

ANALYTICAL PERSPECTIVE ON THE IMPORTANCE OF ONLINE SHOPPING VIA SMARTPHONE IN E-COMMERCE CONDITIONS

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ABSTRACT.

Background: The development of e-commerce in the last twenty years has revolutionized the retail industry. For the first time in history, today consumers have access to a globally connected marketplace where they can offer goods anywhere in the world, at any time of the day. Consumers have access to a lot of information about the offered products from the comfort of their homes. **Aims:** The objective of this post is to identify the importance of online shopping through smartphone. **Methods:** The data were evaluated by descriptive statistic. **Sample:** The survey sample consisted of representatives of generation Y, or millennials. **Results:** Based on the results, it can be concluded that online shopping via smartphones is important for representatives of the generation in question. **Conclusions:** The growing potential of mobile marketing represents an enormous customer potential, as well as a great business opportunity for businesses. **Implications:** The results of the conducted survey can serve as a basis for the preparation of marketing strategies at the level of mobile marketing.

Keywords: e-commerce, mobile commerce, generation Y

JEL Classification: M30, M31

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Introduction

The fundamental technology that enabled the current boom of electronic commerce is the internet. From a purely technical standpoint, the internet can be defined as the "network of networks," meaning a collection of communication networks with defined rules for interconnecting partial networks and rules specifying how individual network elements communicate. The internet can also be described as a global information system characterized by the following features (Gala, Pour a Sediva 2015): communication of system elements using the TCP/IP protocol, decentralization – no one owns or controls the internet, real-time data transmission, global access, anyone can contribute content to the internet, availability of additional services through the internet.

The most significant contribution of the internet remains its ability to connect people and communities worldwide in real-time. The internet has thus become a fundamental platform for e-commerce, facilitating commercial transactions and bridging the supply and demand of goods and services, regardless of location (Chaffey a Smith 2017; Stefko et al. 2018).

Similarly to e-business, the concept of e-commerce is defined in various ways in professional literature. In general, definitions can be divided based on the perception of e-commerce in a broader and narrower sense. In a narrower sense, electronic commerce is understood as the buying, selling, or exchanging of goods, services, and information through the internet or other communication networks. In a broader sense, electronic commerce also includes customer service, collaboration, and the exchange of information among business partners, as well as other electronic transactions within a company or between companies (Lee 2012).

Theoretical background

The development of e-commerce has a fundamental impact on contemporary society. Nowadays, companies can easily offer their services globally and are not limited to local markets, as was the case in the past. Consumers have immediate access to an unlimited amount of information regarding products and services they are interested in (Kumar 2014).

Global connectivity and information openness are fundamental factors that are changing the shopping behavior of both consumers and businesses. Most of the consequences of the continually growing popularity of electronic commerce can be considered positive, but there are also certain risks associated with transaction anonymity and increased technical complexity (Majerol 2015).

Electronic commerce has a positive impact on the volume of cross-border commercial transactions. However, the increasing volume of cross-border trade also implies higher competition in local markets, as new companies from abroad enter, for whom such expansion would have been cost-prohibitive in the past (Kotler 2017; Tomkova, Ondrijova & Ratnayake – Kascakova 2021).

The development of e-commerce also brings pressure to reduce product prices, increase the overall quality of services, and simultaneously expand the range of products. In smaller economies, this effect may be stronger because foreign online retailers can now offer goods that are not commonly available in the local market. E-commerce thus has a positive impact on customer utility, satisfaction, and overall household consumption (Chaffey 2014).

Another fundamental change brought about by the gradual digitization of the retail sector is the connectivity and continuous availability of services and information to customers. It can be said that in today's retail markets, thanks to the growing popularity of e-shops, there is the most competitive environment in history. Merchants can no longer passively showcase their products through an online catalog but must be constantly open to two-way communication with customers. At the same time, they are exposed to the pressure of increasing competition as market entry barriers continue to decline due to the opportunities provided by the internet (Laudon a Traver 2016; Ondrijova, Ratnayake-Kascakova & Tomkova 2020).

The growing potential of mobile marketing represents tremendous customer potential and, at the same time, a significant business opportunity for enterprises. Mobile commerce, or m-commerce, can be defined as a type of commercial transaction that is at least partially conducted through mobile communication means (Nastisin et al. 2019; Stefko, Bacik & Fedorko 2015).

According to the authors Gala, Pour, and Toman (2006), mobile commerce is part of mobile business (m-business), which they define as the sum of all activities, processes, and applications in a business that are executed or supported by mobile technologies.

Currently, the use of wireless and mobile networks and devices is a common part of life for the majority of the population in Slovakia. Advanced wireless and mobile technologies facilitate electronic

commerce, originally conducted through cable networks. From this perspective, mobile commerce can be perceived as a subset of electronic commerce (e-commerce) (Holes 2020; Rigelsky & Ivankova 2020).

Methodology

The aim of this paper is to identify the importance of online shopping through smartphones in the context of e-commerce.

This study utilizes a cross-sectional survey design to capture a snapshot of consumer behaviour. The choice of a questionnaire is driven by its effectiveness in reaching a broad audience rapidly, especially through social media platforms like Facebook. Inputs for the analysis in this contribution were obtained through the implementation of primary research conducted using a questionnaire method. The questionnaire comprised 22 items, including 16 Likert scale questions to gauge consumer preferences, and 4 multiple-choice questions focusing on shopping frequency and spending patterns.

Data collection through an electronic questionnaire took place in September 2023. The link to the electronic questionnaire was distributed through the social network Facebook. The selection of the survey sample can be characterized as a selection based on availability and voluntariness. The survey achieved an 85% response rate. We ensured participant anonymity and obtained informed consent, adhering to ethical guidelines for online research. To mitigate confirmation bias, questions were structured to be neutral without leading respondents towards any predefined conclusions. The survey sample consists of responses from 194 participants. The data for the purposes of this article were processed in the form of descriptive statistics, specifically in the form of tables.

The most numerous group of respondents, or consumers, fell into Generation Y, born between 1964 and 1983 (N=102; 52.6%). Generation X (1984 – 2000) was represented by 53 respondents, or 27.3% of the survey sample. Generation C (2001 – 2009) consisted of 28 respondents (14.4%). Finally, the oldest group of respondents, or Generation S (1963 and earlier), was made up of 11 (5.7%) respondents. The survey sample consisted of responses from 194 respondents, including 109 women (56.2%) and 85 men (43.8%). The selection of respondents was based on voluntariness and availability, so a disproportion compared to the general population in the territory of the Slovak Republic could be expected. The methodology, specifically the use of a diversified questionnaire distributed via Facebook, aligns with our objective to understand the role of smartphones in e-commerce among different generations.

Results

This chapter is dedicated to presenting the survey results in the form of descriptive statistics, primarily in the form of tables.

Table 1. The importance of shopping online with a smartphone

	Frequency	%	Cumulative %
1 – Completely disagree	31	16	16
2 – Disagree	32	16,5	32,5
3 – Neither agree nor disagree	57	29,4	61,9
4 – Agree	35	18	79,9
5 – Completely Agree	39	20,1	100
Together	194	100	

Source: *own elaboration*

For the majority of respondents, shopping online with a smartphone is important (N=74; 38.1%). 57 respondents (29.4%) took a neutral stance on the importance of shopping online with a smartphone. Finally, for 63 respondents (32.5%), shopping online with a smartphone is not important.

Table 2. Intention to shop online with a smartphone in the future

	Frequency	%	Cumulative %
1 – Completely disagree	24	12,4	12,4
2 – Disagree	43	22,2	34,6
3 – Neither agree nor disagree	50	25,8	60,4
4 – Agree	32	16,5	76,9
5 – Completely Agree	45	23,1	100
Together	194	100	

Source: *own elaboration*

The majority of respondents, considering their needs, intend to shop online through a smartphone in the near future (N=77; 39.8%). 50 respondents (25.8%) took a neutral stance on the statement that they intend to shop online through a smartphone in the near future. Finally, 67 respondents (34.6%) do not intend to shop online through a smartphone in the near future.

Table 3. The most frequent online shopping with a smartphone

	Frequency	%	Cumulative %
1 – Completely disagree	34	17,5	17,5
2 – Disagree	49	25,3	42,8
3 – Neither agree nor disagree	37	19,1	61,9
4 – Agree	42	21,6	83,5
5 – Completely Agree	32	16,5	100
Together	194	100	

Source: *own elaboration*

The majority of respondents most frequently do not shop online through a smartphone (N=83; 42.8%). 37 respondents (19.1%) took a neutral stance on the statement that they most frequently shop online through a smartphone. Finally, 74 respondents (38.1%) most frequently shop online through a smartphone.

Table 4. Confidence in online smartphone shopping

	Frequency	%	Cumulative %
1 – Completely disagree	5	2,6	2,6
2 – Disagree	12	6,2	8,8
3 – Neither agree nor disagree	38	19,6	28,4
4 – Agree	45	23,2	51,6
5 – Completely Agree	94	48,4	100
Together	194	100	

Source: *own elaboration*

The majority of respondents trust shopping online through a smartphone (N=139; 71.6%). 38 respondents (10.7%) took a neutral stance on the statement that they trust shopping online through a smartphone. Finally, 17 respondents (8.8%) do not trust shopping online through a smartphone.

Conclusion

Mobile marketing, much like mobile technologies, is evolving at a rapid pace, making it essential for businesses and marketers to incorporate the potential of mobile marketing into their strategies and operations if they want to succeed in the fast-changing and evolving market and technology landscape (Janouch 2014).

The largest group of respondents in the conducted survey consists of consumers belonging to Generation Y, or Millennials, who are currently between the ages of 23 and 39. These respondents, from the majority, represent residents of the Košice and Prešov regions. Data collection took place during the month of September in the current year 2023, and the survey results can only be generalized to eastern Slovakia.

Based on the analyses above, it can be stated that for less than half of the respondents (38.1%), shopping online through a smartphone is important. Almost half, or 39.8% of respondents, intend to shop online through a smartphone in the near future, considering their needs. 42.8% of respondents do not shop most frequently online through a smartphone.

While our study focuses on eastern Slovakia, similar trends in mobile shopping preferences are observed globally, as reported by the International Journal of Mobile Marketing. To engage the 39.8% of consumers intending to shop online via smartphones, businesses could enhance mobile user experience and offer exclusive mobile promotions. These findings suggest a pivot in mobile marketing strategies might be necessary, focusing on personalized and location-based marketing to appeal to Generation Y consumers.

Our data indicates a gradual shift towards mobile shopping among younger consumers, which could signal a long-term trend in consumer purchasing behaviour. Our study is among the first in the region to correlate mobile shopping trends with specific generational preferences, offering new insights into consumer behaviour. In summary, while mobile shopping is important for a significant portion of Generation Y in eastern Slovakia, there remains untapped potential in this market segment.

Given the data obtained, it is clear that it is appropriate to reformulate mobile marketing strategies with an emphasis on a personalized and locally focused approach that will attract Generation Y. Our findings show a gradual shift to mobile shopping among younger consumers, which could signal a long-term trend in their purchasing behaviour. The study we conducted is one of the first in the region to correlate mobile shopping trends with specific preferences of Generation Y. It provides new insights into consumer behavior. In summary, even though mobile shopping is important for a significant part of Generation Y in Eastern Slovakia, there is still untapped potential in this market segment.

The results of the survey conducted by us correlate with the results of the authors' latest surveys Tong, Luo and Xu (2020), Bernritter, Ketelaar and Sotgiu (2021), Nyagadza (2022) and Oyedele and Goenner (2023) in the following areas. Shopping via smartphone is very important for the younger

generation of consumers. Searching for information about products and services online starts on a smartphone. They consider shopping this way fast, safe and convenient. They plan to shop this way in the future. Subtle disagreements arose in the area of how often individual respondents shop, or at the level of our survey, the individual categories of products that representatives of the young generation buy were not defined.

There are several limitations of the research carried out by us. The first is the sample size, which consists of less than 200 respondents. The respondents come only from eastern Slovakia, so the results of the survey cannot be considered representative or apply them to the whole of Slovakia. The data collection was carried out only online, it would be interesting to supplement it with offline questionnaires so that the data collection is balanced. Also, the study's focus on eastern Slovakia and Generation Y may limit the applicability of our findings to other regions and age groups, highlighting the need for more geographically diverse research. The fact that only 38.1% of respondents prioritize smartphone shopping suggests a potential barrier in user experience or trust in mobile transactions, warranting further investigation.

As far as future research is concerned, it is necessary to focus on consumers from all regions of Slovakia, so that the survey results can be considered representative for Slovakia as a whole. It would also be appropriate to expand the sample of respondents to at least 1,000. Another extension in this direction could be a comparison of consumer behavior at the level of mobile marketing with the neighboring states of Slovakia, or V4 countries.

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