

## **THE INFLUENCE OF THE INTERNET AND NEW MOBILE TECHNOLOGIES ON THE CONDITIONS OF THE COMPANY FUNCTIONING AND PURCHASER BEHAVIOUR**

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**Abstract:** *The development and increase of new mobile technology significance evoke important transformations in the economy, which is reflected in new expressions it is characterized by. The most often used terms are: new economy, knowledge-based economy, digital economy. In the new economy, what gains particular meaning are such resources as information, knowledge, new ideas concerning product creation and applied in company marketing activities. New mobile technologies enable a fuller realization of marketing functions, information afflux and its exchange between different market partners makes it possible to adapt to purchaser needs. The Internet development increases the chance of companies' internationalization, faster mobile Internet enables more efficient communication.*

**Keywords:** *new mobile technologies, efficient communication, consumer behaviour, company marketing activities*

**JEL Classification:** *O33, M20, M31, M390*

### **1. INTRODUCTION**

In the world of information noise, this unbelievable flow of information of various importance, which we deal with, only well-judged strategies enable being distinguished from the crowd and effectiveness of undertaken marketing activities. Nowadays, decision making strategies strongly interfuse thanks to a wide spectre of opportunities to reach information and devices which are used to that end. There exists a possibility to always get to the information in such a moment when a need is noticed – there is no necessity to postpone the desire of verifying the information/offer of interest, but it is possible to act immediately using the most convenient channel at the particular moment.

Contemporarily mobile technology means a possibility for people to communicate in private life but also to use it in business in a significant way. Owing to mobile technology there appear chances to lower company functioning costs and thus to increase the competitiveness of those who can use these chances the best. Such a situation results from, among others, consumer trends and behaviours on the market.

### **2. SCIENTIFIC AIM, METHODS**

The aim of the article is to present the influence of the Internet and new information technologies, and in particular mobile technology, on company functioning and purchaser behaviours. The importance of information technologies, the Internet and mobile devices in marketing is currently huge and is still growing.

An economic crisis still up-to-date in many West European countries has an entirely different economic background than the one prevailing in the 30s of the 20<sup>th</sup> century, and thus, it requires from enterprises a totally different approach to searching and implementing effective ways of acquiring new customers. The way the enterprises achieve it has been analysed based on secondary source

materials and the publications of the results from the research run by research agencies and institutes.

### **3. MOBILE TECHNOLOGY**

Talking about mobile technology, it is necessary to present the kinds of mobile devices currently in use, which are [Sznajder, 2014]:

- traditional mobile phones,
- smartphones, i.e. a kind of combination of a mobile phone and a pocket computer,
- other mobile devices enabling communication: tablets, e-readers, mobile devices for games.

Fast mobile technology development lead to the development of constantly new devices which fulfil the function. Recently new devices have appeared which are called phablets, so intermediate devices between phones and tablets equipped with 5 to 7-inch-diagonal display. Another device type constitute smart watches, devices in sync with smartphones, providing the access to an e-mail account and social media. A smart watch allows to make phone calls, and it is also a micro console for playing games [Urbański, 2013].

A noticeable trend in using mobile devices is the development of so called wearable technologies, so placing detectors on clothes or the appearance of Google glasses – glasses of an extended reality developed by the Google company. These glasses shall play the role of a smartphone and be steered with voice. The wearable technology is useful, most of all, for such functions as: entertainment, fitness, health and beauty renewal, healthcare and medical care, it may be also used in industry and the army.

While analysing the importance of mobile business in the contemporary economy it is worth stressing that it influenced, as well, by the development of operational

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systems applicable in mobile devices. The operational systems the most often used in mobile devices are: Android, iOS and Windows Phone [Sznajder, 2014].

From the viewpoint of a company running mobile business it seems important to familiarize with the systems, their scope of application by mobile devices producers. Owing to mobile devices, what is possible is a quick contact within a particular social groups and a fast localization of different places significant for consumers.

One of the most important factors influencing contemporary economy development, which gave it the title of new economy, is to introduce modern information technologies, so originally the Internet, and currently mobile information technologies enabling also the Internet access [Sznajder, 2002]. Nowadays, as it is not hard to notice, the use of mobile devices such as mobile phones, smartphones, tablets and e-readers gains bigger and bigger significance. Because consumers use these devices more and more commonly, including the Internet access, companies have to take into consideration this tendency in their market activities. According to the report made by one of American companies - Flurry, at the end of 2012 there were supposed to be more devices in the world than people [5].

Despite huge social media development it is a website that constitutes the first contact with a company on the Internet. Consumers invariably search for products or service suppliers using Google search engine. They compare offers, look through several or a dozen or so webpages, and experiences they gather have a primary influence on the ultimate company choice. 87% of the Internet users seek opinions about a particular product even before the purchase – using an Internet search engine, looking through price comparison sites, reading Internet forums and blogs [Dyrek, 2012].

Moreover, e-mail marketing provides as well huge opportunities within the form of passing information. Currently, e-mail marketing is the most efficient communication channel on the Internet because it is a particularly personal, highly targeted and completely measurable marketing channel [Sala, 2012]. Owing to the development of mobile devices use, possibilities of the access to the Internet have significantly grown. This fact may be used by companies to realize their business objectives. By analysing the Internet development it may be stated that in the nearest future its use will be universal in different fields of life [Sznajder, 2014]:

- in business: for the automation of the information flow from target purchasers to producers,
- in health care: for monitoring patients outside hospitals and in medical rescue,
- in sport: online ticket sale,
- in politics: election campaigns,
- in public transport: for managing car traffic and traffic lights,
- in logistics: for monitoring shipments,
- in warning systems for disasters: i.e. for collecting data from seismographs, temperature detectors, measuring a water level in rivers,
- for creating so called intelligent houses.

SMS are one of the cheapest and the most efficient communication forms which can be used to streamline business processes. The area where SMS proves the best is a customer service department. It is a very crucial place in every company. A lot depends on the quality of the contact of a customer with a Customer Service Centre as it may influence such factors as the loyalty, satisfaction or company image. SMS constitutes one of the oldest forms of mobile communication.

SMS is often used in such domains as [Zawiliński, 2013]:

- tourism (booking confirmation, informing and reminding about travel details),
- banking and finances (SMS code transaction authorisation, verifying the state of the account while logging to the account on the Internet, eviction SMSs),
- logistics and transport (tracking shipments),
- local administration and crisis management – inhabitant service (informing about a case status, a possibility to pick up documents),
- health (confirming and reminding about appointments at the doctor's, information about picking up results).

Owing to SMSs it is also possible to increase brand awareness by using SMSs with the company name in the recipient field. The purpose of such an action is to create a professional company image and to establish its name in customers' consciousness. Therefore, introducing SMS communication in customer service may be an element building competitive advantage. Thus, a company may be distinguished among others in the branch by offering to a customer the best service quality. Customers have very quickly adapted to the changing reality and new mobile solutions. They use technology to make life easier, to take reasonable buying decisions and so they re-define their way of doing shopping. Consumers are currently verifying again their experience in a shop based on what they meet in a digital world, and vice versa. Mobile devices change consumers, but thanks to their new buying habits and evolving preferences they create needs for changes. A contemporary consumer and their behaviours may be characterized according to the following terms [Sznajder, 2014]:

- online shopping – doing shopping via mobile devices,
- instant gratification – the possibility of acting immediately and ordering products seen by the consumer in a catalogue, as well as, of a quick reaction of the producers of goods and services of his/her interest or shops where they are available to be seen,
- social shopping – taking a buying decision based on the opinion of an Internet community the consumer has contact with, obviously via mobile devices.

The report of a consulting company Boston Consulting Group [Report BCG, 2012] contains a thesis stating that currently we are in the phase of digital revolution which is connected with the development of the Internet, social media and mobile technologies, which influenced the change of interaction between companies and purchasers of their products. On the basis of the research done in 2012 among managers of 30 biggest corporations from different branches and sectors (consumption goods producers, retail trade enterprises, banks and other financial service

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companies, media, technological branch companies and touristic companies) in Asia, Europe, South America and the USA, it has been stated that investing in digital marketing development may bring measurable benefits:

- increase of brand value and loyalty towards a company and a brand,
- sales increase,
- better customer service,
- product innovativeness improvement,
- cost reduction.

The effects of the digital revolution according to Boston Consulting Group have been presented more precisely below (Table 1). What results from Table 1 is that the digital revolution effects presented by Boston Consulting Group are connected, most of all, with marketing actions, and concern particularly relations with customers and other stakeholder groups, including media representatives. The possibility of quick interactivity is a crucial value of companies conducting their marketing activities both on the domestic and international market.

Owing to a common access to technology it is possible to observe a dynamic development of systems of gathering information about consumers. In the United States there are companies specialized in collecting untypical customer data. They analyse forums, follow purchasers, they are able to acquire information about political tendencies or a number of cars possessed. All this has been used by an American retail chain Target, the fifth for revenues on the market. Having at their disposal a guest's identity number, the shop knew that the customer has a credit or debit card and could all this refer to the purchase in the shop. Computers followed the purchase and analysts built appropriate algorithms. Soon the company could track child growth stages beginning by prenatal care until baby prams, and thus, influence buying decisions using personalized promotions. Soon the sales of products from the studied department Mother and Child exploded. Target's revenues increased from 44 milliard dollars in 2002 to over 65 milliard dollars in 2009 [Duhigg, 2012].

Analysts of contemporary technological, economic and social trends draw attention to the fact that the society has already been mobile for some time (Becker, Arnold, 2010). People in all countries in the worlds are often in motion, have mobile phones and other mobile devices via which they may communicate wirelessly in private and business

matters. In the field of marketing, today almost everything is changing apart from one thing – it is still a battlefield for a customer where the winner is the one who will define in the best way the needs of their target group and will reach it in the right place, time and with an appropriate message. This gap may be filled by modern marketing campaigns which are not a standard presentation of a commercial offer. Promotion actions enriched with interaction elements and enabling to get familiar with the company on different grounds have a much bigger relation building potential. Ph. Kotler and K. Keller notice bigger and bigger mobile marketing significance. They highlight the fact that taking into consideration the popularization of a mobile phone use and mobile marketing specialists' skills concerning the personalization of messages regarding demographic and behavioural criteria, the importance of mobile marketing is becoming more and more crucial [Kotler, Keller, 2012]. By using mobile devices in promotion actions both companies organizing a promotion and customers may gain different benefits such as [Sznajder, 2014]:

- time saving for entrepreneurs and consumers,
- interactivity of a promotion campaign which is always desired,
- ease of controlling a promotion campaign,
- automatic promotion process management,
- constant availability of a mobile device for a user,
- possibility of modifying a promotion on its every stage,
- promotion message personalization,
- ease of verifying promotion effectiveness,
- relatively low costs.

The Internet creates new competitive advantage which consists in the ability to use information technologies. An appropriate application of information technologies by business organisations influences faster implementation of marketing activities consisting in, among others, developing new products, adapting products to single consumer needs and building appropriately the proportions within marketing-mix between marketing instruments. A website is one of the main contact points of a consumer with a company. Due to the appropriate content appearing there, it may become a stimulus to undertake cooperation or buy a product. Valuable information enables to allay doubts concerning a product or service already on the beginning stage of a contact of a customer with a company.

**Table 1** Effects of digital revolution according to Boston Consulting Group

	Actions	Effects
Brand value	<ul style="list-style-type: none"> <li>• adapting digital media features to business purposes</li> <li>• using social media to improve brand perception</li> </ul>	<ul style="list-style-type: none"> <li>• better brand perception: 10% or more</li> </ul>
Sales increase	<ul style="list-style-type: none"> <li>• better access to consumers</li> <li>• integrating social media with a marketing strategy</li> </ul>	<ul style="list-style-type: none"> <li>• sales increase: 0,7 – 1,1%</li> <li>• expenses increase: 50 – 75%</li> <li>• return rate decrease: 20 – 65%</li> </ul>
Customer service	<ul style="list-style-type: none"> <li>• improving customer service by the use of social media</li> </ul>	<ul style="list-style-type: none"> <li>• increasing the effectiveness of handling complaints: 90%</li> <li>• customer service cost decrease: 40%</li> </ul>
Relations with media	<ul style="list-style-type: none"> <li>• media-mix optimization</li> <li>• moving promotion budget to more efficient communication channels</li> </ul>	<ul style="list-style-type: none"> <li>• the decrease of wrong media choice costs</li> <li>• additional savings of costs of media used so far</li> </ul>
Relations with customers	<ul style="list-style-type: none"> <li>• better adaptation of products to consumer needs</li> </ul>	<ul style="list-style-type: none"> <li>• big savings of marketing research costs (hundreds of thousand dollars)</li> <li>• lowering research costs to 80%</li> </ul>

Source: [7]

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An undoubted advantage of SMS communication with customers is the fact that it does not involve employees to manage it. The most often SMS functionality is integrated with a software used for customer service. A module for managing shipments may be configured depending on a company need, during this operation it is possible to define situations in which SMSs will be send to customers. Most companies offering mass SMS sending services provide a trouble-free integration of such a module with the software the company uses. A customer receiving SMS announcements about the shipment status feels more comfortable and safer because they know exactly, for example, when they will get the product or service. Therefore, their purchase satisfaction grows and so it translates into greater loyalty. Furthermore, there is a possibility to lead a two-way communication where a customer may answer to an SMS by sending a feedback. Consumers are more and more used to the transparency and expect their interaction with a company to be convenient for them – in person, on the Internet or on a mobile device. They want an interaction started in one contact channel to be able to be freely continued in another.

Apparently, owing to mobile information technologies changes in company-purchaser relations are taking place. What is strengthened is the process called by Kotler “from information asymmetry to information democratization” [Jain, Maesincee, Kotler, 2002]. Digital technologies eliminate the lack of balance in the access to information between producers/sellers and consumers. Mobile technology makes the access to information faster than the Internet does.

Summing up, it is worth highlighting the fact that contemporary trends observed in the economy are analysed also in the European Union, while the European Commission attempts to form them in order to meet these challenges. Supporting mobile information technologies is included within Europe 2020 Strategy [4]. According to its concept, achieving its targets will be possible with the use of the following endeavours related with one another:

- stimulating so called smart growth, so development based on knowledge and innovations,
- supporting sustainable growth, so transformation towards low-emission economy efficiently using resources as well as competitive,
- creating growth favouring inclusive growth, so supporting the economy characterized by a high employment level and ensuring economic, social and territorial integrity.

In order to achieve these objectives, there has been elaborated Digital Agenda aiming to ensure digital economy development and to eliminate or weaken the dangers of its

development. The EU Digital Agenda sets seven priority activity areas which include:

- 1) creating a homogenous digital market,
- 2) improving general conditions for inter-operativeness between ICT,
- 3) increasing the trust in the Internet and security of the operations conducted there,
- 4) providing access to much faster Internet,
- 5) increasing contributions for research and development,
- 6) developing skills of using digital technologies and social inclusion,
- 7) using information technologies in order to meet challenges for the society, such as climate changes, medical treatment cost increase and ageing society.

#### 4. CONCLUSION

Technology availability is so common that the only thing companies lack is a concept how to use the technology and make it their asset in the fight for customer attention, wallets and loyalty.

Owing to revolutionary changes having occurred in the last decade, concerning both technology and customer behaviours, we have the opportunity to register in a detailed, theoretically unlimited way all activities undertaken by consumers on the Internet. Mobile devices, common access to the Internet give them even bigger understanding of a customer. It is worth transforming a webpage into a peculiar customer service centre full of complex information, answers to bothering questions and useful tools streamlining this service. It will enable to keep customer attention for a longer time, increase their satisfaction of the contact with the company and to rationalize buying decisions even during the presence on the website. Such an approach will also allow to optimize costs of the maintenance of a traditional customer service centre, which may indirectly have an influence on lowering costs of company functioning, as well.

Mobile technologies enable a direct contact with consumers, including reaching a customer who uses only cash on an everyday basis and visits a bank only to take a credit or withdraw all the salary from the account set up by the employer. Consumers, mainly young and very young, demand solutions adapted to their own fast changing habits concerning mobile devices. A wide range of interactive experiences offered nowadays by mobile technologies motivates millions of consumers by offering them a more personalized way of interacting with the real world. This is the reason why mobile technologies are becoming indispensable for companies of all branches. Therefore, understanding consumer behaviours in the context of mobile devices and creating a mobile strategy is becoming the essential business target.

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