

Automated Marketing and the Need to Revise Traditional Practices

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Abstract

The development of Internet technologies, of communication and distribution models in the last decade has contributed for the favourable change in companies' business environment and the purchasing conditions for consumers. The changed understanding of distribution and the configuration of channels defined as a factor for market success has set forth the need to apply flexible marketing and real-time marketing in order to achieve target efficiency on the level of market, segment, channel, object and subject.

There are several challenging areas of marketing which can be solved through its automation: management of capacities, increasing the efficiency of marketing communications, overcoming information asymmetry, relevant price setting and management of inventories. Companies invest in designing technologies, software and platforms for automated marketing by striving to facilitate and speed up marketing processes not only on company level but on the level of channel configurations, B2B, B2C and C2C as well. Moving traditional marketing practices to e-environment is not always possible and it does not always achieve success. It is necessary to maintain a balance between the use of new technologies for production, distribution, communication and price setting. Designing and applying innovations for one of these elements only is not enough to achieve long-term market success. Dynamic market changes and offering on behalf of consumers make companies face the issue of the hierarchy of decisions and authorizing managers to make real-time changes. An alternative for companies is to shift part of the processes and activities to automated marketing. The other alternative for them is to give more freedom to their staff and stimulate real-time creative marketing through relevant motivation and organization of positions. It is certain, though, that the speed, scope and control favour the first alternative which will continue to develop in various spheres of economic and social life.

Keywords: automated marketing, marketing automation fields, real-time marketing.

JEL classification: M31.

1. Introduction

The increased market competition over the past two decades calls for a revision of marketing activities and their organization. There are several conditions that necessitate a change in traditional marketing. First, there is the development and widespread application of new technologies in business and public life, which set a new speed for decisions and processes. Second, the variety of risks related to businesses and the marketing of products and services, which require adequate responses, including in the management of capacities.

Third, the change in consumer behaviour and the relative resistance to traditional marketing tools forcing companies to innovate and diversify. Fourth, the increased importance of consumer to business marketing, meaning that companies need to be prepared for a special kind of demand in which the offer is designed by consumers. Fifth, the emerging role of the speed of business processes in the generation of positives for companies and consumers and the increased need for flexible real-time marketing.

Furthermore, the expediency of marketing budgets and the effectiveness of investments in traditional marketing have been questioned over the past two decades: a discussion prompting numerous searches for solutions based on marketing innovation. One opinion is that strategies addressing the high cost of marketing have focused primarily on efforts to improve efficiency through reducing costs (Weber, J., 2002), which causes additional expectation for increased effectiveness of marketing activities. The methodology for determining the return on

investment for marketing has been improved (Duboff, R., 2007).

2. Review of literature on automated marketing

Already in 1960, certain then-current aspects of automation and its relevance to marketing were discussed (Head, G., 1960). During that decade the research of possibilities for marketing automation was focused primarily on distribution and logistics (Table 1). In 1998, the question of the transition from decision support to marketing decision automation became topical, and was the starting point for the improvement of marketing practices in that direction in the following decades (Table 1).

Authors	Aspects and characteristics of automated marketing
Head, G. (1960)	The author presents the then-current aspects of automation and the possibilities for its application.
Goeldner, Ch. (1962)	The author explores automation in marketing, including in the field of distribution. He highlights several important forms: automatic stores, vending machines, electronic data processing, and automatic warehousing. Of interest is the author's view that at higher levels the impact of automation is greater than at the level of retailers and therefore "automation at the retail level will come slowly".
Jones, K. (1998)	The author argues that before the launch of the WEB automated marketing was not possible.
Bucklin, R., Lehmann, D. and Little, J. (1998)	The focus of their study is the possibility for an increasing proportion of marketing decision-making to be automated. There is a tendency for a transition from decision support to marketing decision automation.
Lamont, J. (2015)	According to the author, "marketing automation is one of the fastest growing sectors in the software industry", increasing at a rate of 60 percent per year with market penetration still only 3 to 15 percent.

Table 1. Automated marketing in literature

In conclusion, automated marketing can be presented as part of marketing which is designed and developed on the basis of new technologies, encompassing and bounding the decisions about elements of the marketing mix on operational, tactical and strategic level and contributes for increasing the speed and efficiency of the marketing processes.

3. Arguments in favour of the use of automated marketing

Automated marketing has been gaining momentum over the past decade. Investments in innovative marketing technologies and applications and their spreading among businesses and consumers have contributed to the increased interest in its use.

Automated marketing is an opportunity for companies to take advantage of innovations in order to achieve growth through designed development. Consumers can also benefit from the automated marketing used by companies, in terms of the positive effect on their awareness, decisions, general expenses, benefits from the consumption of the product and other positive transfer effects.

The arguments for the use of automated marketing by companies may be classified into five groups (Table 2). Each of these groups includes specific motives that drive companies to seek solutions for their business in the use of automated marketing.

The arguments for the implementation of automated marketing in business and public life will become increasingly stronger. The practices of companies using B2B and B2C automated marketing tools and the results achieved will contribute to the transfer of experience to different fields of modern marketing, including the marketing of ideas, cities, people, communities, etc.

Arguments in favour of the use of automated marketing	Characteristics
Effective use of the potential of the latest technologies for marketing purposes and increased marketing effectiveness	Touches upon the potential of flexible marketing (Danchiu, V., 2013) with smart solutions in offering, preparing and delivering. Specific aspects of the use of high technology marketing and its contribution to sustainability are discussed (Lim, W., 2015). Modern trends in marketing education (Hanover Research, 2014) and marketing education based on advanced technologies (Green, T., 2015) are presented. Increasing the marketing effectiveness of B2B markets using marketing automation platforms (Digital Marketing Depot, 2015).
Search for ways to overcome the subjective factor in marketing decisions	There is recognition of opportunities for model-based automation of market decisions (Leeflang, P., Wittink, D., 2000). Dealing with the problem of the hierarchy of decisions and authorizing managers to make real-time changes.
Reducing the marketing costs and increasing the effectiveness of the various marketing activities	According to Phuong Nguyen, director of advertising at eBay, "Making an inefficient market more efficient is at the core of why people should embrace the notion of automation (Chahal, M., 2016).
Replacing traditional with automated marketing, due to a necessity arising from the nature of the business/problem	In marketing literature there are discussions on the need for more flexible marketing (Danciu, V., 2013) and addressing customers' immediate personal needs (Aquino, J., 2013). Special attention is paid to automated marketing research (Lee, Th. and Bradlow, E., 2011)
Increasing the competitiveness of the company in relation to direct competitors	The influence of competitive pressure on innovative creativity of companies is the subject of several studies (Sultan, M., Ismail, T., 2015). Increasing competitiveness by increasing the speed of business processes, including that of transactions, will be a priority for companies over the next decade.

Table 2. Arguments in favour of the use of automated marketing by companies

The possibility to predict and counteract the increasing risks to companies and consumers arising from the emerging economic and political crisis in a situation of market turmoil also speak for the implementation of individual elements or comprehensive solutions of automated marketing.

4. Fields of marketing automation

The literature on the subject explores different fields of marketing automation. One field is that of marketing automation of B2B markets, another is B2C markets (including Cloud-Based B2C Marketing Automation Platforms). Silverpop (2012) examines core aspects of marketing automation, including: Email, landing pages and data collection scoring and routing, programs and campaign automation data management and integration and reporting and analytics. Based on the traditional structure of marketing and specific processes, the following main fields of marketing automation can be outlined (Table 3).

Fields	Characteristics
Offering	Automation of the offering process through modern technologies and applications. The automation can be viewed in two aspects: designing an offer and targeting the offer to a particular cluster of consumers or an individual consumer. Offering can be organized in two directions: B2C and C2B, with focus on the possibility of improving the information symmetry between market participants.
Product innovations	Promoting the integration into idea generation platforms of automated processes such as voting in favour of a given idea, registering consumer interest and donating funds for its realization. Automation of the product design process with consumer participation. This is especially important for products that can be produced from

	different ingredients (such as food, clothing, etc.) and 3D printing technologies.
Pricing	Automated pricing, modeled by and contingent on a number of conditions: specificity of the product, variations in demand, quantity, quality in time, cyclicity, environment, etc. Automated pricing is aimed at achieving a higher average price and maximizing the revenue. Special attention is paid to dynamic pricing strategies (DiMicco, J., Greenwald, A. and Maes, P., 2001)
Automated distribution	Use of new technologies and applications to achieve a targeted and highly effective distribution, functionally covering all distribution channels.
Automated promotion of products, services, offers, etc.	Advertising and sales promotion in real time, with a high degree of flexibility and difference from traditional formats. The automation of marketing processes related to sales promotion will improve consumer participation and trust in the mechanisms and principles of the campaigns.
CRM	Automation of processes within CRM would contribute to higher reliability, increased trust and usability of information on companies and their customers.

Table 3. Main fields of marketing automation

In terms of marketing, automated offering can be viewed in two ways. The first aspect is the automated design of an offer aimed at a particular customer or group of customers. The decisions here concern the determining of the parameters of the product/service, product policies, pricing conditions, etc. The possibility to use accumulated information on the individual consumer or the cluster of consumers in the automated design of the offer is an indisputable advantage for companies and their customers. For companies, the leading motives for automated offering are achieving adequacy, dynamization of the offer in time, reporting the changes in the key parameters of the environment and overcoming subjectivism (reducing the likelihood of unequal treatment of customers, shifting the centers of importance and intentional disadvantaging of companies). The second aspect of automated offering is the process of communicating the offer, its targeting. Targeted offering to consumers through the use of specialized software generates a number of benefits for the consumers themselves. The offer received by the consumer is designed according to the consumer's profile, current status, purchasing capacity and other circumstances. Both aspects are very important, especially in terms of speed: the speed of designing the offer and of channeling it to consumers.

Marketing automation in the field of product improvement will develop at a rapid pace. There are several arguments for this:

- Increased importance of open platforms for idea generation and implementation;
- Increased influence of marketing carried out by the consumers themselves, including the impact on the product and product policies;
- C2C integration in all processes of product development.

The automation of pricing in response to the many variables of the marketing environment will be a challenge over the next decade. At present, the models used in practice have a limited number of variables, but in the future we can expect the addition of new variables with a critical impact on the price and market performance of the company. The question is which products/services will be the most affected by the dynamic pricing. The current practice gives grounds to place these into the following groups:

- High-tech products for which consumers are willing to pay different prices;
- Products with a shortened life cycle;
- Perishable products;
- Products associated with a risk;
- Products with large cost differences depending on the utilization of manufacturing and distribution capacity;
- Products with a large variation in the search parameters (quantity, colour, model, size, etc.);

- Products with a multicomponent pricing model, etc.

Among the priorities of automated pricing in the coming years will be revenue maximization through achieving a maximum average price, profit maximization, decreasing illiquid stocks and scrapped goods.

Some analysts (PWC, 2013) pay special attention to the need of improving the overall management of pricing in companies, and examine the processes, organization, technology and data analytics. Automation in pricing will affect not only the online offering, but also the conventional distribution, where problems related to subjectivity and authorization in pricing decisions are strongly pronounced.

Automation in the area of distribution leads to significant changes in distribution processes and solutions. It will most certainly be beneficial to consumers, by offering them the right product, through multiple points of access under reasonable conditions. Moreover, marketing automation will contribute to the linking of the production and the distribution processes, which in turn will lead to a reduced risk for companies and consumers.

Distribution channels with an option for product design by the consumer will be a priority for companies which will be relying on flexible real-time marketing. The availability of new automation technologies under the conditions of multichannel distribution determines their widespread penetration and usage in various fields of business and public life.

The automation affecting the elements of the promotional mix has a very high potential. Advertising and sales promotion are among the most actively automated elements. The motives of companies range from seeking a greater and faster effect to reducing the cost of advertising and sales promotion. There is an improvement of the models used, expressed in the addition of new features and the inclusion of links to other elements of the marketing mix and the conditions and circumstances of purchasing decisions.

The customer relationships management (CRM) solutions are also subject to automation. Several important aspects are of interest in this regard. The first is the automation of marketing research, including for the purpose of CRM, which is crucial for the system maintenance and automation. The second aspect is related to the identification of the tools, mechanisms and circumstances to implement the specific activity. It is essential to enable the consumers of the company's products and services to develop and improve and thus utilize the favourable transfer effects on consumption, purchases, yields and profits. Sharing the profits with consumers is essential for the retaining of existing consumers and the attracting of new ones.

These aspects should not be considered separately, but as a whole, thus enabling companies to execute a balanced implementation in their business and achieve a high level of marketing automation tailored to the business and environmental conditions. There are several key variables that will affect business operations under conditions of marketing automation. First, the speed of decision making and the speed of processes. Second, the utilization of the capacity of companies and the achievement of a balance between production and distribution capacity. Third, marketing dynamization which will contribute to generating and maintaining interest in the company's offers. The fourth variable characterizes the sensitivity and adaptability of marketing to consumer demand and its taking into account the consumer attitude in the design of offers. The fifth variable is the willingness of a company to service customers (existing, new, registered, etc.), which includes not only the marketing aspect, but also the legal, accounting, etc. aspects.

5. Conditions and opportunities for marketing automation from the perspective of companies

An important condition for marketing automation is the use of modern technologies by companies and households. The sustained growth in the use of modern technologies in both

segments is an essential prerequisite for the implementation of marketing automation in B2B and B2C.

With a view to identify the opportunities for the implementation of marketing automation in Bulgarian companies, a qualitative research was conducted by means of in-depth individual interviews with the managers of 12 companies differing in size and scope of business (the survey was carried out between 01.06.2016 and 10.06.2016). The companies were selected based on the following characteristics: size, field of operation, experience on online markets and customer type. The research attempted to cover managers who represent the diversity of business entities in Bulgaria (Table 4).

Characteristics	Classification of respondents according to the characteristics of the company they manage		
	Small	Medium-size	Large
Company size	8	3	1
	3	5	4
Field of operation	Manufacturing	Wholesale and retail	Services
	3	5	4
Experience on online markets	1-5 years	6-10 years	Over 10 years
	2	4	6
Type of customers	Business	Consumers	Business and consumers
	2	3	7

Table 4. Characteristics of the companies whose managers were interviewed

The purpose of the interview guide of the research was to establish how informed the managers were about the nature of automated marketing and its capabilities; their intentions to make use of these capabilities in the future and the availability of trained specialists.

Variables	Results
Awareness of companies managers of the nature of automated marketing	The majority of companies' managers have shown awareness of the nature of automated marketing. In their responses they point out the need for change in the marketing activities of their companies. A quarter of the respondents have shown very high awareness, including of the main fields of marketing automation, and partial awareness of available software for its implementation. The same number of managers do not have any information about marketing automation, but nevertheless show interest in it. The managers' awareness comes from two sources: their personal interest and search for relevant information, and their experience as customers of companies that already use automated marketing tools.
Capabilities of the automated marketing	Half of the interviewed managers named specific opportunities for the application of marketing automation in the specific business area. One-sixth of the respondents believe that marketing solutions are in general subject to full automation and companies should take advantage of this opportunity. The remaining managers speculated on the capabilities of automated marketing but did not specify them. Among the above-mentioned opportunities of automated marketing are: "consumers are always informed through using various channels and points", "achieving more flexible marketing", "gathering and using information more efficiently", "encompassing a broader circle of consumers" and "stimulating consumers differentially according to their profile".
Plans for the implementation of automated marketing	A third of the managers would implement partial modules for marketing automation, with highest priority given to automated offering, advertising, pricing and CRM. Among the most cited reasons for such implementation are „the lower marketing costs“, „increased competitiveness and adaptation of the company to the changing consumer behavior“.
Availability of trained specialists	The prevalent part of managers think the number of well-trained specialists is insufficient, and there is lack of accessible training to facilitate the faster implementation of automated marketing in their business (meaning the specific field in which they work).

Table 5. Summary of responses to basic research questions

The results of the qualitative reach on the possibilities for implementation of automated marketing in companies in Bulgaria are encouraging (Table 5). The awareness of the majority of managers is a good starting point for further search for specific information about available solutions and the possibility to adapt these to the relevant business.

6. Conclusion

As a result of the literature review and the qualitative research, the following conclusions can be drawn:

- The implementation of automated marketing modules will be in the focus of companies in the coming years.
- The interest in specialized software tailored to the specifics of the particular business will increase.
- Companies will have to revisit the links between the departments that use automated marketing and the linking of individual automated functions.
- High priority will be given to the updating of the education in marketing, in pace with new technologies and business expectations. Essential for the preparation of specialists will be hybrid courses ensuring equal attention to education in marketing, information/communication technology and programming.

The environmental aspect in the arguments for marketing automation will become increasingly emphasized, in parallel with the search for paths to sustainable development of companies and compliance with the rules of marketing ethics. Marketing automation can be also seen as a prerequisite for the development of equal value business by small and medium enterprises which have ventured investments in high technology.

References

- AQUINO, J., 2013. *Streamlining your Sales and Marketing Tasks with Automated Technology Can Do Wonders for your Productivity and your Bottom Line*, Customer Relationship Management, May 2013, p. 32.
- BUCKLIN, R., LEHMANN, D. & LITTLE, J., 1998. *From Decision Support to Decision Automation: A 2020 Vision*, Marketing Letters, Volume 9, Issue 3, pp 235–246.
- CHAHAL, M., 2016. *Overcoming the Barriers to Automation*, Marketing Week, 10 MARCH 2016, pp. 29-31.
- DANCIU, V., 2013. *The Future of marketing: an Appropriate Response to the Environmental Changes*. Theoretical and Applied Economics, Volume XX, No 5 (582), pp.33-52.
- DIGITAL MARKETING DEPOT, 2015. *Market Intelligence Report: B2B Marketing Automation Platforms 2015: a marketer's guide*, p.11, [online] Available at: <http://downloads.digitalmarketingdepot.com/rs/thirddoormedia/images/MIR_1303_MarketAuto.pdf> [Accessed 14 June 2016].
- DIMICCO, J., GREENWALD, A. & MAES, P., 2001. *Dynamic Pricing Strategies under a Finite Time Horizon*, EC'01, October 14-17, [online] Available at: <<http://erationality.media.mit.edu/papers/joanie/ec01-DynPricingFinitHorizon.pdf>> [Accessed 25 June 2016].
- DUBOFF, R., 2007. *ROI for Marketing: Balancing Accountability with Long-Term Needs*, Association of National Advertisers, Inc., pp. 1-90.
- GOELDNER, CH., 1962. *Automation in Marketing*, Journal of Marketing, , Vol. 26, No. 1 (Jan.), pp. 53-56.
- GREEN, T., 2015. *Flipped Classrooms: an Agenda for Innovative Marketing Education in the Digital Era*, Marketing Education Review, Volume 25, Issue 3, pp. 179-191.
- HANOVER RESEARCH, 2014. Trends in Higher Education Marketing, Recruitment, and

- Technology, 2014, pp. 1-27, [online] Available at: <<http://www.hanoverresearch.com/media/Trends-in-Higher-Education-Marketing-Recruitment-and-Technology-2.pdf>> [Accessed 23 June 2016].
- HEAD, G., 1960. *What Does Automation Mean to the Marketing Man?*, Journal of Marketing, April 1960, pp. 35-37.
- JONES, K., 1998. *Marketing Finally Gets Automated*, Interactive week, March 16, p.1.
- LAMONT, J., 2015. *Streamlining your sales and marketing tasks with automated technology can do wonders for your productivity and your bottom line*, Customer Relationship Management, pp.32-35.
- LEE, TH. & BRADLOW, E., 2011. *Automated Marketing Research Using Online Customer Reviews*, Journal of Marketing Research, Vol. XLVIII, pp.881-894.
- LEEFLANG, P. & WITTINK, D., 2000. *Building Models for Marketing Decisions. SOM theme F: Interactions between consumers and firms*, April 19, 2000, p.6, <https://pure.rug.nl/ws/files/3137028/00F20.pdf>
- LIM, W., 2015. *A blueprint for sustainability marketing. Defining its conceptual boundaries for progress*, Marketing Theory, Vol. 16, no. 2, pp. 232-249.
- PWC, 2013. *The future of software pricing excellence: The new state of the art*, pp. 1-12 [online] Available at: <www.pwc.com/technology> [Accessed 22 June 2016].
- SILVERPOP, 2012. *Marketing Automation eBook. Email and Marketing Automation that's complete. Not complex. Best Practices for & Marketing Excellence Operational Efficiency*, pp.1-40, [online] Available at: <<http://www.silverpop.com/downloads/white-papers/Ebook-Marketing-Automation-Best-Practices1.pdf>> [Accessed 21 June 2016].
- SULTAN, M. & ISMAIL, T., 2015. *The Influence of Competitive Pressure on Innovative Creativity*, Academy of Strategic Management Journal, Volume 14, Number 2, p.117.
- WEBER, J., 2002. *Managing the marketing budget in a cost-constrained environment*, Industrial Marketing Management, 31, pp. 705-717.