

E-COMMERCE MANAGEMENT - EXPLORING USER PREFERENCES FROM THE TERRITORY OF THE BOSNIA AND HERZEGOVINA

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Abstract: Electronic or Internet commerce is the process of buying, selling, transferring, and exchanging products, services, or information through computer networks. With the rapid development of information technology, collaborative consumption supported by platforms is becoming attractive to consumers. It enables quick and straightforward communication, transmission of information over long distances, easy publication of various documents, and transactions via the Internet. The goal of every trading company is to understand each client individually and use this understanding to facilitate the customer's decision to work with a specific company -rather than the competition. Online shopping is experiencing exponential growth and has many advantages compared to traditional shopping. Hence, the goal of the research is to examine the impact of modern electronic solutions on shopping. The research subject is related to determining the attitudes and decisions of consumers on the issue and making the final decision about the purchase using electronic services. The purpose of the research is to present a set of activities that affect the success of electronic commerce. From the comparative study of consumer behavior, the hypothesis was tested where H_0 - electronic commerce has a significant impact on the behavior of consumers of this type of commerce. The research conclusions refer to the observation of variables that can be useful when making more effective decisions in the future.

Keywords: electronic commerce, management, buyers, sellers

INTRODUCTION

Electronic commerce involves business communication, the transfer of goods and services via networks and computers, as well as the transfer of capital using digital communication. Internet trade is considered the most profitable form of trade due to its very low costs and simplicity. An online store has no working hours, making shopping possible 24 hours a day. The product is available even to the most remote Internet users. More than 300 million Internet users [3] worldwide become potential customers, and there is no need to pay for office space lease because instead of a storefront, only one Internet site is needed.

The Internet market is one of the world's largest developing markets. If there is a quality offer, users easily decide to buy via the Internet because it implies a larger selection, simple price comparison between several sellers, and door-to-door delivery service, which means saving time. All information or prices

in the online store can be changed immediately so that the information reaches the customers as soon as possible. Electronic commerce includes all forms of business transactions performed by both natural and legal persons, based on the processing and transmission of digital data, including text, sound, and image. Electronic commerce can occur between a company and a customer or between business partners. It can also be conducted between the government and other parties, between individual customers, and between a firm and its employees.

Electronic commerce includes: internal electronic mail and email messaging, online publication of corporate documents, online search of documents, projects and relevant knowledge, logistics automation, supply chain management, distribution and storage, order information processing and supplier reporting to customers, tracking orders and deliveries, distributing information to employees, managing account-

ing and personnel systems, as well as numerous other business activities.

The subject of the research is related to determining the attitudes and decisions of consumers on the issue and making the final decision about purchasing using electronic services. The purpose of the research is related to the recognition of a set of activities that affect the success of electronic commerce.

Instagram and Facebook in the territory of Bosnia and Herzegovina represent a gray marketing zone, as followers have certain expectations, e.g., favorite actors, singers, groups, and the like. There is a situation where these same public figures receive certain products from well-known brands free of charge, which are advertised by well-known individuals through social networks, thereby achieving a better and more effective marketing reach to the audience. [9]

Amazon and eBay are considered the largest online stores today. These two e-commerce giants exemplify why e-commerce is the most successful form of business. Today, technology serves profit and promotion. Through the Internet, every promotion has a stronger resonance than through traditional media, and the Internet as a medium enables competition.

LITERATURE REVIEW

EDI (Electronic Data Interchange) refers to electronic data exchange. It is a standard format for exchanging business data, typically done via email or fax. EDI is defined as the exchange of structured business data between computers of separate companies, carried out without manual intervention, electronically, through standardized messages that replace traditional paper documents. [6]

EDI represents the exchange of business or administrative messages (order, invoice, payment notification, stock status) between the computers of two or more business partners with the application of agreed norms for structuring transactions or data. [4]

The application of electronic commerce began in the early seventies of the last century with the introduction of electronic business applications in large corporations and a small number of business firms. The use of EDI expanded the types of firms that participated in these businesses, from financial institutions to manufacturers, retailers, and services. EDI represents "the exchange of structured commercial data between computers of separate companies, car-

ried out without manual intervention, electronically, through standardized messages that replace traditional paper commercial documents." [1]

A business model is a method of planning a business in a way that brings profit to the company, indicating where it will be positioned in the market chain. Since there are a large number of different interpretations of various models of electronic commerce, only some models, which are the most widely accepted in the literature, will be explained here. These are: storefront model, auction model, portal model, dynamic pricing model, and online trading and lending model.

Storefront model - an online catalog with products, purchase procedure, secured payment, manufacturer's server, and manufacturer's database. It usually offers a wide variety of products and services, and it is possible to place multiple orders in one transaction. (www.amazon.com) Auction model - in this case, it is mediation. Internet users appear, who can come in the role of either a seller or a bidder. Auction sites make money by taking a commission from both parties. (www.ebay.com.) Portal models - are goal-oriented towards knowledge products, knowledge integration, and knowledge management, directed towards a specific market segment or a specific event (www.webmd.com, www.women.com) Dynamic pricing model - characterized by buying and selling products and services on the free market where prices vary depending on supply, demand, and consumer preferences. Online trading and lending models refer to brokerage companies for insurance, real estate, and securities trading over the web. [6]

The three payment methods that are most commonly used are processes that use models such as debit/credit cards, electronic funds, i.e., digital cash, and digital checks. Browser add-ons, known as electronic wallets, represent identified customers by displaying their credit card and digital asset data, they can be used freely by browser manufacturers and some of the sites that take advantage of those files. Digital cash is a payment system that enables the digital transfer of asset reports from one computer to another. The e-commerce payment processor application enables transactions, encrypted security, and verification. The main participants in payment transactions can be divided into buyers, sellers, intermediary institutions - banks, and state regulatory bodies.

Each of these participants shows different preferences towards existing payment systems, depending on their interests and goals. [5]

The Department for Combating Computer Crime of the Federal Police Administration (FUP), due to increasingly frequent internet scams, warns citizens that when shopping online, they must ensure that the site they are shopping on is legitimate, as frauds occur when shopping on fake sites. They note that there are still ongoing frauds that happened and are still happening on a domestic website for the sale of goods and services using the so-called "phishing", where the attackers presented themselves as customers and obtained data from bank cards from sellers of certain items on the said website with the aim of allegedly making a payment to the bank account for the goods they want to buy. In this way, the attackers obtained data from bank cards that are needed for online shopping, after which they "removed" money from the victims' accounts in various ways. [8]

The first question that arises when performing a transaction is the question of trust in those with whom the work is being done. On the Internet, one cannot be sure whether one gets what one wants before the payment is made, and the possibility to return the product if it does not fit often does not exist. Some types of services and products cannot be returned, and this has a negative effect on creating trust for online business. Products that cannot be delivered in this way require a special delivery process in addition to the process of review of the offer, payment, and execution of the order. Before starting the e-commerce process, it is necessary to decide when the products should be delivered and when the customer should make the payment. Losing money in Internet business is also a problem that attracts a lot of attention. That is why it is necessary to define ways to prevent loss, as well as multiple and unauthorized use of money.

When segmenting the market in the conditions of electronic commerce, it is very important to analyze the interrelationship between the consumer and the product, whereby in the segmentation the interrelationships must be checked whether the consumer is willing to buy a product or he is less willing to buy and use a certain product. [2]

Customers may have legitimate reasons to return products; however, some buyers take advantage of a

generous return policy as an incentive to buy without paying and to use the retailer. Due to a wide range of commercial considerations, this consumer behavior issue has long been of particular interest to both scholars and businesses. Likewise, other research studies have looked at the issue from a motivational standpoint, which is dishonesty and scam intention, such as returning products for personal gain by taking advantage of a flexible return policy. [7]

Growing marketing pressures, along with attractive market opportunities and technological developments, have induced many e-commerce platforms to leverage their strong brands. Being an intangible asset that can shape a firm's competitive advantage, a strong brand is crucial for customer loyalty, price premium, and long-term brand equity value. [10]

Customers also write online reviews in a more concise, diverse, and relaxed fashion, conveying positive emotion and a more subjective tone than expressed by hosts' project descriptions. Additionally, a large topic difference, reflected by customers' more details about various attributes elaborated in their online reviews, increases sales. [11]

METHODOLOGY RESEARCH

The analysis of e-commerce management, the results of which are presented in this paper, is based on the data from the conducted survey as well as interviewing methods. The aim of the paper is to determine the opinions of respondents regarding electronic shopping. The research part of the work aims to show how electronic commerce, which is available 24/7, influences and facilitates the making of the final purchase decision for potential customers, that is, how much this kind of commerce facilitates the work of users of this kind of commerce. The study adopted a survey research design. A research instrument was used for data collection Questionnaire on about the attitudes about electronic commerce. The technique used in the research function is the method of anonymous filling in of questionnaires and interviews. The research in the paper is non-experimental research, i.e., it is a representative sample, which means that the research was conducted on the target group of respondents. The respondents are divided into two groups, one group of respondents consists of respondents who consume this type of purchase, while the other group of respondents consists of respondents

who deal with this type of sales. The first group consisted of a group of 108 respondents, while the second group of respondents consisted of 30. The list of research questions used in the research, in addition to general socio-demographic questions, included a certain group of questions that show the consumer's attitude towards electronic shopping, i.e., how much influence this type of trade has in the territory of Bosnia and Herzegovina with a series of open and closed questions. The questions related to questions about the type of electronic commerce that is used, how often respondents use this type of trading, how safe they are when making this type of purchase, how much influence did social networks have when entering this type of trading.

The research was conducted in the period from mid-January to March 2024, 138 respondents from the territory of Bosnia and Herzegovina, male and female, aged between 18 and 50, participated in the survey.

The questionnaire was created and distributed via DM (direct message), in which followers participated (acquaintances and unknown respondents), via Facebook and Instagram profiles.

Based on the review of the literature and previous research, the null hypothesis was set, which reads: H_0 - electronic commerce has a huge impact on the behavior of consumers of this type of commerce.

RESULT AND DISCUSSION

Based on the research conducted in the observed period, the following empirical data were collected, the results were analyzed using the statistical program StatPlus, the author presented the results theoretically, tabularly, and graphically. The variables in this study are on non-parametric scales, and therefore it is necessary to transform them into higher-order scales, and in this case, it is necessary to apply the analysis of variance (ANOVA), to test the hypothesis, that is, the statistical significance of the difference in the distribution of the frequencies of attitudes, the Chi-Square test was used and Tukey Kramer test.

138 respondents participated in the research, looking at the socio-demographic structure of the sample it is possible to state that in the sample of respondents there were slightly more female respondents $N=88$ (64.77%) while there were male respondents $N=50$ which makes (36.23%) of respondents.

According to the age structure of the respondents, 90 respondents (57%) are between the ages of 20 and 30, the other respondents, 48 of them (34.7%) are respondents over the age of 31-50, according to education with a university degree or more, there were 27 (19.56%) of the respondents, 102 (73.91%) had secondary education, 9 (6.52%) had primary education. The following table shows socio-demographic data.

Table 1. Socio- demographic structure

Variable	Category	No.
Gender	Male	50
	Female	88
Age structure	20-30	90
	31-50	48
Education	Elementary education	9
	High school education	102
	Faculty and higher	27

When looking at the skewness ratio and its standard errors, the results shown in Table No. 2 indicate that the results are within the interval ± 1.96 . In this case, they are considered acceptable in the interpretation of the normality of the distribution, considering the symmetry of the obtained results.

Table 2. Methodological approach to presenting data

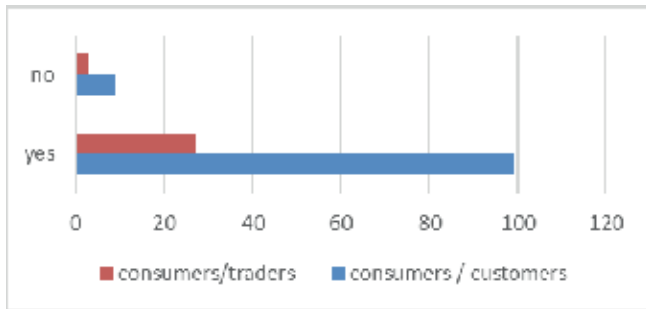
Source	Result Details		
	SS	df	MS
Between-treatments	220.96	4	55.24
Within-treatments	13000	20	650
Total	13220.96	24	
Skewness:	0.058321.	F = 0.08499	
Kurtosis:	-1.989869.		

Presentation of statistical results

The f-ratio value is 0.08499. The p-value is .986103. The result is not significant at $p < .05$.

The answer to the set null hypothesis was obtained by asking questions related to the attitude of consumers of this type of trading business system on the question of whether electronic commerce has a huge impact on the behavior of consumers of this type of trade.

Figure 1. the impact of electronic commerce on consumer behavior.



Presentation of respondents' answers to the question of the impact of electronic commerce on consumer behavior

The results of this research showed that 71.739% of buyers in RS/BiH believe that the future of e-commerce is bright, the same opinion prevails among online sellers, while only 8.696% of respondents believe that e-commerce will not progress in the future. Consumers of e-commerce in RS/BIH are familiar with the advantages and disadvantages of this type of trading. The most important advantages of online shopping consumers are: the possibility of shopping 24/7, more favorable prices, the possibility of comparing prices as well as the variety of offers. Disadvantages of this type of trade are related to the insecurity of business, where fraud most often occurs (e.g., goods are ordered but not picked up, and therefore the postage is paid by the merchant or the goods are ordered to be picked up and when the package is opened it is not the ordered goods, misuse of personal data, misuse of data on credit/debit cards, etc.). Most often, consumers choose this type of trading because of the possibility of seeing the product at the moment of handing over the package.

Table 3. Answers of respondents

	yes	no	Marginal Row Totals
consumers / customers	99 (98.61); [0]	9 (9.39); [0.02]	108
consumers/ traders	27 (27.39) [0.01]	3 (2.61); [0.06]	30
Marginal Column Totals	126	12	138 (Grand Total)

The proposed hypothesis: H_0 - electronic commerce has a significant influence on the behavior of consumers of this type of commerce was verified using the appropriate test, i.e., X^2 - test of independence

of characteristics and with a probability of 95%. The chi-square statistic is 0.0821. The p-value is .774414. This result is not significant at $p < .05$. The chi-square statistic with Yates correction is 0.0063. The p-value is .936545. This result is also not significant at $p < .05$, which means that the null hypothesis is accepted, the views of the respondents are in a close relationship where there is no statistically significant difference.

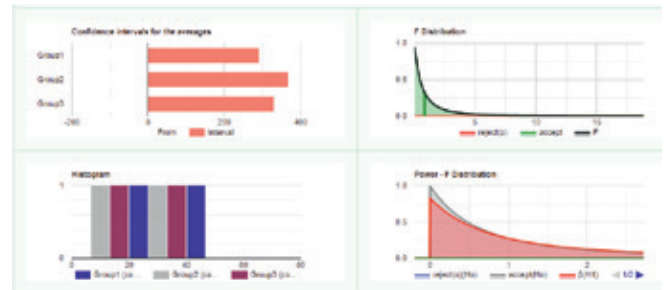


Figure 2. Tukey HSD / Tukey Kramer

According to the Tukey Kramer test, it was determined that there is no significant difference between the mean values of any pair shown in Figure 2.

CONCLUSION

Electronic commerce, as a new and completely different technology, will be maintained in the future. Thanks to the Internet and web technology, trade around the world has changed to electronic trade. With the development of Internet technologies, new types of mediation appeared, such as providers of electronic stores, electronic payment systems, and the like, which enabled direct sales from the manufacturer to the end customer. A significant advantage for companies is the collection of feedback from customers, related to products and services. Therefore, it is about interactive connections that complement each other in time and are in mutual dependence and coordination during the achievement of the set goals. The development of Internet technologies brings with it another "dark" side, where there are limitations and problems that may appear in electronic commerce. Some of the main issues relate to customer trust when purchasing, security of e-commerce systems, and interoperability between global market participants. Consumers should be educated on how to distinguish between legal and illegal electronic commerce, which is most associated with fraud and misuse of data. Users are greatly helped by the exist-

tence of the BiH Consumer Protection Law. The proposed hypothesis is accepted.

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