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COVID-19 and the digitalization of Central Europe

The COVID-19 pandemic outbreak has become a global stress test. The restrictions of social distancing have led the world to accelerated "lessons" in the areas of communication, digital skills, online activities, information technology for businesses and digital public services. Paradoxically, this could be a turning point in the digital transformation of the Central European countries in the coming years.

Distance yes, but not in cyberspace. The coronavirus pandemic, more precisely: the measures taken by states to prevent further spread of COVID-19 constitute an unprecedented shock to the global economy, in terms of scale and specificity. Forcing people to keep social distance causes serious, not to say catastrophic, economic consequences. However, it has become apparent how immediately and efficiently human activity has been transferred – where possible – to cyberspace.

Estonia, known for good e-government practices, has allowed to report a child's birth and give them a name without leaving home since 19 March. The National Theatre in Prague offers live dancing classes conducted online by Czech ballet masters. In Romania, medical mobile platforms are launching online consultations for patients with chronic diseases or mild conditions. Many similar examples from the countries of Central Europe can be identified. Today millions of people work, study, enjoy additional activities - including sports - shop, visit museums or participate in concerts without leaving home.

Experience shows that the pace of digital transformation depends on two groups of factors. On the one hand, this is a broad institutional issue including informal cultural norms and habits. On the other hand, there are tangible constraints, such as the availability of relevant infrastructure. The current crisis has a chance to have a positive impact particularly on the former.

Change of habits. One of the biggest barriers to implementing innovations - including digital ones - is resistance to change. In order to do so, an external stimulus is sometimes needed that will disrupt current habits, the status quo, and will bring "forced experimentation". Researchers from the universities of Oxford and Cambridge took up this issue². They looked at the strikes of the London Underground workers of 2014, which blocked some lines and caused travel chaos. It seemed that for commuters who were going to work at that time, no good would come of it. However, it turned out that 5% of passengers who had been forced to use other alternative routes stuck to them after the strikes because they were more efficient - allowing them to reach their destination faster. The definitive cost-benefit statement showed that the time saved in the long term exceeded the time lost by commuters during the strike.

The Economist recently referred to these studies³, noting some analogy to the current situation, stating that the outbreak of the COVID-19 pandemic poses a much greater challenge than the strike of transport workers. However, the "forced experiment" that we are currently experiencing can potentially also permanently change certain trends in business organization and public administration. These include, among others, implementation on a much larger scale of remote work and e-services than before. In some cases, this may

¹ Before that only married couples could do so.

² S. Larcom, F. Rauch, T. Willems, *The benefits of forced experimentation: striking evidence from the London underground* network, "The Quarterly Journal of Economics" 2017, vol. 132, issue 4, s. 2019–2055.

³ The Economist, Covid-19 is foisting changes on business that could be beneficial, www.economist.com/ business/2020/03/05/ covid-19-is-foisting-changes-on-business-that-could-be-beneficial [access: 5.04.2020].





prove much more efficient, just as alternative routes were for London Underground travellers. So far, in terms of the proportion of remote workers and the implementation of e-services, most of the Central European countries have clearly lagged behind the developed countries of Western Europe. Moreover, northern countries had a much greater flexibility of work, whereas the south had less. For example, among Central European countries, the highest percentage of people who at least once worked remotely in 2018 is 22% in Estonia and 16% in Latvia, while the lowest is in Kosovo and Romania -4% (in Poland 12%). Similar differences exist in e-services: 80% of Estonian residents have used e-government at least once in the last 12 months, while in Romania only12% have (Poland -40%)⁴.

Infrastructure. The pace of digital transformation is also highly dependent on the above-mentioned relevant infrastructure. The current crisis has emerged at a certain "state" point in its development, thus giving different response possibilities for both businesses and public administrations. Differences between the countries of Central Europe in this area are very significant. This is demonstrated by the selected Eurostat data⁵ from (extreme values are presented, i.e. for the country with the highest regional and lowest indicator):

- 90% of households in Estonia have internet access, while in Bosnia and Herzegovina 72% (in Poland 87%).
- 83% of households in Estonia have a fixed broadband connection, 58% in Bulgaria (62% in Poland),
- 68% of the Estonian residents made online purchases in the last 12 months, Montenegro 16% (in Poland 54%),
- 81% of Estonian residents use internet banking, Montenegro 3% (Polish 47%),
- 29% of non-financial enterprises in the Czech Republic conduct e-commerce sales e-commerce, in Bulgaria 7% (in Poland 14%),
- 83% of non-financial enterprises in the Czech Republic have a website, in Bulgaria 47% (in Poland 70%).

The digital efficiency of the Central European countries, at least those of the European Union, is presented comprehensively by the Digital Economy and Society Index (DESI) published by the European Commission. According to its latest edition of 2019, Estonia is the most efficient in this regard among the Central European countries, but has only taken 8th place on an EU-wide basis. The other countries and their positions: Lithuania – 14th, Slovenia – 16th, Latvia – 17th, Czech Republic – 18th, Croatia – 20th, Slovakia – 21st, Hungary – 23rd, Poland – 25th, Romania – 27th and finally Bulgaria – 28th against the backdrop of the EU.

Digital single market. The DESI Index is a tool that has been developed to measure the progress of EU countries toward a digital single market. It is a strategy adopted by the EC in 2015, the main objective of which is to remove national restrictions on online transactions. The Digital Single market, as stated in the European Parliament's documents, is "one of the most promising and challenging areas of progress". It took initiatives such as General Data Protection Regulation (EU GDPR) in 2016 and the abolition of roaming charges in 2017.

The main differences in digital efficiency in the Member States have led the EU to take further action including the creation of the next long-term budget for 2021-2027 of the Digital Europe Programme. The programme is expected to start in 2021 and provide funding for projects in five areas: supercomputing, artificial intelligence, cyber security, advanced digital skills and the widespread use of digital technologies across the economy and across all societal groups.

Conclusions. The experience of the crisis that the world is currently facing will also be reflected in the economies of Central Europe. At the same time, the crisis can be a stimulus that will accelerate the pace of needed reforms, lead to a change of thinking and pave the way for digitalization efforts in the coming years.

⁴ Eurostat, Database – Digital economy and society, www.ec.europa.eu/eurostat/web/digital-economy-and-society/data/database [access: 5.04.2020].

⁵ Ibidem.





The explosion of the COVID-19 pandemic has made digital technology more important than ever. The coronavirus crisis has also highlighted its significance. At the company level, implementation of digital solutions is a key factor in market success (and often survival in the current situation). At the level of the economies – especially those that are making up for a lack of development, aspiring to a group of highly developed economies – digital transformation is a prerequisite for bridging the technological gap and is now becoming a key factor in global competitiveness.