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ICT Usage in the Czech Business and the Strategy of Digital Literacy in the Czech Republic

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ABSTRACT

The paper is focused on the current situation of ICT usage in the Czech business. Attention is paid to the role of ICT in business as well as the status of ICT skills of employees. Unfortunately, a gap still exists between the needs and the real situation. Therefore, adequate actions have to be prepared and implemented. The paper points to actions that will lead to improvement of the skills required for effective use of ICT in practice. Strategy of digital literacy is showed there. The discussion is oriented towards a joint search for the optimal paths leading to improvement of ICT skills and their subsequent effective utilization in practice.

Key words : Competitiveness, Enterprise, Digital literacy Information and Communication technology, Strategy

1. INTRODUCTION

One of the main characteristics of the contemporary globalized world is very fast, headlong and often uncontrolled development of digital technologies in recent decades. Digital availability saturates all parts of day by day life – from the manner in which individuals' interface to the financial scene, political basic leadership and the aptitudes expected to find a new line of work. The world is going to encounter an exponential rate of progress through the ascent of programming and administrations [1].

Companies must accelerate digital transformation. Looked with the advanced change challenge and the need to stay focused in their ventures, business pioneers must figure and execute techniques that grasp the ramifications of computerized change and drive better operational execution. [2]. However, organizations ought to go past basically computerizing a current procedure. They should revaluate the whole business process, including cutting the quantity of steps required, diminishing the quantity of records, creating computerized basic leadership, and managing administrative and misrepresentation issues. Working models, aptitudes, authoritative structures, and jobs should be updated to coordinate the re-examined procedures [3]. The digitization goes together with the digitalization, which is a process of reframing of almost all aspects human social life around digital communication and media infrastructures.

On the other hand, according to the European Commission, nearly half (47%) of the European population does not have enough digital skills. As an area, ICT is developing quickly and making around 120,000 new openings every year. Be that as it may, because of contrasts in requests and abilities, and in spite of high joblessness - particularly among the youthful – Europe could confront a lack of up to 900,000 gifted ICT laborers by 2020 [4].

With ICT access moving toward universality, policymakers' next test is to guarantee that people, organizations, and governments are making the most ideal utilization of systems and applications. Nations that have accomplished propelled levels of digitization—the mass appropriation of associated computerized advancements and applications by purchasers, undertakings, and governments—have acknowledged critical advantages in their economies, their social orders, and the working of their open areas [5].

2. ICT IN BUSINESS AND ITS USAGE BY EMPLOYEES IN CR

A. *Importance of ICT in Czech Business*

Data and interchanges innovation ICT is regularly utilized as broadened equivalent word for data innovation IT. Energize characterizes ICT (data and interchanges innovation – or advances) as an umbrella term that incorporates any specialized gadget or application, including: radio, TV, mobile phones, PC and system equipment and programming, satellite frameworks, etc, just as the different administrations and applications related with them, for example, videoconferencing and separation learning. ICTs are frequently talked about in a specific setting, for example, ICTs in training, social insurance, or libraries [6,7].

Information and communication technologies have played a key role in the business sector for several years. Currently, almost all companies in the Czech Republic use a computer and have Internet connection. Thanks to ICT, communication and dissemination of information among enterprises and other

companies and within companies themselves seem to improve every year. These technologies are also able to create completely new ways of implementing various business processes. ICT in a business environment can be used for a lot of work with data such as recording data, storing data, manipulating data and retrieving data. ICT and its use offer significant employment opportunities; stimulate businesses to invest in innovations and can contribute to increased competitiveness.

B. Research problem

The aim of the research is a description and analysis of ICT usage in the business sector in Czech Republic with the attention to the employees and their ability to use ICT effectively and identification of optimization steps to improve the existing state in Czech Republic.

3. THE SURVEY INFORMATION SOCIETY IN FIGURES

A. Research method

The information contained in this paper depend on the consequences of the Czech Statistical Office's yearly measurable overview on the utilization of ICT in the business part in the Czech Republic in 2016. The overview was directed in the Czech Republic since 2003 and since 2006 was completely tantamount with comparable reviews did in the other EU Member States in the system of Regulation (EC) No 808/2004 of the European Parliament and of the Council concerning Community measurements on the data society. An example included 7812 units comprised of undertakings of 10-49 workers 79%, 50-249 representatives 17% and in excess of 250 workers 4%.[7]. The auxiliary examination of information from this factual review was utilized for the investigation of the present territory of ICT use in the business area in the Czech Republic.

B Utilization of ICT in the Czech Business Sector

The survey Information society in figures 2016 that was performed by the Czech Statistical Office shows an expansion and utilization of information and communication technology in the business sector (Czech Statistical Office, 2016). The results of a study performed in January 2015 that focused on legal and natural persons with more than 10 employees show that the observed way and extent of using ICT and chosen IS between companies and their employees is often connected with the size of the company. There are also significant differences caused by the main economic activities of the observed companies. 7644 units took part in this study.

In January 2015, almost three fourths of companies were equipped with a company computer network in the Czech Republic. Company computer networks are used by more than 90 % of companies with 50 or more employees and by almost all companies with more than 250 employees. The percentage of small companies using local computer networks is traditionally the lowest (69, 2 % in January 2015), however it has been raising.

Figure 1 clearly shows that mainly in the case of small companies there is a significant lack of usage of company networks and of employee remote access to company applications, documents and files. In January 2015, 52 % of Czech companies were providing their employees with remote access to documents, files and applications. Large companies provide remote access more often than small companies (94 % large companies, 44 % small companies) provide [7].

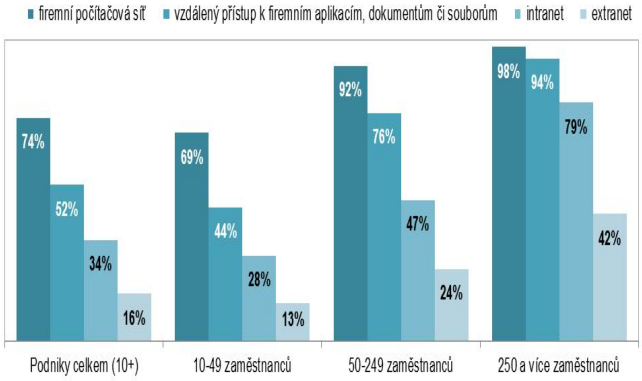


Figure 1: Enterprises in the Czech Republic using a company network and related technologies, in January 2015[7]

The study also shows that 46 % of workers in the business sector use computers to perform their jobs. There are no significant differences in the percentage of employees using computer in their jobs based on company size. There are more differences based on individual branches.

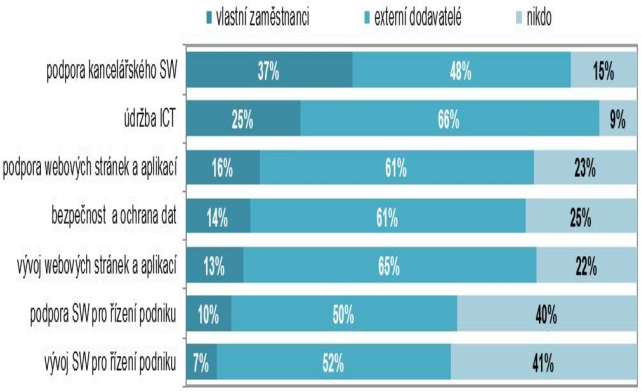
Figure 2 shows that based on the data from 2010 and 2015, the percentage of employees using computers and internet connection in their jobs has been growing. In 2015, 38 % of employees of the observed companies had internet connection, more often in small companies (43 %) than in large companies (36%) [7].

Figure 2: Computers and computers with internet access usage by employees in the Czech Republic[7]

C ICT Competence and Skills

One of the important results of the study is finding out to what extent Czech companies put performing of chosen ICT

activities into the hands of their own employees and to what extent they put these activities into the hands of external workers. As shown by Chart no.3, in all seven observed fields more than half of the companies use external providers. External providers are used mainly for the purposes of ICT maintenance and application and web page development. Own employees are tasked primarily with office software support and ICT maintenance, however outsourcing of these activities to external providers still prevails here. Two fifths of the companies stated that they use neither their own employees nor external providers to develop and support software for company and company systems management [7].



Figrue 3: Competence to perform selected activities related to ICT, January 2015[7]

Opportunities to train and broaden ICT skills appear to be the key indicator of employee readiness to use ICT effectively. In January 2015, more than one fifth of the companies (22 %) provided an opportunity to enroll in a course for acquiring or broadening computer knowledge. Almost one tenth of the companies offered a course for broadening their knowledge and skills to their IT professionals. As it, turns out there are still many improvements to be introduced in the field of using ICT in the business sector. One of the most important goals appears to be improving the readiness to use ICT and increasing the abilities of using ICT effectively not only in the case of end-users but also knowledgeable experts and professionals.

4. DEVELOPMENT OF DIGITAL LITERACY IN THE CZECH REPUBLIC

For safe and effective use of ICT, the level of digital literacy needs to be increasingly higher. Digital literacy is more, than the skills how to work with computers. Digital literacy is a lot of capacities by the UNESCO definition, which incorporates the utilization and generation of advanced media, data preparing and recovery, investment in interpersonal organizations for creation and sharing of learning, and a wide scope of expert processing abilities. Computerized proficiency improves employability since it is entryway expertise, requested by numerous businesses when they initially assess an employment form [8].

In 2015, the Czech government adopted a new Digital literacy strategy for the period 2015-20. The strategy is a joint initiative of the Ministry of Education, Youth and Sports (MŠMT) and the Ministry of Labour and Social Affairs (MPSV). It is linked to the following European strategies and national programs. The strategy adopts a comprehensive approach to achieving this. It covers most aspects of how ICT influences individuals in all aspects of life: employment, entrepreneurship, social inclusion, family life, public electronic services, and education and training. Various measures and initiatives are foreseen in each of these areas [9].

- Employment. This objective is aimed at improving the digital literacy of people threatened by unemployment.
- Competitiveness. Attention is paid to employees and workers in small and medium-sized enterprises and self-employed people who lack the necessary digital literacy level due to the rising industry trends 4.0.
- Social inclusion. Support is given to individuals and groups socially and digitally excluded.
- Family support. Encourages the use of the opportunities that the digital technology provides to families and elimination risks that digital technologies bring.
- Electronic public sector services. The target is aimed at fulfilling the standards of e-government.
- Support education and learning through digital technology. Fulfilling this goal leads to massive support of education through digital technologies and open educational resources [10].

5. CONCLUSION

The speed of technological development brings a wide range of highly innovative changes in almost all aspects of human life. The economic sector plays a key role in the realization of innovative measures and using ICT is an inseparable part of these changes. Increasing optimal ICT use in businesses requires competent employees equipped with sufficient knowledge and skills needed for working with ICT. The Czech digital literacy strategy defines the main fields that should be in the centre of attention and in which direction it is necessary to go. An implementation of the strategy into practice will be implemented by projects prepared in certain calls for proposals. The projects will be submitted by the relevant authorized bodies for each area. The projects activities that follow the strategy of digital literacy will be set in order to match the needs of specific target groups [10, 11].

The success of proposed implementation of the described strategy could be high in case of effective co-operation in the industrial, business, educational, research and governmental sectors. The very important step to increase the efficiency of the existing co-operation between these entities seems to be an application of a holistic approach in management as well as the interest, effort and ability of all participating entities to co-operate effectively.

The digitization of nearly everything and the expansion of ICT is enormous at present. The modern technology utility across various processes in the different types of organizations is seemingly beneficial and it is up to us how we will react on this reality and how we will manage this challenge as well [12].

Technological developments are getting faster and many technologies already exist. However, our readiness to use them effectively is still not entirely adequate. Many organizations have already understood that it is necessary to respond adequately to these developments and to implement the changes associated with digitization flexibly. In order to make these changes successful, it is necessary not only to digitize but also to strengthen the readiness of managers and employees to adequately adopt and manage these changes. Increasing our readiness should become a purposeful process of adequate continuing education, effective training activities and other activities related to adapting to the new reality of a digitized society.

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