

# INTERNET USAGE AND ELECTRONIC BUSINESS DEVELOPMENT IN KOSOVA

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## **Abstract**

*Worldwide, more and more companies are using the Internet as a medium for the development of business through electronic means. Internet usage has changed the business process in many companies, whereas electronic business has been accepted as a new form for the realization of digital business transactions, without use of hard copy documents and direct contacts in the business process. While the economies of western countries have started to utilize new forms of business through the Internet, in Kosovo we have just started to talk about electronic business, and neither have the advantages of B2C business been yet discovered. New technologies and the increase of their usage, especially the Internet, have changed the traditional business manner and enabled the overcoming of time and space limitations in communications and business development, and have increased the efficiency of the business system work, creating new business forms and models, which meet the needs, desires and requests of the consumers.*

*Firstly, such a paper aims to emphasize the opportunities of Internet usage for business purposes in Kosovo, and the need to raise the awareness amongst the business community so that they accept such new model of digital business if they intend to be competitive in the market.*

**Key words:** *Internet, Electronic Business, B2B, B2C and EDI.*

## **1. Introduction**

The growth, integration and sophistication of Communication and Information technology (CIT) is changing the society and the economy, and is impacting that, on the one hand, many industries undergo changes, and on the other hand, new business forms and models are created based on the Internet, as well as the use of information systems and computer networks<sup>1</sup>. New communication and information technologies have changed the traditional business manner, by reflecting the manner of their development, and simultaneously by bringing it closer to the needs, desires and demands of the consumers.

Worldwide, more and more companies are using the Internet not only for communication and provision of information, and for the realization of business with consumers, such business which from the consumer aspect is known as electronic business model B2C (business to costumers), but also for the development of business electronically with other enterprises, by actualizing a business trend known as electronic business between two enterprises or B2B (business to business).

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<sup>1</sup> A network is a way of connecting computers so they can communicate with each other and share responsibilities like printers and other devices. Networks include the Internet, Intranet (internal network within an enterprise's firewall) Extranets, (networks using Internet/intranet technology that permit businesses to securely share information with selected suppliers, parting customers, or other businesses).

Taking into account the exponential growth of the number of Internet users, and the great impact of Internet usage in all fields of life, but also in the development of contemporaneous business, and noting that, despite the fact that an increase of the Internet users has also been noted in Kosovo during these last years, but we lack data and research on the usage of such technology in the function of business development, efforts have been made to provide data regarding the Internet usage in such paper, with special emphasis in Kosovo, its role, importance, opportunities and advantages it offers for a successful development of electronic business and increase of work efficiency of business systems.

## **2. Internet – its Background and its Usage for Business Purposes**

Internet is a general term which is used informally to describe a union of related computer networks. As a term, it was introduced for the first time in the 80's of the last century, whereas in the 90's the Internet started to be used by all. The foregoing project was ARPANet (Advanced Research Project Agency Network), which was funded by the Ministry of Defence of the USA (1968), the purpose of which was to find new ways for telecommunication system management, which would have decentralized governance and would enable distribution of information included in the computer. The USA universities joined such network in the 70's, whereas in the 80's the Academic Institutions of Europe. A turnabout on the Internet development and usage is marked in the 90's, when the Internet usage extended from the military and academic institutions to commercial usage. By the establishment of different presenting formats together with their transfer through the Internet, World Wide Web (WWW) was born and necessary preconditions for the Internet impact in the development of business activities were created [Z. Panian, 2005]. Such impact started to be noticed especially in 1993 when the enterprises started to bring to the Internet the electronic industry through electronic brochures (e-brochure).

The Internet<sup>2</sup> created a new space for communication, distribution of data and information and business development, by enabling the introduction of new information finding forms and cooperation between individuals. Although at the beginning nobody knew what such new medium offers, very soon it became one of the main communication and contemporaneous business development medium. The Internet provided the users with the opportunity to have access from around the world, and enabled the exceeding of time and space limitations for communication and business development between business entities, by impacting in the creation of an informative business environment for the enterprises and the introduction of new business forms and models, which were previously unknown.

Under the impact of the communication and information technology, the world economy is experiencing rapid technical, technological and organizational changes. Such changes are, first of all, a result of Internet expansion, which made possible that production, consumption and circulation exceed national borders and increase the dependency level between states. While previous technologies, such as electricity, the telephone technology, vehicle industry etc. required decades to reach the critical usage level, the Internet reached this only within several years. [V. Milicevic, 2002:24]. Currently, millions of people use the Internet through wireless modem equipment, through laptops or mobile telephones for everything: to purchase books, for games, to download music and films [Susanne Huttnner, 2007], but also to carry out business transactions electronically.

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<sup>2</sup> Although the Internet operates as a unique network, it is in fact a decentralized network which has no owner, but operates based on the respected standards.

Much estimation on the number of Internet users exist in the world. According to Internet World Statistics<sup>3</sup> the world Internet users estimate is 1.319.872.109 for year-end 2007, the penetration was 20.0%, based on the world population estimate of 6.606.971.659 persons. World average of Internet users was 20.0%, while in Europe penetration was 43.4%.

#### Internet Usage in Europe and Balkan countries in 2007

	Population 2007 Est.	Internet users	% Population (Penetration)	Use growth 2000-2007
Albania	3.600.523	471.200	13.1%	18.748.00%
Bosna & Hercegovian	4.552.198	950.000	20.9%	13.471.40%
Bulgaria	7.322.858	2.200.000	30.0%	411.60%
Croatia	4.493.312	1.684.600	37.5%	742.30%
Macedonia	2.055.915	392.671	19.1%	1.208.9%
Montenegro	684.736	266.000	38.8%	n/a
Serbia	10.150.265	1.400.000	13.8%	250.0%
Romania	22.276.056	7.000.000	31.4%	775.0%
Slovenia	2.009.245	1.250.600	62.2%	316.9%
Kosovo*	2.300.000		3.5%	
Europe	801.821.187	348.125.847	43.4%	231.2

Source: <http://internetworldstatistics.com/stats4.htm>

Based on the same source, the European countries and the countries of the Balkans are characterized by a rapid growth dynamics of the number of Internet users. In 2007 there were 43.4% Internet users in Europe. There is an evident distinction between the Balkan states with regard to Internet usage. Slovenia has made substantial progress in this regard with 62.2% users, followed by Montenegro (38.8%), Croatia (37.5%) and Rumania (31.4%). Albania had the lowest percentage of Internet users with 13.1%. By September 2006, statistics gathered for Serbia as a whole showed 14.3% of the people to be Internet users<sup>4</sup>.

Very little data are available on Internet access and usage in Kosovo. Since 1999 in Kosovo there has been a rapid expansion of communications technologies and the growing interest in computer and Internet usage. While, in October 1999, just 0.45% of the population in Kosovo was Internet users,<sup>5</sup> research carried out by Index Kosova in 2006 show that in Kosovo there were 6.3% computer users, but only 3.5% were Internet users.<sup>6</sup> According to UNDP "Human Development Report 2006", although the number of young people with their own computer is still low, most young people know how to use one and some 75% of young people report using the Internet<sup>7</sup>. These figures account for increased awareness on computer and Internet usage in Kosovo, but the figures remain well below the level of the countries in the Balkan region. The main Internet services providers in Kosovo, is IPKONet providing services such as Internet access, data transport and inter-office telephony<sup>8</sup>.

<sup>3</sup> Source: <http://www.internetworldstats.com/stats.htm> (downloaded: 26.03.2008)

<sup>4</sup> Internet World Statistics: <http://internetworldstatistics.com/euro/rs.htm>

<sup>5</sup> <http://www.lse.ac.uk/collections/polis/pdf/Kosovonetworkedcomms.doc>

<sup>6</sup> Source for data: <http://www.indexkosovo.com>

<sup>7</sup> This report is available at: <http://www.Kosovo.undp.org/repository/docs/hdeng.pdf/>

<sup>8</sup> Source: <http://www.ipko.net>

\* Data for Kosovo are for year 2006.

### 3. Electronic Business and its Models

Taking into consideration the increase of the number of Internet users and the many opportunities it provides, its natural to expect that, from the economic aspect, the Internet has become very important. In particular, the opportunities that the Internet provides for the development of business electronically are very important.

Today, it has become a habit to name the business development through the Internet usage electronic business. By using the expression electronic business, the aim is to show a rapid application of informatics and their products in business during these last 15 years, under which conditions the manner of business development is changing, and many traditional businesses are being transformed into new business forms and models, based on Informatics systems and the Internet. Electronic business was enabled by the Internet development as international network of computer networks and medium for communication, and the introduction of access tools to access some of its certain functions such as WWW and E-mail.

Although 1993 is considered as the year of commencement of business through networks, the real influence of the Internet in business is marked in 1996, when the famous company Amazon.com made available on the Internet the electronic book industry [U.Werner, 2002] thus making electronic business a reality. Basically, electronic business implies developed of business through computers, namely, through the use of Internet and digital technology, for the purpose of realizing business activities. It does not imply only purchase and sale, although, up to date, electronic business was mostly manifested in electronic commerce (e-commerce).

We do not yet have a general definition of electronic business. Even voluminous encyclopedia, such as the British one, defines electronic business (e-business) as electronic commerce (e-commerce).<sup>9</sup> Explanation must be sought in the fact that from the very beginning, the changes caused in the manner of organizing the work of the enterprises, as a result of the development and application of Internet Technology and computer networks, and popularity of a new way of commerce development was called electronic commerce.

Author Z. Pianic defines electronic business as a contemporaneous form of business organization, which implies intensive use of Informatics and Internet Technology in the business development [Z.Pianic, 2005:281], and we consider that this definition expresses the essence of such concept.

In the knowledge society<sup>10</sup> and under the conditions of the new economy, as a result of intensive Internet usage in business, the role and importance of information as well as of knowledge increased, and other forms of immovable property. Information became an important resource for the development of contemporaneous business and in the decision-making process. Application of Information Technology became an important success and business efficiency factor, whereas the enterprises underwent changes which may be compared with those that occurred in the era of being transformed from a pre-industrial society to an industrial one. While the industrial epoch is characterized with the

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<sup>9</sup> Although the expression electronic business was used in 1993, until 1997 the expressions electronic business (e-business) and electronic commerce (e-commerce) were used as synonyms of one another, even though there are differences between them. Electronic business presents a union of business activities, which are developed with the aid of information and communication technology, whereas electronic commerce is a narrow concept and presents only one form of electronic business, which implies the purchase and sale of goods or services through the Internet, in particular through the use of the service World Wide Web.

<sup>10</sup> The term "Knowledge Society" reflect the essence of changes, connected with the growing role of knowledge and information in life. Knowledge Society is a new post-industrial social-economical organisation of society with highly-developed information and telecommunication infrastructures providing the possibility of efficient use of intellectual resource development of civilization.

transformation of physical resources, the new economy<sup>11</sup> is characterized with the transformation of non-material resources [V. Milicevic, 2002:4] and the success of the economy in the 21<sup>st</sup> Century depends on the capability of the enterprises to fulfil their needs, desires and consumer demands.

Internet usage for business purposes paved the way to the globalization process of the economy and world markets, by enabling the economic entities to place their products where they can ensure better income [V. Milicevic, 2002] and where economic values for the company may be created. Such changes had an impact for the unification of dispersed economies on a global scale and for the creation of regional and world integration.

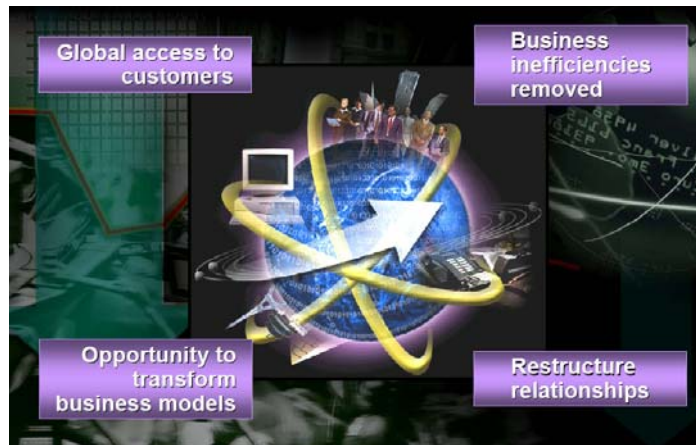
Markets of the countries are narrowing, making the integration of different countries in the world economic processes necessary for the purpose of free circulation of people, goods, ideas, capital and services. In this whole process, information technology development had a great impact, in particular the Internet expansion, which had an impact on the increase of the market globalization trend, and the transformation of business manners on how to work, how to communicate, how to live and develop business. Under such circumstances, the enterprises have found themselves in a general competition environment. Thus, for them to develop business successfully, they must become part of global business processes, whereas the letter “e” (electronic) which we hear too often in our everyday language, and we find it to be used before the words such as business, commerce, marketing, banking business etc., is mainly related with the Internet terminology and the opportunities such medium creates for the increase of business effectiveness and efficiency [T. Lucey, 2005:244], and it shows the philosophy of adaptation and adjustment to the current world trends of business development, which must be followed by the enterprises, business entities and organizations, if they want to be competitive in the field where they develop their business.

The competition between enterprises and modern companies is not realized in the field of information technology application, but in the field of needs, desires and consumer demands fulfillment to the best possible. The most important competition factors are; innovations, product and service quality, time and low prices. [V. Milicevic, 2000:12]. This shows that the traditional manner of lowering costs and increasing productivity and business efficiency are not sufficient for success in a dynamic and information technology environment.

Under such circumstances, by acting in an environment where information technology is applied everywhere, as a result of the Internet impact for the transformation of the economy, with the aim to be competitive, the enterprises are obliged to increase their competitive skills and their presence in the global market. Internet usage for business purposes enables penetration into new markets and new market segments, by ensuring the consumers global access, whereas enterprises opportunities to transform business models and increase of business efficiencies, and restructure relationships with business partners.

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<sup>11</sup> In scientific and professional literature, besides the expression new economy, expressions such as digital economy, Internet economy, economy of the 21<sup>st</sup> Century, virtual economy, web economy, economy based on information and knowledge etc. are also used. In all the cases, the intention is to show the impact of information and communication technology in the accomplishment of economic activities.



Source: <http://labs.adobe.com/technologies/digitaleditions/library/>

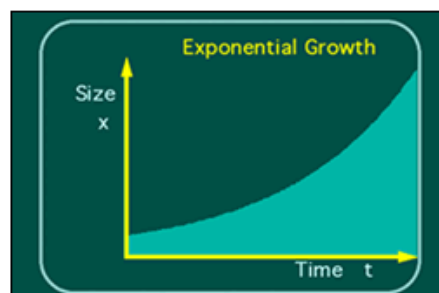
Therefore, currently, the aim of application of new information technologies and new computer choices is the link of technological opportunities with the needs, desires, and consumer demands [B. Djordjevic: 139].

Main trends for electronic business development deal with business models B2C and B2B, although other electronic business development models exist<sup>12</sup>.

The business model B2C (business-to-business) is a model oriented towards the consumers, and aims to fulfil their needs with regard to the provision of products, services or information. Model B2B (business-to-business) means business process which is developed through business entities, with the support of information technology.

Although, in general, such business model<sup>13</sup> is still in its initial phase, we may conclude that many organizations and companies use electronic business models<sup>14</sup> B2C and B2B in order to develop business transactions with consumers and other enterprises [T. Lucey, 2005:247], because now everybody has understood that we are talking about a new way of developing business and presenting new business models, which previously were not possible.

Data show an exponential growth of business transaction development based on such models, and in the future it is expected to be created mobile business models.



Source: <http://www.portocontinental.si/B2C.htm>

<sup>12</sup> See: M. Gradisar, J. Jaklic, T. Damij, P. Balok: 2005, pg. 141

<sup>13</sup> Business model is the way in which a company makes (generates) revenues (and profit).

<sup>14</sup> Examples include Dell, which sells computers and other ICT hardware and software, Staples which sells stationary and office equipment etc.

The reason why Internet is widely used today for the development of business has to do with the fact that the business entities have understood that development of business through computer networks and the use of information technology provides them with more knowledge work regarding the business, with mobile workforce, and more rapid communication. Companies<sup>15</sup> learn to compete in a new way, whereas consumers become powerful more than ever before [Carl Shapiro & Hal. R. Varian, 1998]. They use the Internet and computer networks to identify merchants, to find products and services, to compare prices, to purchase and execute payment [Thomas L. Mesenbourg].

During the last years, the number of Internet users has also increased in Kosovo by the business community, and some enterprises and organizations provide their presence online<sup>16</sup>. However, due to lack of data, we cannot exactly know the general number of enterprises which are present online and the type of services they provide. Some research conducted by Riinvest Instituti<sup>17</sup> show an increase of Internet usage by the small and medium enterprises from 22.0% (in 2002) to 30.2% (in 2004). Nonetheless, the data that only 14.9% of the small and medium enterprises which use the computer have their Web-sites is a concern. Internet is basically used (41.8%) to communicate via e-mail, for market search (36.0%) and to promote their businesses on the Web (10.1%). We do not know the level of application of such modern business model by domestic enterprises, and by all chances, the percentage of the use of such technology for the development of business activities and commerce based on the business model B2C, still remains low.

The data that in the enterprises in Kosovo during the last years, there is an indicator on the usage increase of computer and Internet, is encouraging and proves that the business community has understood that, under the contemporaneous conditions for the development of business, the creation of a commerce image of the company, the establishment of visual identity and promotion of businesses in distance is of special importance. Furthermore, some enterprises have developed their services on the Internet, which make their businesses more rapid for the consumers and of better quality. However, while the business model B2B of electronic business has become a reality in the world, in Kosovo we still lack it, and no actions are noticed for the application of such current trend for the electronic business development, although the concept of electronic government (e-government) was mentioned as an option for implementation in the future<sup>18</sup>.

Some research and serious analysis view business model B2B as a model of future electronic business development in the 21<sup>st</sup> Century. [Z. Panian, 2000:115]. Today, electronic business is developed through computers, but with further developments of mobile telephones, more and more business transactions shall be conducted through such technology. Therefore, if such business model is not recognized by domestic enterprises, they shall stagnate further compared to the competition in the regional markets and broader.

It is worthwhile to emphasize that in order to develop electronic business necessary infrastructure must be ensured<sup>19</sup>: institutional, digital, legal and staff regulation. Enterprises should use computer networks and information technology, general standards for business

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<sup>15</sup> Reasons for the increase of Internet usage for the development of contemporaneous business are also the opportunities and potential which new information technologies possess to change the organizational structure of the enterprises, by enabling small enterprises to be competitors of big enterprises in electronic markets.

<sup>16</sup> The term online is a synonym for Internet usage (to be on-line = to be on the Internet).

<sup>17</sup> [www.riinvestinstitute.org](http://www.riinvestinstitute.org)

<sup>18</sup> The e-banking concept is also in the initial phase.

<sup>19</sup> E-business infrastructure is the share of total economic infrastructure used to support business processes and conduct electronic commerce. It includes hardware, software, telecommunication networks, support services, and human capital used in electronic business and commerce.

communication, known as Electronic Data Interchange-EDI<sup>20</sup> and Extranets<sup>21</sup> as communication infrastructure which links the different organizations [Z. Pianic, 2000:115].

Electronic Data Interchange is a technology based on which business is developed electronically, and it presents the interchange of structured data based on the previous set standards for the delivery of orders and electronic data interchange. Electronic Data Interchange or transfer of standardized documents and data is carried out between the applications activated in the computers of the companies or business entities [K. Stevica & M. Danimir, 1998:103]. We are referring to a system with universally acknowledged standards by the companies which develop their business between themselves [A. Kovacic, A. Groznic & M. Ribic, 2005:68], in which case the standardized data are forwarded in a format which enables automatic processing, with no need to intervene manually [T. Lucey, 2005:245]. It is obvious that electronic data interchange is a system of the future, and presents one of the key issues for the development of business electronically and for the economy of ones country.

The first forms of electronic data interchange are found in the 70's when the banks commenced the development of the system for the electronic transfer of cash, known as Electronic Fund Transfer-EFT. Electronic Fund Transfer, as a specialized form of data electronic transfer, makes possible for the computer users of an enterprise to include data electronically to the bank computers, by providing instructions to realize the payment through the relevant bank accounts [T. Lucey, 2005: 245]. Such form of electronic funds transfer is also applied in Kosovo.

#### **4. Conclusion**

Electronic business is a reality and presents a current trend for the business development on a world scale. It is not yet applied in Kosovo, and we lack the necessary infrastructure, although the first initiatives for its implementation are noticed. Knowing that due to our past our country is behind with regard to information technology usage, and taking into account that every technological enhancement if followed with new opportunities which cause changes to the business environment of the enterprises, electronic business should be considered as an opportunity for the inclusion of the Kosovo enterprises into the current trends of business development in the region and broader, and their representation in markets and new market segments.

The market of electronic business has progressed, and this is proved by the statistics of the increase of Internet users in the world and in the region. Also, it has been testified that companies which successfully apply electronic business, ensure quality services for consumers and manage to be competitive in the market in the field in which they develop their business. Stagnation in this regard means punishment with non-sukses. Domestic companies must face such challenge of contemporaneous business and to recognize such new business model if they want to be competitive in the market. Moreover, there is another strong reason to understand that future business models shall be mobile and that the computer networks shall continue to develop and their infrastructure to refine.

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<sup>20</sup> Electronic Data Interchange (EDI) is a costly technology, and is mostly used by big enterprises. Small and medium enterprises use on-line services of Value Added Networks (VAN).

<sup>21</sup> Although extranet as a computer network links two or more local computer networks (Intranets) of enterprises belonging to the same organization, in the globalization process, due to the use of contemporaneous technology computer networks, extranets may also be developed by enterprises belonging to the same organization. Extranet is the main computer network for the implementation of the B2B business model.



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