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Corporate Education with Focus on Utilization of ICT – Case Study in the Czech Republic

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Abstract: The computer competence is an inseparable part of crucial competences required from people at the digital age. It can be assumed that employers will build the corporate education/ training scheme, to meet the needs of companies reflecting unstoppable technological progress. The paper focuses on a real current situation on the local Czech scene in an approach of citizens to further education. A pilot study with 86 participants was conducted to demonstrate or refute the findings presented by national and transnational statistical institutions relating to the accessibility and utilization of Information and Communication technologies for study purposes. In this article, which is intended to be descriptive and exploratory in nature we present empirical results that show the answers to the research questions on preferable kinds and ways of education, as well as on study materials. The pilot study showed that individuals preferred combination of ICT and face-to-face. Surprisingly, in the age group 18-25, individuals preferred use of printed sources. Individuals in the age group 26-35 preferred computer/notebook most. Based on the findings, it is recommendable to use corporate education portals and enrich them with a section of the links with free accessible education portals, which respondents prefer.

Keywords: corporate education; ICT; technologies

JEL Classification: I20

1. Introduction

This paper focuses on corporate education, which is a specific part of the lifelong education. Current society, which is characterized by accelerated development, distribution and use of Information and Communication technologies, is often called Information society, Knowledge society or Learning society. 'Information' became and is up to now a crucial economic phenomenon with social and cultural consequences. Sociologist Bell (1976) used the term 'information society' in his The Coming of Post-Industrial Society book. He forecast unavoidable changes in the structure of society caused by the dependence on science and innovations. Not only structure of the society has been undergoing changes but also the whole system of education including further education has been undergoing significant changes reflecting different requirements on knowledge, skills and competences favouring performance results (Titmus, 1996).

A critical approach to knowledge and 'unknowledge' can be traced to the thirties of the last century, already at that time serious concerns were formulated relating to dominant focus

on economic outcomes, see more Köhn (2017). The terms Knowledge society and Information society are terms, which are often perceived as interchange-able (Burch, 2006). Knowledge society is considered a wider term that is related not only to the economic dimension but reflects desired transformations in the system of education both formal and informal, institutional and life-long.

It is evident that current society is a society of changes. The dynamic and even turbulent development requires continuous involvement of people into the learning process (Armstrong, 2009; Gómez et. al, 2016). Keeping the pace with the development is an issue for the educational institutions, because there is often inconsistency or discrepancy between current educational programmes and employers' requirements on potential employees' competences (Rabusicova & Rabusic, 2006; Cerkovskis & Titko, 2017).

Life-long education represents one of main components in creation of competitive economy. It is a wide concept covering activities aiming at getting knowledge and competences at various stages of human life enabling his/her further development in social and working life (Drucker, 1999).

The Computer competence is an inseparable part of crucial competences required from people at the digital age. It can be assumed that employers will build a system of education on the use of ICT, to meet the needs of companies reflecting unstoppable technological progress (Svobodova & Cerna, 2018; Cerna & Svobodova, 2013; OECD, 2016).

2. Methodology and Goal

Based on the literature review it can be stated that speed, affordability and flexibility rank among key features of the corporate education scheme as well as of performance support. Without utilization of Information and communication technologies, the concept of corporate education would hardly work. That is why we have focused on the real current situation on the local Czech scene to demonstrate or refute the findings presented by national and transnational statistical institutions relating to the accessibility and utilization of Information and Communication technologies for study purposes.

The core of the paper forms the approach of employees to ICT within the system of corporation education scheme.

In this article, which is intended to be descriptive and exploratory in nature, we present empirical results that show the answers to the research questions:

- RQ1: What kind of education fits the employed respondents (F2F, ICT support, both), and what is the correlation between age category and preferred way of learning?
- RQ2: What is the preferred format of sources (printed, spoken, computer, tablet, mobile) and correlation between age category and preferred format of studied material.
- RQ3: What kinds of ICT respondents use (LMS, intranet, web portals, mobile applications) and what is the correlation between age category and utilized ICT?

The study brings comparison between official data on the national basis and data gained from the field regional findings. The data from the regional search stem from the survey carried out among 86 Czech adults. Findings from the survey were compared with data

presented by the official Czech National Statistical Office. The Czech National Statistical Office uses elaborated methodology of the European Union on monitoring, measuring and evaluation of implemented strategies in the Lifelong education.

2.1. Conceptual Framework of the Research

The conceptual framework of the paper was worked out into methodological bases and procedures. The course of methodology is outlined in the following diagram, Figure 1.

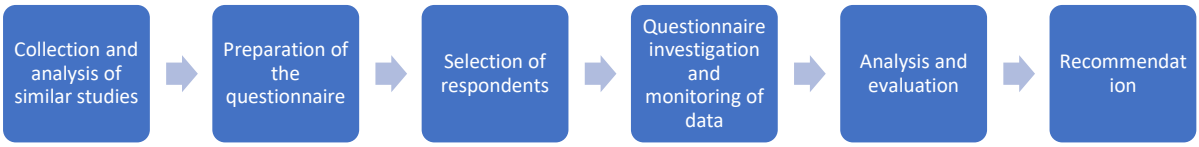

Figure 1. Methodology of research (own elaboration)

Firstly, studies on further education, and corporate education were collected and analysed, e.g. (Kim et. al., 2004; Coulson-Thomas, 2013; Sberbank, 2019; Fan & Wei, 2010; Hodges, 2009). The pilot questionnaire stemmed from the literature review and reports from statistical offices (Eurostat, 2020; CZSO, 2016; CZSO, 2017). When designing the pilot version of the research, selected criteria like age, economic status, income, utilized electronic devices and preferable ways of learning became key monitored areas. The age criterion might be found dubious but this is a natural matter. In this article, we focus on the age criterion and on various tools used in the process of education without intending to discriminate anyone. In order to illustrate the situation and sample of respondents, their economic status is monitored and recorded in the results section. This makes it clear that the sample of respondents covers the full range of population composition.

The questionnaire investigation was conducted in January 2019. Printed form of questionnaires was distributed and consequently filled in by respondents in hand. Filling in the form took the respondents 10 – 15 minutes. Respondents´ answers from questionnaires were recorded into .xls. Then the data were placed into tables. Graphs were used for better visualization of gained data. Descriptive statistics was applied. Based on the gained findings, recommendation for employers, employees were formulated, and then adaptations in the questionnaire which is going to be used in the following stage of the project were made.

Methods and a data source should be described with enough details to allow others to replicate and build on published results. Datasets that are deposited in a publicly available database should be properly referred to. Be sure to include hypotheses you tested and indicate what types of descriptive statistics were used. In case of a scientific question, describe how the data were summarized and analyzed. New methods should be described in detail while well-established methods can be briefly described and appropriately cited.

3. Results

The sample consisted of 86 people. The largest group of respondents was at the age of 26 to 35 they formed one half of the whole sample, the 36-45 age-group represented one quarter of the sample, the youngest age group 18-25 formed about one fifth of the sample, remaining 5% were respondents 46-55 old, see Figure 2.

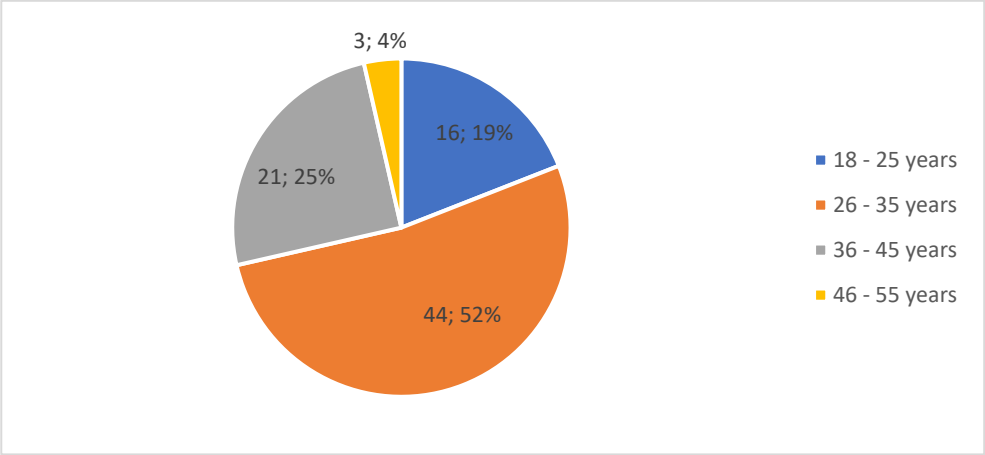

Figure 2. Age distribution

The sample was different not only in the age criterion but in the economic status criterion, as well, see Figure 3. The various age and status distribution represents actual composition of employed respondents. More than half of the respondents were employee in private sector. Parental maternity leave were only 5 respondents.

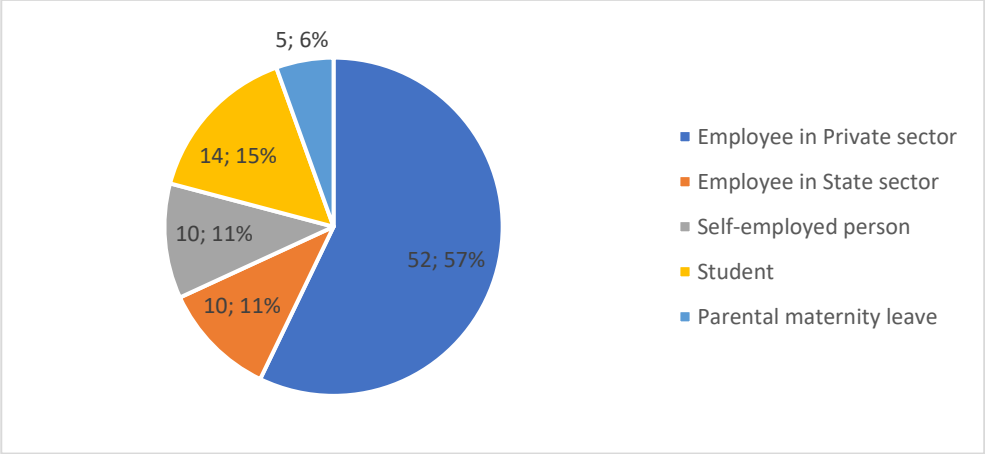

Figure 3. Economic status

The majority of respondents prefer face-to-face training in conjunction with the support of ICT. The smaller group of 22% of respondents prefer ICT support and only 16% of respondents select exclusively a face-to- face form of education, Figure 4.

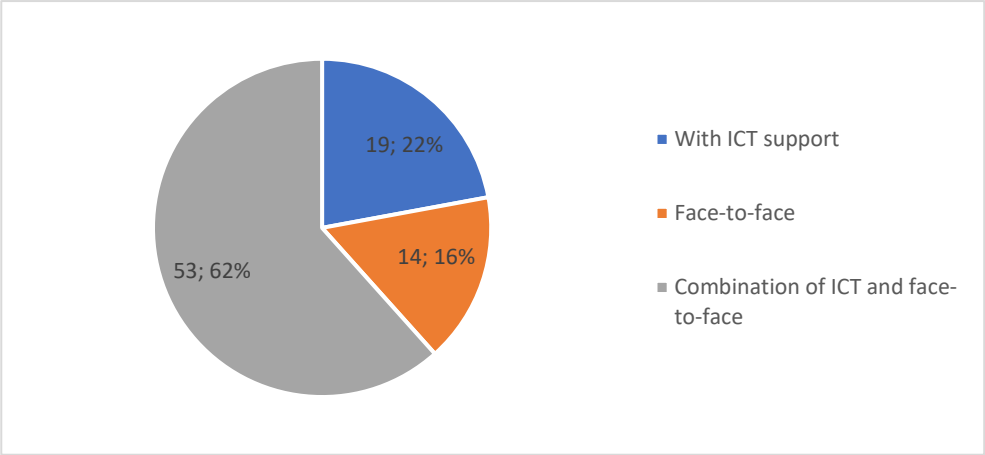

Figure 4. Ways of learning: with ICT support, face-to-face, combination of ICT and face-to-face

If the results are divided according to the age groups, the most respondents be-longed to the age category 26-35 years, then to the age category 36-45 years and finally to the 18-25 years age category. Only 3 respondents ranked to the 46-55 years age category and 4 respondents did not write their age. The largest percentage of respondents (88%) from the youngest age category 18-25 preferred combination of ICT and F2F form of education, 12% of respondents selected only ICT way of education. With increasing age these preferences declined. In the 26-35 group, the com-bination of ICT and F2F still prevailed (56% to 28%). In the 36-45 group, the ICT and F2F education preferences fell again to about 53% and the F2F preference in-creased to 25% and 12.5% in the group prefer ICT-only education. There were only 3 respondents in the group 46-55. Two of them prefer ICT education and one did not, Figure 5.

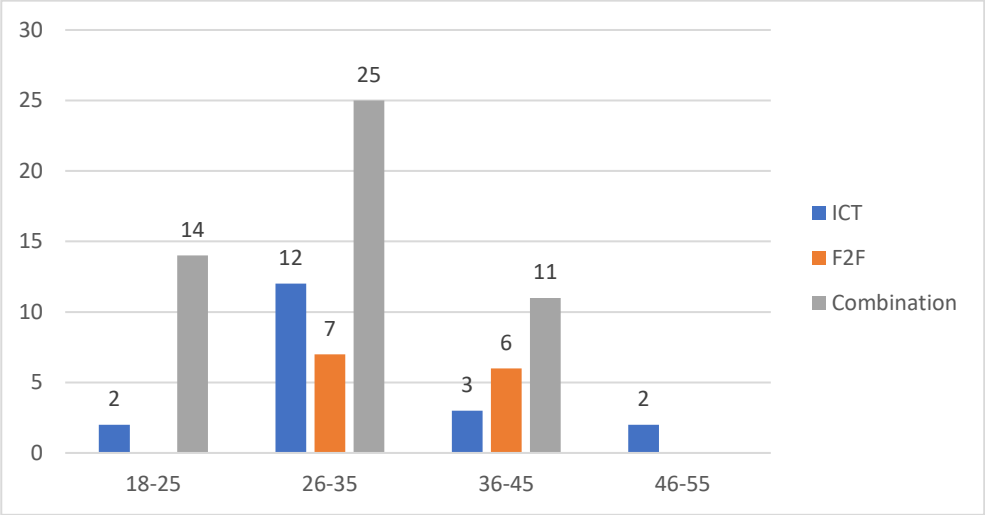

Figure 5. Preferred way of education

When it comes to the form of utilized sources, in total 70% of respondents prefer printed sources. It is true in individual age-categories, as well, except for the largest group of respondents from the 26-36 age category. Then computer/notebook was selected in 64% as the preferable source or electronic device for study purposes. Then there was a deep gap and

spoken sources followed with 33% occurrence. Surprisingly, utilization of mobiles was mentioned only in 20% responses and the tablet selected only14% of respondents.

When we look at the utilization of printed and audio sources together with utilization of electronic devices like computer/notebook, tablet and mobile from the perspective of age categories, printed sources and utilization of computer dominate. Bigger discrepancies in answers were found in 18-25 and 36-45 age groups; however, findings in the 36-45 age group were quite balanced. Overall, as already mentioned and computer fit the studying most audio sources and tablets are less used. The mobile phone is most used in the 26-35 age group. Surprisingly, for the 18-25 age group, half of those surveyed prefer printed sources, see Figure 6.

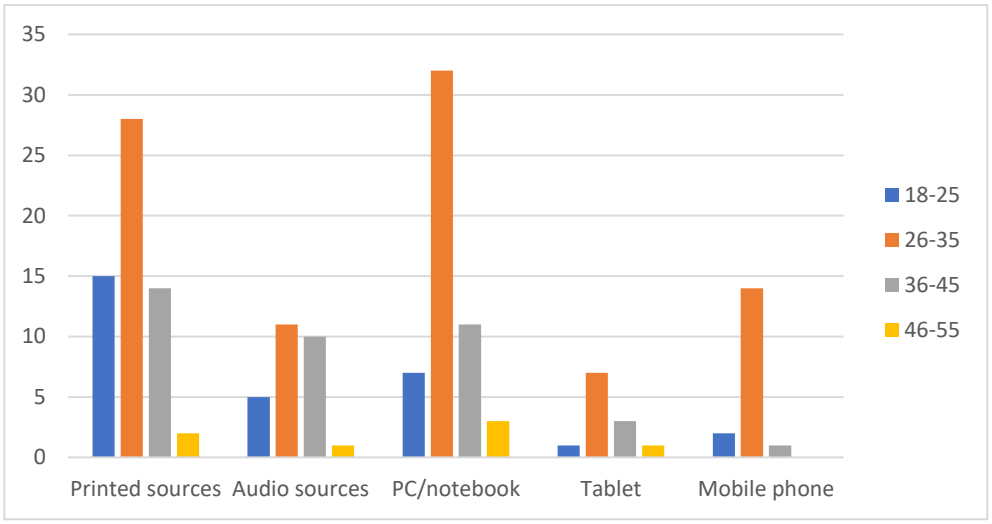

Figure 6. Technologies and education

The largest group of respondents, 71% use free educational web portals. 33% use the corporate learning environment, 30% use mobile apps, and 24% use educational virtual platforms. As for individual age groups, they all prefer education through other portals (websites) followed by educational portals with free access. Only after these options the company virtual environments are mentioned. The results (Figure 7) show that people within professional training prefer freely available materials to materials funded by the employer.

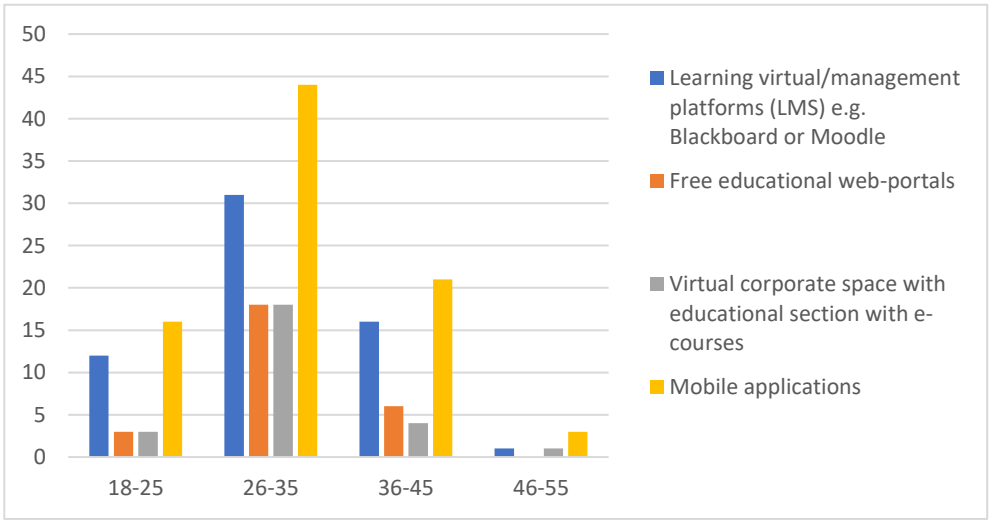

Figure 7. Study virtual environment

4. Discussion and Conclusion

Combination of face-to-face education and with utilization of ICT was the most preferable way of education in all followed age-groups.

Findings from the research revealed that, despite the fact that Czech educational authorities give formal support to adult education, reality 'in the field' is somewhat different (Rabusicova & Rabusic, 2006).

Results from Eurostat (2020) showed that the Czech Republic is in utilization of study materials on the Internet and in running communication on-line with lecturers and other students better than the average results of the whole EU28. Results also show that citizens are used to use the Internet on mobile, notebook or desk computer. Some of them are also used to using a tablet, but individuals do not use tablets so often. In informal education won computer and/or Internet and printed materials before other sources. Unfortunately, almost 30% people didn´t participate in the in-formal education. Computer and/or Internet education are the most preferred ways of further education in respondents until the age of 54, in the older age category utilization of printed materials is more preferable.

Our pilot study shows that individuals prefer combination of ICT and face-to-face. Surprisingly in the age group 18-25, individuals prefer use of printed sources before others. Individuals in the age group 26-35 prefer computer/notebook the most. Based on the findings, it is recommendable to use corporate education portals and enrich them with a section of the links with free accessible education portals, which respondents prefer.

The following phase of the design of the corporate education portal should follow two directions: firstly compose a scheme and the elaborated offer of training programmes covering end-to-end online and offline employee training and secondly create a comprehensive way reporting of employees' learning activities and providing control over their personal progress.

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