

Analysis of e-Commerce Application in Macedonia and Albania

Rezarta Zhaku, Majlinda Fetaji, and Bekim Fetaji

Abstract— The use of e-commerce outlets in the Balkan countries are scarce and therefore the research study focused to analyze the current state of e-commerce, issues and analyses how to improve, focusing in Albania and Macedonia. The study analyses the strengths and weaknesses of e-commerce, the reasons why it is not very common in the Balkans (Albania and Macedonia). Based on the insights created an application for transaction services of mobile phones and performing other services regarding the mobile phone commerce. The software solution was tested and evaluated. Research study was conducted in several public and private enterprises in Macedonia, 2013. Participants in this study were 20 employees at various companies, and 40 clients, customers of these companies. Participants belong to different ages from 18 years and above and were from both genders, males and females. For the data collection a likert type scale questionnaire was used. Insights are stated, results of the analyses are discussed and recommendations are provided.

Keywords— e-commerce, electronic commerce, internet business.

I. BACKGROUND RESEARCH

E-COMMERCE is an application field through which customers order products or services through the Internet [2]. That is, to operate an e-commerce application, if one party makes a request of the service / product and sending money, the other will provide products or services required. Nowadays, technology has made it possible for almost everything that we see in different stores or shops; you can buy through the internet.

To function properly, website transactions must first have a mechanism to get order, or orders and also a mechanism for payment. One of the ways to execute these payments is through credit cards or debit customers. Also, company or firm must ensure and enable the product be distributed to customers on time, or different services be carried out in time, because she cares more customers is efficient and timely

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service. But to make all this happen, consumers must first be registered in the relevant website, giving all relevant data to be required to achieve the required services. This data is stored and kept in secret and will be available to firms in which the order or request as discussed in [7],[17]. To identify the consumer, the pair username and password is used. In short to operate e-commerce customer must find the right online company or shop, to optimize product or service, and to confirm the order made. Payment mechanism makes the transfer of money from the account of consumer in a bank account server and then the seller delivers goods or performs various services are commissioned with details explained in [7], [13]. The most important types or models of e-commerce applications are the following: Business-to-Consumer (B2C) - Interactions business-to-consumer, Business-to-Business (B2B) - Interactions business-to-business, Consumer-to-Consumer (C2C) - interaction Customers -Peer-to-Peer (P2P) - interaction colleague colleague Mobile Commerce (M-commerce) - mobile trade. Regarding this research, we focus more on B2C model, which means cooperation between different businesses or firms with customers, or in other words the interaction seller-buyer. Model B2C e-commerce application, facilitates the sales and purchase enterprise customers, enabling those services via the Internet.

II. ANALYSES OF ADVANTAGES AND DISADVANTAGES OF E-COMMERCE

According to [2] B2B e-commerce began in the early 1990s, no one expected the growth explosion it experienced in the latter part of the decade. According to [3] in their study "Advanced SWOT analysis of E-Commerce", mentioned several strengths of some weak through e-commerce. According to them, the main features of e-commerce and at the same time the biggest advantage is that e-commerce application knows no bounds. E-commerce enables companies to be recognized and developed throughout the world, and in turn helps customers visiting companies from all countries of the world without having to be physically there [3]. Also, e-commerce makes possible for customers to save a lot of time, since there is no need to walk around in different firms as discussed in [14], [16],[17]. This is also a service that enables access anywhere and anytime, 24 hours a day, 7 days a week [3]. This service enables customers to easily compare prices across different companies and choose the most appropriate service that provides faster and faster procedure transactions [3].

E-commerce service is fast, efficient and helpful and people feel more comfortable when buying or book material or services from the Internet as discussed in [4], [7], [9], [11].

However, besides the advantages, e-commerce there are gaps or weaknesses. Safety is the first element. Safety has been and still remains one of the main problems in e-business world, because the most basic thing is that customers or clients feel secure payment processes and procedures of the transactions, as before they be entered transactions or procedures for research various services online.

Conservation and protection of data is another problem in this area. Protection or security of personal data and the integrity of the system that deals with data are serious problems which concern various clients. There are full of electronics and new viruses are appearing almost daily. They cause various injuries, unnecessary delays, problems in data storage, and other related difficulties. Also, there is a danger of hackers, who can attack and gain access to customer personal information. Lack of security and privacy of data and the lack of a law that protects the privacy of personal data is an issue that concerns everyone and is a problem for all those who wish to use these services.

Another disadvantage of e-commerce is the way of communication. Clients always have a sense of infidelity, because they communicate with a computer, leaving aside the communication face to face, which is somewhat safer. This means that the physical contacts are replaced with computer processes / electronics. It is true that customers can see more things online via the internet / computer, to visit different websites and decide on the product or service they think is best. However, again there is a question to consumers as they are unable to touch and perceive closely until it reaches products in their home.

On the other hand, the numbers are even more fake website and it makes customers become more confusing, do not believe in e-commerce services and reluctant to use them, because it is likely that their data are misused.

According to [1], consumers to gain a full confidence and be able to use e-commerce services without hesitation, each website has a few rules:

1. Ensure common standards and safety for all users and this can be accomplished through a combination of faith and to set the rules.
2. Provide protection for copyright (copyright).
3. To balance freedom of speech against the use of insults and slanders, because freedom of speech on the Internet is not a simple matter. Right off the bat should have all the customers or users, regardless of their religion, race, age, etc..
4. To encourage the beneficial use of educational and social.
5. To protect against misuse and antisocial uses by various criminals and cenzurimi is a good way to prevent such actions.
6. Protected countries, languages and different cultures, to ensure access for the rich and for the poor [1].

III. ANALYSIS OF E-COMMERCE IN ALBANIA

The experience of the neighboring countries offered

available models for Albanian road of economic growth. According to [18] the period 1990-1997 may be considerate as the first stage for economic development of Albanian businesses. This period is characterized with a convulsive development of financial and non-financial sector. Period 1997-1999 is considered like second stage for Albanian economy and businesses. Differently from first stage, in this stage the economic growth rate is declined sensitively; inflation is grown-up, while most of foreign investors left Albania. Period 1999-2009 was the third stage for Albanian business development in which started again the raise. From 2008 till today can be considered as the fourth stage for Albanian business development. Even yet in year 2008 Albania adopted the law for electronic commerce, this isn't sufficient for the most of Albanian businesses to apply e-commerce according to study of [18]. A key issue and limiting factor for e-Commerce is security, a requirement that is becoming more crucial in the current Albanian e-Commerce environment. Albanian consumers are interested in purchasing online while worried and skeptic about privacy and security issues. These result to be the main obstacles to the e-commerce development as regarding the consumers. Central Bank of Albania and major banks operating in Albania (like Intesa San Paolo bank, Raiffeisen Bank, National Commercial Bank etc) that facilitate the e-commerce process by providing and improving the security of electronic payment methods. The Chambers of commerce and industry have a special role to play as they act between the government agencies and their companies-members in order to influence the latter towards the adoption of electronic commerce.

IV. ANALYSIS OF E-COMMERCE IN MACEDONIA

As worldwide, as well as in Macedonia, the number of Internet users has increased and is increasing. According to a statistical survey conducted by the Agency for Foreign Investments of the Republic of Macedonia, the information technology market in Macedonia, has seen a record growth in 2007, to 63.8%, which means \$ 164,000,000.

According to the statistics provided by [6], [8], [12], this increase was due to large investments by the government and telecommunications companies in the information technology (information technology - IT), as a result of the collapse of IT equipment and lower prices VAT for IT equipment. [6], [8].

During the years 2006 - 2008, the number of Internet users has increased and this is reflected very well in a graph in the statistical study of the Agency for Foreign Investment Database.

From the graph it is clear that in 1000 residents, 267.9 were Internet users in 2006, then the number has increased to 416.4 in 2007 to 877.5 in 2008 [15].

Regarding the electronic acquisition or e-COMMERCE, Macedonia has left little behind for some reason. According to an analysis carried out by USAID, 2012 in terms of e-COMMERCE in the Republic of Macedonia, some reasons were low use of credit or debit cards (payment cards), the lack of choice of where and what to buy, as in Macedonia there were no online shops, or firms that have made the sale of their

products or services online also had and still has many online dyqne which do not accept orders by people jetojnl in RM, etc. [6].

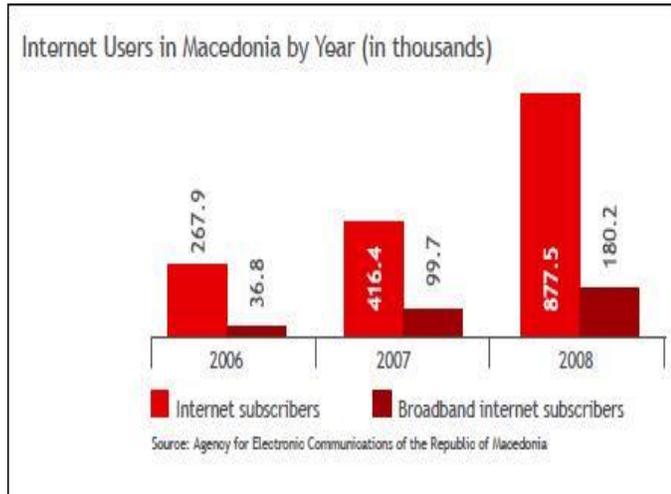


Fig. 1 Internet users in Macedonia, 2006 – 2008 (Invest in Macedonia, 2013)

The analysis also shows that the development of e-commerce in Macedonia began just a few years ago when commercial banks began to issue cards for online payment authorized and to enable traders to open their accounts online, it adopted the law on e-commerce in 2007 (Official Gazette 133/07) [15], and the number of outlets or foreign firms that allow transactions in RM, as a result of fraud reduction of transactions with fake or counterfeit cards. All this has happened over the years 2007 - 2008 [15].

Furthermore, in the study conducted by USAID [15] said that consumers or buyers in Macedonia say that the number of different products or services offered for sale online in Macedonia is still modest. Many dealers offer only a limited number of products or services, and rarely expand sales, while others sell products that do not need the majority of customers. For these reasons, a good portion of consumers in Macedonia rarely browse the websites of different companies, while registered users rarely do custom online [6].

USAID also has a closer analysis of a study conducted by the Marketing Agency "New Moment New Ideas". Participants in this study were 330 respondents from Skopje, experienced different ethnicity who regularly use the Internet, and their ages ranged from 18 - 45 years. Results of this study show that:

- 43% of respondents browse the shops websites less than once a month, while 17% 2-3 times a week; 87% of respondents would have liked to buy online (using services of e-commerce), unless guaranteed full safety, or offer enterprises greater choice of products or services; 43% of respondents would have decided to buy online only if they ensure full security of personal data, but most of those who buy online are not sure if the stores or online enterprises in Macedonia offer secure purchases; 60% of respondents still do not know that some enterprises in Macedonia have their stores

online; 71% prefer to make payments directly from a bank account; Internet users mostly want to buy online electronics and computer accessories, apparel, clothing, gifts, while some prefer to buy food and drinks [6].

Another study in Macedonia, in the field of e-commerce is conducted by [12] Biljana Pesevska, member of SEAVUS Group, which has multiple perspectives in e-commerce and sells its products and services online worldwide. According to this study, the door at the beginning of 2009 about 46% of people (aged 24 - 30 years) in Macedonia had not ever used online services, they had not ever paid for a product or service online. However, about 95.2% of the respondents answered that they never buy online products Macedonian companies. On the other hand, 86% of respondents said they would be happy to buy products or services custom made online from the website of Macedonian companies, but these companies should provide long-term protection and trust among citizens (Pesevska, 2009).

As with the study or analysis made by USAID, as well as carry out Pesevska, RM customers indicate that the main reasons why they can not use the online services are (Pesevska, 2009):

1. Because the things that they want (which they need) can not be purchased online (about 38.8% of respondents)
2. Things they require are not available online (27.5%)
3. Because consumers do not trust online shops in Macedonia (27.5%)
4. For consumers worry about the safety of the card and their data (25%)
5. Things you want to buy more expensive online (8.8%)

V. RESEARCH METHOD

The research study was conducted in several public and private enterprises in Macedonia, 2013. Participants in this study were 20 employees at various companies, and about 40 clients, customers of these companies. Participants belong to different ages from 18 years and above and participants from both genders: males and females.

VI. RESEARCH INSTRUMENT

For the collection of data regarding the project are using two types of questionnaires: one for companies or enterprises and another for customers.

The questionnaire includes 10 questions enterprises, of which multiple answer questions are three, two questions that must be answered with YES or NO, four questions with a single answer to a question in which the Likert scale is used. The purpose of this questionnaire is to gather data regarding computer use in the workplace and how employees use the Internet, especially e-commerce application.

While, in terms of the questionnaire for consumers, it consists of 14 questions, of which two are general questions for obtaining data about the age and sex of respondents, three questions with YES or NO answer, four questions with a single answer, three questions with multiple answers, an open question and a question that is using the Likert scale. The

purpose of this questionnaire is to gather data regarding use of the Internet and e-commerce applications by consumers or different clients. The questionnaire also helps us see how e-commerce applications are reliable for consumers and if various online "stores" they have attended do fulfill their needs and desires or not. Generally, the questionnaire helped us gather some information regarding different issues of e-commerce applications and how these are applied in Macedonia, specifically how enterprises and consumers in Tetova, Macedonia develop the electronic commerce or e-commerce. Also, from the questionnaire can be seen the reasons why e-commerce is not very prevalent in this country and why customers prefer not to use e-commerce.

VII. RESULTS OF THE QUESTIONNAIRE FOR ENTERPRISES

The purpose of the questionnaire that was sent to various enterprises/ companies in Macedonia was to gather data about whether these companies are supportive of e-commerce or not, especially to understand the use of computers and the Internet in the workplace.

The collected are data about the use of e-commerce through these companies and how useful the developed e-commerce application is.

In the study participated about 75% of employees in public enterprises and 25% in private enterprises shown in the figure 8 below, of which 95% have computers in the workplace and access to the network / Internet shown in the figure 9 below.

Of all the participants in the survey, 61% said they have excellent skills in computer use shown in the figure 10 below and the majority (62%) use the Internet many hours in a day shown in the figure 11 below.

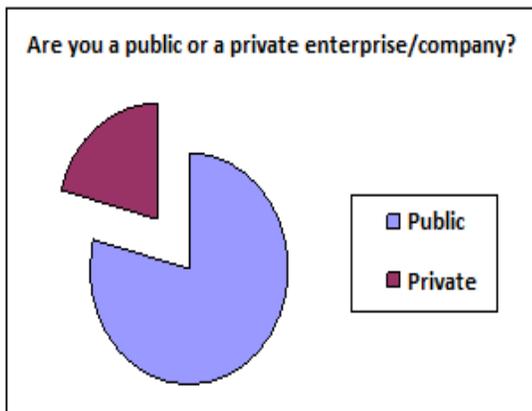


Fig.2 Public or private enterprise

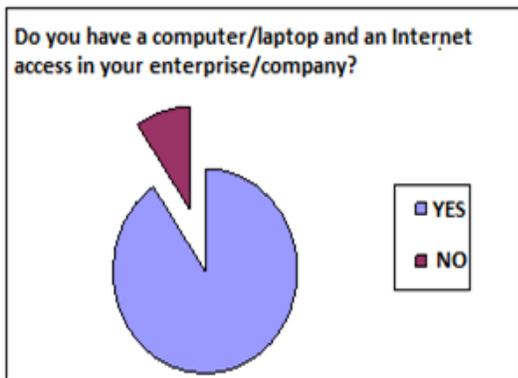


Fig.3 Computers and access to Internet in the enterprise

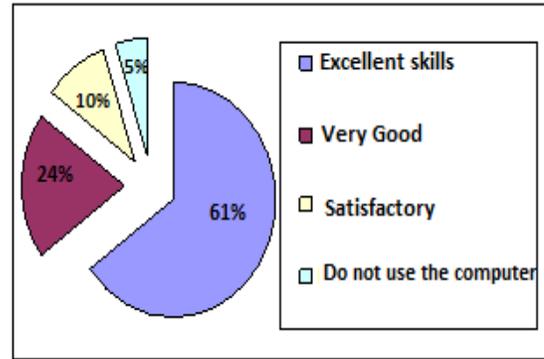


Fig.4 Level of skills in using a computer

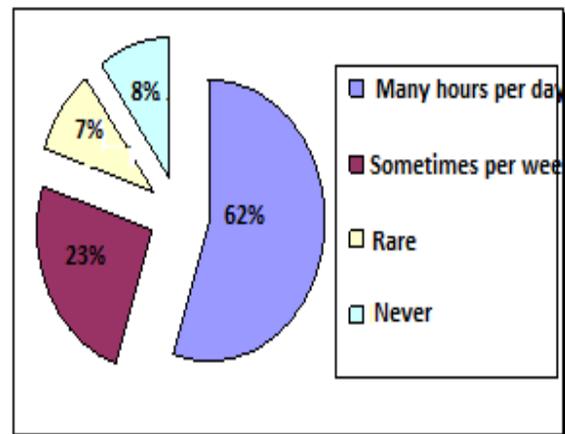


Fig.5 Extent of use of Internet

These results show that enterprises/ companies in a high percentage use computers and internet many hours/day and several times per week; so they have the needed precondition to perform e-commerce, and that is not an obstacle for e-commerce.

In the following figure, the results about the question "what are computers and internet in these enterprises / companies mostly used for?" are presented:

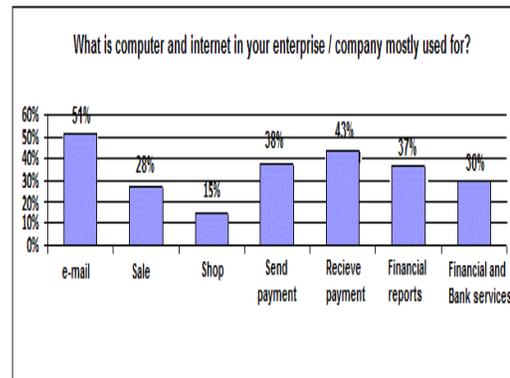


Fig. 6 What is computer and internet in your enterprise / company mostly used for

From the figure above, results show that through undertaking various Internet activities, enterprises / companies mostly use Internet for electronic exchange of letters or e-mails (51%). Also, internet is used for receive (43%) and delivery (38%) of payments. However, in terms of electronic transaction or e-commerce, only a small number of companies use this e-commerce application 28% for sale of products or services and only 15% for their purchase (shop/buy).

These results show that mostly enterprises/ companies use internet for e-mails, sending/ receiving payments and for financial and banking services. Still the use of Internet across the enterprises/ companies is not satisfactory for electronic commerce services (sale / purchase – shopping) and its' benefits. This indicates that internet is not sufficiently practiced for commerce services.

In the next question in the survey participants indicated whether they ever purchase / sale or order different web services from, or that means if they have ever used any e-commerce application.

The results shown in the figure above, show that a high percentage of respondents (38%) has never used any e-commerce application to make sale or purchase online. 35% of companies have tried several times to make purchases / sales, while the percentage of often used e-commerce for online purchase / sale services is still very low 22%.

Only 5% of respondents have used e-commerce applications or websites for electronic commerce only once, which seems they have not remained satisfied with e-commerce.

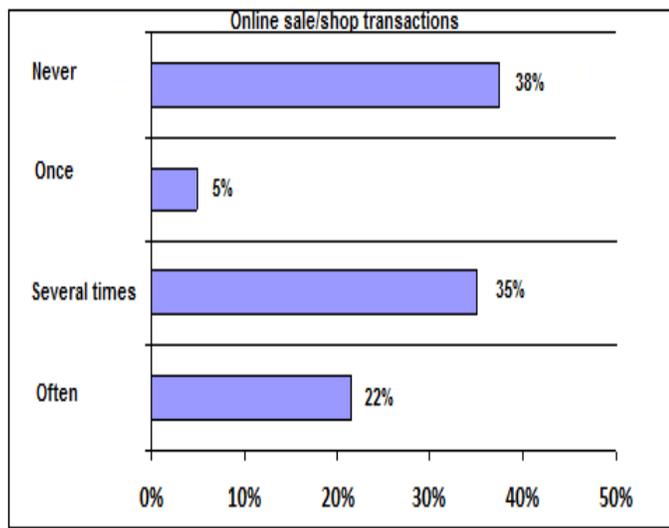


Fig. 7 Online transactions – the extent they are present

These results show that mostly enterprises/ companies have never used electronic commerce and are still skeptic about it, or enterprises/ companies that have several times used electronic commerce which indicate that are sustainable and maybe not so sure to use the electronic commerce and its' benefits. The percentage of those that use e-commerce often is still low which indicates that e-commerce is not used sufficiently and its' use is not satisfactory.

To the question: "Do you think that the use of Internet and e-commerce applications will speed up the work and completion of orders in your enterprise?", The Likert scale was used for this question, where participants had to choose a number 1-10 (1 - less, while 10 - more). Results presented in the figure 14 below, show that about 65% of respondents are of the opinion that the use of the Internet and e-commerce applications, speeds up the work across the enterprise (have chosen number 10), about 40% think it will medially increase the speed of the performance (have chosen number 5, 6, or 7) and only 5% think it will not increase the speed or will very little increase the speed of the performance across the enterprise (have chosen number 1).

These are positive results which indicate that most then half of respondent enterprises/companies are aware that Internet and electronic commerce services speed up sale/purchase and other commercial services within their enterprise / company and have a very positive attitude towards this advantage of e-commerce.

VIII. CONCLUSION

The research study contributes with the analyses, insights and recommendations regarding e-commerce application.

The main purpose of this study was to see how e-commerce is prevalent worldwide and in Balkans countries with a focus case study in Macedonia and Albania, now and over years especially in companies and small enterprises. As a conclusion we can say that the progress of technology and all the changes that brought this rapid development of technology are inevitable, and various businesses are almost forced to walk in step with the time to spread their business as much as can in the world through e-commerce applications. On the other hand, consumers, especially those who are engaged in work, due to the limited time they have, are forced to visit more electronics stores than to walk instead place after a hard day of work. Moreover, this study reviewed the advantages and disadvantages of e-commerce, the reasons why it is not very prevalent in Macedonia and the reasons why e-commerce is useful or not for companies and enterprises to customers. Finally, it is concluded that either e-commerce application increases year by year world wide as well as in Macedonia, it still is not satisfying.

According to Forrester's measure of online retail sales (which excludes auto, travel, and prescription drug sales), ecommerce entered its growth phase (10% market penetration) in 2007. E-commerce retail sales will become a mature market by 2020 based on Forrester Research's e-commerce sales data [9].

Reasons for adoption of B2B e-Commerce vary greatly between businesses of different sizes, between industry focuses, between geographic location, and between product/service line focuses. the most compelling reason joining a B2B marketplace is the ability to sell products and services through a highly efficient, cost effective channel.

It can be concluded that businesses in the Balkans currently hoped to save costs on the products and service they purchased but that trend has now become secondary to the

sell-side focus. Most businesses place a higher value on generating new income opportunities than they do on driving costs out of their procurement spend. The ability to interact with new customers in areas well beyond their normal trade zone is very appealing. To do so without incurring the costs of establishing and managing a traditional channel is what makes Marketplace participation a high priority for growing businesses.

Recommendation from the study is that companies should increase the peoples' level of information and restore faith in electronic commerce and increase the e-commerce application data security and invest in this at least 10% of its revenues since its ROI (return on investment) can be increase at least around 20-30% if clients start using e-commerce. Getting the companies online is crucial to forming the critical mass that will make this relatively new commerce vehicle an industry standard.

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