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DIGITAL EXCLUSION AS A FORM OF SOCIAL INEQUALITY

Abstract: The article addresses the issue of digital exclusion as one of the key forms of modern social inequalities in the information society. The purpose of the paper is to present the essence of the digital exclusion, identify its primary causes and social consequences and present measures to mitigate the phenomena. The rationale behind addressing this subject is the growing importance of information and communication technologies in the social, professional and civic life and the fact that the lack of access to such technologies may deepen the existing social inequalities. The paper analyses the literature on the issue of digital exclusion. The authors analysed definitions of the phenomena, its dimensions and factors that affect the level of participation of individuals in the digital world. Particular attention was paid to dependencies among access to technologies, digital competencies and the social position of an individual. The analysis points out that digital exclusion is multi-dimensional and results not only from limited access to the Internet and computer hardware, but also from inadequate digital competencies, lack of motivation, low level of education, age, place of domicile or economic and financial situation. This phenomenon affects in particular senior citizens, residents of rural areas, low-income individuals and people with disabilities. Digital exclusion results in, among others, limited access to the labour market, education, information and public services, as well as leads to a greater risk of social marginalisation. Conclusions from the analysis demonstrate that effective prevention of digital exclusion needs comprehensive measures in the field of development of digital infrastructure, education, and consolidation of digital competencies of society.

Keywords: *information society, digital exclusion, social inequalities, information and communication technologies, digital skills*

INTRODUCTION

The concept of 'information society' is a sort of mental shortcut, an attempt at synthetic definition of the key characteristics, operating mechanisms and consequences of a relatively new civilizational phenomena. The concept of 'information society' has been used to define society at the sufficiently high level of technological development for which information is the most valuable and commonly exchanged good, which is extensively used in economic, social, cultural and political life, treated as a peculiar intangible resource that is equivalent or even more valuable than tangible goods. It is society that holds rich means of communication and information processing which are necessary for creation of the majority of the domestic product and which provides a source of income for most of the people. A computer, the Internet and all digital techniques have become one of the most important aspects of life and work for participants of that society. Information society is society where information is extensively used in economic as well as in social, cultural and political life (Skrabacz, Lewińska–Krzak, 2022, p. 123). It is stressed that information society holds rich means of communication and information processing which are necessary for creation of most of the domestic product and which provide a source of income for most of the people. The processes of society digitalisation improve the living standard but they also carry a number of risks. One of such risks is social stratification to people who have access to information and people who lack such access and are digitally excluded (Chalimoniuk, 2020, p. 76). The purpose of the paper was to present digital exclusion as a modern form of social inequality and to analyse the causes, consequences and means of prevention. The author points out that access to digital technologies, the Internet and digital competencies in information society has become one of the key factors that determine participation in social, educational, professional and civic life. The paper is also intended to demonstrate that the lack of access to such resources deepens existing social inequalities and leads to creation of new divisions among social groups.

1. What is digital exclusion?

The incredible progress in the field of health care, the improvement of the quality of life, development of knowledge, and greater affluence of citizens all contribute to the process of prolonging life. Yet the simultaneous process of falling fertility rate translates to far-reaching changes in the age structure of the population since we are dealing with the dwindling number

of children and production-age people with the concurrent growing number of older people. What is more, population of Poland is becoming smaller and the predicted drop in population is one of the most dramatic in the European Union. The trends that can be observed follow the theory of demographic transitions, namely lasting changes in the patterns of population reproduction. It should be also mentioned that the demographic decline occurring in Poland has and will produce profound social and economic consequences. The growing number of older people will require certain adaptation of the social services system. The COVID-19 pandemic clearly demonstrated that the future of social and economic transformations will be largely based on digitisation (Czarnecka, Kelm, Koczur, 2023, pp. 95–96).

Digital exclusion is viewed from two perspectives. The first one consists in the access to the computer hardware, the Internet connection and its quality. In this case the exclusion also consists in the inability to purchase computer hardware because of its high price. This type of exclusion mainly refers to the place where people live, for example urban or rural areas. The second perspective focuses on competencies related to the use of the Internet. Many people do not believe in their skills or have no skills at all, are concerned about hazards of Internet use or lack the will and motivation to change their situation (Tur, Filipiak, 2024, p. 73). There are two key dimensions of digital exclusion, internal and external. While researching the internal dimension of digital exclusion we are focusing on differences in the access to new technologies among individuals and groups within a country. In other words, specific society and the rate of divisions within that society is the unit of analysis. At this level, the phenomenon of digital exclusion is interesting mainly for sociologists and political scientists (and, on a micro scale, for psychologists who analyse, for example, the personality-related or emotional consequences of remaining outside the sphere of impact of the ICT). They study changes in the social structures, the new shape of stratification, and the consequences of such processes for the model of articulating social interests and functioning of the political system. The analysis of the internal dimension of digital exclusion provides answers to the question how the differences in access to new information and communication technologies affect the socio-political picture of society. The external aspect of digital exclusion is very often called the global digital divide and may be defined as the "level of differences in benefiting from various forms of information technologies by rich and poor countries". From this perspective, the global political, social and economic system is the natural subject of analysis, while the research focuses primarily on

various planes of consequences of digital exclusion for the shape of international relations. Obviously the research of the external aspect of digital exclusion is not limited to the global dimension only. Every analysis which goes beyond the level of a single state and society namely exploration of differences e.g. within the integration structures or continents may be included in this field of research (Porębski, 2014, pp. 93–94). It should be stressed that social inequalities deriving from information society could result in exclusion practices, such as in particular:

1) Persons with low income: digital deprivation makes it impossible for them to buy computer hardware with the infrastructure; participation in a media-rich culture is quite often not a priority for them in the hierarchy of needs fulfilled;
2) Low educated persons: this fact prevents them from using digital technologies at the simplest level since it is correlated to media competencies understood as contemporary cultural competencies.
3) Persons with a particular type of disability: in such cases their health and impairments, for example those relating to perception, make it difficult or impossible for them to use new technologies, such as screen-based devices,
4) Persons who find it difficult to adapt to technological novelties: this calls for continuous self-education that requires intellectual effort and keeping up to date at all times,
5) Persons who do not understand the way information society works: the lack of understanding of the controls of information flow networks, or, more broadly, its role and significance in the lives and functioning of individuals, communities and institutions, may contribute to self-marginalisation,
6) Older people (Olejniczak, 2021, p. 102).

It is also worth considering the view presented by A. Sytek who argues that in its strict sense digital exclusion consists in infrastructural limitations such as the lack of technical capabilities of using the Internet or financial limitations. The biggest issue are the so-called soft limitations such as lack of knowledge, motivation or proper skills in using electronic administration. Since soft barriers are true with respect to electronic banking to a much lesser extent, and the same society living in the same territory with the same funds and the same access to the Internet is being compared, then at this point an argument can be put forward that first sufficient information on how to use electronic administration is missing and second there are technical issues with using e-administration (Sytek, 2016, p. 74). For some time the literature has included calls for increased funding of promotional

campaigns and informing citizens that it is possible to contact selected offices electronically, which undoubtedly is part of the need to take measures to make e-deliveries more popular (Wach, 2024, p. 586).

2. Causes and consequences of digital exclusion

Digital exclusion is a multi-dimensional phenomena. It has multiple causes: not only lack of access to computers and the Internet, but also motivational reasons such as lack of faith in one's own digital competencies or general skills, lack of motivation and also lack of willingness to learn new technologies and fear of novelties. It turns out that even if a person has proper computer hardware and access to the Internet, they do not always feel the need to be a participant in the digital world. The vast amount of information can also be a barrier. It should be stressed that declared reasons for not using the Internet such as lack of skills or high costs are actually the form of rationalizing the decision on not using the service because of lack of motivation (Baranowska, 2023, p. 46).

M. Błażewski argues that causes for digital exclusion can be presented in four dimensions of technology, motivation, skills and usability. The technological dimension covers hardware and Internet accessibility. Such access is also conditioned upon funds available to the individual and the existing infrastructure. The motivational dimension refers to motivation to use information and communication technologies by its potential users. This dimension refers to mental barriers related to unwillingness to use such technologies. The barriers may result from fear of low security triggered by lack of sufficient knowledge of hardware and the Internet. The second dimension also involves a conscious need to use electronic means of communication. The dimension of skills refers to ability to use the hardware, search for information and edit content. The dimension of usability is related to the need to use information and communication technology. The access is conditioned upon knowledge of benefits that may arise from the use of information and communication technology (Błażewski, 2023, p. 56). Factors that may influence the exclusion include legal standards. When creating legal regulations, the legislator shapes reality, creates framework based on which administration and recipients of actions design their conduct and make decisions on choosing the course of action in a given case. Practice often shows that the way certain fields of life are regulated may encourage or discourage individuals from taking steps in the field (Ulasiewicz, 2021, p. 147). A. Stolarczyk argues that causes for digital exclusion may be divided to technological and mental. They can be

connected to two types of inequalities that condition the level of digital exclusion: individual, such as age, gender, origin, level of grasping information, personality or state of health; and situational, such as job or type of work, education, financial situation of the country or region (place of domicile), and the role in the household. The sources of causes result from unequal distribution of resources – not only material ones, but also time, mental, social and cultural resources (Stolarczyk, 2018, p. 303).

The phenomenon of digital division is related to social and economic exclusion. Persons who are unable to use new technologies or lack sufficient information competencies run the risk of exclusion, which may deepen and bring negative consequences in different areas of life. At present, some information about employment is available online only. People who are online are more likely to evade unemployment or may become employed again more easily, they find a better paid job more easily, are able to find additional work and improve their skills and qualifications, which improves their chances of promotion and better pay. Online users become self-employed more often. Most certainly the use of new technologies is conducive to professional activation and navigating the ever-changing labour market (Kurowska, 2013, pp. 7–8). In addition, people who face digital exclusion do not have access to information. Today, information is currency. The ability to find and verify information and the skill of critical thinking are becoming key competencies of the future. Limited access to public services is a consequence of digital exclusion. A digitally excluded person faces issues with using solutions of e-administration, such as e-office, e-banking or e-health. The exclusion not only means no access to services, but also limited digital competencies and lack of full participation in social life based on information and communication technology. For people with disabilities, access to the Internet and digital tools is a crucial part of their social inclusion that improves self-sufficiency and participation in public and professional life. Digital exclusion also has a social and interpersonal dimension. It is particularly true of the young people who believe that ‘if you are not online, you don’t exist’. This highlights the importance of being present on social media for building peer relations. The Internet is becoming space where social relations are established and maintained, often before going to a new school, as pupils or students often establish their first relations online. The last dimension is civic exclusion, which can be manifested in lower level of social and political participation. People who are digitally excluded exercise their civil rights, including voting rights less often, which may lead to marginalization of such people in democratic processes (Baranowska, 2023, pp. 45–46).

3. Preventing the digital exclusion

Many attempts at preventing digital exclusion have been made. These attempts have been geared towards overcoming certain issues that prevent people from using information technologies and reducing causes for digital exclusion. To prevent digital exclusion a number of measures are designed to allow a certain group of people use information technologies. These measures are addressed at specific social groups and have a clear-cut purpose. Implementation of such measures also eliminates several causes for digital exclusion. Such measures are implemented by state institutions, private institutions and local government units. The measures vary. The institutions spend their own funds or seek funding from other sources (Lipnicka, Lipnicki, Wojczyk, 2015, p. 82). Prevention of digital exclusion requires comprehensive approach that includes infrastructural and educational measures. Development of digital competencies, in particular among groups which face exclusion the most, namely the older people, residents of rural areas and people with lower income, is of major importance[1].

Education targeted at using a computer should be offered to all age groups including third age universities. The lasting and growing unemployment in some regions of the country leads to stagnation and poverty. Children who learn how to use a computer and search for and use information will certainly fare better in adult life, both professionally and personally. Lack of access to the Internet based on a conviction that access to the Internet is not necessary is the fundamental element of the digital divide. The more people in the groups or social categories follow such a belief, the more such groups or categories run the risk of digital exclusion (Żuk, 2015, p. 179).

The analysis of the issue of digital exclusion helps identify a number of recommendations which, if implemented, may improve the digital inclusion and reduce barriers that prevent people from using information and communication technologies. Prevention of digital exclusion needs measures that go beyond securing access to the Internet. Identification of individual needs and motivation of people running the risk of exclusion is

[1] J. P. Kwaśniewski, Determinanty konsekwencje i efekty wykluczenia cyfrowego, downloaded on 21 June 2025 from: https://www.researchgate.net/profile/Jacek-Kwasniewski-2/publication/407088697_Determinanty_konsekwencje_i_efekty_wykluczenia_cyfrowego/links/6a303fce68552924bb00d118/Determinanty-konsekwencje-i-efekty-wykluczenia-cyfrowego.pdf

crucial since it is only when access to technologies is combined with the actual benefits of using the technologies that continuous digital inclusion is supported. One of key areas of measures is to reduce motivational exclusion. Many people, especially senior citizens and people with disabilities, do not use technologies not because of lack of access, but because they believe that such technologies are hardly useful. This is why it is necessary to present practical applications of digital tools that may facilitate everyday life, communication and participation in social life. Effective prevention of digital exclusion also calls for high quality of access to the Internet and necessary hardware. A stable Internet connection and modern devices improve comfort of use and increase people's willingness to use digital services. Of particular importance are infrastructural investments in remote areas and support for the families who do not have necessary computer hardware. The experience gained during the COVID-19 pandemic demonstrated how important digital competencies are for complete participation in social and educational life. Limitations related to education and remote work revealed issued which people without sufficient digital skills face. This is why development of competencies on the use of technologies should be a major part of inclusive measures. Comprehensive prevention of digital exclusion requires co-operation of public institutions, social organisations and local communities. Only measures which take into account technological, social and educational needs can effectively support digital inclusion of all groups of inhabitants (Wrzesińska, 2023, p. 19).

CONCLUSION

Digital exclusion is one of key forms of contemporary social inequalities as it limits the possibilities of full participation of individuals in social, professional, educational and civic life. In the information society, access to digital technologies and the ability to use them become major resources that condition development and quality of life. Social and economic situation of the people without such resources is less favourable. The analysis of the issue shows that digital exclusion does not result from lack of Internet access or computer hardware only. The barriers related to the level of education, age, place of domicile, financial situation, health and lack of competencies and motivation to use new technologies are just as important. This means that the nature of digital inequalities is material and social-cultural. The lack of digital competencies and limited access to technologies lead to numerous adverse social consequences. Excluded persons find it difficult to access the labour market, education, information and public

services which are provided electronically. This may lead to lower professional activity, limited participation in social and civic life and higher risk of social isolation. Prevention of digital exclusion calls for comprehensive measures that include development of the digital infrastructure as well as education of society on digital competencies. Improving the awareness of benefits of using technologies and adapting support measures to the needs of groups most at risk of exclusion is also of crucial importance. It is only when technological, educational and social measures are combined that digital inequalities can be effectively mitigated and development of more inclusive society favoured.

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