



# UNIWERSYTET PEDAGOGICZNY im. Komisji Edukacji Narodowej w Krakowie

ul. Podchorążych 2, 30-084 Kraków  
www.up.krakow.pl

tel. 12 662 6014, fax 12 637 2243  
e-mail: info@up.krakow.pl

PhDr inż. Łukasz Tomczyk PhD.  
Pedagogical University of Cracow, Poland  
Faculty of Pedagogy

Kraków, 20.05.2019

**Review of doctoral thesis „Social software to the benefit of the elderly”, author  
Ing. David Zejda, written under the supervision of Prof. RnDr. Josef Zelenka, Csc.**

Digital divide is still one of the relevant and priority challenges of the modern information society. The problem of digital inclusion is still a challenge in the so called Visegrad Group states where almost 20% of the citizens still lack access to the Internet. The recent Eurostat data from 2019 confirm that the majority of the population affected by digital divide are seniors. In addition, as noticed by J. V. Dijk, the access itself does not mean using the full potential of various online applications and websites. Considering the conditions related to digital inclusion, it seems reasonable to analyse different ways seniors can be included into the information society, for example, by developing solutions adapted to the characteristics of this group (such as limitations due to sight, hearing or motor dysfunctions, economic conditions in the oldest age groups or lack of “tailored” technical solutions). The reviewed thesis titled “Social software to the benefit of the elderly” fits the scientific discussion on the praxeological introduction of the elderly to the popular services used by the majority of digitally literate users. This subject is also consistent with the European Union guidelines for the development, stating that digital literacy and using the resources of the global digital village are as important as other classic skills.



# UNIWERSYTET PEDAGOGICZNY im. Komisji Edukacji Narodowej w Krakowie

ul. Podchorążych 2, 30-084 Kraków  
www.up.krakow.pl

tel. 12 662 6014, fax 12 637 2243  
e-mail: info@up.krakow.pl

From the formal point of view, the thesis has been constructed according to the standards set for the third cycle studies. The work has a well-developed introduction where the interdisciplinary subject is outlined. It contains the analysis of the properly selected source materials presenting the issues of digital inclusion of seniors, development of digital products dedicated to older people, consumer issues and marketing research focused on the oldest users of digital media. The theoretical part also presents the methodology based on the triangulation of the research methods (derived mainly from the qualitative social studies). Chapters 4-7 present the research results and discussion. The thesis includes also the literary references based on foreign sources. The reliability of the studies has been additionally strengthened by the interview questionnaire included (focus sessions and semi-structured interviews). The language of the thesis is communicative English which is not common in the Visegrad Group countries. The structure of the dissertation meets all the criteria set for doctoral (PhD) theses.

The work is interdisciplinary and combines the perspectives of different fields: andragogy, social gerontology, IT and marketing. Presentation of the research problems, related to the diagnosis of the needs of seniors and perception and styles of using ICT and, primarily, the development of the dedicated software, is a complex task which requires knowledge of many, often not directly connected areas. Therefore, it is a unique study, relevant not only in the context of developing new products but first of all presenting the specific social sensitivity which requires considering the biological, social and cultural limitations in the process of full digital inclusion. The author rightly notices that software development issues discussed in his work result also from the transition between the eras (analogue and digital). Despite elaborate theoretical introduction and discussion over the results, the author could have referred to the classic concepts of digital divide by J. V. Dijk – it would justify the need to initiate research and discussions of this type even more. Young researchers often forget that one of the unquestionable arguments is a horizontal presentation of a given phenomenon, for example, by referring to a region or a group of neighbouring countries. This way the data collected serve as an indicator and at the same time justify the need to address the issue in a wider context. It



# UNIWERSYTET PEDAGOGICZNY im. Komisji Edukacji Narodowej w Krakowie

ul. Podchorążych 2, 30-084 Kraków  
www.up.krakow.pl

tel. 12 662 6014, fax 12 637 2243  
e-mail: info@up.krakow.pl

is worth to confront the most recent data regarding the information society (I suggest OECD, EUROSTAT, UNESCO, PIAAC reports) by way of introduction, as the problems discussed are not unambiguous. The group of the digitally excluded is heterogeneous. It includes seniors who are only seemingly excluded because the quality of their lives does not decrease significantly if they are not digitally literate or do not have access to customised software or websites. However, as rightly noticed by the author, the major objective of the qualitative research connected with designing precise IT solutions is not only business (though similarly important) but also practical implementation of the assumptions of social inclusion. In this context, chapter 4 is crucial for both social gerontology and IT sciences as it presents the areas where both disciplines meet, namely the needs of the seniors in terms of functionality, consumer choice or the developing sectors based on the cognitive sciences. I would like to point out that the term 'older person' and definition of such person as someone aged 50 and more, may be questionable, especially among the social gerontology experts. This results from the simple fact that there are several categories of determining the old age: birth, legal, cultural, biological and subjective feelings. It would be worth to complement this motive and correct it in the version to be published. The group of seniors is also very heterogeneous. For example, if we compare a 65-year old and 90-year old or seniors living in cities, who have access to lifelong learning institutions like Universities of the Third Age, and their peers from rural areas where there is no such support available. Besides, this heterogeneity depends on the geographical location, e.g. seniors in Czech Republic, Poland, Slovakia and Hungary will use ICT completely differently than their peers from, for example, Germany or the United States. The aspect of the inner diversification in the group of seniors should be visible when we conduct our research and attempt to draw general conclusions. However, in my opinion, the results presented in chapter 4 deserve to be popularised in journals specialising in gerontology, media or social pedagogy, or analyses of services available in the information society.

Ing. David Zejda is a mature explorer of digital inclusion processes because when he designs his studies, he refers to different sociological concepts like the divide into the digital immigrants and natives (M. Prensky's concept) and presents important nuances



# UNIWERSYTET PEDAGOGICZNY im. Komisji Edukacji Narodowej w Krakowie

ul. Podchorążych 2, 30-084 Kraków  
www.up.krakow.pl

tel. 12 662 6014, fax 12 637 2243  
e-mail: info@up.krakow.pl

which divide online service users into linear and multi-tasking (young generations in particular). All the seemingly minor differences in ICT use, pointed out by the author, are important when designing user interfaces, especially those dedicated to seniors. I also suggest publishing chapter 5.2.4 on developing solutions adopted to the characteristics of the users in a specialist journal, with more detailed presentation of the results with interview quotes as the exemplification of the factors.

The methodological overview in chapters 4, 5 and 6 might need some complementation. While performing the qualitative analyses, it is worth to refer to the paradigm applied during the interviews and interpretation of the results. When completing the text before submitting it to be published – what I recommend as the results obtained are highly valuable – I would suggest to consider which paradigm was more useful during the interpretation of the individual interviews and the focused group interviews. It is worth to refer to the normative or interpretative paradigm of the qualitative research in your analyses – according to the model the author adopted and which was insufficiently described.

When analysing the results, you should also remember that there are many intermediate variables which determine the needs of seniors, the shape of graphical interfaces or the process of testing applications and websites. These variables include: digital literacy level, having family members using e-services, participation in the lifelong learning system, educational habits, health condition and other.

**Considering the thesis as a whole, that is: the relevance of the subject, quality of literature references, methodological correctness, innovative character, transparency of the scientific narrative, argumentation and fluency in combining different perspectives, I definitely positively rate the thesis presented as the basis to defend the doctoral degree (PhD).** The comments in the review do not results from cardinal errors but are only provided to show the candidate some new factors related to the development of software solutions dedicated to older people. **To summarise, my evaluation of the work is very positive.**



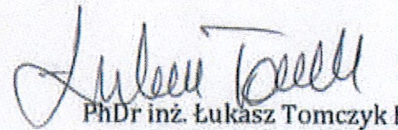
UNIwersytet PEDAGOGICZNY  
im. Komisji Edukacji Narodowej w Krakowie

ul. Podchorążych 2, 30-084 Kraków  
www.up.krakow.pl

tel. 12 652 6014, fax 12 637 2243  
e-mail: info@up.krakow.pl

At the same time I have three questions to the author:

1. To what extent can the qualitative data obtained be practically applied to the Czech specialist IT solutions market?
2. What is the dynamics and value of the creative sector in Czech regarding software and hardware solutions, as related to the older Internet users?
3. From the point of view of software designers - what is the greatest problem in implementation of the new digital services addressed to older Internet users?

  
PhDr inż. Łukasz Tomczyk PhD.