

## **IMPORTANCE OF MODERN INFORMATION AND COMMUNICATION TECHNOLOGY FOR THE IMPROVEMENT IN MANAGEMENT OF THE COMPANY**

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**Abstract:** All successful managers build themselves up and learn from their good and bad decisions because as in life itself, the path to success is never a straight line. The most important thing is to take a good attitude after an error occurs, not to stop and give up the planned; it is necessary to try to learn something from everything and to move forward. The telecommunications industry is one of the most dynamic ones in the world, and regardless of the position and work it deals with, it is understandable that it should be online, to monitor the development of technology and new trends. Modern digital solutions and applications that are available help in better business and private obligations and arrangements. There is a danger for a successful business of companies that do not adapt their business models, as the digital revolution is increasingly affecting all industrial branches. Also, digital transformation saves time, resources and money for companies and makes them more efficient and flexible, and the task of companies is to develop new digital services and services for users, to help them digitize more easily in their everyday life and work. This enables communication and business, improves the quality of life of citizens and improves the economy. At the same time, it opens up new opportunities for global and regional growth. The obstacle is a good understanding of the principle of change brought about by the digital revolution.

**Keywords:** ICT, organizational performance, development.

### **INTRODUCTION**

Information technologies influence business performance of a company. This impact can be direct and indirect. The direct impact is achieved through the acceleration and improvement of production and business processes, which is directly and positively reflected on financial indicators in organizations, such as productivity, profitability, competitiveness, etc. The indirect impact of information technology on company's business is realized through the influence of information technologies on various elements of organizational behavior, on all three levels: individual, group and organizational ones.

Elements of organizational behavior affect the financial performance of the company. Therefore, information technology has become an important part of everyday life. It improved the knowledge exchange, accelerated the flow of information and communication. Their impact on people's lives, both professional and private, is indisputable, and the continuous development of information technologies constantly sets new challenges for people to improve, learn and adapt. Information technology has become a strategically important resource for organizations. It provides a concentration of all information important for quality decision-making (Galbraith, 2012). Information communication technology has broken barriers between individuals employed in organizations, i.e., they have increased their integrity and knowledge of one another. Every individual, any time and any place has access to information, which increased flexibility and dynamism in companies.

### **1. MODERN INFORMATION TECHNOLOGY IN MANAGEMENT**

A feature of the modern world is the wide and varied use of computers. Computers can largely support management activities and decision-making. The possibilities of computers in these applications are the following (Stošić Mihajlović, Lj. 2015)

- fast data processing;
- storing large amounts of data;
- ability to manage over the computer;
- ability to communicate with the computer.

In order to meet the needs for accurate, timely and relevant information, as well as to provide a basis for decision-making, information systems are designed, introduced and used.

Through different time stages, there were periods when there was a lack of information and when there were too many information. The development of knowledge management is presented as one of the most important changes management of such an environment. Knowledge management has benefited much from information technology. Based on a review of the literature and various research, there was an apparent connection between the conceptual model of linking knowledge management and information technologies.

Knowledge Management and Information Technology (IT) became inseparable. Strengthening and development of one area lead to the strengthening and development of another one. This is extremely important for any organization that wants to manage and use its human capital. This property of knowledge changes as organizations themselves develop, trade, compete and establish interaction with other organizations, constantly supporting the development of practical and applied knowledge. It provides the opportunity to improve employee decision skills and support the transformation of individual information into organizational knowledge. Efficient technical infrastructure with appropriate search combines and indexes processes that influence the reuse of knowledge.

It is known that the fastest technological changes occur in the sphere of information technology. New information and communication technologies provide enormous opportunities for increasing the speed and quality of communications. In business terms, this is very important because companies can quickly get relevant information from the market. In modern business, information becomes a strategic resource, so it is quite logical that the modern economy rests on the creation of information, their possession, and exchange (Đorđević, Čočkalo, 2004). Often, the term informational technologies is used instead of information technology, it is mentioned in plural. According to (Marčićević, Marošán, 2010), this emphasizes the heterogeneity of this notion, which includes not only computer hardware or its components but also software, computer networks, data capture systems, telecommunication systems and many other technologies that are often subject to the study of other scientific disciplines. It seems that the representation of this term in the plural is more correct; therefore, it will be mentioned in this way, as information technologies.

According to Vujovic, 2005, modern information technologies and information systems based on them have a strategic importance for the functioning of the company. Vujović (2005) states that the influence of information technologies on the company's business is reflected in the following: Information technology is:

- Information technology is built in numerous products and services.
- The emergence of new products and services based on information technologies.
- Information technologies significantly change business performances.
- Business strategies are defined in accordance with information technologies.
- Information technologies contribute to reducing costs.
- Information are used for management.

Information systems consist of appropriate components. These components carry out certain activities through interaction with the internal and external environments. The internal environment is of an internal character, i.e., the company itself. The external environment is of an external character, meaning the market, competitors, consumers, suppliers, etc.

This model contains the conceptual framework, components, activities, as well as relations within the information system and relation with the environment. Information system activities can be summarized as follows: collection, sorting and data entry, processing, organizing, storing and maintaining data. Finally, the data is sent to system users.

According to (O'Brien, 1998), all information systems contain four key concepts:

1. People, hardware, software, data and computer networks make up five basic groups of resources for each information system.
2. The human resource includes specialists and users of information technologies, the hardware resource includes computing devices and the media, the software resource includes programs and procedures, the data resource includes databases and knowledge, and the resource of the computer network includes communication media and computer networks.
3. The data resource is transformed by processing activities into different information products for different end-users.
4. The processing of information includes the following activities: input, processing, output, storage, and control.

## 2. RESOURCES OF INFORMATION SYSTEMS

An information system is a societal system that disposes of, organizes and uses the following resources effectively and efficiently:

- Human Resources. In terms of information systems, human resources are made up of IT professionals and end-users of information systems. IT specialists have the task of developing, implementing and maintaining information systems. Human resources (primarily IT experts) are usually located in the information center. IT specialists can have different specialties, such as information system designers, system analysts, developers, database administrators, software engineers, hardware and network experts, and others. End users are people who use the information system. The final beneficiaries are managers, analysts, engineers, researchers, people from marketing and procurement, people employed in accounting, legal services, etc.

- Hardware resources. Hardware resources comprise all computer resources that support the operation of information systems. These include database servers (large computers and general purpose computers), application servers (mini-computers), workstations (microphones), various peripherals, such as printers, keypads, monitors, etc., storage media discs, magnetic strips, CDs, USBs, external memory, etc.). It can be noticed that almost all employees in the organization represent users of information systems.
- Software Resources. Software resources are all software packages and procedures, such as operating systems, database management systems, statistical data processing software, program interpreters, OLAP software, various application software, as well as numerous procedures that provide user instructions, which are organized within the database, knowledge base, etc.
- Data resources. Resource data consists of data, information, and knowledge that are being stored and it should be noted that data, information, and knowledge represent both the resources of the organization itself and as such, have additional significance. Such computer infrastructure is the basis of the successful functioning of organizational systems.
- Computer network resources. Resource networks are comprised of intranets, extranets, and the Internet. The resources of computer networks include communication media (coaxial cables, optical cables, satellite communication systems, microwave systems, etc.), network equipment (routers, switches, modems, hubs, various terminals, etc.) and communication control software.

### 3. INTERACTION OF INFORMATION SYSTEMS AND ORGANIZATION

The organization and its information system are in very complex relationships. On the one hand, the organization affects information systems and information technology, and on the other hand, information systems also have an impact on the organization. According to (Balaban, Ristić, Djurković, Trninić, 2005), in that sense, many questions may occur:

- Do information technologies and information systems influence the organizational structure?
- Do information systems reduce the production and distribution of written documents?
- To what extent are information technologies significant in the re-engineering of business processes?
- Do information technologies contribute to decentralization of power within the organization?
- Do information technologies help to highlight the creativity of employees
- Do the information systems influence better integration within the organization and better connectivity with the environment?

The impact of the organization on the information system is reflected in the following: (based on Balaban, Ristić, Đurković, Trninić, 2005).

1. Management decides how the organization should actually use information systems.
2. Management defines who should be the carrier of development, innovation and maintenance of information systems in the organization.
3. Management defines a strategy for the development of information systems.
4. Management makes decisions about software packages, services to be used in the field of information systems.

Influence of information systems on the organization is reflected in the following: (based on Balaban, Ristić, Đurković, Trninić, 2005)

1. Information systems and information technologies accelerate production cycles, thereby contributing to the savings of money and time.
2. Information systems and information technologies accelerate, simplify and reduce business processes, such as procurement, sales, administrative activities, etc.
3. Information systems and information technologies contribute to reducing the cost of internal and external communications.
4. The application of modern information technologies leads to a reduced need for the number of employees, primarily administrative staff, but also middle managers.

### 3.1 METHODS OF KNOWLEDGE MANAGEMENT IN THE KNOWLEDGESHARING PHASE BASED ON INFORMATION TECHNOLOGIES

There are many knowledge management methods based on information technology used in knowledge sharing. Only those methods most commonly used are explained below.

Blog - A blog (*abbreviation of weblog*) is a website that is very simple and convenient for publishing articles periodically and sorted by date, usually with the last published at the top. The blog is a window into the world of our work. In places with unrestricted access to the Internet, the blog provides an easy way to manage and share knowledge. The blog has the power to create and nurture good relationships with colleagues, partners,

stakeholders, donors and the environment. Blogs often have RSS channels (Really Simple Syndication) that allow people to subscribe to new blogging platforms; a blog can have one or more authors.

Expert systems –Expert systems are intelligent computer programs that simulate problem-solving in the way that experts do and represent one of the most important areas of artificial intelligence research. Expert systems solve real problems from different areas, which would otherwise require human expertise. The goal is that the computer program always provides correct answers in the given area, not worse than an expert, although it is difficult to achieve. Therefore, a less ambitious goal is set, and the system is required to provide assistance in decision-making.

Content Management System - CMS is a dynamic content management system.CMS is a software application that can be managed with content without knowledge of programming. The most common type of CMS is the web CMS that serves to manage content on Internet presentations and Internet applications using HTML and Java script programming languages for displaying content, PHP, JSP ASP or CFML languages for executing queries over the database and My SQL, Post gre SQL or MS SQL Server databases data which remember the content.

Internet -the Internet, intranet, and extranet as the most widespread forms of communication and sharing of knowledge and information in the modern business world. The Internet is a global system of networked computer networks that has transformed the way communication systems operate.

Intranet -Intranet is a term that denotes a private computer network (usually a company's property) that allows secure access to the resources of the network only to authorized persons, that is, those users who have their user account in that network (staff, employees, etc.). The intranet works on the same principle as the Internet, but precisely defines network resources, and which users and to what extent they can use them.

Extranet -Extranet is a private computer network that allows sharing a part of the company's information with business partners, suppliers, customers, etc. Extranet access is also enabled through logging onto the system, only to those users who have the appropriate username and password, who are used to determine the level of access to information. The main purpose of the extranet is interconnection in order to exchange information.

Google Drive - *Google Drive* is a cloud where Google provides free storage for files and collaborates with other users. In addition to the large, free space and the ability to jointly edit files with other users, this service also allows you to view a variety of format types.

Micro blogging – *Micro blogging* is a form of blogging that allows users to write short text messages (typically less than 140 characters) and to publish them, whether intended for everyone or for a specific group of people selected by the user himself or the message creator. Hess messages can be sent in different ways - like text, instant messages, e-mail, MP3, etc. Micro blogging is increasingly being used in the development of organizations at the international level, for sharing information and resources, asking colleagues questions, and raising resource visibility to a higher level, all using URLs.

Really Simple Syndication (RSS) –RSS is a web-based standard that provides information to users in an easily accessible and delicate format.RSS is an abbreviation for Really Simple Syndication and "Information Publishers" as bloggers and news organizations use it to broadcast and regularly update content, so they can be quickly and easily downloaded by other media and pasted in the same form and time when, for example, Associated Press posts its news. It is often said that RSS releases web-based content in a format that can be shared and published on other sites.

Voice Over Internet Protocol (VoIP) –*Voice over Internet Protocol* (VoIP), or Internet telephony or IP telephony, is a popular name for several technologies that enable voice over the Internet through the use of IP protocols. VoIP technology, designed to transfer voice over a computer connection, was designed long ago, at the time of the first public computer networks created in the first half of the seventies of the last century. However, this popularity is only reaching the end of the twentieth century. Skype is a commercial Voice over Internet Protocol (VoIP) service that allows you to talk to other people using the Internet instead of a fixed or mobile phone.

Wikis - More and more organizations, as a means of sharing knowledge, use the so-called. "wikis".Wikis are online databases that can be supplemented and modified in the simplest way by using any web browser.The most famous "wiki" today is, of course, the onlineencyclopedia Wikipedia.However, a large number of organizations, from Microsoft to the FBI, use "wiki" to collect the knowledge of their employees and thus create space for them in which they will be able to meet and cooperate in connection with a variety of issues, from planning meetings to documenting the best practice, to brainstorming new products and processes.

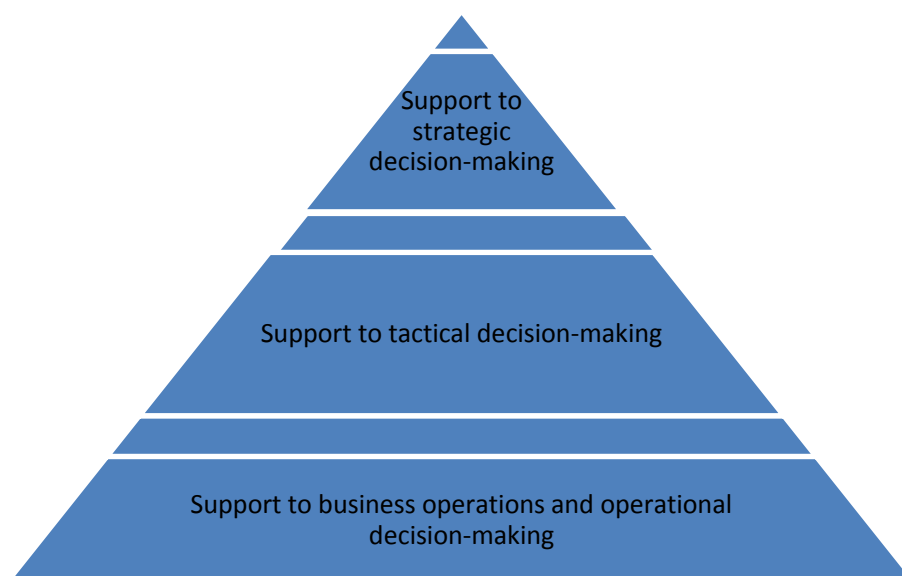
SAP - SAP (German, Systeme, Anwendungen und Produkte, in Translation Systems, Applications, and Products in Data Processing) is the world's leading software manufacturing company for electronic business management. The main product of SAP is MySAP ERP, a program that provides a complete set of functionalities for business analytics, finance, human resources management, logistics and corporate services.

In addition to the more detailed tools and methods already explained, they are also less familiar but also used to sharing and sharing knowledge such as: Text-based conferencing, Groupware tools, Videoconferencing, Expert "Yellow Pages", E-learning, Calendars, Chats, Collaborative Workspaces , Content - sharing and using creative content on the web, Data / Information Visualization Tools, Forums, Widgets, Embedding External Content on the Site, Expert Locator Systems, Libraries and File Sharing, Frequently Asked Questions, Instant Messengers, Language Translation Technologies, Learning Management Systems, Low Bandwidth Tools, Mobile Phones, Newsletters, Online Collaboration Platforms, Online Surveys, Personal Home Pages, Photo Sharing, Podcasting, Rural Radio, Sharing Workdays Sheets, Resource Centers, Slide Shows, Social Media, Social Networking Sites, Social Network Analysis, SOCIAL Reporting, Social Search, Survey and Data Collection Tools, Statistics from our Tools, Synchronous Web Meeting Tools, Syndication of content, Tagging / Social Bookmarking, Phone, Video, Webcast and websites or web pages.

(Source: *Information Technology to Support Knowledge Management in Organizations* available at [https://www.researchgate.net/publication/280306750\\_Informacione\\_tehnologije\\_kao\\_podrska\\_menzmentu\\_znanja\\_u\\_organizacijama](https://www.researchgate.net/publication/280306750_Informacione_tehnologije_kao_podrska_menzmentu_znanja_u_organizacijama)).

#### 4. INFORMATION SYSTEMS AND LEVELS OF MANAGEMENT IN ORGANIZATIONS

Manager's job requires disposition of a high amount of information. This information must be of good quality, timely, reliable. Only with the possession of such information, managers can successfully respond to the challenges of their work, which is extremely stressful and responsible. Different types of information are needed at different levels of governance and decision-making. Organizations have strategic (higher), tactical (middle) and operational (lower) levels of management and decision-making. Information systems provide support to management and decision-making to managers at all levels. This can be presented schematically as in the following picture.



Picture 1. Support for information systems at different levels of management

#### 5. NEW ROLES OF INFORMATION SYSTEMS IN ORGANIZATIONS

Information systems and information technologies have an important role and influence in modern organizations. This impact is reflected in the fact that information systems and information technologies significantly define strategic and operational planning in organizations and strategic and operational decision-making in organizations. Technological progress brings the most significant changes in the environment of organizations. Such changes are not controlled by the company. For this reason, as well as the significance of changes in the information technology sphere, organizations must take an active role in such changes. In fact, the survival and development of organizations depend on their ability to adapt to technological development, and therefore to the development of information technologies.

According to some authors (Nikolic, 2007), technological progress influences the business of a company in the following way:

1. It influences obsolescence of expert knowledge and management methods.
2. It influences product obsolescence.



3. It influences obsolescence of technological and production processes and equipment.

Management in the organization must continuously research and monitor the latest trends in science and technology, as well as to integrate them into existing products and win new ones (Nikolić, 2007). These issues most often have a strategic character and a long-term impact on organizations. For making strategic decisions in organizations, it is necessary to take into account the factor of the present information technologies in the organization, as well as the factor of development of new information technologies in the environment (Stošić Mihajlović, Lj., 2015).

Numerous research points to the importance of information technology users' satisfaction, even the satisfaction of information technology users is considered a surrogate of information technology (Delone, McLean, 1992). The results show that information technology has more impact on employee satisfaction with the dominant technical professional orientation than those with managerial orientation. The results of the survey have shown that information technology does not have a direct impact on job satisfaction, unless the company has a high level of technology orientation. In addition, the results indicate that administrative skills simplify the effects of information communication technologies on employee satisfaction.

Satisfaction with job and commitment of employees have certain touch points. Lumley (2011) explored the impact of information technology on job satisfaction and organizational commitment. According to this survey, positive results can be expected in conditions where, through appropriate use of information technologies, an environment that encourages employees to stay in their organizations is created. Also, it is important, with the support of the IT environment, to create the conditions in which employees consider their work tasks significant, they are satisfied with the salary and feel that cooperation in the workplace is encouraged. Additionally, the increase in organizational commitment of employees in the IT environment influences career development opportunities and business policies that support the family. At the same time, characteristics job have no impact on job satisfaction and commitment. Also, the system of beliefs and values in the organization significantly influences the degree of organizational commitment to employees/users of information technologies (Chandna, Krishnan, 2009). Communication plays an important role in the organization, and information technologies have a significant impact on communication within the organization. The level of satisfaction with communication between employees working in a virtual work environment and a traditional work environment has been practically carried out. The results, contrary to the set hypothesis, showed that employees in a virtual work environment have a higher degree of satisfaction with communication. The authors point out that such a situation is due to better support from higher levels, the application of appropriate technologies and technology support, training culture and technical training, labor restructuring to support virtual workplace and the provision of additional social support systems in order to reduce alienation.

Therefore, in virtual work environments recommended measures have been taken as measures to improve traditional working environments in order to improve various work aspects. White, Vanc and Stafford (2010) have investigated the opinion employees in large companies have about communications. Employees believe that e-mail communication is an effective way of exchanging information; however, direct interaction is still best-accepted, and it applies to employees at all levels. The authors conclude that, if carefully used, electronic communication can successfully replace the traditional ways of communication in an organization. Priority would be given to creating feelings for employees at all levels of the organization, to obtain information from the top in a timely and direct manner. This is particularly important as the results show that employees (at all levels) who have a relationship with the CEO are more satisfied with the information they receive and feel more responsibility toward the organization. Thus, information technology contributes to the quality and quantity of information in the organization. In that sense, it is important to consider the concept of trust in conditions that are different from traditional ones. On the one hand, confidence can be seen from the point of trust in information technology. This implies the willingness of an individual to depend on or rely on technology instead of trying to control it (McKnight, 2005). On the other hand, trust can be seen as mutual trust, under the new conditions influenced by the use of information technologies, which is the angle of observation of this work, too. The results of the research (Ashleigh, Nandhakumar, 2002) indicate that team members need personal contact and direct interaction in order to develop confidence. Also, trust in team members is reduced with an increase in isolation. The specificity of work in virtual teams/organizations implies the specific behavior of members. More precisely, members from the very beginning behave as if trust among them exists. (Stošić Mihajlović, Lj., 2017). Intensive, high-quality, multidimensional, open and honest communication is an extremely important component of organizational learning. In this respect, both horizontal and vertical communication are important. It is therefore logical to simultaneously explore satisfaction with communication and organizational learning. Information technology is a key tool in the knowledgemanagement process, but the presence of information technology does not guarantee the creation of knowledge, knowledge distribution or the use of knowledge (Ruiz-Mercader et al., 2006). Individual learning with individual and collaborative information

technologies has a positive and significant impact on organizational learning. On the other hand, individual and organizational learning have significant and positive effects on organizational performance.

## 6. THE ETHICAL ASPECT OF INFORMATION TECHNOLOGIES

How did information technology and systems lead to ethical problems? In reality, ethical topics have passed to information technology - they are the constant concern of every society. In addition, information technology has raised ethical concerns and has led to problems in existing social arrangements and to the obsolescence of existing laws. There are three technical key foundations that have led to these problems.

Increasing computing strength (power) every 18 months from the early 1980s in the 20th century has enabled many organizations to use information systems in major production processes. As a result, the dependency on systems, the concern about system errors and poor quality of data are increasing. Occasional system errors have increased our concern more than the growing dependency on systems. Social laws and regulations for this dependency are not yet prescribed. Standards for ensuring the accuracy and reliability of information systems are not universally recognized and applied.

The advancement of data retention techniques and the rapid decline in storage costs were responsible for copying databases of individual employees, buyers of potential customers in private and state organizations.

These advances have led to the daily deterioration of privacy being cheap and effective.

The latest advances in telecommunications infrastructure, for example, DSL and other digital forms of communication and the establishment of state telecommunications networks, significantly affect the reduction of data transfer costs. Developing state-of-the-art digital communications networks on a high new level, and widely available to individuals and business people, raises many ethical and social issues. Who will receive a receipt for streaming information through these networks? Will you be able to track information about you? What will these networks do to traditional relationships between family, work and the environment?

Powerful technologies cause deep social consequences. Take, for example, the impact of technology on agriculture, printing, and industrialization. Each of these technologies, when developed, led to social and ethical revolution. Information and communication technology (ICT) is not an exception.

Computer technology is the most powerful and most flexible technology ever designed. For this reason, the computer system has changed everything: where and how we work, where and how we learn, buy, vote, use medical services, spend our free time, fight or hang out.

Therefore, the informational revolution is not only technological: it is deeply social and ethical.

The reason why ICT is so powerful is explained by **James Moore in the book What is Computer Ethics?**

Computer technology, according to Moore, is a universal tool because it is logically variable and can, therefore, be designed to perform any task. In industrialized countries, this universal tool has changed many forms of life, such as banking, trade, employment, medicine, national defense, transport, entertainment. ICT has profoundly influenced - both good and bad - social and family life, education, freedom, democracy... It is clear that politicians, businessmen, and industrialists, professors, sociologists, in fact, every citizen, must have a great interest in the social and ethical changes caused by information and communication technologies.

Today, in the first years of the information age, the long-term social and ethical impact of ICT is still unknown. Rapid changes in technology make it impossible to anticipate any social-related conjectures associated with them. New social and ethical information age policy needs to fill in newly emerging vacancies caused by the exponential development of technologies. Filling these vacancies is a complex social process that involves the participation of individuals, organizations, governments. Work and jobs have undergone a transformation under the influence of ICT. Now, it is possible to increase flexibility and the choice of workspace using advanced technologies at home, on the road, at any moment in every place. In line with this, new jobs and work opportunities open up, such as webmaster, data-miner, cyber counselor ... These benefits are accompanied by many risks, such as unemployment caused by the replacement of a human factor by computerized machines, stress caused by the imperative of monitoring the rapid development of technology in the industry, frequent injuries at work, computer radiation and strong magnetic fields, computer surveillance of workers and production ... A wide range of new laws and regulations is necessary if the intention is to make the company efficient and equitable with this development of workspaces.

The more social activities rely on cyberspace (business, education, medicine, employment, entertainment ...), the more difficult it will be for people who have little or no access to information technologies to use the benefits and opportunities of society. A person without an "electronic" identity may lose a social identity as well. Therefore, social justice (not to mention economic prosperity) must influence society to develop systems to enable people who have not had contact with information systems (the poor, the elderly, disabled, peasants ...) to get educated and involved in "Technological vortex".

## CONCLUSION

Recommendations for leaders and managers in companies in Serbia can be summarized as follows:

1. Leaders and managers must be aware of the importance of information technology and their role in improving the organizational and business performance of enterprises.
2. Leaders and managers must be aware of the importance of their own role in the advancement of information technology in the enterprise
3. It is necessary to continuously and systematically invest in the purchase and maintenance of modern information technologies in enterprises.
4. It is very important that leaders and managers find ways to motivate employees to work with modern information technologies.
5. Finally, leaders and managers need to continuously and systematically improve their professional skills, as well as the quality of their strategic action.

The clear practical significance of research results, as well as recommendations for leaders and managers, define the social justification of the research. Fulfilling given recommendations for managers and leaders is a significant step towards improving the number of organizational and business performance in enterprises.

Information and Communication Technology (ICT) has had a radical impact on traditional forms of life and work and on all segments of the economy and society, changed the corporate design, especially in service organizations, and reduced the "range of organization" and made corporate service organizations "shallow". By abolishing hierarchical positions based on power, greater capacities in territorial and subject decentralization were created as higher quality forms of a service organization (A. Seen, J.). Under the circumstances, ICT has moved the center to the periphery, and the central axis of all events is the buyer. In the online, ie ICT economics, everyone must feel as if they are in the center. Information technology changes the way businesses operate and affect the entire process within which they create their products. Moreover, it transforms the product itself, that is, the entire package of physical goods, services, and information that companies provide to create value for their customers. New technology has a strong impact on the scope of competitiveness. Information systems allow companies to coordinate activities that generate value in remote geographic locations. The application of information and communication technologies in the process of processing data and information transfer has brought about major technological changes in the functioning of banks and other financial institutions.

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