

BUSINESS INITIATIVE FOR CREATING COMPETITIVE ADVANTAGE THROUGH INFORMATION TECHNOLOGY

Afërdita BERISHA-SHAQIRI*

Abstract

To achieve economic and social development, as well as high standards of living should be paid special attention to the development of information society and spreading the use of information technology.

Countries around the world are moving from industrial economy to knowledge economy in which economic growth of a country is dependent on the ability to create, accumulate and disseminate knowledge. Computer and Internet are the catalyst for economic growth of knowledge by enabling people to codify knowledge in a digital form easily transmitted anywhere in the world.

Increasing the pressure of competition forces businesses to fight for new research, new products and new markets, these businesses can only afford having support from a quality information system. This support should enable higher quality solution for the governance of resources that businesses possess.

Contemporary Management is increasingly dependent on information technology, because without a perfect technology and available data, the software may not have adequate information to be managers in making decisions.

Keywords: *competitive advantage, management information system, business, database, competitive surroundings, decisions etc.*

1. Introduction

Information system is a dynamic field monitors changes, perhaps the most important driving force that is driven by the development of computers, is a system that works and has to do with the information, by Mustafa Muhamet (1995).

Through better organization of the MIS come by qualitative decision making at all levels of management from the high level to the lowest. As computer technology over the organization better and optimal database offers great opportunities to be able to serve for a quick and qualitative manipulation to raise the quality of preparation of decisions. So rapid development of information technology coupled with the development of telecommunications technology has streamline every area of life and human activity.

Current processes of business development in global scale clearly show that sustainable economic development in the time in which we live is derived from their ability to be innovative in business processes to gain competitive edge, to be involved in the management and Conditions success and prosperity in a much longer period of time. Computers are being used in all areas, it is especially expressed mostly in business. Those who learn to use this powerful tool to gain competitive advantage and provide information that you needed them for careers, successful business, regardless of the profit which field are oriented in finance, marketing, management or in any other field business, and for those who do not absorb this powerful tool will be far from the future.

The business itself changes all the time and with his growth and development of information needs to

ask businesses will vary. At the same time computing systems have a need for support, growth, change and development.

BUSINESS INITIATIVE FOR CREATING COMPETITIVE ADVANTAGE THROUGH INFORMATION TECHNOLOGY

Many businesses began to realize that the information system is a tool with which to create advantage against competition. They used the information system to support management for planning and control to make operations more effective and efficient. However expression system using information as a competitive advantage is new, so the rapid development of information are managers creates opportunities to support their business decisions on a rational action that ensures business. This development has made the need to align business activities in relation to internal competition and external. The rapid development and competitive pressure compels businesses to fight for new markets, new products and new channels of distribution.

New technologies and their use allows to overcome borders between countries by promoting business cooperation between companies in different countries, because computer networks provide a 24 hour service by accepting and transferring customer requirements from one place to another with a very high speed. These nets at the same time enable enterprises to cooperate to achieve economy of volume. Many authors, especially in managerial literature agree that knowledge and technology are the main business resource and the basis for achieving

* Assistant Professor, PhD, Department of Management & Informatics, Faculty of Economics, University of Prishtina "Hasan Prishtina", Kosova. St. Agim Ramadani, no number, 10000 Prishtina, Kosova. Correspondence concerning this article should be addressed to Afërdita Berisha-Shaqiri, Universiteti i Prishtinës "Hasan Prishtina", Fakulteti Ekonomik, Rr. "Agim Ramadani" p.n. 10 000 Prishtinë, Kosovo (e-mail: aferdita44@hotmail.com).

competitive advantage for an enterprise (Dierkes et al, (2001); wedge, 2002, Strict, 2004). In the developed world companies that have the knowledge base are leaders in the industry.

It would not be exaggeration to say that the importance and role of ICT in economic growth and productivity growth trend in the first decade of the 21st century, they observed may suggest that ICT will be the navigator of economic growth in the the near future.

Economic growth means increasing the ability of goods, products and services of a country (Miles, 2001). The use of ICT also facilitates the production of goods in a short time with the help of computerized information systems, and services are fast and effective according to Miles (2001).

Today, the new model of the enterprise requires a new shape and form of business organization which made the economic value created in the business not only by the use of new technology but also of teamwork, where most of the value created stems immaterial factors: information and knowledge.

Computerization of the economy expressed by the level of use of computers in business activities and financial processes banking, marketing, etc., through the use of internet, web-pages possession, etc. Increased productivity and reduced costs in developed countries rely on computer manufacturing leadership in production robotization and computerization of administrative work (Muhamet Mustafa, 1995).

Therefore, with the right research and various scientists put out that ICT will become the assistant principal business activities in the modern world (Tapscoot we Casto, 1993; Mandel, 1994; Gill, 1996).

Information Technology is used as a strategic tool for companies to enhance their competitive advantages in a time when insecurity is growing (WR King, V. Grove, and EH Hufnagel, 1989). The idea that information technology can contribute to the optimization of enterprise resources, strengthen, enable and enhance business performance, is accepted and supported by many empirical studies (V. Seth and W.R. King, 1994),(Chan, S.L. Huff, D.W. Barclay, 1997), (A.M. Croteau and F. Bergeron,2001).

Advances in information technology are vital components of an honor for business success. ICT constantly being studied and used for more business is helping to expand and compete with competitors. Businesses are using ICT to improve the efficiency and effectiveness of business processes and decision support for group collaboration. A successful cases of companies that are using this technology are: American Airlines and Baxter Company that created an entirely new business and competitive advantage precisely because the use of this technology.

Authors Leonard-Barton, 1988 consider that the implementation of new technology is a kind of innovation, and this implementation should be seen as a mutual adaptation of technology in the enterprise's

internal organization, and the adaptation of new technology enterprise.

Today, many companies have realized the great effects that brings the application of new technology and how it can create the basis for sustainable growth and competitive advantage (Michael E. Porter and Victor E. Millar).

Since the business environment is constantly changing and evolving, the business itself changes all the time and with his growth and development of information needs to ask businesses will vary. At the same time computing system needs to support growing, changing and developing. (Vakola and Wilson 2004).

The findings of the authors mentioned above clearly indicate that businesses invest in computing technology, because they believe this technology will enable them to be more competitive (Ross A. Malaga, 2001).

Businesses usually have a need for the application of information technology to help the business to work with computerized processes that case comes to spending cuts, increased productivity and in this case also comes to higher sales and profit growth. Also, information technology helps companies enter a new market or spend the new branch. To create competitive difference condition seen by the authors (Robert Urwiler and Mark N. Frolick, 2008) are innovations in information technology because information technology is an integral part of organizational strategy and planning processes and not just opportunities.

Application of information technology should be based strategy (Moon-Koo Kim and Kyoung-yong Jee, 2007), which enables the company repositions the configuration of competition within the market, or to overcome the unfavorable competitive situations (Seth V. and WR King, 2004). Using information technology companies have the opportunity to improve the efficiency of their operations and performance in insurance and asset management, and enable them to enhance competitive advantages in certain areas, making competitive moves and consolidating resources and opportunities (V. Sethi and WR King, Chan, SL Huff, DW Barclay, and DC Copeland, 1994).

MANAGEMENT INFORMATION SYSTEM AND COMPETITIVE ADVANTAGE

By the mid 80's many companies began to use information technology as a tool to gain competitive advantage, to support management in planning and control, to make business operations more effective and efficient, and to change the structure of business activities.

Although the use of informatization expression to create new competitive advantage is, most enterprises have created a significant competitive advantage precisely through the use of information technology in order to increase competitiveness. Such

are eg American Airlines, United Airlines SABRE system, the Apollo system etc, by Hicks, Jr, O. James (2003). Information system is entirely related elements among themselves which operate together to the purpose of collecting, processing and distribution of information.

Author James O. Hicks (2003) defines information system as formalized system that collects, stores, processes and reports data from various sources to provide information needed to manage the process of making decisions. J.W. Wilkinson (1997) talking about computer operating systems mentioned five tasks or activities:

1. Data collection;
2. The processing of data;
3. Data Management;
4. Control and obtaining data and
- 5 Generation of information.

Through these activities by J.W. Wilkinson (1997) the data from various sources through a process called data processing is converted into information necessary for the user. While management information systems comprise components of his own physical hardware, software, databases, procedures and personnel.

An information system is formalized system where collected and sorted out by several processes, reports, data from various sources to provide information necessary and important to obtain important management decisions. Although it is difficult to understand the strategic importance of information technology, can to say that this technology has transformed the nature of the products, business processes, companies, industry and competition. While most recent information technology managers have treated as a support service, each company has today understand the effects of things application of new technology and sustainable competitive advantages.

Authors Rackoff, Wiseman, and Ullrich have identified several factors that ensure computerization of competitive advantage for enterprises. They are:

- Modification, differentiation or changes that make the company stand out with its products and services or weaken competition and reduce the competitive advantages;
- Adapting and adjusting supply cutting costs, reducing consumer spending and increasing competition expenses;
- Company being introduced innovative products or services that result in changes in the way business is passed then in the industry;
- Improving growth and development by increasing volume, expanding geographically and being harmonized with suppliers and customers;
- Forms of mergers and alliances through various agreements in marketing etc.

Some other authors (Urwiller and Florick) noted that to create competitive difference as a result of computerization first condition are innovations in

information technology, which today have become an integral part of organizational strategy and planning processes. Information Technology is not only possible, but is streamlined entity and the way to create competitive edge. To achieve competitive difference information technology and its use in business processes results in a new way of doing business (e-business) as well as providing products and services electronically.

One such service 24 hours / 7 days a week and enable computer networks by transferring customer requirements from time zone to another. These networks create preconditions that small firms collaborate without limitations of time and space. Therefore, it is not surprising that today the whole world is connected to the Internet and the Internet is the most powerful medium of modern communication.

INFORMATION TECHNOLOGY AND REENGINEERING OF BUSINESS PROCESSES

Using information and communication technology (ICT) contributes significantly to the growth and development, because it raises productivity and work efficiency by enabling creativity and stimulate innovation, and most importantly helps the penetration and the existence in global markets. ICT enables the participation of all stakeholders in the programs and projects regardless of their location and physical distance, if available and have access to the network infrastructure of ICT.

Enterprises are often motivated to apply IT in business processes, if it is necessary in internal business processes for better quality information or even the impact on competition. Business processes are a series of activities that transform inputs into outputs, goods, and services.

Enterprises are required to improve business processes to stay competitive in today's market. During the last 10-15 years, companies have been forced to improve their business processes, because we, as clients are demanding products and services better. And if we do not get what we want from a supplier, we have many to choose from other business competitors. Therefore, many companies begin the process of improving business performance with a continuous improvement model. This model made efforts to understand and measure the actual business process and its performance accordingly. This method for improving business processes is effective. However, during the last 10 years, several factors have accelerated the need to improve business processes with the most appropriate method. Internet technology and its use of which has rapidly increased competition, the opening of global markets and creating opportunities for free trade has extended enterprises make changes in performance and speed of introduction in the market with products and services.

Because the rate of change has reached everyone, few businesses can afford a slow process of change. An approach to rapid change and dramatic

improvement in business is definitely reengineering process of business process (Business Process Reengineering (BPR)), by (www.isixsigma.com, www.prosci.com). That is to say that in terms of the new economy to compete in global markets and in step with the achievements in IT, enterprises are forced to make reengineering of their business processes, aiming at improvements in business processes by increasing efficiency and effectiveness of the process business.

Reengineering of business processes (BPR) is the process of redesigning the business process which means the business transformation or change management process, by (wikipedia.org/wiki/Business_process_reengineering). Reengineering is a radical reconstruction of business processes to achieve improvements in cost, quality, speed, and services. BPR combines a strategy for business innovation with a strategy to make major improvements in business processes so that a company is very strong competitive and successful in the market (Jimmy, W.2010).

CONCLUSION

Information Technology is used in business processes due to the pressure of competition and the need for companies to be more effective and efficient and building their competitive position. Great importance has also inter alia reaction time, decision to become more effective and profitable business. Information Technology is considered one of the assets which build prosperity and survival in the global economy because the value of information is too large.

Countries in the world are moving from the industrial economy to knowledge economy, and the growth of a country is dependent on the ability to

create, accumulate and disseminate knowledge. Computer and internet are a catalyst for economic growth of knowledge by enabling people to codify knowledge in a digital form easily, and transmitted throughout the world.

Advancements in information technology are a vital component of success among business. ICT has been constantly studied and used because it helps many businesses to expand and compete with competitors. Using ICT to enhance the impact and effectiveness processes to support business decisions and cooperation in the group. A successful case is that companies use this technology are creating entirely new business and advantage.

So, competition is what pushes businesses to apply information technology in their business processes. Typically they create their business processes with an emphasis on internal and local efficiency. The problem becomes more acute when they decide to work with external partners. In this case, data systems and incompatible information technology make it difficult to harmonize all activities of production and distribution. Another area of concern is the lack of detailed documentation. Therefore to be competitive in the domestic and foreign businesses must meet the following basic conditions:

- To achieve the highest quality of products and services offered;
- Use modern technology and efficient;
- Introduce scheme more effective management and network working;
- The individual earned good skills and managerial staff;
- To have access, and easy access to comprehensive information involvement in the economic systems of new products and services etc.

References

- Mustafa, Muhamet - Kibernetike dhe hyrje në informatikë. Prishtine, 1995.
- Blaženka Knežević, M.Sc. Graduate School of Economics and Business, Trg.J.F Kennedy 6, 10000 Zagreb, HR- Croatia. Knowledge Management Support System As The Basis For Competitiveness.
- Information Communications Technologies, ICT and Economic Growth. Evidence from OECD countries, industries and firms, OECD- Organisation for economic co-operation and development, 2003.
- Miles, P. Globalisation –Economic Growth and Development and Development Indicators. Planet Papers. 2001.
- Vlado Dimovski, Miha Škerlavaj, Information –Communication Technologies as Management Tools: Case Slovenia, Faculty of Economics University of Ljubljana.
- W.R. King, V. Grove, and E.H. Huffnagel, “Using Information and Information Technology for Sustainable Competitive Advantage: Some Empirical Evidence,” *Information & Management*, vol. 27, nr. 2, 1989, p. 87-93.
- V. Sethi and W.R. King, “Development of Measures to Assess the Extent to which an Information Technology Application Provides Competitive Advantage,” *Management Science*, vol. 40, no. 12, 1994, p. 1601-1627. [15] Y.E.
- Chan, S.L. Huff, D.W. Barclay, and D.C. Copeland, “Business Strategic Orientation, Information Systems Strategic Orientation, and Strategic Alignment,” *Information Systems Research*, vol. 8, nr. 2, 1997, fq. 125-150.

- A.M. Croteau and F. Bergeron, “An Information Technology Trilogy: Business Strategy, Technological Deployment, and Organizational Performance,” *J. of Strategic Information Systems*, vol. 10, 2001, fq. 77-99.
- Leonard Barton, D(1988). Im[plementation as mutual adaption of technology and organization, *Reaserch polisy*, p.251-267
- Michael E. Porter and Victor E. Miller, (1985), How information give you competitive advantage: the information revolution is transforming the nature of competition, *Harvard Business Review*, p. 149-174.
- Vakola, M. & Wilson, I.E. The challenge of virtual organization: critical success factors in dealing with constant change. *Team Performance Management*, 10 (5/6),2004, p.112-120.
- Ross A. Malaga, *Information systems technology*, University of Maryland, 2001.
- Robert Urwiler, Mark N. Frolick. The IT Value Hierarchy:Using Mslows,s Hierarchy of needs as a metaphor for gauging the maturity level of Information Technology use withing competitive organizations (*Information Systems Management*, 2008, p.93–97
- Moon-Koo Kim and Kyoung-yong Jee, Factors Influencing Strategic Use of Information Technology and Its Impact on Business Performance of SMEs, *ETRI Journal*, Volume 29, Number 4, August 2007.
- V. Sethi and W.R. King: “Development of Measures to Assess the Extent to which an Information Technology Application Provides Competitive Advantage, *Management Science*, vol. 40, nr. 12, 1994, p. 1601-1627.
- V. Sethi and W.R. King: Development of Measures to Assess the Extent to which an Information Technology Application Provides Competitive Advantage, *Management Science*, vol. 40, no. 12, 1994, p. 1601-1627.
- Hicks,Jr, O.James - *Management Information System (Third edition*, Virginia Polytechnic Institute and State University).2003
- J.W.Wilkinson: *Accounting Information Systems - Essential Concepts & Application*, 1997
- Robert Urwiler, Mark N. Frolick. The IT Value Hierarchy:Using Mslows,s Hierarchy of needs as a metaphor for gauging the maturity level of Information Technology use withing competitive organizations (*Information Systems Management*, 25: 93–97)
- <http://www.isixsigma.com/offsite.asp?A=Fr&Url=http://www.prosci.com/intro.htm>
- http://en.wikipedia.org/wiki/Business_process_reengineering#The_role_of_information_technology
- Jimmy, W. (2010). Business process reengineering. Retrieved from http://en.wikipedia.org/wiki/Business_process_reengineering#The_role_of_information_technology;