SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY 2023
ORGANIZATION AND MANAGEMENT SERIES NO. 174

MARKETING COMMUNICATION OF MODERN ENTERPRISES IN THE ERA OF DIGITAL ECONOMY

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Purpose: The purpose of the study is to present the digital nature of the marketing communications of companies located in Poland by determining the digital-based activities they undertake in their marketing communications with stakeholders. The study assumes that the digital nature of their marketing communications is determined by their business profile, form of ownership, ownership capital and the number of employees they employ.
Design/methodology/approach: The survey was conducted on a sample of 225 enterprises in July-September 2020 throughout Poland (16 provinces). The sample selection was stratified and random. The method used in the study was a diagnostic survey.
Findings: The survey results show that a sizable percentage of companies located in Poland have some catching up to do in basic digital functions in the area of stakeholder communication. On the other hand, enterprises using digital solutions in marketing communications boast a fair amount of diversity in them, making the integration of digital instruments and solutions a feature. The undertaking of selected marketing activities by organizations is determined by various attributes of the organization, i.e. business profile, form of ownership, especially their size and ownership capital.
Research limitations/implications: The results of the survey call for a broader and more in-depth analysis of the digital activity of modern enterprises in the area of marketing communications. This includes, first and foremost, learning about the determinants of the deficiencies manifested by a sizable percentage of companies in this area, which would make it possible, perhaps, to remove the barriers to these companies becoming more digital in the area of communication with stakeholders.
Practical implications: The results of the research prove that among the surveyed attributes of organizations, it is the form of ownership and size of the enterprise that most differentiates them in terms of the digital solutions used in marketing communications. Sole proprietorships are less likely to use such solutions than partnerships and limited liability companies, and companies employing between 10 and 49 people are less likely to use such solutions than medium-sized and large companies. They are the ones that should accelerate the implementation of digital solutions in marketing activities first. This would require building a management culture conducive to change and based on an understanding of the role of new technologies, which are now becoming a guarantor of their success.
Social implications: Better understanding of the business impact of digital marketing tools.

Originality/value: The article is primarily of cognitive value, emphasizing the importance of digital solutions used in marketing communications by modern companies. Consequently, it can be an element that stimulates the management of modern organizations to seek and apply marketing instruments using the latest digital solutions to reach specific groups of stakeholders.

Keywords: marketing communications, digital economy, digital technologies in marketing communications.

Category of the paper: research paper.

1. Introduction

The digital economy permeates many aspects of modern life, including retail, transportation, education and agriculture and modern technologies are being used in all sectors of the economy, both in the business environment and in households and government operations, benefiting both businesses and their stakeholders (customers, consumers, professional partners, etc.).

In most of the definitions identified in the literature, the digital economy is defined through the use of new technologies and platforms, i.e. mobile networks and devices, wireless networks and sensor networks, Internet of Things and Internet of Everything, cloud-based applications and services (cloud computing), Big Data Analytics and Big-Data-as-a-Service, automation and robotization, multi-channel and omnichannel distribution models for products and services, social networks, or by the more general term "digital technologies" (Gudanowska, Kononiuk, 2020, pp. 21; Bukht, Heeks, 2017, pp. 4-6; Pieriegud, 2016, p. 11). "Digital technologies based on computer hardware, software and networks are no longer a novelty, but are becoming increasingly sophisticated, integrated and, as a result, transforming societies as well as the global economy" (Schwab, 2018, p. 23). This aspect is also pointed out by C. Dahlman, S. Mealy, M. Wermelinger, (2016) arguing that the digital economy is rooted in digital technologies, information networks and the activities that people perform through these networks. Thus, it is an economy in which transactions are carried out electronically through the Internet, resulting from billions of online connections, being a combination of digital technologies and people's actions (Śledziewska, Włoch, 2020, p. 78). The aforementioned technological solutions play an important role in creating the effective functioning of modern organizations by providing them with flexibility and increasing the mobility of their operations. They are not insignificant in the planning and creation of effective marketing communications, and the investment of enterprises in its digitization is becoming a necessity for them and a condition for them to remain on the market and develop.

The purpose of the study is to determine the activities based on digital solutions undertaken in marketing communications by enterprises located in Poland. The study assumes that the digital nature of marketing communications of modern enterprises is determined by their business profile, form of ownership, ownership capital and the number of employees employed in them. The selection of variables was based on factual considerations. In making the selection of variables an effort was made to include variables representing different sides of the company's business and treated simultaneously in marketing research theory, as basic and standard variables considered in enterprise research.

2. Digital aspects of enterprise marketing communications

Marketing communication is a specific process of interaction and dialogue between an enterprise and its target market (Wiktor, 2013, p. 14), it is "a process of information flow leading to audience engagement" (Gregor, Kaczorowska-Spychalska, 2016, p. 31). Marketing communication is also the formation of an enterprise's distinguishing features, i.e. its identity, as well as its appropriate partner response to the information flowing from the environment (Perenc, 2013, p. 471).

The rapid development in recent years of new technologies, including the Internet, as well as the increase in the popularity and scope of the use of mobile devices by consumers results in the transfer of marketing communication activities of enterprises to the virtual world, creates opportunities for enterprises to conduct individualized dialogue-based activities in the so-called "virtual space", allowing them to quickly and easily access feedback (Szymański, 2016, p. 98). This communication, known as mobile communication, is carried out using the resources of the global computer network, new media tools, including mainly the Internet. It focuses on transmitting integrated and interactive messages through them from organizations to their stakeholders (Gracz, 2016, p. 167) and uses dialogue, which is the basis of relationship marketing. Interactive marketing communication tools with buyers make it possible to involve them in a specific game with the producer and/or seller of specific goods (Wiechoczek, 2011, p. 503), to ensure the flow of information between companies, intermediaries and consumers, as well as within the company (Szymański, 2016, p. 98), and to make it possible to obtain important information from consumers, such as ideas for product innovations or promotional messages, as well as to evoke in them a sense of appreciation by these entities.

These tools include Internet tools used in the online channel, such as websites, newsletters, blogs, display ads, chat rooms, online forums, social media and others. The primary interactive tools of online communication are websites, i.e. company websites. Through them, users can learn not only about the attributes of products and the benefits they are supposed to provide to

buyers, but also report problems they encountered while browsing it, send their comments and opinions on the company's products and suggestions for improvement. Of the aforementioned online tools, it is social media (Facebook, Twitter) that most enable companies and brands to have an interactive dialogue with the market environment. Interacting means both transmitting information externally and receiving and analyzing information from the environment (Zbrzyzny, 2011, p. 52). The goals for which companies or brands have a social media presence are most often to build a community around the brand, increase brand awareness, increase website traffic, increase sales, manage brand reputation and identify customer needs (Całka, 2015, p. 330).

Assuming that customer relationships are becoming the most important resources for an organization, these assets must be actively managed to maximize the organization's added value (Billewicz, Olszak, Bartuś, 2015, p. 179). Customer relationship management is now strictly determined by the use of information technologies and tools to monitor, establish, maintain and manage customer relationships. These include advanced marketing automation systems (*Marketing Automation*), tools such as CRM, ERP, or AI.

Marketing automation systems make it possible to integrate and synchronize the processes taking place in marketing and sales departments, accurately assess their effectiveness, and streamline marketing and sales processes (Rutkowski, 2020, p. 4). Covering a potential customer with an automated marketing action involves directing a series of tailored marketing, information or sales messages to such a person, the purpose of which is to: maintain contact with the potential customer, convey key ideas to the potential customer, indicate the best moment to sell. Examples of marketing messages can be automatic welcome messages sent by the marketing automation system to an identified customer after his/her visit to the company's website, which allow to immediately identify the potential customer's area of interest and equip him/her with knowledge about the company's activities and/or its product offerings, or cyclical programs (Drip programs) consisting of creating sets of information sent at specific intervals to particular customer groups (Błażewicz, 2012).

Customer relationship management is also enabled by CRM (Customer Relationship Management) systems. This term refers to a company's ability to acquire customers, get to know them, renew contacts with them, make sure that the company provides them with exactly what they expect and what it has committed to, and finally - realize profits through these activities (Power, 2003). This is made possible by the operational, analytical and interactive subsystems working together within CRM (Billewicz, Olszak, Bartuś, 2015, p. 180). Operational CRM functions in the area of customer data collection, supports business processes within marketing, sales and marketing service, among others, by: - marketing automation: market segmentation, campaign management and event-based marketing, - sales automation: opportunity management, contact management, product configuration, - service automation: contact and call-center operations, web service. Analytical CRM analyzes customer data structures, thus discovering unknown information about customers, allowing business analysis and generating

operational reports and forecasts, for example, in customer behavior. It uses tools such as data warehouses, data mining, marketing and campaign analysis, clustering and segmentation. Interactive CRM seeks to improve the organization's communication process with customers, suppliers and business partners in order to develop long-term cooperation. Such means as telephone, SMS, e-mail, snail mail, fax and voice applications are used for communication. Interactive CRM is mainly used for direct communication with customers in departments such as service, sales and marketing. Its essence is the active acquisition and exchange of data with key customers and the rest of the environment.

Nowadays, in the era of the digital revolution, we can see other examples of technological transformation in organizations. One such implementation is artificial intelligence (hereafter AI) (Gwiaździński, 2018, p. 228). AI is an issue that structures and gives direction to methods of designing "intelligent machines" so that they behave in ways that mimic the intelligence of humans (Nilsson, 2014, p. 2). Thus, it is the ability of a digital computer or a computer-controlled robot to perform specific actions commonly attributed to intelligent individuals (e.g., inference, pattern finding, learning, problem solving (Warszycki, 2019, p. 114). Computer systems with artificial intelligence functionalities allow, among other things, the acquisition and management of data containing information about consumers shopping online. When consumers move online, companies collect information about almost all their activities, record them and combine them with other data. During these operations, data are recorded indicating, among other things, what information a customer searches for on an Internet search engine, what products he or she buys, in what order this is done, and how much specific time he or she spent on these activities. Nowadays, AI is used not only to build customer knowledge, but also to develop services and products, support customer service processes, manage production, forecasting and risk assessment (Balakrishnan et al., 2020). In recent years, an observable trend in the management of an organization's communication with customers is the introduction of dialogue systems called chatbots into the customer service office and the use of digital assistants with speech synthesizers (Dağli, 2018, p. 22; Kaczorowska-Spychalska, Sułkowski, 2018, p. 93). Chatbots simulate a conversation with a consumer using artificial neural networks (Budzanowska-Drzewiecka, 2018, p. 326). They have the ability to talk to people and process natural language (Carter, Knol, 2019, p. 113, so they can answer questions to increase the efficiency of communication (Popiel, 2022, p. 269). These include informational, transactional and advisory chatbots (Kozłowska, Rodzik, 2018, p. 8). The former provide the customer with simple information such as temperature, cloud cover, stock market indexes, among others. Transactional chatbots enable a specific action, among others, ordering a cab, making a money transfer, booking concert tickets. The last advisory type is an example of a program with a developed artificial neural network, which creates certain algorithms based on the customer's behavior, requests, actions in order to be able to offer better and more personalized alternatives in the next confrontation with the consumer (Kozłowska, Rodzik, 2018, p. 8). Chatbots used in customer communication bring numerous benefits to

an organization, i.e. influencing consumer behavior, reducing customer service costs (Budzanowska-Drzewiecka, 2018, p. 331), communicating with customers 24 hours a day (Zumstein, Hundertmark, 2017, pp. 101-103), and more. The company's communication with the customer can also take place through digital assistants, which have a speech synthesizer that allows them to communicate audibly with the consumer and control via voice commands. Commonly known digital assistants include Amazon's Alexa, Google Assistant from Google, Siri from Apple and Cortana from Microsoft (Jarek, Mazurek, Hałas-Dej, 2018, p. 195; López, Quesada, Guerrero, 2018, pp. 242-243). Through them, a customer can turn off the lights at home, lower the blinds, order food, make a doctor's appointment, book a table at a restaurant, pay bills or change the temperature in a room (Bartosik-Purgat, Mruk, 2017, p. 249). According to entrepreneurs, in the future, applications of artificial intelligence will expand to include generating quick, automatic recommendations for customers and forecasting sales.

In an era of progressive digitization of businesses, there is a constant increase in the amount of information collected. "The amount of information is growing four times faster than the global economy, and the computing power of computers is growing nine times faster" (Mayer-Schönberger, Cukier, 2014, p. 24). Hence the great importance of Big Data and Big Data analysis in marketing communications with customers. By Big Data is meant very large databases that are difficult to use and difficult to manage with conventional software (Sondhi, Arora, 2014). Taking into account in the analysis of Big Data all customer data collected by the enterprise without a known purpose, it is easier to discover unexpected value that was not even anticipated or expected by performing traditional analyses (Graczyk-Kucharska, 2015, p. 272). Examples of this type of data being analyzed include: social networks such as: Facebook, Twitter, LinkedIn; applications such as Whatsapp, Messenger or Pinterest, Instagram, Skype and Viber; video portals, e.g. YouTube, ipla, or other sources that allow for the collection of customer data, e.g. on the amount and type of music downloaded from the Internet, movies watched on video-on-demand services, etc. In the case of conducting online communication activities, thanks to Big Data analysis, the central focus is no longer on content, but on the individual nature of the message (e.g., ads appearing on users' computer screens) (Drzazga, 2016, p. 91). With the help of analysis of a number of external and internal factors, the content of ads that should be shown to individual users can be determined (e.g., each individual banner ad is individually prepared and delivered to the user in real time). In turn, the recipient(s) of communication activities can also decide for themselves what they want to "watch".

In conclusion, it is worth noting that mobile Internet communication allows optimizing the process of marketing communication of enterprises (Drzazga, 2016, p. 91), and in particular it allows reducing costs (digital media are used in it), facilitates reaching the target audience in real time, can be individually tailored to the location and preferences of customers, and allows direct dialogue with consumers.

3. Digital nature of marketing communications of enterprises located in Poland in own research

The research on digital competence of companies located in Poland, undertaken under UGB research grant No. 744, was commissioned to the IPC Research Institute Sp. z o.o. in Wrocław and conducted on a sample of 225 companies in July-September 2020 across Poland (16 provinces). The selection of the research sample was stratified and random. The respondents were owners, board members, general managers or managers in charge of IT in the surveyed organizations. The research covered several areas of business operations. One of them was the area of marketing. The aim of the research undertaken in this area was, among other things, to learn about the digital nature of marketing communications of enterprises located in Poland, differing in business profile, form of ownership, ownership capital and number of employees, by learning the opinions of the surveyed entrepreneurs on the digital solutions used by their companies. The research sample included 75 (about 33%) each of manufacturing, trade and service organizations, as well as an equal number (75 each - about 33%) classified as small enterprises (employing 10 to 49 people), medium-sized enterprises (50 to 249 people) and large enterprises (250 people and above). 124 enterprises (about 55%) were incorporated companies, 79 (about 35%) partnerships, and only 22 (about 10%) were sole proprietorships. 173 enterprises (about 77%) had predominantly or exclusively Polish capital, while 52 (about 23%) had predominantly or exclusively foreign capital.

Statistical tests consisted of testing the statistical hypothesis of equality of the structure index (incidence rate) in two populations with tests of consistency (null hypothesis), against the alternative hypothesis (the structure index in one population is greater than in the other). The research was carried out with a significance coefficient of alpha=0.1. Thus, companies in three industries were tested in pairs against each other by company size, form of ownership and ownership capital. For the purpose of learning about the digital nature of the marketing communications of the surveyed companies, a five-point scale was used: definitely no, rather no, hard to say, rather yes, definitely yes, according to which respondents determined the digital-based activities undertaken in marketing communications by the surveyed companies. As an indicator of the structure for the population, the frequency of the trait (action) was used for the answers: definitely yes and rather yes (combined). The purpose of the study undertaken was to determine whether selected attributes of organizations (business profile, form of ownership, ownership capital and size of the organization) differentiate them in terms of digital solutions undertaken as part of marketing communications. These solutions included:

- the interactive nature of marketing communications,
- integration of means of communication (offline and online),
- monitoring the activities of stakeholders (customers, competitors, contractors) on the Internet,

- monitoring opinions about the company and its products in forums and social media,
- using cooperation with interactive agencies, advertising agencies and media houses in the implementation of marketing communications,
- use of IT tools for monitoring and managing customer contacts (CRM type, Marketing Automation, ERP, AI, etc.),
- the use of IT tools to automate marketing communications and conduct them through various communication channels,
- use of analytical tools to evaluate the effects of online communication (such as Google Analytics),
- introducing innovative marketing communication solutions to increase the company's competitiveness.

A general summary of all surveyed companies shows that about half of them undertake the listed activities using digital technologies in their marketing communications. For 20%, these solutions are not typical of their companies' marketing communications, while about 1/3 of respondents admitted that they do not know whether these activities characterize their companies. This may be related to a lack of orientation in the digital capabilities used in stakeholder communications.

To the greatest extent, the measures taken are differentiated by the size of the enterprise (Figure 1). This differentiation is particularly true for small enterprises, which significantly diverge from medium and large enterprises in the use of digital technologies. A statistically significant difference was confirmed in most of the listed digital solutions undertaken in marketing communications. Small enterprises are less likely than medium-sized ones to introduce innovative marketing communication solutions to increase competitiveness (41% of small and 55% of medium-sized enterprises, respectively), use IT tools to automate marketing communication and conduct it through various communication channels (41% and 56%, respectively), monitor the opinion of the company and its products on forums and social media (41% and 59%, respectively), use cooperation with interactive agencies, advertising agencies, media houses, etc. (29% and 47%, respectively). The same relationship regarding the latter activity also exists between small and large companies. Small companies, moreover, monitor the activities of customers, competitors and contractors on the Internet less frequently than large companies (44% of small companies and 55% of large companies, respectively).

It may come as a surprise that medium-sized companies monitor the opinion of the company and its products in forums and social media to a greater extent than large ones (59% and 44%, respectively). For the other activities, no significant statistical differences were shown between companies of different sizes.

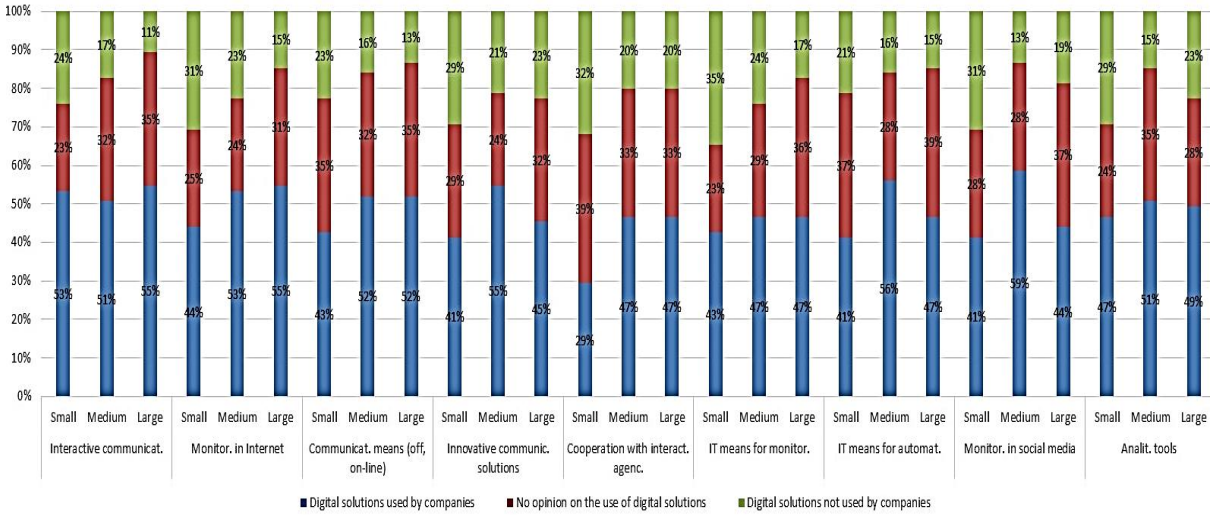

Figure 1. Digital solutions in marketing communications of companies of different sizes (by number of employees) (N = 225).

Source: own study.

Analyzing each of the three groups individually, it should be noted that the most frequently indicated feature of marketing communications of small enterprises is its interactive nature (53%). This feature was also indicated by the largest percentage of large enterprises (55%), and as many of them monitor stakeholder activities on the Internet. Medium-sized enterprises, on the other hand, most often use the Internet to monitor opinions about the company and its products on social media (59%).

Analyzing the digital solutions listed in the survey undertaken as part of marketing communications for several, significant statistical differences were noted between companies differing in ownership form (Figure 2).

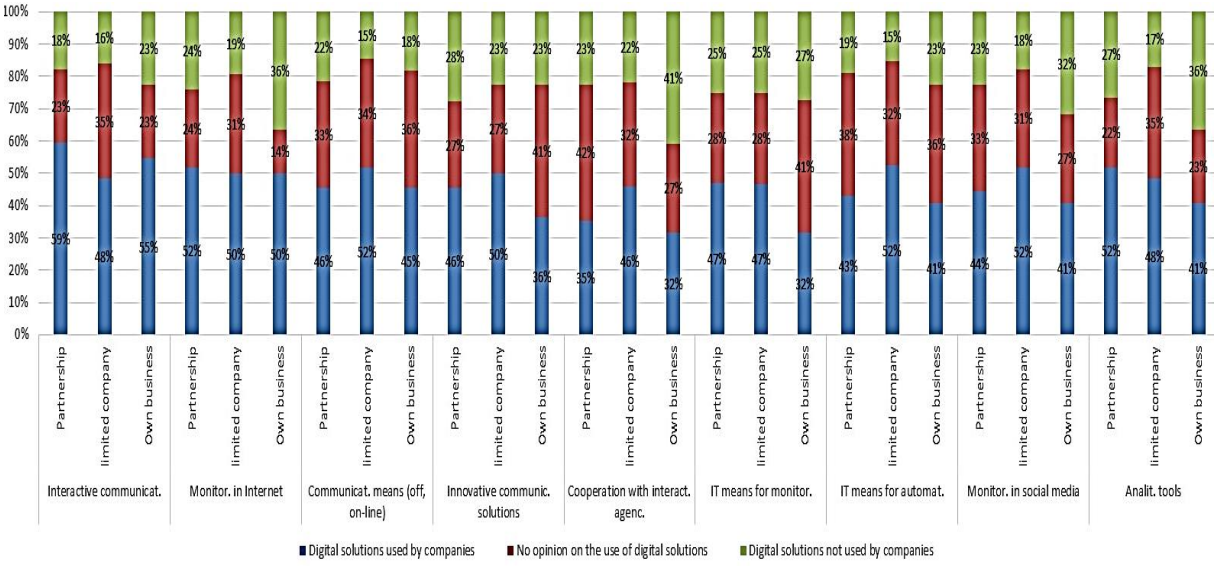

Figure 2. Digital solutions in marketing communications of companies differing in ownership form (N = 225).

Source: own study.

Partnerships use cooperation with interactive agencies, advertising agencies, fashion houses, etc. to a lesser extent than capital companies when implementing marketing communications (35% and 46% respectively) and use IT tools to automate marketing communications and conduct them through various communication channels (43% of partnerships and 52% of capital companies). Partnerships (59%), on the other hand, indicate to a greater extent than equity companies (48%) that their marketing communications are interactive. In addition, incorporated companies (47%) are significantly more likely than sole proprietorships (32%) to use IT tools to monitor and manage customer contacts (CRM, Marketing Automation, ERB, BI, etc. types). The statistical research did not show significant statistical differences in the other digital activities that characterize the marketing communications of companies differing in ownership form.

Analyzing each of the three groups of companies separately and comparing them with each other, it is worth noting that partnerships and sole proprietorships, among the selected digital activities, most often point to the interactive nature of communication, while limited liability companies point to the use of IT tools that allow marketing communication to be automated and conducted through various communication channels, as well as monitoring opinions about the company and its products on forums and social media.

The surveyed companies were also compared taking origin of the owner's capital as a basis. This organizational attribute unexpectedly differentiated the organizations in terms of their use of digital solutions in marketing communications (Figure 3).

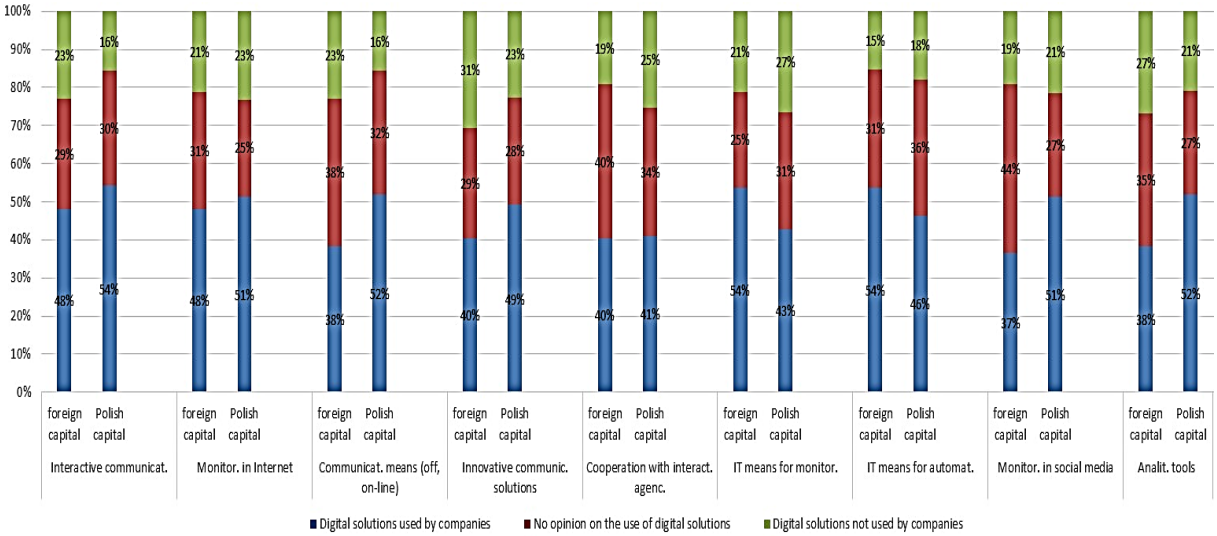

Figure 3. Digital solutions in marketing communications of companies with Polish and foreign capital (N = 225).

Source: own study.

Comparing companies with Polish and foreign capital, a difference in the measures they take was observed. In foreign companies, IT tools are most often used to automate marketing communication and conduct it through various communication channels, as well as IT tools for monitoring and managing customer contacts. In companies with Polish capital, most often

communication is interactive, the means of communication (offline and online) are integrated, and tools are used to evaluate the effects of online communication. Significant statistical differences between the two groups of companies, however, relate to a few selected characteristics. Surprisingly, it turns out that in companies with Polish capital more often than those with foreign capital, the means of communication (online and offline) are integrated (52% and 38%, respectively), opinions about the company and its products on the Internet are monitored (51% and 37%, respectively), and analytical tools are used to assess the effects of online communication (52% and 38%, respectively). Only in the case of the use of IT tools for monitoring and managing customer contacts do foreign-owned companies outperform Polish-owned companies (54% and 43%, respectively). No statistical difference was found when companies differing in ownership capital undertook other digital activities.

The least significant statistical differences were shown in the digital solutions used in marketing communications in companies that differ in their business profiles. The statistical research only confirmed significant differences between manufacturing and trading companies and manufacturing and service companies in the use of digital tools for monitoring and managing customer contacts. In both cases, manufacturing companies (53%) are more likely to use tools such as CRM, Marketing Automation, ERP, BI, etc., than trade (40%) and service companies (43%). Manufacturing companies (55%) are more likely to monitor the opinion of the company and its products on forums and social media (Brand24, Senti One, etc.) than trading companies (44%). In the case of undertaking other activities by companies, there were no significant statistical differences between companies in the above-mentioned industries.

Manufacturing companies (on average about 19%), service companies (on average about 21%) and retail companies (on average about 24%) do not undertake at all the listed activities specific to marketing communications based on digital technologies. It is puzzling that 36% of trade companies do not introduce innovative marketing communication solutions to increase the company's competitiveness.

4. Summary

The literature survey conducted and the results of our own research provide grounds for the conclusion that despite widespread awareness of the important role played by new digital technologies in the modern economy, many companies still have a lot of catching up to do in basic digital functions in the area of stakeholder communication. This is especially true for sole proprietorships and small businesses with 10 to 49 employees, nearly a third of which do not undertake any activities based on digital solutions. An overall summary of the digital solutions used by the surveyed enterprises in marketing communications shows that they are used in only half of the surveyed enterprises. However, their diversity and complexity mean that

an important feature of marketing communications for about half of the surveyed companies located in Poland is the integration of digital instruments and solutions. In order for this to be a feature of all enterprises, the biggest challenge is to build a management culture conducive to change and based on an understanding of the role of new technologies, which are now becoming a guarantor of their survival.

The assumption made in the study that different attributes of organizations, i.e. business profile, ownership capital, size and form of ownership determine their undertaking of digital activities in marketing communications was confirmed by the results of the study. Particularly statistically significant correlations were found in the case of enterprises differing in size. This is because small enterprises use most of the digital solutions included in the study in their marketing communications to a lesser extent than medium and large enterprises. It can be assumed that this is due to the fact that for small companies, investing in new technologies and digital solutions can be a huge challenge. The study further proved that companies with predominantly or exclusively Polish capital most often use different digital technologies in marketing communications than companies with predominantly or exclusively foreign capital. However, a significant statistical difference was shown in several activities they undertake. Surprisingly, in most of them it is the companies with Polish capital that are ahead of those with foreign capital. This provides a basis for dispelling stereotypes that allegedly Polish companies lag behind foreign ones in the use of modern technologies. An analysis of companies taking their business profile as a basis showed that modern digital solutions are used to a greater extent in manufacturing companies than in trade and service companies. For several of them, the difference is statistically significant. As expected, companies that are sole proprietorships incorporate digital solutions into marketing communications to a lesser extent than partnerships and limited liability companies. Similarly, as in the case of small businesses, this may be conditioned by financial considerations. On the other hand, incorporated companies use most of the digital solutions included in the survey in marketing communications to a greater extent than partnerships.

In conclusion, it should be added that marketing communication instruments related to the use of digital solutions, despite the fact that they are still not equally used in modern organizations differing in business profile, size, form of ownership or ownership capital, they are not completely alien to them and are used in marketing activities. It can be assumed that companies realizing that investment in digital technologies is now a way to stay ahead of the competition and realize above-average growth, allows them to achieve greater efficiency and provides them with new business opportunities will more often reach for them in marketing activity.

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