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THE IMPORTANCE OF ICT IN CREATING DIGITAL MARKETING

ZNACZENIE ICT W KREOWANIU MARKETINGU CYFROWEGO

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Abstract: The creation of digital marketing was conditioned by many experiences of using its previous forms, derived from interpersonal communication itself. The moment when society entered into interaction with new information and communication technologies forced a kind of integration of both issues, which began to create a new concept known today as digital marketing. Its key channels, including online technologies used to communicate with recipients, serve many businesses as a leading tool for promoting their own brand. The aim of the article is to illustrate the process of a marketing evolution towards its digital version through the presentation of the technologies used, as well as a step-by-step approach to online sales using methods from the borderline of ICT in image building and sales. It can be said without any doubt that marketing communication is evolving from classic solutions and interactions to its digitalized counterpart, which is mainly found in online solutions. The research method used in the article was a critical analysis of the literature and identification with the characteristics of information and communication solutions used to create digital marketing.

Keywords: marketing, digital marketing, information and communication technologies, online technologies, sales relations

Streszczenie: Powstanie marketingu cyfrowego było uwarunkowane wieloma doświadczeniami wykorzystania dotychczasowych jego form, wywodzących się z komunikacji interpersonalnej. Wejście społeczeństwa w interakcję z nowymi technologiami informacyjno-komunikacyjnymi wymusiło swoistą integrację obu zagadnień, które zaczęły kreować nowe pojęcie, znane dziś pod nazwą marketingu cyfrowego. Kluczowe jego kanały, w tym technologie *online* wykorzystywane do komunikacji z odbiorcami, służą wielu podmiotom gospodarczym jako główne narzędzie do promocji własnej marki. Artykuł ma za zadanie zobrazować proces ewolucji marketingu w kierunku jego cyfrowej wersji poprzez prezentację wykorzystywanych technologii, a także etapowe podejście do sprzedaży internetowej z wykorzystaniem metod z pogranicza ICT w budowaniu wizerunku i sprzedaży. Można stwierdzić, że komunikacja marketingowa podlega ewolucji z klasycznych rozwiązań i interakcji do jej zdigitalizowanego odpowiednika, który znajduje ujście głównie w rozwiązaniach *online*. Metodą badawczą w artykule była krytyczna analiza literatury oraz identyfikacja wraz z charakterystyką rozwiązań informacyjno-komunikacyjnych stosowanych w celu kreowania marketingu cyfrowego.

Słowa kluczowe: marketing, marketing cyfrowy, technologie informacyjno-komunikacyjne, technologie *online*, relacje sprzedażowe.

1. Introduction

The importance of information and communication technologies is constantly growing, in many areas they have found many applications, especially since the digitalization of data and the way they are stored helped to develop practically every branch of the world's economies. Marketing has become one of the areas covered by the broadly understood concept of digitization and the development of new technologies. The foundations of communication processes were laid by new technologies enabling the digitization, and in later stages the automation of many aspects of the analysed marketing.

The first section deals with the evolution of marketing itself towards digitalization and development in the environment of new information and communication technologies, where the analysis of the digital communication process in market conditions is crucial. The ICT sector technologies build tools for achieving the goals set at that time.

The digital marketing has key components that are the basis for achieving these goals, including primarily marketing, where the most important of them will be presented. The use of these online technologies in the communication of digital marketing in a practical application on the web finds its calling primarily in e-commerce. The section illustrates the most important elements resulting from the actions of the recipient and the sender of the content at each stage of the customer relationship.

The aim of the article is to show the importance of information and communication technologies in the creation of modern communication in digital marketing, especially showing the practical use of these technologies in e-marketing plans, with reference to one of the leading sectors, namely e-commerce. The article was prepared on the basis

of literature research, which was the first stage of the authors' work on the concept of his doctoral dissertation. The second part of the article was developed as a result of the identification and characteristics of the information and communication solutions used to create digital marketing.

2. The evolution of marketing towards digitisation

The evolution of marketing over time has not been based on sales alone, but also knowing and understanding customers, so that the acquisition of a product is emotionally linked to the brand. According to the broadest understanding of marketing, i.e. satisfying customers' needs while making a profit, one can see the signs of the decision-making and communication process that has to take place for a transaction to take place. The revolution connected with globalization and digitization brought with it, above all, increased competition.

This was one of the reasons for the emergence of a marketing activity that is customer-oriented, today perceived not only as a potential buyer, but as an entity that consciously makes its decisions. In order to understand the process of the evolution of classic marketing towards its digital counterpart, one of the sets of the elements constituting the classic concept of marketing, i.e. the 4P model, should be looked at closer. The classic concept was based on product, price, distribution and promotion (Nowicki, 2014, p. 12). With the process of digitalization of society and increased access to information by the recipient, this model has become less useful.

Other factors such as people and their decisions, processes and their optimization, programs and their performance and achievements, and differently measurable effects of work became crucial, which together resulted in the modernized 4P model. This change took place when the marketing stage evolved from 1.0, through 2.0, to the modern 3.0 concept, where the new 4.0 marketing concept is successively unquestionably created with the focus on the customer as a person aware of his/her own decisions through modern media.

The process of evolution, in which the consumer wants only to buy cheaply, and only what is high-performance mass production with low production costs and poor quality has now become unprofitable, and has just passed with the advent of the digital revolution. In the classic definition one can find an interpretation of the issue that says that marketing is aimed at recognizing and satisfying human and social needs (Kotler, Kartajaya, and Setiawan, 2017, p. 10). Digital marketing draws its features from global marketing due to the global nature of the activities that can be defined as aimed at gaining a competitive advantage on the international market with a clear focus on a high degree of integration and coordination. The graph below illustrates the process of digital communication resulting from the evolved classical form of marketing (Figure 1). This process assumes five key elements, where the first one determines the designation and analysis of the target group, otherwise it is the identification of customer needs. Next, it is setting goals that will be in line

with the common planning principle, SMART, i.e. it will be specific, measurable, achievable, relevant and defined in time.

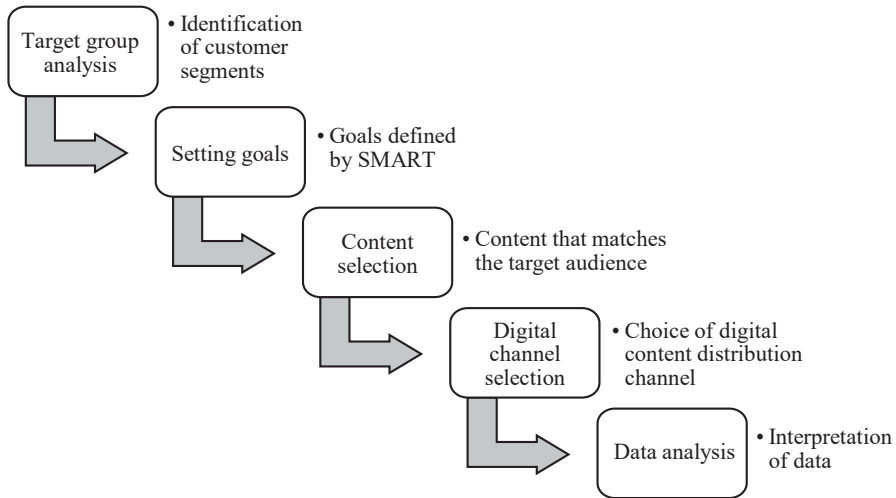


Fig. 1. Digital communication process

Source: own elaboration based on (Wiktor, 2002).

Then the choice of content is crucial, as it plays the most important role in the communication of digital marketing, the art of writing has now been reduced to simple content assuming that the customer makes conscious and prudent purchasing decisions, only supported by short and concise guidelines for a given basket of goods. This determines the next step, i.e. the choice of a digital channel. There are many ICT solutions available in the field of digital marketing, which will be explained in the next section on online technology in digital marketing.

The last, and also the most revolutionary element of the process, is data analysis. Currently, the analysis of large data sets and their aggregation and interpretation are among the most important factors determining market advantage on the market. The analysis allows to optimize the actions and draw conclusions regarding future acts of communication in digital marketing. The key to the evolution of marketing, especially digital marketing, is the information collected by means of information and communication technologies, which can be measured, presented and learned; it is the moment when a message becomes information and information, concrete data. Over the years, information has become the equivalent of more value than the most important raw materials in global economies such as oil. This is why digital marketing was created, a kind of a tool to distribute and at the same time aggregate information in a thoughtful and logical way among the recipients, making a profit on a mass scale, starting to benefit both the sender and the recipient.

3. Online technologies as a basis for digital marketing

Analysis at the basis of information and communication technologies can show how important and inseparable these technologies are in building conscious and concrete digital communication. In the circle of ICT technologies, the core of research is the Internet itself. These technologies have distinctive features such as:

- taking into account the individual needs of the users, presenting the recipient both as a unit with specific characteristics, but also his or her location on a mass scale, i.e. a group of people with similar interests,
- encouraging the dissemination of information, regardless of geographical, demographic or cultural circumstances,
- the possibility of multiple playback and transmission of information, where the greatest advantage is the repeatability of the content in relation to the recipients' interests, which has been used for example in remarketing techniques,
- global reach through a network, which is supposed to be highly interactive and breaks down geographical barriers (Maciorowski, 2013).

As part of the technology analysis, five key online technology solutions are presented which contribute significantly to the development of digital marketing communication. These are services or tools in forms of highly developed software available on the market. In addition to the technological aspects, the analysis also explored the solutions stemming from the nature of a given channel and the ideas used in practice by marketers all over the world in order to effectively maximize the achievement of the assumed goals. The graph below illustrates the most popular network technologies used in digital marketing, tailored to each digital marketing channel (Figure 2).

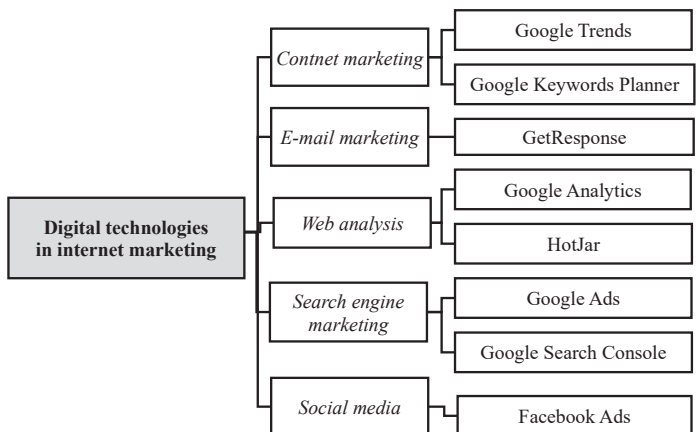


Fig. 2. Digital technologies in digital marketing

Source: own elaboration based on (Maciorowski, 2013).

Content marketing – focusing primarily on the techniques and methods of content marketing, one can distinguish the use of keywords popularized by the network. Currently, they are the base element for content marketing, and the core of the whole channel is based on the selection of words commonly used, especially in Internet communication. One of the platforms enabling planning the selection of words and their segmentation is Google Keywords Planner, a free dedicated tool from Google, which enables the configuration of keywords and determining their effectiveness among searches made by consumers in the network. The tool is available after logging in to the Google Ads platform, which is an advertising ecosystem, which will be discussed later. Among the key features in Keywords Planner one can distinguish:

- monthly number of searched words,
- seasonality of keywords,
- competitiveness of words,
- estimated cost per click (PPC).

A concept directly related to keywords is the recently popularised word *buzzword*, i.e. terms to which users react. They play a special role in content marketing, used in social media and thematic blogs. These words are responsible for attracting attention and evoking expected reactions. Their disadvantage is that they do not build long-term contact, but they are especially responsible for quick reactions with recipients. A tool operating in the area of *buzzwords-based* content creation is Google Trends, a tool that allows to study the trends and preferences of selected target groups. The platform has a simple interface that allows to analyse words in relation to user searches in the world, comparing them to other words and showing where they are most often searched by geographical data, as well as at what time they were searched and in what configurations they may occur.

E-mail marketing – in recent years the form of e-mail marketing has started to change especially because of the above mentioned content marketing. Currently, newsletters create cyclical and thematic blogs, which are regularly delivered to interested users. The newsletters are based entirely on mailing databases of customers who have agreed to use them. In the process of collecting these e-mails, mailing databases are created which are very much sought-after nowadays. Newsletters based on content marketing are also a part of the whole marketing strategy, including promotions and discounts available only to registered users. In addition to the text layer and containing promotional elements, the mailing often includes a graphic layer, specially adapted to the target group. One such software application offering email marketing solutions is Get Response, currently one of the most popular platforms of e-mail marketing support, characterized by the collection of consumer e-mail data, as well as building a graphic or text layer and, most importantly, automating the entire process. The ecosystem allows to generate such e-mails with simple interface functions for the creator, so that they will interest the widest possible audience in the shortest possible time. The tool enables analysis of open e-mails and their effectiveness

through conversion measurements. The Get Response platform is the basis of a well-organized mailing campaign, which owing to its compatible content and interactive elements, is able to systematize contact with users and thus increase turnover.

Web analysis – over the years, web analysis has begun to cover new segments of digital communication, starting with the analysis of traffic on websites, stores, as well as the analysis of traffic throughout the network, reaching users' preferences, including their behavioural data. The multitude of elements to estimate and the platforms for their analysis has progressed at a very fast pace. This was primarily related to the development of such IT segments as databases, artificial intelligence and machine learning. There are currently many platforms on the market offering assistance in the analysis of Internet data. For many years Google Analytics has been the leading technology. The platform is a key tool to analyse website statistics. The tool works on the basis of the code tracing user traffic on the website. This data is aggregated on the basis of client's paths which occur in the network, assigned to unique IP addresses. Google collects a lot of data resulting from one's interaction in the network, in particular through the e-mail accounts set up on their platform, especially the time spent browsing the web, one's preferences and tastes resulting from the interaction with specific links. The aggregation of such data contributes to creating dedicated reports. The main functionalities of the platform are:

- generating reports,
- possibility to segment customers according to the available criteria,
- integrating accounts with Google Ads accounts,
- simultaneous collection of data from an unlimited number of websites.

Internet analysis based in particular on aggregated data for sales optimization, is also based on the systems implemented for tracking user traffic on selected websites. One of the tools dedicated to this is the widely used HotJar. The tool creates databases, maps of clicks and examines users' engagement on the website and their direct interaction. The software allows to track user traffic, generate places where the click zone is the largest, and records combinations of user traffic. All these activities are carried out with a division into users with mobile and desktop versions. HotJar allows to optimize not only the website in terms of traffic but also the graphic layer. One can adjust the elements of the website so that they are located in the points most frequently clicked by users. It focuses the experience of recipients, based on their real needs.

Search engine marketing – based on the division into search engine marketing and paid ads per click, the first ads resulting from the paid clicks model will be presented, having a number of technologies used for the optimization and selection of keywords in relation to content marketing. One of the basic tools that constitute an ecosystem for campaigns focusing on PPC ads is the Google Ads platform. This ecosystem specializes in online campaigns, and is one of the most powerful and common software for digital communication world-wide . It includes primarily the Google search engine and the advertising network of affiliate sites. The system allows for the transmission of text, graphic and video ads. One of the main attributes

of the tool are data aggregation and compatibility with other Google tools, such as Google Keywords and Google Analytics. The original form of advertisements in search engines are sponsored links, based largely on content marketing, i.e. keywords that are displayed to the user as the first links in search engines to the phrases of his choice. It is also based on an auction system, offering leading positions in search engines to the owner of the site offering most for a click. Another form is display ads (banner ads), based on graphics distributed by the algorithm on websites adapted for this purpose at that time. Google Ads also offers video ads, appearing on social networking platforms such as YouTube. A number of features of Google Ads also offer performance reporting and the manual optimization of per-click rates. The second element of search engine marketing is positioning, i.e. interference in the algorithm for positioning content in the search engine. A tool from the Google family used by SEO specialists is Google Search Console. This platform allows to monitor the position of the website in the search engines and to eliminate any problems related to positioning. The activities in it focus mainly on tag optimization, where for the search engine itself it is important that the text on the site is appropriate to the tags describing it, as well as the use of web technologies in a proper way. Google Search Console allows above all to:

- index pages,
- aggregate traffic data on the site,
- generate alerts related to threats and the updates of Google algorithm,
- update and verify the internal linking system.

Social media marketing – a communication channel of digital marketing, whose main purpose is to generate traffic and create demand through popular social channels such as Facebook, Instagram, LinkedIn and YouTube. By actively running social profiles it is possible to build some awareness and brand loyalty. This area is also designed to communicate directly with customers and create a long-term e-marketing strategy. At present, the technologies that make it possible to run campaigns differ in relation to the nature of a given medium. However, Facebook and Instagram remain the most popular. A dedicated Facebook Ads platform was created for social media activities, an ecosystem created for business entities to generate traffic by means of advertisements and account for them directly with the platform. Facebook Ads is based on a scheme offering three main categories for Facebook and Instagram users, namely:

- **Awareness** – campaigns based on building relationships with customers, creating in their consciousness a sense of brand existence.
- **Action** – the most interactive category that induces specific users to take specific actions.
- **Conversions** – mainly sales targets, a category used largely on platforms offering products or services.

Facebook Ads is a natural competition in the digital media market for the Google Ads platform, despite the fact that the former generates demand and the latter satisfies it among users.

4. ICT in creating stable business relationships in the network

Both in the real world and in the virtual world, the customer acquisition process looks relatively similar, where opening the process means gaining customer attention, and in the final phase, making a purchase and maintaining the relationship for further communication. On the basis of these data, a kind of sales funnel is created, i.e. the stages of customer acquisition according to a predefined procedure:

1. **Attracting attention** – at this stage there are mostly people who have had some contact with the brand, but who are not yet its customers.
2. **Interest** – a small group of customers who are interested in the brand arrives at this stage.
3. **Desire** – the customer is aware of the brand, wants to buy the product and only needs a sales incentive.
4. **The action** – the very end of the funnel, to which only customers who are willing to buy are directed.
5. **Loyalty** – the stage where the least number of customers reaches is the most valuable for the brand.

In commercial relations, digital communication plays a very important role. Each stage of the sales funnel will map out a certain cycle of activities depending on where the consumer is located (Table 1, 2). These processes are one-off or permanent, where in the case of the first stage, i.e. the acquisition and interest of the customer, the conversion of visits and establishing relationships are one-off, while loyalty building is a permanent process. The three most popular channels of digital marketing, i.e. e-mail marketing, social media marketing and search engine marketing, were also taken into account. For each stage an action was mapped to determine the goal.

Table 1. The stage of acquiring customers by elements of digital marketing in e-commerce

	Process Name	Process Type	Channels		
			E-mail marketing	Social media marketing	Search engine marketing
Customer acquisition	Converting anonymous visits	Disposable	Sending an e-mail with the presentation of the product offer	User tracking with the Pixel tracking code	User tracking with Google tracking code
	Relationships with new customers	Disposable	Welcome message to the new customer	Educational campaign about the product offer	Preparation of the target group
	Loyalty	Permanent	Message with an introductory promotional offer	Encourage interaction with the store profile	Dynamic remarketing

Source: own elaboration based on (Błażewicz, 2018).

The second stage, i.e. maintaining relations with the customer, is one of the most time-consuming and important in building appropriate sales relations. It employs most of the methods related to digital marketing, which can be seen by the constancy of processes in the stage. It refers to the customer who is already at the moment of purchase and customers who already know about the basket of goods but do not take the conversion step, i.e. finalising the purchase.

Table 2. The stage of maintaining a relationship with the customer in online sales using digital marketing

	Process name	Process type	Channels		
	Customer involved			E-mail marketing	Social media marketing
Cross-selling		Permanent	Dynamic messages – after shopping	Adding the client to the appropriate remarketing category	Generating advertisements based on collected information
Up-selling					
Basket without purchase			Messages with products from the cart at promotional prices	Return campaigns	Ads to remind the customer to complete a transaction
Retaining the customer					

Source: own elaboration based on (Błażewicz, 2018).

The third stage consists of after-sales customer service through the remarketing tools available on the market resulting from digital communication. It focuses on one constant process which is to activate customers and attract them back to its product offer. The stage is based in particular on the subject of behavioural marketing or product recommendation.

Table 3. The stage of recovering customers in online sales using digital marketing

	Process name	Process type	Channels		
	Customer inactive			E-mail marketing	Social media marketing
Activation customers		Permanent	Messages with discounts	Dynamic sponsored messages dedicated to inactive customers	Launch a campaign with a remembered or related search category

Source: own elaboration based on (Błażewicz, 2018).

The tools listed in the article certainly help to build a long-term relationship with the consumer in the network, but above all, it is the human factor that determines success (Table 3). The presented stages and processes in combination with communication technologies of digital marketing provide a wide range of possibilities in sales relations in the network, allowing to aggregate and analyse data to use in their own strategies. However, the optimization of actions and the selection of technology depend on the human factor. Poorly selected tools and a lack of an appropriate communication strategy will generate unnecessary costs with a minimum of profit and disrupt any commercial relations. Nowadays the synergy between the usefulness of digital marketing tools and human knowledge about their use remains very important.

5. Conclusion

The digital variant of marketing communication, which has become an element of revolution in the process of information exchange, has initiated a number of changes resulting from the technological progress in the network. The evolution of marketing towards digitalization has opened new paths of development for online communication between a business entity and the consumer. The online technologies used to distribute content have also begun to play an important role in digital communication channels. Nowadays, each of the analysed channels has dozens of solutions used in market conditions, where the most significant technologies are used by millions of broadcasters and recipients of content in the network. The development and evolutionary process of marketing towards digitalization has found many markets, the most important ones, where it could find is application, i.e. commercial relations in the network. Currently, Internet sales is one of the fastest growing branches of the economy. Digital marketing has become an inseparable element of commercial relations in the network, therefore the author's solutions resulting mainly from the practical experience of using ICT in digital marketing and sales relations in the network allowed to illustrate the current situation. As a result of the analysis of the state of affairs discussed in the article, it is recommended to carry out further analysis resulting from the specific application of digital marketing communication processes with the use of large data sets to analyse behavioural marketing, which currently plays a key role in the evolution of classic marketing to digital marketing.

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