Knowledge and Perceptions About Mobile E-Commerce Technologies in Kosovo

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Abstract—The enormous increase of online shopping, sales and online orders is disproportionate to the knowledge of the users of these services. The purpose of this paper is to understand how online shopping and orders are perceived by people who are directly or indirectly involved in online e commerce services. The study utilized questionnaires in the collection of data. Data was analyzed using Excel and percentages. Based on the results of the conducted study, it was revealed that very few people know how to distinguish between online shopping and online orders. The same hypothesis can be used to explain what e-commerce is.

Keywords—online shopping, e commerce, online orders, commerce, internet, services, pandemic

1 Introduction

The Internet is a community of millions of interconnected local area networks, thus creating the global communication network. Thus, the Internet is a network of networks [1]. This network is a distributed system and is not owned or administered by anyone. It can also be said that the Internet is a global space that enables the exchange of information in large quantities, around the world and at a high speed [2]. There are a number of services on the Internet that are constantly being added. Some of these services are [3]:

- World Wide Web (WWW)
- Electronic mail (E mail)
- File forwarding (FTP)
- Searching for information
- Conversations and discussion groups
- Organizing web pages
- Data encryption
- Buying and selling (e-commerce), etc.

The Internet has been adopted much faster than previous technologies. For instance, it took radio 38 years to reach 50 million users, personal computers took 16 years, television 13 years, whereas the Internet took only 4 years to reach that figure [4], [5].

Many people think that the Internet, e - business and e - commerce are the same thing, but this is not the case. Internet is a tool, e-commerce is simply a transaction (sale or purchase) through the Internet or other electronic devices, while e-business is the integration of people, processes, and technology to run the business [6]. E-commerce (selling and buying through the Internet or e-business) is part of e-business that was discovered by Michael Aldrich in 1979 [7]. E-commerce from the consumer's point of view, means the purchase of products or services through the website (amazon.com, ebay.com, etc.), while e-commerce, from the business's point of view offers consumers the right way to develop business through powerful websites and online databases [8], [9].

E-commerce, depending on the degree of digitalization can take several forms of: sold product, payment process, and method of distribution. The product can be physical (tangible) or digital, the payment process can be physical or digital, and the delivery method can be physical or digital. These alternatives create eight cubes, each of which has three dimensions. In traditional business, all three dimensions are physical, and in pure e - commerce all dimensions are digital. All other cubes make up a combination of physical and digital dimensions. If there is at least one dimension digital, then the process is considered partly e - commerce. For example, buying jeans from an online company is partial e-commerce because the goods are physically distributed. However, buying an e-book (electronic book) on amazon.com or anywhere else is a pure e-commerce process because the product is distributed, paid for and transferred digitally [10].

So, as a basic prerequisite for online commerce, there should be Internet penetration in those countries, and in the case of Kosovo penetration according to Internet World statistics (2021) is 88.8%, which is higher than any country in the region but also more than some European Union countries, for example Austria (87.6%), Czech Republic (87.7%), etc. As a result of the pandemic and the high rate of Internet penetration, online shopping and online orders have recently started to be widely used in Kosovo, but online orders are used much more [11]. Online orders can be easily realized, as most businesses have profiles on social networks on behalf of their businesses. Most online orders in Kosovo are related to food products, so payments are made physically after receiving the product, while to order a product (whatever) outside Kosovo, it cannot be sent to Kosovo without paying it first, so this process is transformed in online shopping. From what it was discussed, it can be noticed that online ordering is a process which is not about e-commerce, but simply a trade where social networks are used such as Facebook or Instagram, etc. [12] and upon arrival payment is made. Electronic payment through the POS device (point of sales) [13] – [15] can also be included in this process.

1.1 Related research

This paper is based on research, but the literature used has been sufficient to show the essence of why it was realized. Through the literature it was seen as important to

show some things like for example that e-business and e-commerce are not the same, and this has been done by Sweeney [6]. Then it was seen important to also show that e-commerce is more complex than the name itself, so to clarify that it is divided into partial and pure or complete e-commerce, and this can be seen from the group of authors headed by [10]. From this literature of Turban (2015) [10] the difference between online shopping and online orders can be seen for which this research is conducted.

Then from the statistics of Internet World Statistics (2021) it can be noticed that the penetration of the Internet in Kosovo is extremely large, which has affected the tremendous growth of online shopping, sales and orders in Kosovo. Several links have also been used to show how some businesses use social media to enable customers to place messages online (Facebook).

1.2 Purpose of study

We are living in a time where the use of the Internet also dictates the way of living, operating, and doing business. The use of the internet for buying and selling online started a long time ago, but in the period of the pandemic it was the only economic sector in many countries of the world which has had growth. This sector has worked quite well in many companies in Kosovo, where those who had sufficient knowledge of e-commerce had quite large revenues. Even before the pandemic but even now many trades online, but few of those who buy, sell or order can distinguish between online shopping and online ordering. In general, there are also very few of them who know how to distinguish between pure e-commerce and partial e-commerce. Hence, the enormous increase of online shopping, sales and online orders is disproportionate to the knowledge of the users of these services. Therefore, the purpose of this paper is to validate through the questionnaire the hypothesis that, although most people are directly or indirectly involved in online trading services, very few of them are theoretically aware of what they are accomplishing.

2 Research methodology

2.1 Data collection tool

The research was conducted through a questionnaire designed specifically for this issue, as the group of authors considered it very necessary to look at what online buyers think and whether they can distinguish between online shopping and ordering. The questionnaire was compiled based on the experience of the team, from the lectures held at the faculty from the course "E - commerce" (master program) and another course called "Electronic Business" (bachelor program), as well as based on extensive discussions in various institutions and on social media. Before the questionnaire was finalized, it was discussed and evaluated with experts and collaborators from the Primorska University in Kopri Slovenia, the University of Applied Sciences in Ferizaj, the University Fehmi Agani in Gjakova and the University Johannes Kepler of Linz in

Austria. The questionnaire was prepared through the software, so that the data were processed automatically.

2.2 Data collection procedure

In order to obtain accurate results that correspond to the purpose of the paper, the created questionnaire is designed in four sections or with four levels of protection of the results, so that the greatest possible filtering of records it is done. The first two questions of the questionnaire are related to demographic factors, such as gender and age, and the third question is related to whether or not the respondent's work. After the fourth question, the first filtering or selection is done, where those who declare that they have no knowledge about online shopping and orders, do not proceed to the other questions. The next filtering of participants occurs after the fifth question, where those who declare that they do not distinguish online shopping and orders do not proceed further. The last filtering of the participants in the survey occurs in the sixth question, where those who state that the difference is not in the method of payment (which it really is) then they cannot proceed to the last two questions. In the last question the respondents had the opportunity to answer by choosing more than one option, while the purpose of the eighth question was to get information on how much they understand exactly what commerce is.

2.3 Participants

This research was conducted by the team of the Dean's Office of the Faculty of Computer Science under the guidance of the author of the paper. The questionnaire was answered by 89 respondents. The companies with which the faculty has cooperation agreements have also provided great assistance in research. Everyone from the team is first trained on the purpose of the survey so that participants can be filtered according to the sections into which the questionnaire is divided. Many colleagues, students and Internet users were also interviewed.

2.4 Analysis

All obtained results will be presented in tables (except the seventh question) with numerical values but also with percentages and will be commented. The seventh question will be presented graphically through the Excel program [16]-[18], and will also be commented.

3 Results

The research conducted consists of a total of eight questions and the respondents could chose more than one option in some of the questions. The questionnaire was answered by 89 respondents, and it was considered that this number is more than enough to gain valuable results in terms of knowledge that Internet users have about

the difference between online shopping and online orders, and whether these or any of those could be e - commerce.

The first two questions were of a demographic nature, while the first had to do with the gender of the respondents. There were two options in the answer: Male or Female, and out of 89 respondents surveyed, most were male, i.e., 66 or 74.2% while females were 23 or 25.8%.

Table 1. Gender of the respondents

Question 1	Male	Female
Gender	66	23
	74.2 %	25.8 %

The second question which was also of a demographic nature had to do with the age of the respondents and out of the three questions asked the answers were as follows: 32 participants or 36% were aged under 30 years, aged 30 to 50 were 40 participants or 44.9% of the total, while over the age of 50 were 17 or 19.1%.

Table 2. Age of the respondents

Question 2	Under 30 years	30 to 50 years	Over 50 years
Age	32	40	17
	36 %	44.9 %	19.1 %

The results obtained from the first two questions prove that men are the most frequent Internet users in Kosovo (the first question) and the age of the most frequent users is between 30 and 50 years. These results are close to the statistics on Internet use in Kosovo conducted by the Kosovo Agency of Statistics, 2020 [19].

In the third question which was whether the respondents work, the answers were as follows: the majority of them answered with a positive answer Yes, i.e.,80 or 89.9% of them, while 9 of them or 10.1% answered with a negative answer No. Results are summarized in Table 3.

Table 3.	Empl	loyment
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Question 3	Yes	No
Do you work?	80	10
	89.9 %	10.1 %

Even from the answers to the third question it can be understood that the respondents had good knowledge on how to use the Internet.

The fourth question was how much the respondents know about online shopping and online orders, and their answers were as follows: 87 or 97.8% stated that they have knowledge while 2 of them or 2.2% did not have knowledge. After this question, the first selection or filtering of the participants was done, where those who declared that they have no knowledge do not continue in the subsequent questions. This was done

with the intention that if anyone has no knowledge about online shopping and online orders, then there is no reason for them to respond as the results obtained would not be credible. So, in the next question (fifth) 87 respondents will continue to participate. Results are summarized in Table 4.

Question 4	Yes	No
Do you have knowledge about	87	2
online shopping and online ordering?	97.8 %	2.2 %

Table 4. Knowledge of online shopping and online ordering

In the fifth question that had to do with the respondents' perceptions whether online shopping differs from online orders, the answers were as follows: with Yes answered 64 respondents or 73.6%, with No 17 or 19.5% and 6 or 6.9% stated that they have no idea about the issue addressed. Results are summarized in Table 5.

 Table 5. Difference between online shopping and online orders

Question 5	Yes	No	I have no idea
Do you think online shopping	64	17	6
differs from online ordering?	73.6 %	19.5 %	6.9 %

After this question, the second selection or filtering of participants is conducted. In the next question (sixth) the research will continue with the participation only those who stated that they distinguish online shopping with online orders, i.e., a total of 64 respondents. This is done with the intention that if anyone does not have accurate knowledge of this difference between these two kinds then the answers to the following questions cannot be completed as the questions are interrelated so that to get the most accurate result.

Where do you think online shopping and online orders differ, was the sixth question and from which these answers were obtained: 37 or 57.8% said that they differ in the method of payment, in their difference regarding transportation stated 8 or 12.5% and other19 or 29.5%. After the answers to this question, the third and last filtering of the respondents is done and in the following two questions continue those who said that online shopping and orders differ from the method of payment (so that is correct), that is, 37 respondents in total. Results are summarized in Table 6.

 Table 6. Where is the difference between online shopping and orders?

Question 6	Payment method	Kind of transportation	Other
Where do you think online	37	8	19
shopping differs from online ordering?	57.8 %	12.5 %	29.5 %

The answers to this question lead us to the conclusion that, although there are regular Internet and e-commerce users, not everyone understands what they are actually doing.

So, in the seventh question 37 respondents continue to give answers, and who in the question of which transactions you have used so far, have given these answers (have had the opportunity to choose more than one option - graph):

- Online shopping was used by 10 respondents or 27%.
- Online orders were used by 13 respondents or 35.1 %
- Both services were used by 18 respondents or 48.6%.
- None of the services from the above mentioned was declared by only one person who did not use them or 2.7%.

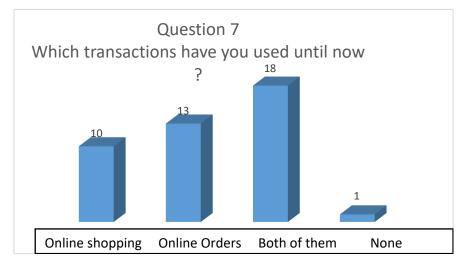


Fig. 1. Transactions used by respondents

The eighth question to which 37 respondents also continued to answer was, which of the options can be called e-commerce: for the option online shopping were declared 21 respondents or 56.8%, for online orders 6 or 16.2%, for the first two options 9 or 24.3% while for neither of them 1 respondent nor 2.7%.

Table 7. Which of the following options can be called e - commerce?

Question 8	Online shopping	Online orders	The first two options	None
Which of these options can be called e - commerce?	21	6	9	1
	56.8 %	16.2 %	24.3 %	2.7 %

Analyzing the results from the last question, it can be said that a little more than half of the remaining respondents or 56.8% really understand what e-commerce which is an unsatisfactory number since the total number of initial respondents were 89, which means that 21/89 = 23.6% have knowledge of e - commerce.

4 Discussion

By analyzing the findings from the questionnaire some conclusions can be made which in addition to confirming the hypotheses raised, are also consistent with some data presented by the Kosovo Agency of Statistics [19]. Initially, it can be said that most of the respondents were male and that the age of Internet users in Kosovo who mostly use the Internet is 30 to 50 years. From this it can be assumed that at this age is the highest number of employees and potentially also those who use the Internet for any electronic transaction [20]-[22].

In addition to the above data, from the answers to the aforementioned questions it can be concluded that although most say that there is a difference between online shopping and online orders, still only 37 respondents out of 89 of the total number answered exactly where the difference is, so 41.6% of the total which leads authors to the conclusion that most do not know where to distinguish online shopping with online orders.

In terms of perception of which of these can be e - commerce, this result was obtained that 23.6% know what this is and based on this it can be concluded that less than a quarter of users know what e - commerce really is. This result corroborates to that of Arante [23] and Pineida [24].

5 Conclusion

Based on all of this it can be concluded that, although the penetration of the Internet in Kosovo and its use is extremely high, still there is much room for improvement regarding knowledge in the theoretical field of Internet services.

The next step in expanding this research is to establish contacts with researchers from the region, so that the data obtained from this research can be compared with data of other countries. From this comparison knowledge about the level of theoretical education in the field of electronic business or e - commerce will be gained.

6 Recommendations

Looking at the data obtained from research and all the opportunities that the Internet offers, i.e., doing business through it, then it is necessary that in pre-university education curricula there are modules that affirm the theoretical aspects of the services offered by the Internet. Also, the companies that provide such services are suggested to name their services more specifically. Perhaps this is an issue that belongs only to experts in the field, but looking at the knowledge, usage, penetration and skills of young people for the Internet, it can be said that practical work should be combined with theoretical learning. Social media as well as numerous television stations should contribute to this regard.

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