-controlling production flow is created. In order to reach the aims of the paper the authors used a quantitative research method and a case study. The findings of the research showed that digitalization improves the performance of today's organizations and, in the case of the German company, leads to providing safer products for customers and achieving better results. The paper contributes to the development of the scientific literature by emphasizing the key role played by digitalization in obtaining a higher corporate performance.

**Keywords:** organizational performance, digitalization, Industry 4.0, company, BMW.

**JEL classification:** M10.

### **1. Introduction**

Since the birth of modern organizations, concerns over their performance have stimulated the emergence and development of numerous researches and studies related to organizational performance. Therefore, the need for a systematic study of organizational performance both in the private and public sector has led to the expansion of a burgeoning literature that addresses key issues of this topic as organizations have always competed with one another. Especially the last decades witnessed the publication of several bestsellers (Peters and Waterman, 1982; Peters and Austin, 1985; Collins and Porras, 1994; Collins, 2001; Porter and Tanner, 2004) aiming at identifying the features of high performance organizations.

For a long period of time, organizational performance was regarded in a quantitative manner through the output terms. Later, it began to be assessed also qualitatively by reference to benchmarking and standards of performance (Armstrong and Baron, 2005).

In recent years, organizations have increasingly launched, developed and delivered products and services, and interacted with their stakeholders more and more on a digital way. Social media, mobile and cloud computing, big data and the Internet of Things are among the new

drivers of the actual business world and together with other digitally based technologies have a huge impact on today's organizational performance. Digitalization represents a key feature of the fourth industrial revolution or the so-called "Industry 4.0", a new phase in the development of industry all over the world. In Industry 4.0, products, logistics and services are technically and organizationally merged with one another by using cyber-physical systems in such a way that an increased and self-controlling production flow is created (KPMG, 2016). Companies that have successfully implemented Industry 4.0 became digital organizations, obtained increased annual revenues and reduced their costs (PricewaterhouseCoopers, 2016). The aims of the paper are to present the relationship between the concepts of organizational performance and digitalization in Industry 4.0, and to illustrate the case of a globally operating German car and motorcycle manufacturer, the Bayerische Motoren Werke Aktiengesellschaft (BMW AG). In order to reach these aims the authors used a quantitative research method and a case study.

## 2. Literature review

The main concepts of the paper, namely organizational performance, digitalization and Industry 4.0, are to be found in many articles and books worldwide. Thus, the term organizational performance can be defined in various ways as follows:

- "Organizational performance encompasses three specific areas of firm outcomes: (a) financial performance (profits, return on assets, return on investment, etc.); (b) product market performance (sales, market share, etc.); and (c) shareholder return (total shareholder return, economic value added, etc.)" (Richard et al., 2009, p. 722).
- Organizational performance represents "an analysis of a company's performance as compared to goals and objectives. Within corporate organizations, there are three primary outcomes analyzed: financial performance, market performance and shareholder value performance (in some cases, production capacity performance may be analyzed)" (Business Dictionary, 2018, p. 1).

Organizational performance and digitalization are already working close together. New methods of work, business models and organizational structures have been created in order to obtain higher performances as follows (Federal Ministry for Economic Affairs and Energy, 2015):

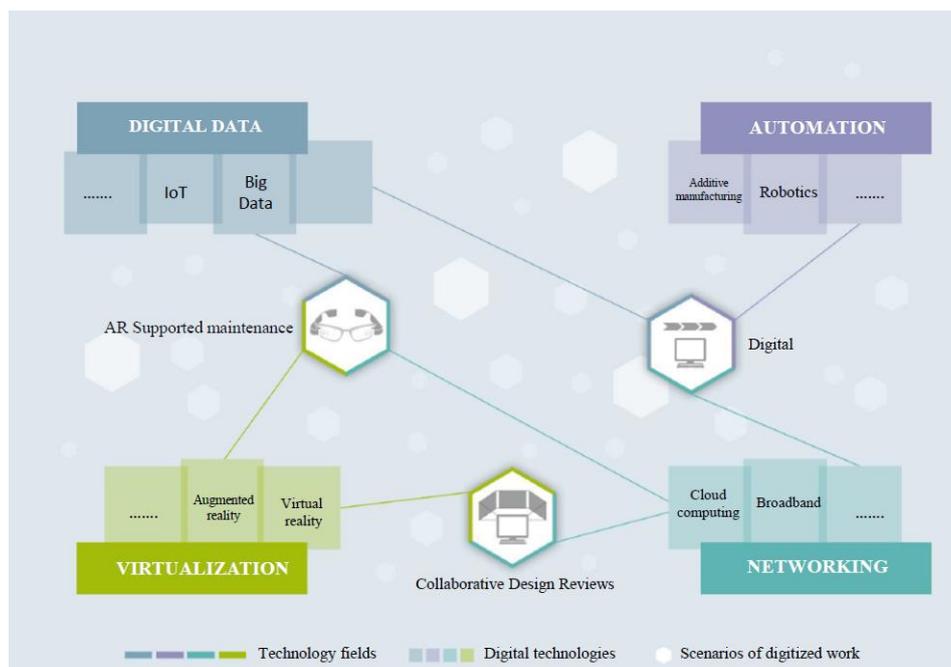
- Moving away from the organizational chart: instead of established line responsibility, the employees organize themselves into independent teams that work exclusively on particular projects. Instead of specific established functions, everyone works to attain the same goal (e.g., to create something new).
- Moving away from the old job: employees need time and opportunity to develop something new. By focusing their attention exclusively on the new project, they are investing time and energy into it without any frictions.
- Moving away from established regulations: sprint projects work exploratory, prototype-driven and after customer feedback. This is easier if employee have a higher degree of freedom than in the classic organizational chart.
- Moving away from the old office: working with short feedback cycles needs direct interaction. Colleagues exchange ideas informally in a project office or on a common floor, and develop faster a sense towards the project.
- Moving away from departmental thinking: teams are multi-functional and act across departments. The close cooperation of various people (e.g., product managers, knowledge professionals, software engineers, designers) in a team creates a comprehensive understanding of a product and/or service and triggers a change of perspective among the people involved in the project.

- Digitalization: people are working together in teams all over the world at the same time by using modern telecommunication devices and shared technology platforms.

Industry 4.0 describes the merging of production and information technology. It offers the opportunity to take the flexibility, energy and resource efficiency of production processes to the next level through intelligent control and networking. Electronics and sensors play a key role in these processes as they lead to cyber-physical systems that communicate with each other, optimize production and interact safely and reliably with human beings. The required hardware is based on complex microelectronic systems for the acquisition, processing and exchange of data as well as plant control. Such "More than Moore" systems combine sensor and actuator components, radio frequency and communication components, power supplies, power electronics and microelectromechanical systems (MEMS) as well as components from optoelectronics. Important applications are the tracking of production goods, the preventive maintenance of production facilities and relevant infrastructures through continuous monitoring and the statistical evaluation of process data. For such applications, various sensors and measuring methods must be used and combined. These increase the complexity of microelectronic systems, which at the same time have to fulfill high demands related to performance, reliability, robustness and energy efficiency.

This digital transformation is based on a fast and broad adaptation of technologies in the context of Industry 4.0. Each of them, and even more so in interaction with each other, has great potential to fundamentally influence the way people do business and work. The technological foundations of the digital transformation of the working and business world can be differentiated into the following fields of technology (Figure 1):

- Technologies related to the collection, processing and analysis of digital data, such as big data approaches.
- Technologies for networking systems (e.g. cloud computing) and for virtualization, such as augmented and virtual reality (AR / VR).
- Technologies for the automation of value chains and products, such as approaches of robotics (Gilchrist, 2016).



**Figure 1. Digital technologies- the basis of the working world of today and tomorrow**

Source: own adaptation after Institut für Angewandte Arbeitswissenschaft, 2016

Digitalization and networking are among the drivers of a comprehensive, dynamic and complex change: everything is going to be linked together, the evolution curve is going to be much higher and technology will co-work with people in a matter of impacting the performance and business processes in the daily activities of the company.

### 3. Research methodology

In order to achieve the two above mentioned research objectives the authors used a quantitative research method combined with a case study. In this respect, the authors searched for various sources of data in order to define the key concepts of the paper and to show their relationship by exemplifying the case of BMW AG. The information was gathered from secondary sources of data (e.g., annual reports, books and articles from the domains of management and information technology) through a desk research on the basis of a literature review. The literature review was conducted mainly in German libraries where electronic databases (e.g., SAGE) were found and consulted.

### 4. Digitalization, a driver of organizational performance at BMW AG

BMW AG is the parent company of the BMW Group, a globally operating German car and motorcycle manufacturer based in Munchen. The product range includes the automobile and motorcycle brand BMW, the car brands Mini and Rolls-Royce as well as the BMW sub-brands BMW M and BMW i. With its anniversary of 100 years of existence and the beginning of the digital age, BMW decided in 2016 to improve its organizational performance. In this respect, the company concentrated its efforts on three main issues (BMW Group, 2018a): strategy, process and resources (Figure 2).



Figure 2. A model for designing digitized working environments at BMW

Source: own adaptation after BMW Group, 2018a

The domain STRATEGY is designed in the following fields of action:

- *Corporate strategy* has to take into account the way the effects of digitization on corporate strategy are shaped. This applies to products and business models, but also

to the organization of value creation structures and service creation processes.

- *IT strategy* examines to what extent scenarios of digitized work influence this strategy. The topic of data security plays a central role. If value-adding processes and core competences are digitized, the protection of these data is crucial to business success.
- *Corporate culture* can be the biggest barrier to implementing digitized work environments. The willingness to change as well as the common togetherness is a critical success factor.

In the section PROCESS the following elements play an important role:

- *Digital organization*- by introducing scenarios of digitized work, the adjustments to the structure and, in particular, to the process organization of companies, are accompanied by profound changes that have come about. These need to be identified and appropriate recommendations for action derive.
- *Technical infrastructure*- an important prerequisite for the implementation of digital working environments is the provision of the necessary infrastructure. The focus is put on internal resources, such as the knowledge management systems.
- *Human-system interface*- the interaction between human beings and systems is designed. This applies to both motor and cognitive assistance systems. The focus is put on the effective completion of work tasks. Accordingly, it is necessary to design interaction possibilities and to define the division of tasks between people and systems.

Finally, the following three fields of action can be identified in the section RESOURCES:

- *Work organization and methods*- the digitization of work requires or enables new working methods and forms of organization. On the one hand, the work can be made even more flexible. An increasing delimitation of time and place can be observed. On the other hand, for example, new creativity methods in product design are possible - based on technologies such as the virtual reality.
- *Working tools*- digitized work tools are considered in terms of human-technology interaction. It has to be examined how technologies should be designed meaningful in the sense of the user in order to guarantee a technology acceptance among the employees. From this perspective, of course, already existing technologies must be considered.
- *Qualification*- scenarios of digitized work lead to a fundamental and continuous change in the activities and qualification profiles of the actors involved. It is important to involve the employees in this change and to accompany them. In doing so, chances and possibilities for a human-oriented organization of the working world have to be created, and, therefore, the human factor in the digital work plays a decisive role.

By implementing the above model and taking as a foundation the Watson AI technology, BMW AG has started a project aimed at helping vehicles communicate with each other and providing the driver a better understanding of traffic conditions, and, finally, to improving the organizational performance and supplying much safer products for the customers. The results after the first years were the following:

- Networked vehicles are now able to analyze real-time information to give vehicle users and fleet operators new insights. Thus, their experience is optimized.
- Information comes from vehicles and in-vehicle data, so that the driver can be better

understood and protected – digitalization of the business/customer communication.

- Engineers are connected to the vehicle over its entire lifecycle, and can improve and extend their functionality, avoiding quality issues and callbacks.

The main objective of the German company is that the car has to become familiar with driver's habits and provide suggestions on how to adopt a safer driving style, optimizing vehicle-to-vehicle communication or monitoring the status of the vehicle in order to diagnose and fix automatically any issue by implementing modern technologies like machine learning or internet of things improving the performance in the company (IBM, 2018). As a consequence, the net profit of BMW Group has continuously risen from 5,817 mil€ in 2014 to 6,396 in 2015, 6,910 in 2016, and 8,706 mil€ in 2017 (BMW Group, 2018b).

## 5. Conclusions

Being highly connected with the global megatrend of digitalization, Industry 4.0 has created the favorable environment for the digital transformation of the manufacturing industry. The findings of the research showed that digitalization improves the performance of today's organizations and, in the case of the German company, leads to providing safer products for customers and achieving better results. The paper contributes to the development of the scientific literature by emphasizing the key role played by digitalization in obtaining a higher corporate performance.

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