

Information and Communication Technology (ICT) and SME in Kosovo

~ Lecturer **Afërdita Berisha-Shaqiri** (Faculty of Economics, University of Pristina)

~ Assistant Ph.D. **Mihane Berisha-Namani** (Faculty of Economics, University of Pristina)

Abstract: *The new information and communication technologies are transforming the structure and functioning of the economy having impact on the creation of a new society and economy. Rapid development of this kind of technology and the benefits of it, are forcing classic enterprises to transform their businesses into digital ones. Having into consideration the actual ICT trends in global dimension as well as necessity of transformation of the enterprises in Kosova into digital one, in this paper will be presented some aspects of ICT of the SME-s in Kosova with particular emphases on informatization as factor of rising of competitive advantages of the enterprises as well as the link of informatization with increase of turnover, productivity and modern way of business development.*

The modern trends of businesses and ICT technology are taking place in Kosova too, but not yet in adequate and sufficient way. In the near future, in these direction must be undertaken much more activities.

Keywords: Informatization of economy, Informatization of the SME-s, Information and Communication Technology (ICT).

1. Introduction

This research is based on a survey with about 600 small and medium private enterprises (SME) in Kosova, which was carried out from the Riinvest Institute (Institute for Research and Development). The

questionnaire was realized on May 2008 and includes the sample of 500 private enterprises and 100 public owned enterprises, which were privatized from Kosova Trust Agency. This research observed the development of enterprises according to their size and sector through all Kosova. The purpose of this

research is to show the influence of information technology application in the development and growth of businesses in Kosova. At this regard, we can notice a growth rate of informatization and other aspects of information technology by Kosovo SME side. The results of questionnaire show that application of this technology is accompanied with productivity growth, cost deductions and growth of competitive capacity. The research is structured as follows: Firstly, has to do with expected changes and innovations from information and communicative technology. Secondly, is continued with informatization technology analysis as a competitive capacity factor, as well as relation with other factors. We continue with link-up of informatization with revenues, productivity, and investments. At the end we submitted a summary.

2. Expected changes and innovations from information and communication technology

Informatization of economy is expressed with the rate of computer usage during business activities. And in the developed countries is result of high growth of production of electronics and huge investment on these equipments. Therefore, countries that have taken characteristics of information society are: USA, because of their multiple investments per capita in informatics equipment other developed countries. Productivity growth and cost deduction in developed countries relies on computer management of production, productivity robotize and at the computerization of administrative work¹. Information society is a new characteristic of human civilization, where universal services

¹ **Mustafa, Muhamet** (1995): *Kibernetikë dhe hyrje në informatikë*, Prishtinë, fq. 254.

and equal access in information together with systems and developed infrastructure of electronic communications contributes to sustainable social-economic development, poverty reduction, and better standard life condition.²

In Kosova, in new economy conditions³, globalization process has stimulated connection between different companies, increasing of usage of information technology, and cooperation in business with business, with partners and customer.⁴

3. Informatization as a competitive factor and his relation with other factors

Under pressure of growth of competition SME's are forced to fight for new markets, new products and new distribution canals. These environment movements can be faced only by those businesses that have support of quality information systems. This support should equip businesses with proper software for resource governance and quality decision making. Most of the problems rise due to lack of knowledge to manage available resources.

According with research realized from the Riinvest Institute⁵ (2008), over 70% of

² Ministria e transportit dhe telekomunikacionit (2006): *Strategjia nacionale për shoqëri të informacionit*, Prishtinë.

³ In accordance with Don Tapscott new economy or global economy is nothing more than trade with goods, services, work capital and information. See: Grup autorësh (1998): *Tema të zgjedhura nga informatika*. Prishtinë. 1998

⁴ Grup autorësh (1998): *Tema të zgjedhura nga informatika*. Chapter: Don Tapscot: *The digital economy*

⁵ Riinvest Institute carries out researches almost every year..

business are equipped with computers, which makes us understand that Kosovar business has understood the importance of information technology usage in business processes and the changes that this powerful equipment usage can brought to them. Research also has shown that except SME rate growth which possesses computers from year to year, it has also increased number of computer per enterprise. In 2007 (6.7 computers) comparing with 2003 (4.8 computers), growth is almost 40%. While, sector that includes the highest percent of technology is trade (40%), followed by service sector (34.5%), and manufacturing (25.5%).

Initially, small and medium enterprises used computer just for financial evidence and text processor. Today, computer usage by SME is changing in quality way. Especially, positive dynamic of computer usage is noticed in the last three years in the market and planning research (14, 2%). Furthermore, positive movements of computer usage have been shown by production leadership (10.4%) and quality control (6.6%).

Table 1: Computer usage by SME in Kosova

	2005 (%)	2007 (%)
Financial evidence	41.6	33.8
Planning	13.7	14.2
Text processing	14.5	16.0
Market research	14.2	14.2
Production leadership	6.8	10.4
Quality control	5.0	6.6
For something else	4.3	4.6
Total	100.0	100.0

Source: SME Research, Riinvest Institute, 2008

Computers network usage⁶, in business processes has enabled effective communication in 24 hours per day, 7 days per week, space and time restriction in communication, and transferring of consummators request from one time zone to another one. Computer networks create communication facilities and give the capability small enterprises to cooperate in order to achieve success in economy. Therefore, we should not be surprised why today the whole world is connected with Internet⁷, which is the most powerful media of communication. Mentioned research show us that over 96% of SME in Kosova that have computers are connected with Internet. Current worldwide movements show us that usage of communication and information technology will be an important factor for competitive growth of SME in global and regional markets. Some actual worldwide trends are noticed also at SME in Kosova, which mark growth of computer equipment from year to year. Positive trends were marked in 2005 and 2006. In year 2007 a higher growth is observed comparing with prior years (2005 and 2006).

Informatization of economy and business processes are connected with Internet usage and exponential growth of its users. The speed of computer network technology usage and Internet went beyond usage of other technologies and mediums such

⁶ With computer network, we understand the connection of two or more computers with each other in order to communicate, exchange information and use common equipments such as printer and other equipments.

⁷ Internet has come across in '80 and '90 of XX century, but the origin of it can be found in global computer networks, which were shown in the beginning of '60 of XX century (accurately in 1968). See: Berisha-Namani, Mihane (2004): Informatika e biznesit-Ligjërata, fq. 156.

Table 2: Informatization and SME revenues

	Revenues	Number of enterprises	Average revenue
Enterprises which have computers	16,667,500.0	341	48,878.3
Enterprises which do not have computers	725,000.0	145	5,000.0
Total	17,392,500.0	486	35,787.0

Source: SME Research, Riinvest Institute, 2008

as phone technology, automobile technology, etc. Kosovar business is continually remarking growth of usage of this technology for business purposes. This growth from the year 2005 (68.6% of surveyed enterprises) in 2007 (76.2% of enterprises) is 11%. SME's use Internet to cooperate with business partners and consummators, and for promotion of their business activities in distance, with clients and suppliers finding, as well as for product launching in markets. We may say that in Kosova, information and communication technology (ICT) is still not used enough for these purposes, so in the near future in this direction much more activities need to be taken.

Having into consideration the fast growth of ICT development and their application, adaptation of Kosovar businesses in global business environment is a hard challenge, especially if we take into account that Kosovar market has limited size. Therefore, restructuring can be done only through development, which intends to substitute import with local products and stimulate export. The importance of informatization SME's in Kosova is illustrated with the fact that in 2007 the export in average was higher for at enterprises which have been informatized than at those that were not.

SME for their businesses should use as a primary base information systems, while this system is seen as compounded of people, equipments, and procedures in order to gather, coordinate, analyze, and distribute

necessary information at appropriate time. Information systems can gather, supply, and report data of different sources in order to assure all needed information for decision makers in all managerial levels⁸.

One of the factors with which economical development of one country is measured is the intensity of information technology usage, which are finding fast usage due to many priorities such as cost deduction, faster communication, faster realization of products and services, transport cost deduction, effective and rational promotion, etc. It is important to emphasize that Kosovar enterprises are in initial phase of electronic business transaction development through Internet. Over 46% of SME develop business transaction with each other (business-to-business B2B), whereas over 35% of them develop business transaction with client (business-to-costumers B2C).

4. Informatization and SME revenues

Even if private enterprises hesitate to show the level of their revenues, the survey carried out from Riinvest Institute, offered us the answer opportunity via intervals. The results clearly show us that enterprises which

⁸ Hicks, O. James (1993): *Management Information System*, 3rd Edition, Virginia Polytechnic Institute and State University, fq.25

Table 3: Informatization and revenues

	Revenues	Number of employees	Average for employee
Enterprises which have computers	16,667,500.0	8370	1,979.4
Enterprises which do not have computers	725,000.0	495	1,464.6
Total	17,392,500.0	8865	1,961.9

Source: SME Research, Riinvest Institute, 2008

have computers have distinctly higher revenues (48,878 €), than those that do not have computers (5,000 €). This comes due to fact that informatized enterprises have a lot of informatized activities (table 2).

5. Informatization, productivity and investments

Employee work productivity is connected with employee's professional preparing and with the usage of information technology (table 3). Effective usage of information technology depends highly from the level of employee's education in enterprises and from the age of the employees. Therefore, taking decisions in higher levels of management based on information technology is a critical point for the SME existence and development.

Today, new enterprises model request new forms and structures, which assure flexibility and equip them with a new educated management. As a result, economical value in SME is created from the usage of new technology and teamwork, where the majority part of the created value comes from non-material factors: information and knowledge. The connection between business and information technology caused huge changes in the structure of business enterprises, and this change firstly is result of changing way of leadership and organization, which assures

new views comparing to classic and old enterprises.

The results of this technology usage are seen in the production cycle, which is shortened more and more for production, while for some services within a day. We may say that information technology and economy based on knowledge are producing new products and services that until now were unknown, while they are creating new way of doing business, known as electronic business⁹.

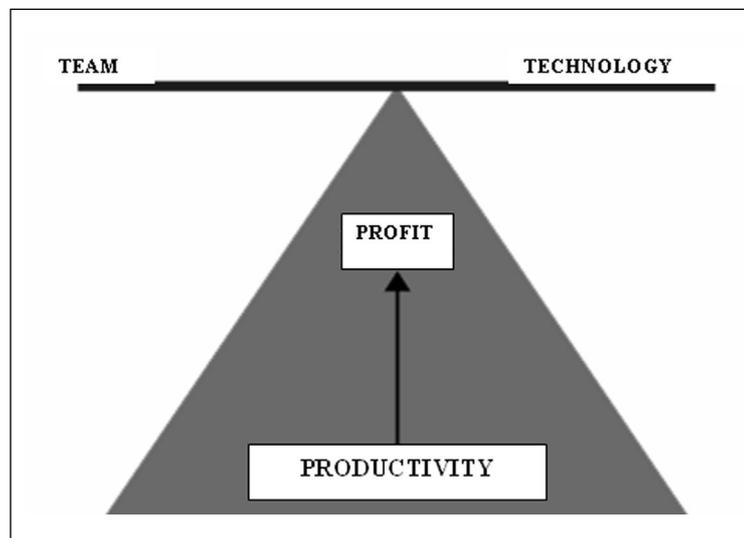
This way is created a new economy structure and network economy intelligence, which has become new reality. All of these technologies made possible that SME in Kosova are also developing, transforming and raise their productivity.

In order to achieve a higher productivity, which results in higher profit, it is more than needed to balance an educated team with new updated technology¹⁰. The research shows us that we cannot have success if we combine new technology with uneducated (illiterate) structure of employees, or educated structure of employees with old technology.

⁹ The most known forms of electronic business are electronic market, electronic marketing, electronic banking transactions, electronic prosecutor, electronic government, etc.

¹⁰ Hoxha, Naim: Projektimi i sistemeve informatike, Ligjërata e autorizuar, viti shkollor 2005/2006.

Figure 1: Informatization and productivity



Source: Naim Hoxha Projektimi i sistemeve informatike, Lectures, 2005/2006

Regarding the connections of SME informatization with level of made investments, the research show that over 76% of SME in Kosova made investments in 2007, in compare with less than 24% of enterprises which made investments in 2007, but were not informatized.

6. Summary

Informatization of Kosovar enterprises show positive movements of development since 2005 to year 2007 and this is expressed in trade enterprises. The research demonstrates that because of SME informatization in Kosova the productivity has grown up, costs decreased, and product life cycle was shortened. In addition, tendency of growth is positive regarding computer usage not only for financial evidence and for text processing, but also for market researching and planning, for production leadership and finally

for quality control. Enterprises which have computers have higher revenues (48,878 €), than those that do not have computers and we cannot achieve success if we combine new technology with un-educated structure of employees, who do not know how to use the potential of ICT technology. Even we have growth of this technology usage in SME in Kosova, it is still not used in satisfactory level.

The research also shows us that informatized enterprises have distinctly higher level of sale and exports, comparing to them that are not informatized. We may conclude that fast changes and innovations of this technology create economical growth and competition in global market. Although, SME in Kosova have informatized businesses in considerable way, this technology is still not used enough for business purpose, so in the near future in this direction much more activities must be done if we want to be competitive in the market.

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