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Цифрові трансформації та інноваційні технології в економіці: виклики, реалії, стратегії

**Digital Transformations and innovative technologies in the
economy: challenges, realities, strategies**

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Для науковців, науковців, студентів, аспірантів, представників бізнесу та громадських організацій і вищих навчальних закладів та широкого кола читачів.

The materials of the International scientific and practical conference "Digital transport and innovative technologies in the economy: challenges, realities, strategies" provide the results of scientific research focused on the search for a systematic solution to multidisciplinary problems in the field of electronic business and technological innovations, digital transformation of educational systems, the introduction of innovative technologies in financial sector. .

For scientists, researchers, students, postgraduates, representatives of business and public organizations and higher education institutions and a wide range of readers.

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THE INFLUENCES OF THE DIGITAL ECONOMY ON THE DEGREE OF PARTICIPATION AND TRUST IN THE RESPONSIBLE AUTHORITIES

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Digital economy created the new economic and social relationships among both enterprises and individual consumers, based on broadened using of ICT that becomes as a common need of digital transformation [1]. For example, smart contracts, also called self-executing or digital, herald a new type of contract relations and push out traditional civil agreements by using blockchain technology, that guaranteeing confidentiality and confirming of e-identity of civil relations. There are also occurred some shortcomings, resulting from an automated algorithm but they can be eliminated by auditing codes by reputable IT professionals. Blockchains cannot completely replace human behavior, but they support the independence of finance from the traditional financial and political system [2]. Therefore the need to enhance functioning system, as well as users' skills those with basic, advanced or expert skills, increases.

The results of qualitative research of the Covid-19 impact [3] performed by The Institute for Public Affairs (IPA) (the public policy issues and the company's transformation processes) confirmed in particular the changes in the adult digital literacy in Slovakia. More than two thirds of respondents (survey conducted in 2/2022 on a sample of 1003 respondents older than 18 years in SR) confirmed enhancement of their basic skills, but only 41% confirmed progress in the use of specialized, resp. professional applications. People with enhanced skills or whose prefer ICT use extended their skills, regardless their place of residence or level of education. Marginalized groups that are elderly, unemployed or low-income families confirmed the lower interest in IT. It is also due to they do not understand the need to adapt to the digital age, the lack of money or knowledge of e-services using. Covid 19 pandemic is the basic factor that during last two years forced people to increasing their own digital skills. They expanded their knowledge by self-study or self-education (40%), or using social contacts (in 37% with family, 32% - friends or 28% -colleagues at work) to wider the use of e-communication, e-services or e-payments (e-health services (67%), portals (59%), with health centers (53%), and in 31% or less with health insurance, e-government, social and employment office, tax office or other. These results were partially confirmed by the conclusions of our survey research (conducted from 12/2018 to 04/2019 on representative sample of 987 buyers (in the age range of 16 to 75 and over, by gender: female: 65.7%, male: 34.3% and by income and living location's categorization in SR), using SPSS software and the multiple regression analyzes. We assess how socio-demographic or socio-economic factors significantly

influences the role and selection of digital tools, the role of participation, and the trust in institutions (in detection of unfair practices in the field of dual quality goods, sold in SR and the EU). We compared the partial outputs of both researches to assess the role of digitization or pandemic.

Firstly, we assessed if the influence of the size or place of settlement will differ digital tools using (assumption from Eurostat statistics in 2018)[1], which has not been confirmed. We can say, that due to pandemic influences decreases the digital gap (approx. -2%) of respondents in dividing by region or settlement size [3]. Either young or adult, especially in working age have to work with specialized equipment or services, they should dispose with advanced digital skills that according to results of IT Slovak Association research decreases and need to be improved [4]. In the Multiannual Financial Framework 2021-2027 (prepared by MIRRI SR)[5], is not included the lifelong adult education and digital skills in the education plan, even though SR is on the tail of Europe [6]. Such education could strengthen the growth of productive forces possible to react to the rapid changes in the market or to adapt to various alternative solutions [7, p. 140] what is also priority of The Digital Transformation Strategy of Slovakia 2030. As finances from recovery programs (Digital Slovakia 2030) are loans that need to be repaid, they must be used effectively. The digitization of public administration is significantly more preferred than other sectors (research of digital technologies, or only 10% of the budget designated for digitization of Slovak companies) [6]. The main aim is to develop the digitalization of health, education or the electoral process, with the support of digital mobility directly from mobile devices (mostly preferred as tolls of e-connectivity by all income groups). Next, due to pandemic restrictions in mobility or difficult logistic conditions caused the wider use of local resources (material or labor), supports sustainable development of the regions [8]. As wider public dialogue [9] supports exports and investments, economic diplomacy, digitization and education, The Ministry of Economy of the SR formed the Slovak Government Council for Competitiveness and Productivity [10] with the aim to support SMEs innovation potential to produce smart solutions that are as a common need [11, p. 109]. Set up of consortiums between financial institutions and other law, technological and consulting companies is the way to eliminate the risky investments in innovation in EU [12]. In the SR, the first open platform up to 2020 as FinTech Hub Slovakia was established [13].

The basic barriers that may lead to fail of digital transformation programs (app. 70% of them) are: employee resistance to changes, costs and lack management strategy [12] without unified information and business strategy [14, p.28].

In such economy institute of trust is growing. As many as possible institutions should reproduce the trust [15, p. 167], where increases the role of social media as a tool for interpersonal communications and economic life, but not secondary in comparison to the market and political conditions (strategical or tactical) [16, p. 2].

Special portal as www.slovensko.sk/supports the mutual e-connectivity citizens with e-government, and with other institution aimed at presentation of the various outputs of regular (using legalized methodologies) or random controls, as well as customers' suggestions, complaints, petitions and requests for information[17]. Such tools help them to indicate unfair practices or suspected violations, bans or non-compliances supported by the use of ICT using also unified e-identity portal.

Barriers of non-use of these tools caused from lower level of practical and digital skills and knowledge, resulting in their rejection [5]. Microsoft offers the functioning of state and public administration offices on its digital office website. In transition to new forms of hybrid work, it offers digital tools and experience by the use of cloud services and sustainable technologies.

Another problem is the broadband connectivity (also of marginalized or low-income people) groups to the Internet, where user verification sometimes takes a long time or it does not work correctly. Based on the personal experience of the respondents, we state that even though a citizen is the owner of an eID Card, if he does not need to communicate with the public administration often, his digital soft skills are weak, which weakens his communication opportunity. Encrypted communication networks or servers, as well as wider support for development of various IoT applications can help speed up connectivity with e-government.

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