

The Role of Information Technology in Small and Medium Sized Enterprises in Kosova

Dr. Mihane Berisha-Namani¹

Abstract

Information technology had a great impact in all aspects of life and the global economy is currently undergoing fundamental transformation. Information technology has very real impact in most of industries and in all aspects of economy, while businesses and enterprises continue to undergo considerable changes. Usage of these technologies is revolutionizing the rules of business, resulting in structural transformation of enterprises. Modern businesses are not possible without help of information technology, which is having a significant impact on the operations of Small and Medium Sized Enterprises (SME) and it is claimed to be essential for the survival and growth of economies in general.

SME is drawing attention in developed and developing countries as well as in transition countries. It is generally recognized that SME play a key role in the revitalization and development of national economy in many countries and particular in the context of Kosova. It is encouraging the development of SME and the role that SME sector can play in promoting economic and social development by creating opportunities for employment. These components are described and discussed while more research and studies on the adoption of information technology in SME in Kosova are proposed as necessary.

Key words: Information technology, Small and Medium Sized Enterprises (SME), Business, Economy.

1. Introduction

Small and Medium Sized Enterprises (SME) play an important role in economic development of a country. Several theories elaborate on connection between information technology, economic development and social change. Almost all agree on the importance of information and communication technology adoption in SME, while the importance of SME as engines to economic growth is well acknowledged worldwide. Information technology, particularly the Internet is having a significant impact on the operations of SME and it is claimed to be essential for the survival and growth of nations economies in general and SME in particular. Especially information technology are

¹) Mihane Berisha-Namani, Ph.D., Assistant Professor, Faculty of Economics, University of Pristina, St. Agim Ramadani, no number, 10000 Pristina, Kosova, Mihane_Berisha@yahoo.com

changing the economy and traditional business become more dependent on new technologies. Compared with traditional business new technologies facilitate an increased interactivity, flexibility, cheap business transactions as well as improve interconnection with business partners and costumers. Information technology is having a significant impact in sector of Small and Medium Sized Enterprises (SME), especially where industries are in decline or when unemployment levels are high. In Kosovo, SME development is drawing attention too and modern trends of businesses and information technology usage are taking place.

This paper observed the impact of new technologies in SME. The focus is on exploring the opportunities that new technologies present to SME. While, the purpose of the paper was to show the status of the SME in Kosovo, with regard to usage of information technology for competitive advetages in both local and international markets. Firstly, has to do with the concept of SME and information access and use in SME. Secondly, is continued with the description of SME in Kosova and ICT infrastructure. In addition, highlights usage of this technologies for business purposes as a matter of urgency.

2. Concept of SME and information access and use in SME

New technologies had a great impact on all aspects of life and the global society and economy is undergoing a fundamental transformation². Society is changing and is becoming “knowledge society³” more dependent on new technologies, with a new economy or “knowledge economy”, where knowledge and information are essential and the key factor of production and where ideas, processes, knowledge and information are growing share of trade in the knowledge economy.

In the information society environment successful enterprises produce high technology goods and services and transform human effort materials and other economic resources into product and services that meet customers need. In such society, in order to be successful, SME would need high quality information and must always provide superior value, better than competitors, when it comes to quality, price and services [Pollard, 2006].

SME are often seen as vital for the growth and innovation of economies and the long-term of economic development of the countries depends on the promotion of SME sector [Ramsey, 2003:253]. Behind this lies an common recognition that SME play an important and a key role in revitalization and development of national economy in many countries [Pollard, 2006], by providing various goods and services, forming a structure of division of labour and developing regional economies and communities [Kaibori, 2001]. Furthermore, SME are considered key agents of social and economic growth and are

²) In the last part of the twentieth century, the Internet and mobile phones not only changed the face of communications, but also gave the impetus to economic growth.

³) Knowledge society is a society that creates, shares and uses knowledge for the prosperity and well being of its people.

increasingly becoming the most vital part of the economy since they play a key role in fostering growth, creating jobs and reducing poverty.

There is no acknowledged universal definition of SME. For our purpose we restricted our attention to the common definition of the Organisation for Economic Cooperation and Development⁴ [OECD, 2002], which is based on employment figures. The widely accepted definition points to Small Sized Enterprises with between 1 to 49 employees, while Medium Sized Enterprises are firms with between 50 to 100 employees [Mustafa & Gashi, 2006]. According to this definition, Small Sized Enterprises are defined as firms that are registered and have less than 50 employees. On the other hand, Medium Sized Enterprises are defined as registered firms with less than 100 employees. In financial terms, an SME would have less than 15 millions US \$ a revenue [Gungen, 2003].

Globalization of world economy and technological developments in the two decades of twentieth century have transformed the majority of wealth creating work from physically based to knowledge based and has greatly enhanced the values of information to business organisation by offering new business opportunities. While, for the last two hundred years, economics has recognised only two factors of production: labour and capital, this is now changing. Information and knowledge are replacing capital and energy as the primary wealth creating assets. Information has become a critical resource, a priceless product and basic input to progress and development. Information has become synonymous with power. Therefore, accurate, rapid and relevant information are considered to be essential for SME [Combs, 1995:67].

SME would need as well as effective information systems⁵ to support and to deliver information to the different users. Such information systems would include those technology that support decision making, provide effective interface between users and computer technology and provide information for the managers on the day-to-day operations of the enterprises. Information is needed for various purposes and serve as an invaluable commodity or product. Information is very important aspect of decision making in all levels of management in enterprises [Hicks,1993:648], especially in competitive business environment and managers utilize information as a resource to plan, organize, staff administer and control activities in ways that achieve the enterprises objectives. The ability of SME's to realize their goals depends on how well the organisation acquires, interprets, synthesises, evaluate and understands information and how well its information channels supports organisational processes.

Combs [1995:124] noted that information technology is one of the most important factors of any production activity and technological changes can have profound consequences. These technology will continue to enable the growth of global work, where SME operate across national boundaries. Today, new technologies, especially Internet technology are changing the global flows of information, trade and investment and the competitive

⁴) OECD noted that SME are fundamental for the economic growth in member countries and constitute over 95% of enterprises. (See: OECD, 2002)

⁵) Information system is a system compounded of people, equipment and procedures in order to gather, coordinate, analyze and distribute necessary information.

advantage of industries, services and regions. These changes are requiring from all enterprises, no matter of their size to invest in the adoption of new technology. The ability of SME to survive in an increasingly competitive and global environment is largely influenced upon their capacity to access information as a resource and usage of new technologies. Greater use of these technologies is often associated with improved availability of information, quality of work, effectiveness and efficiency in accomplishing tasks.

This trends will develop rapidly over next years and capabilities will steadily increase accompanied by greater easy of use [16]. Information technology will continue to be first importance in the development of the countries, economies and enterprises. Taking in to the consideration the full potential of these technologies, they may also play an important role in the future.

3. SME in Kosova and it infrastructure

In last part of the twentieth centry and beginning of twentyfirst centry, the Internet and mobile phones not only changed the face of communications, but also gave the impetus to economic growth. Information technology is playing a critical role in contemporary society. It has transformed the whole world into a global village with a global economy. Information technology which includes information technology and communication (ICT)⁶, influences organidations in a variety of ways.

Lucey [2005:298] pointed out that there is some evidence that technology has a significant effect on the structure of organisation. Similarly, Wilkinson [1982:247] stated that computer definitely affect organisational structure and managerial decision making and allow firms more flexibility in the choise of feasible organisational structure [Wilkinson, 1982:246]. Today, most people realize that computers have had and will continue to have a significant impact on their lives [Hicks, 1993:649]. Information technology enables peoples and enterprises to capture economic opportunities and to improve business processes by increasing process efficiency and productivity and opportunities for employment [12], and can countribute to income generation and poverty reduction.

Current worldwide movements show us that usage of information technology will be an important factor for competitive growth of SME in global and regional markets. Growth of competitive pressure force SME to fight for new markets, new products and new distribution channales. These environment movements can be faced just from those businesses that have quality information systems support. The only competitive advantages companies and SME enjoy are their process of innovation and availability to derive value from information as resource [17].

⁶) Information technology is also known as Information and Communication Technology (ICT) and is defined as the technology required for information process. In particular, the use of computers to perform calculations, convert, store, process, manipulate the text, communicate and retrieve information.

As noted earlier, information technology is the technology that is used to store, manipulate, distribute or create information. Furthermore, it is claimed that through the use of information technology, SMEs can gain from developing capabilities for managing, information intensive resources, enjoy reduced transaction costs, develop capacity for information gathering and dissemination of international scale and gain access to rapid flow of information [Minton, 2003]. New business models and market configurations enabled by information technology, including business process outsourcing, provide SMEs with access to new market and new sources of competitive advantages [12].

Some orientation may be noticed also at SME in Kosova and it is encouraging the development of SME sector as a way to diversify Kosova economy which has market a considerable progres. There are 55.000 registred businesses in Kosova . The percentage that SME account for in the economy of Kosova is around 98% and SME's have potential to play a major role in economic growth. Enterprise structure is mainly dominated by micro enterprises. SME present 65% of the agregate employment and the countribution of SME sector in GDP is 80% [19].

Information technology usage in SMEs in Kosova is finding fast usage due to many priorities such as cost deduction, effective and rational promotion, faster communication, faster realization of products and services etc. In particular, information technology growth and development are being driven by the private sector and private businesses. The importance of information technology adoption in SMEs in Kosova is illustrated with the fact that export average in 2007 is higher at SMEs that have adopted information technology than at those that do not use these tecnologies [Riinvest, 2008]. As a result of information technology usage the productivity of SME's has grown, cost decreased and product life cycle shortened.

Furthermore, in Kosova were marked growing positive tendency of computer usage for market researching and planning, for production leadership and for quality control. Adoption of information technology in Kosova business in generall is a challenge, especially if we take into account that Kosovar market has limited size [Riinvest, 2008].

The importance attached to the information technology adoption in SME's in the Kosovo economy is also reflected in the increasing number of studies that are being undertaken on the sector. However, a few of those studies have undertaken the assessment of the adoptional of information technology in the SME and have not addressed issues relating to the enhancement of the SME competitiveness in the regional and international market. In particular, the informal sector⁷ which is huge due to the large number of employees it absorbed as a consequence of inadequate jobs and opportunities in the formal sector, is under researched and widely generalized.

For this reason, the government of Kosova and donor agencies have increasingly been emphasising the key role that the SME sector can play in pomoting economic and social

⁷) Kosova like many countries in transition faces the challenges of poverty and high unemployment which is estimated at between 40% to 55% on the working age population.

development and is encouraging businesses in general and SME sector in particular to invest in information technology so as to achieve economic development. The government recognized that as a result of information technology usage, much of the innovative activity in the new economy appears to come from small firms and even small firms find it increasingly easy to produce and deliver information anywhere in the world, and gain access to new markets and new opportunities. In addition, computers significantly impact the ways that a firm organizes, makes decisions and utilize its accounting functions [Wilkinson, 1993:246]. Information technology usage support SME's to gain competitive advantage by creating value and competing with large organisations.

The government has realized that it is not sensible to depend on social enterprises for long term economic development of country and privatisation process is going on. The commitment of the government is reflected in its steadily increasing investment in information technology. Increasingly, World Bank⁸ is supporting and encouraging SME sector in Kosova. This is influenced by recognition that for Kosova to achieve sustainable economic development, efforts must focus on the entrepreneurial base.

A study realized from Riinvest Institute ensure that over 70% of SME's in Kosova are equipped with computers and mark growth from year to year (22% in 2002 to 30.2% in 2004). Also, positive movement were marked in 2005 and 2006. Especially in year 2007 a higher growth is observed comparing with prior years (2005 and 2006). This growth from the year 2005 (68.5% of surveyed enterprises) in 2007 (76.2% of enterprises) is 11% [Riinvest, 2008].

Beside this research also has shown that except SME's rate growth which possesses computers from year to year, it has also increased number of computer per enterprises (6.7 computers in 2007 comparing with 4.8 computers in 2003) for almost 40% (Riinvest, 2008). Sector that includes the highest percent of technology is trade with 40%, followed by service sector with 34.5% and manufacturing with 25.5%.

While, initially SME's in Kosova used computers just for financial evidence and text processing. Today, computer usage by SME is changing in quality way. Mentioned above study show us that over 96% of SME's that have computers are connected with Internet⁹ and even if enterprises hesitate to show the level of their revenues, the research carried out from Riinvest Institute offers us the answer opportunity. The results clearly show us that enterprises which possess computer have distinctly higher revenues (48.878 €), than those that do not possess computer (5.000 €) [Riinvest, 2008].

In an age of communications in which we live, much or most of the total volume of communications is transmitted electronically [Nash, 1998: 257], so developing of this kind of technology are forcing enterprises to transform their business into digital ones. Countries that have well developed information technology infrastructure have most of

⁸) World Bank Report: Poverty in Kosovo (www.worldbank.org)

⁹) Computer network create communication facilities and give the capability SMEs to cooperate in order to achieve success in knowledge economy.

their SMEs increasingly going online¹⁰. In Kosova despite the improvement of information technology infrastructure in SME's and although information technology is perceived as critical in creating employment and increasing countries competitiveness internationally and nationally, compared to other countries in the region, we lag behind. For example, while e-business and e-commerce has become a reality and turnovers world-wide and in some countries in the region Kosovar enterprises are in initial phase of e-business transaction development through the Internet.

5. Conclusion

It is encouraging the development of SME sector as a way to diversify Kosova economy Information technology usage in SMEs in Kosova is finding fast usage too. But, despite the improvement of information technology infrastructure in SME's and although information technology is perceived as critical in creating employment and job opportunities, compared to other countries in the region, they lag behind their counterparts. Consequently, their level of information technology usage remained low. This situation was largely attributed to many factors such as: the lack of access to credit, inadequate information make infomed decision, the lack of expertise, digital illiteracy, high cost of access to information technology infrastructure and high taxation.

Without using of information technology today, SME will have serious and fatal consequences in the future and will imply the risk of lagging behind economically with all the implications that this entails. In particular, if we take in consideration that information technology presents a critical factor of development of economy in general and SME's in particular.

This technology should be used by SME's in Kosovo as a powerful tool to obtain competitive advantages, produce high added value products and processes and develop competitive strategies within a business, regionally and internationally, implement programmes to promote sustainable regional integration and create conducive environment that would stimulate the SME's competitiveness in the regional environment.

The government should be involved in providing environment to support and help SME's to better use information technology and increase the countries competitiveness, productivity and growth through investment in information technology, e-business and new business models.

6. References

1. Hicks, O.J. (1993): *Management information systems*, 3rd Edition, USA
2. Kaibori, Sh.(2001): *Development of Small and Medium Sized Enterprises and Policy Support-Action "Guidelines for tomorrow for policy makers in transition countries*, Economic and Social Research Institute.

¹⁰) For example in 2003, Canada was the worlds most connected country and a global lider in the digital economy and had approximately 85% of SMEs and large enterprises using the Internet for momunication purposes (Source: <http://strategies.ic.gc.ca/>)

3. Lucey, T. (2005): *Management information systems*, 9th Edition, London
4. Mustafa, M. & Gashi, P. (2006): *Biznesi i vogël dhe i mesëm*, Prishtinë, Kosovë
5. Nash, J.F. (1988): *Accounting information systems*, 2nd Edition, PWS, Kent Publishing Company, Boston
6. Pollard, D. (2006): *Promoting Learning Transfer. Developing SME Marketing Knowledge in the Dnipropetrovsk Oblast*, Ukraine.
7. Ramsey, E.Ibbotson, P. Bell, J. & Gray, B. *E-oppotunities of service sector SMEs*, Journal of Small Business and Enterprise Development, 10(3)
8. Riinvest Institute (2008): *Zhvillimi dhe kushtet e afarizmit të NVM në Kosovë*, Projekt Hulumtues, Prishtinë, Kosovë
9. Wilkinson, J.W. (1982): *Accounting and information systems*, John Wiley and Sons, INC, New York, USA
- [10] Gungen, T. (2003) E-finance for SMEs in Turkey. [http://r0.unctad.org/ecommerce/event_docs/xmefinoct2001/gungen.pdf]
- [11] <http://www.kosovo.undp.org>
- [12] <http://www.opt-init.org/framework/pages/2.3.2.html>] May 2008
- [13] <http://www.informaworld.com/smpp/content~content=a713698787>] november 2007
- [14]http://www.isoc.org/inet2000/cdproceedings/7d/7d_2.htm#s31] may 2008
- [15] http://www.crec.mcombs.utexas.edu/works/articles/internet_economy.pdf]
- [16] [http://www.med.gov.nz/templates/page_10117.asap#%20knowledge%20society] october 2008.
- [17] [<http://www.enterweb.org/know.htm>] october 2008.
- [18] [<http://strategies.ic.gc.ca/>]
- [19] World Bank Report: *Poverty in Kosovo* (<http://web.worldbank.org>)
- [20] Enti i statistikave të Kosovës (2005): *Statistikat e tregut të punes* [http://www.ks-gov.net/EKS/eks/pdf/shqip/sociale/stat_treg_punes_05.pdf/]
- [21] UNDP (2007): *Development and Transition*, Kosovo Edition, Private Sector Development, 3 Kos. 2007. Abdixhiku, L: *Barriers to SME Development in Kosova*. Available at: [http://www.kosovo.undp.org/repository/docs/Dev_transit_eng.pdf]
- [13] Kiseri, G.: *Development of Private Sector in Kosovo - The need for a strategy* [http://www.kosovo.undp.org/repository/docs/Dev_transit_eng.pdf] 12.01.2009
- [22] Minton, S. (2003) *Nordic Nations still top information index. The World Paper* . Available at:[<http://www.worldpaper.com/2003/oct02/isi1.htm>] accessed August 2004.
- OECD 2000. OECD study highlights role of small and medium enterprises in job creation. Available at: [<http://www1.oecd.org/media/publish/pb00-11a.htm>]
- [23]OECD 2002. Measuring the informal economy. [http://www.oecd.org/document/5/0,2340,en_2649_34449_2765701_1_1_1_1.00.htm]
- [23] <http://www.riinvestinstitute.org>