

## **E-commerce in Bosnia & Herzegovina**

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### **Abstract**

With the rising of e-commerce in the past few years, distinct buying patterns and preferences have emerged for specific groups and other demographics.

Since e-commerce is still a relatively new phenomenon in B&H, our goal was to collect enough information and measure those patterns in order to understand how consumers connect with the new technology. This paper lays the foundation with brief introduction to definition of e-commerce, followed by history timeline of e-commerce evolution and some important trends and factors which are generally known to have influence on people's attitude toward online shopping. This is then followed by their general perceptions and preferences of online shopping including product and payment option selection.

Each of these e-commerce “generalities” is compared to the information achieved as a result of collected surveys whose respondents are from different regions of Bosnia & Herzegovina. Furthermore, it will also investigate the favorable as well as negative website characteristics

and sum up the positive elements into a description of an e-commerce website that would be suitable to the group being most present as an online buyer.

**Keywords:** E-commerce, online shopping, E-business

## **1.INTRODUCTION**

A single physical marketplace used to be positioned in a geographical region has transformed into a borderless marketplace including national and international markets. Through empowering e-commerce, businesses can now reach people all around the world. Consequentially, all e-commerce businesses have become virtual multinational corporations.

Electronic commerce or e-commerce can be defined as an extensive range of online business activities in order to provide products and services. E-commerce is usually associated with buying and selling over the Internet, or conducting any transaction involving the transfer of ownership or rights to use goods or services through a computer-mediated network instead of physical exchanges or direct physical contact (Thomas, 1999).

Though popular, this definition is not inclusive enough to describe contemporary developments in this new and radical business phenomenon. A more complete definition can be given as: "E-commerce is the use of electronic communications and digital information processing technology in business transactions to create, transform, and redefine relationships for value creation between or among organizations, and between organizations and individuals" (Andam, 2003).

### **1.1.Literature review**

#### **Bosnia and Herzegovina**

Bosnia and Herzegovina may be a synonymous with the Yugoslav wars that was destroyed in the Balkan region in the 1990s. The country is still struggling with the legacy of this, having a fractured infrastructure and a countryside that remains littered with mines in some regions.

Bosnia and Herzegovina was before one of the six federal units of the Socialist Federal Republic of Yugoslavia, gained its independence during the Yugoslav wars of the 1990s. Bosnia and Herzegovina can be described as a federal democratic republic that is transforming its economy into a market-oriented system, and it is a potential candidate for the European Union and NATO membership. Additionally, Bosnia and Herzegovina has been a member of the Council of Europe since April 24, 2002 and a founding member of the Mediterranean Union despite its establishment on July 13, 2008 (Imamović, 2008) .

## **1.2. History of E-commerce**

The predecessor of Electronic Commerce (e-Commerce) was Electronic Data Interchange (EDI). EDI was first introduced in the 1960's and consisted of a set of rules enhancing large businesses to conduct a method of electronic transaction and to exchange useful information. In 1990, Tim Berners-Lee developed the first web browser, Worldwide Web, using a NeXT computer. The next fundamental step was the introduction of Mosaic web-browser was further named as Netscape in 1992. This was a huge step in the evolution of e-Commerce (Kaushik, 2010).

In 1992, J.H. Snider and Terra Ziporyn published the book "Future Shop: How New Technologies Will Change the Way We Shop and What We Buy" which discuss the reasons of spending huge amount of money on consumer information. The book also identified why people believe this situation can and will change if they can only continue to build an information infrastructure which revolutionizes the economics of providing consumer information (Snider & Ziporyn, 1992).

When Future Shop was written, online sales were represented less than .01% of retail sales and the World Wide Web hadn't even been invented. A significant number of businesses all over the world have developed their web sites. In the dot com period, electronic commerce has included activities which are called "Web commerce" or the purchase of goods and services over the World Wide Web through secure connections with e-shopping carts and with electronic payment services such as credit card payment authorizations (Dunhill, 2008). Finally, Solorzano (2011) reported that US ecommerce and Online Retail sales projected to reach \$197 billion, an increase of 12 percent over 2010.

## **1.3. Weaknesses of online shopping**

Waiting for the pages to load is one may be sometimes slower than standing in line on the phone or driving to the store. This happens due to poor web design of the page, bad hosting providers and other technical difficulties. It's not often, but it's something that prevents a lot of people from buying online. Another reason is insufficient, incomprehensible, or just plain wrong information for making a buying decision. And one of the main reasons is that people feel insecure and are not confident typing in their credit card number on a website, in fear somebody might steal it and commit some kind of forgery (Tognazzini, 2004).

## **1.4. E-commerce is taking off**

Despite the mentioned weaknesses, consumers through the world are increasingly changing crowded stores for one-click convenience, as online shopping becomes increasingly safe and popular alternative. According to a global survey by The Nielsen Company More than 85 percent of online population in the world has used the Internet to make a purchase and more

than a half of Internet users are regular online buyers, making online purchases at least once a month (Niesel, 2007).

### **1.5. Main reasons for utilizing online shopping**

According to Nielsen Online survey, being able to shop 24 hours a day was identified to be one of the main factors. The next factor is saving time. Also 65% said that they shop online in order to avoid the crowds and waiting in offline local stores. According to 59%, it saves gas for not having to use car to drive to local stores. 55% buy online because they are regularly searching for bargains and discounts which are often offered by online stores. 53% buy online because of lower prices for products. And 37% do so because ordered items are always in stock (Nielsen, 2008).

### **1.6. What do people buy online?**

Many internet users (65%) have paid to download or access some kind of online content from the internet including music, software, and apps as the most popular contents. For the methods of online content access, the majority of the internet users pay for subscription services (23%), versus downloading an individual file (16%), or accessing streaming content (8%) (Jansen, 2010).

### **1.7. The impact of E-commerce**

The marketplace has been transformed by Electronic commerce by changing the way of business such as developing new products and markets, replacing traditional in-between functions, creating new and much closer relationships between businesses and consumers, and transforming the organization of work. The consequences may be the requirement for more flexibility and adaptability, new channels of knowledge circulation and human interactivity in the workplace, and redefinition of worker functions and skills (Wyckoff & Colecchia, 1999).

### **1.8. Mobile trend involved in E-commerce (m-commerce)**

There are over 3 billion mobile phones worldwide meaning that over 40% of the world's population, far more than those who use a computer or have access to the internet. In many developed countries, mobile phone penetration is above 90% and developing countries are catching up fast. Closer and more personalized relationships between businesses and consumers are possible via mobile phones. Existing business issues (such as inefficient couponing) can be resolved by effectively using mobile technology. These improvements that could be implemented using mobile devices for e-commerce show how much potential there

is, and that's why m-commerce is one of the biggest rising trends in recent years, and it will continue to be so in years to come (GS1 Mobile, 2008).

## 2. Research Methodology

Due to timeliness, low cost and convenience factors, survey-based research method was preferred in this study in order to collect enough information and measure the patterns in order to understand how consumers connect with the new technology.

The survey questions were set to find out general information about participants; on the net, how important are the factors such as the photo or graphic of the item that was presented, the price, the explanation of the item and its features, which influence their decision to purchase items and etc.

All questionnaire items used to measure these constructs were adapted from prior studies and had proven validity and reliability. The questionnaire consisted of a mixture of closed and open-ended questions. Seven open-ended questions were used to acquire basic demographic information (age, sex, position, education level) and additional textual comments on any aspects of interest. The survey was designed to allow anonymity so that the subjects could freely express their thoughts and feelings.

Subjects for this study were people from different parts of Bosnia and Herzegovina. A total of 350 people participated in the current study. Surveys were reserved for 300 Bosnian people, done in Bosnian language, and 50 for other nationalities, done in English. It took between 10 and 15 minutes to answer all survey questions. Then, the participants' responses were collected, encoded, entered into the computer file and analyzed using Microsoft Excel spreadsheet program. The results of the analyses performed are presented in the following section.

## 3. Results and findings

Out of all people (350) who participated in this survey, 110 said they have bought online at least once. As opposed to the other 240 people who said they have never used websites to order products, or to sell them. Therefore 31% of people surveyed have bought online at least once (Figure 1).

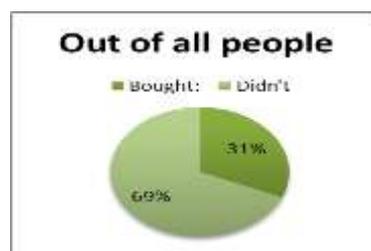


Figure 1

Out of total 350 survey respondents, 195 were male. Out of those 195 male, there were 75 of them who said they bought online at least once. As opposed to 120 who said they have never used online sites in such manner. 38% of surveyed males bought online at least once (Figure 2).



Figure 2

Out of all 350 respondents, 155 were females. Out of those 155 females, 34 of them said they have bought online at least once. Whereas the other 121 said they have never utilized online shopping (Figure 3).

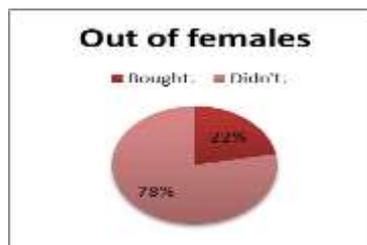


Figure 3

We also found what the items that are most often bought are. And we saw that they differ when it comes to males (Figure 4 and 5).

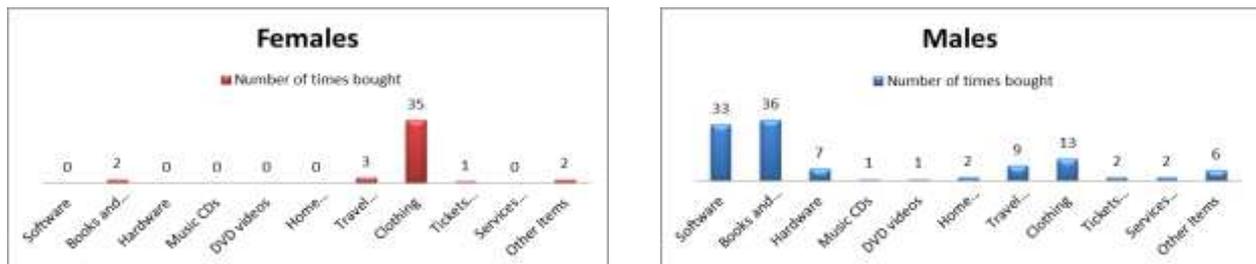


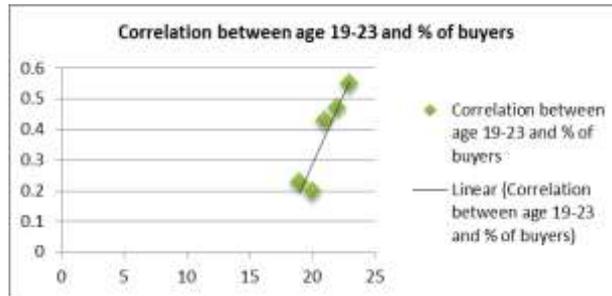
Figure 4 and 5

As it can be seen above, the items that males usually tend to buy, in order of the biggest to the smallest quantity are books, software, clothing, travel (airline tickets, hotel reservations), computer hardware and then others were approximately evenly distributed.

Whereas females tend to buy mainly clothing items online, with some responses of books and magazines, as well as travel (airline tickets and hotel reservations).

*Correlation between age and percent of people who buy online*

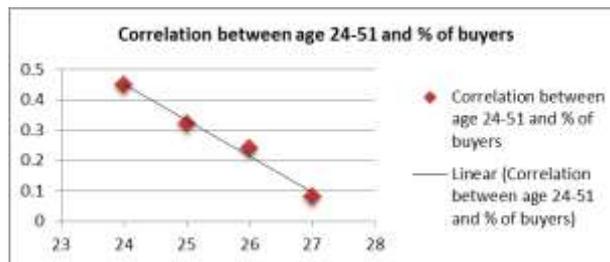
As we observed from the sample of respondents, there was really strong correlation between age of a person, and whether that person is likely to buy online or not (Figure 6).



**Figure 6**

People in earlier years (19 – 23), were the biggest portion of those who said they bought online at least once. Correlation of this group age related to their likeliness to buy online is very strongly positive (0.937).

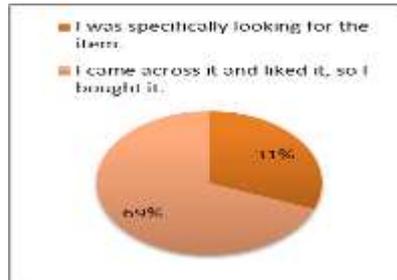
Those who had 24 years or more are less likely to be online customers as shown by the survey. The negative correlation is as strong as -0.99253 (Figure 7).



**Figure 7**

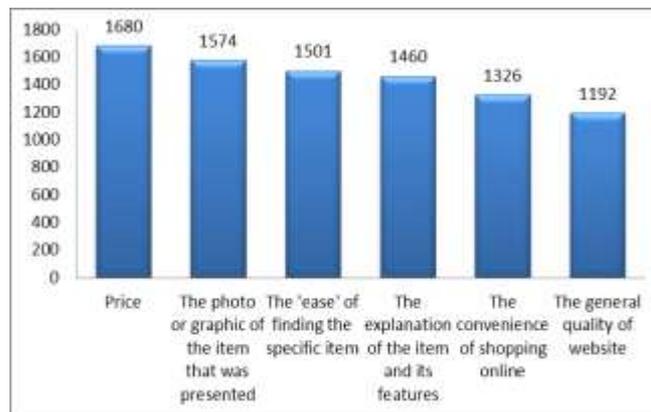
*Do people search for a specific item online, or they buy what they come across?* We asked the respondents who bought online at least once, whether they were specifically searching for an item they intended to buy, or they came across it on some of the online stores or through other website ads.

Out of total 110 people who said they bought online at least once, 34 of them said they have specifically searched for an item (31%), as opposed to the other 76 who have said they came across it and liked it, so they bought it (69%) (Figure 8).



**Figure 8**

*How important is the look of photo or graphic of the item that is being sold?* We asked respondents to rate with 1 to 5 on how they feel about given factors that influence their decision to buy. Their ratings were then summed up and we've got the following results, from highest to lowest. Price, the photo or graphic of the item that was presented, the "ease" of finding the specific item, the explanation of the item and its features, the convenience of shopping online, and the lowest of these was the general quality of website (Figure 9).



**Figure 9**

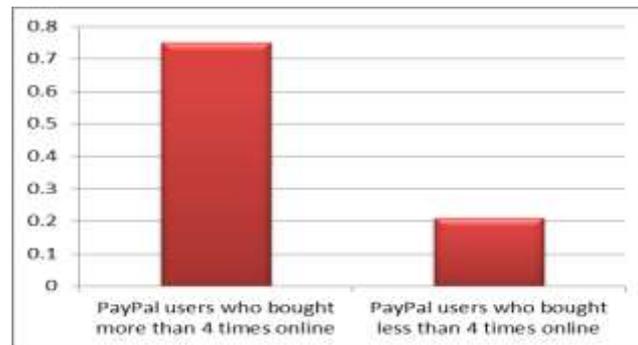
*What do users like the most when it comes to online buying?* It happens often that people can't make their mind about whether they should buy a specific product or not. The following factors help people prevail into making the decision to buy. By summing up the 1-5 ratings of each option, we found that discounts were the highest on the list of the things that people like when it comes to online buying.

Discounts were then followed by Money-Back Guarantee option; free delivery, customer reviews of the product offered, and the lowest one were different options of payment (Figure 10).



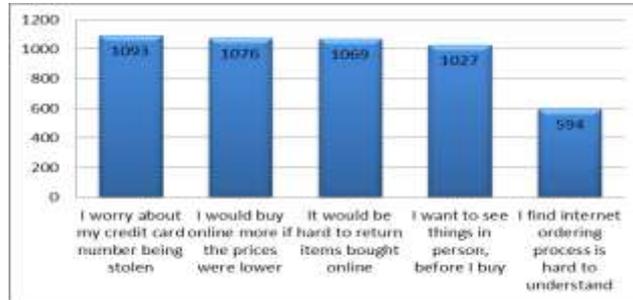
**Figure 10**

People, who buy online often, usually use PayPal. Out of those who said they buy online, 75% of those who bought four times or more said they use PayPal as a service for paying the products they buy online, as opposed to users who bought less than 4 times online, out of which 21% uses PayPal as a payment service (Figure 11).



**Figure 11**

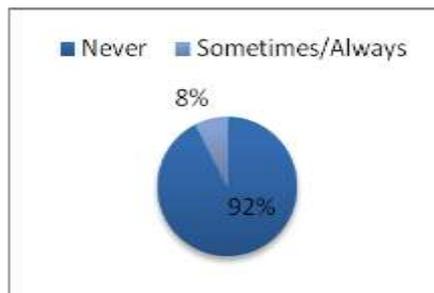
*What are the reasons for people who don't buy online?* Among the main reasons, as stated by respondents, were those of fear that someone might steal their credit card number? Followed by prices, complexity of returning items bought online, wanting to see things in person, and the lowest was finding the whole buying process complicated and hard to understand.



**Figure 12**

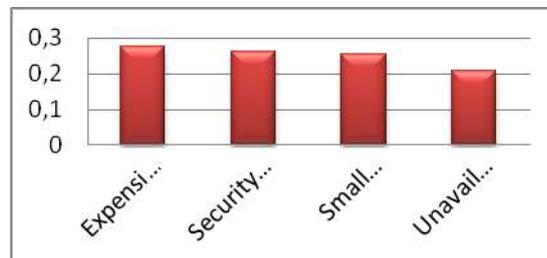
Social networks do not affect customers purchasing decision. Even though social networks are widely used in Bosnia and Herzegovina, they do not affect customers purchasing decision.

Those who have bought online at least once, 92% of those people said that social networks like Facebook never affect their purchasing decision, as opposed to 8% who said social networks influence their decision sometimes or always (Figure 13).



**Figure 13**

When we talk about mobile e-commerce in Bosnia and Herzegovina we got that 77% of all respondents said that they would never use mobile devices for shopping online. Main reasons, as stated by them, are expensive mobile internet service cost followed by security, small screen size and unavailability of products (Figure 14).



**Figure 14**

#### **4.CONCLUSION**

Aim of our research was to find out what people in Bosnia & Herzegovina are thinking about the e-commerce and what should be done in B&H to bring more customers to online shops. Needed technologies for online shops are available in Bosnia and such shops do exist, but customers are not used to shopping online. Our research helped us to find out what are the reasons that are keeping customers away from shopping online and what are some of the most important features that every online store should have in order to get as many online customers as possible.

Mobile devices are the newest tools for doing business online but are not yet used as much in Bosnia and Herzegovina as in other, more developed countries, mainly because of high mobile internet service price.

E-commerce is new way of doing business in B&H, but will soon become the standard as new generations, that are using internet more and are keen to shop online, are coming. Shops that offer different discounts, product images and descriptions, simpler but safer paying mechanism and variety of guarantees will get more customers, as they are requesting such features. Younger population is more likely to shop online as they can easily buy things with their favorite toy, computer, without the need for moving from “the warmth of home”, therefore the products that are sold online should be the ones that are demanded by younger customers, mainly students and younger workers. We were able to gather necessary information, which could be useful to local companies who plan to implement E-commerce as a part of their business in Bosnia & Herzegovina.

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## Appendix

### E-Commerce in BiH Survey

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#### Instructions for completing the questionnaire

- Please answer all questions
  - For the questions with a numeric scale **circle only one number for each scale**
  - Read the specific instructions under each section where applicable
  - This survey is expected to be completed in **10 minutes**.
- 

**E-Commerce:** Buying and selling of products and services via internet. It reduces cost and time and has potential to expand business into wider geographical locations.

<b>I. Demographics</b>					
a.	Name of your department/unit:				
b.	Your position/role:				
c.	Your education level:		e.	Gender:	f. Age:
d.	Time in Position:		g.	City/Canton	

<b>II. General Background of a Client.</b>	
<p><b>1. Have you ever purchased a product from a company via the Internet?</b></p> <p>a) Yes</p> <p>b) No</p> <p><b>2. If yes, was your purchase(s) for an item that you specifically were searching for, or was it an item that you came across while Internet shopping and decided to buy?</b></p> <p>a) N/A - Never purchased anything online</p>	

- b) I was specifically looking for the item.  
 c) I came across it and liked it, so I bought it.
- 3. How many times have you made online purchases?**
- d) Never  
 e) Once  
 f) 2-3 times  
 g) 4-6 times  
 h) 7-15 times  
 i) More than 15
- 4. How do you pay for online purchases?**
- a) Via credit card  
 b) PayPal  
 c) Mailed a check or money order via postal service  
 d) Other (please state the method):
- 5. What type of products have you purchased online? (Circle all that apply)**
- Software
  - Books or magazines
  - Computer hardware
  - Music, CDs, recordings
  - Videos, DVDs
  - Home Electronics
  - Travel (airlines, car rentals, hotels)
  - Clothing
  - Tickets (concert, movies, etc.)
  - Services (insurance, legal)
  - Other items
- 6. In general, do you like the idea of online, computerized shopping?**
- a) Yes  
 b) No
- 7. If available in BiH would you prefer using mobile phones for shopping online?**
- a) Never  
 b) Sometimes  
 c) Often  
 d) Almost always
- 8. Do social networks affect your purchasing decision?**
- a) Never  
 b) Sometimes  
 c) Always

<b>III. On the net, how important are the following factors which influence your</b>	<b>Unimportant</b>	<b>Very</b>
--------------------------------------------------------------------------------------	--------------------	-------------

<b>decision to purchase items (not relating to the product, but to its presentation)?</b>		<b>t</b>	<b>Important</b>
a.	The photo or graphic of the item that was presented.	1 2 3 4 5	
b.	The price.	1 2 3 4 5	
c.	The explanation of the item and its features.	1 2 3 4 5	
d.	The general quality of the website.	1 2 3 4 5	
e.	The convenience of shopping online.	1 2 3 4 5	
f.	The 'ease' of finding the specific item.	1 2 3 4 5	

<b>IV. Related to online and local shopping, how these statements best describe you?</b>		<b>Not at all like me</b>	<b>Just like me</b>
a.	I like the help & friendliness I can get at local stores.	1 2 3 4 5	
b.	I think Internet shopping would avoid the hassle of local shopping.	1 2 3 4 5	
c.	I find the Internet ordering process is hard to understand & use.	1 2 3 4 5	
d.	I like it that no car is necessary when shopping on the Internet.	1 2 3 4 5	
e.	I think Internet shopping offers better selection than local stores.	1 2 3 4 5	
f.	I want to see things in person before I buy.	1 2 3 4 5	
g.	It would be a real hassle to return merchandise bought on-line.	1 2 3 4 5	
h.	I worry about my credit card number being stolen on the Internet.	1 2 3 4 5	

<b>V. Related to prices, how these statements best describe you?</b>		<b>Not at all like me</b>	<b>Just like me</b>
a.	I would shop on the Internet (more) if the prices were lower.	1 2 3 4 5	
b.	I think the Internet offers lower prices than local stores.	1 2 3 4 5	
c.	Internet stores have more discounts than local stores.	1 2 3 4 5	
d.	I dislike the idea of shipping charges when buying on the Internet.	1 2 3 4 5	

<b>VI. Related to shipping service, how these statements best describe you?</b>		Not at all like me				Just like me
a.	I dislike the delivery problems & backorder of Internet buying.	1	2	3	4	5
b.	I like having products delivered to me at home.	1	2	3	4	5
c.	I don't like having to wait for products to arrive in the mail.	1	2	3	4	5
<b>VII. Do you agree that following statements are the problems when It comes to shopping online with mobile devices?</b>		Disagree				Agree
a.	Small screen size.	1	2	3	4	5
b.	Security of mobile websites.	1	2	3	4	5
c.	Unavailability of products.	1	2	3	4	5
d.	Expensive mobile internet service cost.	1	2	3	4	5

<b>VIII. How important are the following features on the online stores?</b>		Unimportant				Very Important
a.	Free shipping offers.	1	2	3	4	5
b.	Discount coupons.	1	2	3	4	5
c.	Money back guarantee.	1	2	3	4	5
d.	Different payment options.	1	2	3	4	5
e.	Customer reviews of products.	1	2	3	4	5

**Part IX: Please add here any positive /negative comments regarding E-commerce implementation in BiH**

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Thank you for participating in this study.

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