

Boosting digital environments in CEE – a Slovenian perspective

Harmonized and transparent digital regulation and a connected digital environment are the keys to our digital future

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The digital decade, boosted by the pandemic in the last two years, significantly influenced all the economies and raised awareness of the importance of digitalisation in all areas of our society. But above all, we realized that our digital challenge and our digital future on the national level, in Central Eastern Europe (CEE) and the entire EU relies heavily on two factors: smart digital regulation and unified, competent and innovative digital environment.

Key words — digital transformation, digital regulation, inovatoin, technology

First: Digitalization first and foremost relies on infrastructure and competences. When the country has sufficient network coverage, the appropriate IT services and people who are able to use it, the first essential step towards digital transformation is done.

Second: the whole social environment should show a high degree of readiness for digital transformation, including the public administration, especially in the legislative and broader regulative processes. The efforts from the innovative and development environment must be supported by the applicable laws and secondary legislation acts which enable gains. We must understand that Europe’s problem is not dependency on others – on the contrary – it is mostly in the slow adoption and uptake of modern technology and adaptive (global) business models. Therefore, digital regulation for the “EU’s Digital Decade” must strive towards several goals: maintaining European values and principles of democracy, freedom of expression and privacy on one side and a unified, transparent and applicable regulatory framework on the other.

Slovenia gained three ranks on the DESI index [1] ranking in 2021 and it is now in the 13th place among EU member states in a composite index (see Figure 1). This advancement is attributed mostly to increased connectivity, especially due to the multiband auction for the implementation of 5G networks. Slovenia ranks above the EU average also on the indicator marking the ‘Integration of digital technology’, due to increasing digitalization of SMEs and new technologies uptake. State aid projects vouchers for digitalization that already include Artificial intelligence (AI) also contribute to digitalization of SMEs. AI is undoubtedly one of the technologies with a long history in Slovenian academia, and is lately increasingly implemented into business processes. One of the biggest achievements on the global level is the positioning of the International Research Centre on Artificial Intelligence (IRCAI), the UNESCO AI institute, in Slovenia in 2020. Another major achievement is also the

installation of HPC Vega, one of the strongest supercomputers in Europe and in the world.

Slovenia though, ranks 15th in the public services with the best indicator being open data. Improving digital competencies of the employees in the governmental sector is where the action is needed most. In addition, we also need to secure and improve access to open databases and e-identifiers and strive towards other improvements in the government sector.

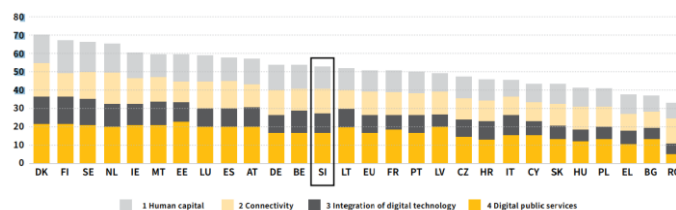


Figure 1: Digital economy and society index (DESI) 2021 ranking

Digital competences are a must in all sectors of the digital society, and they also represent the base level for digital profiles. Digital skills enhancing programs are available not only to students and employees, but also to elderly people. During the pandemic, those people who had better digital skills, were able to stay in touch with their families and friends, were able to shop online and attend virtual events. For the work force the primary driver of adopting new digital skills is acquiring new work processes and dynamics rather than having a social connection digitally. Many professions will undergo drastic changes due to digitalization and the labour market should adapt accordingly. School and study programs must follow the needs of the market, which brings numerous challenges – from educating teachers and mentors to more flexible and efficient curriculums. Digital Innovation Hub (DIH) Slovenia conducted several research studies, namely Forecasting staffing needs in the field of digital profiles [2] and Development of content for different study programs [3]. The results of the former research clearly show the growing need for ICT profiles over the next years. DIH Slovenia proposed the methodology used to forecast the needs for ICT profiles in the individual small or medium

organizations. The acquired data helped us to predict that for the next 5 years the demand for ICT experts and other digital profiles is expected to grow (see Figure 2).

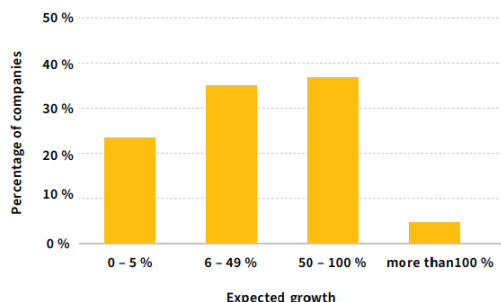


Figure 2: Expected growth of the needs of ICT experts or other digital profiles in the next 5 years on the sample of Slovenian companies

Based on the Skills Panorama [4] report we can predict 98.000 new ICT profiles in Slovenia will be needed. If we combine this result with the report from the European Commission [5], we can assume that the technological development will create new working places connected to big data and the development, maintenance and updating of the AI technology. These expect the fastest growth until 2030. Such work positions demand a higher level of education, intensive usage of social and interpretative skills and at least basic knowledge from the ICT field. Digital competences are the basis for digital profiles and for this reason Slovenian digital coalition is addressing the area of competencies in a strategic working group.

Second basis for the successful digitalization is the infrastructure. The European Commission issued the directive EECC – European Electronic Communications Code32 in 2018 which should have been transposed into national legislation by the end of 2020. In Slovenia ZEKom-2 (Telecommunications act) is still in the governmental procedure. Proposed changes of this extremely complex act, covering the functioning of telecommunications operators, represent one of the most important regulations for further development of the digital environment.

Digital regulation will be another key factor to the success of Central Eastern Europe (CEE) and the entire EU in the next digital decade. Countries of the CEE have a harder task in assuring that our legislative framework remains open to new business models, in line with innovative global trends. Our economies rely mostly on SMEs, which are crucially dependent on technologies, available on the global digital market. Our ability to shape economic outcomes within the EU and on the global level must not be diminished by (over) burdensome regulation on one side and poor economic performance on the other. Fragmented markets and closing the doors of “fortress Europe” will only push more SME’s and other businesses to grow their enterprises in other parts of the world. We strongly believe that the EU has the chance of a decade to become the “global digital regulator”, as we did to a notable extent in the field of personal data and privacy with the GDPR. But

we believe this goal can only be achieved by observing the realities, challenges and opportunities in the global, interconnected digital market.

Slovenian presidency of the Council of the EU in the second half of 2021 proved to be a success in the drafting of new digital regulation, mostly embodied in the Digital Services Act, Digital Markets Act, regulation of AI, Digital governance, ePrivacy and many other digital files. Despite rather pessimistic predictions, Slovenia managed to maintain its role as the “fair and honest” broker in the shaping of the Council’s proposal of the Digital Services Act, perhaps the most notable success of the entire (digital) presidency. Compromise wording, adopted by the Member States on the 25th November represent a good basis for further shaping on the trialogue levels and a balanced compromise between the expectations of the “maximalist” and the “minimalist” Member States.

In conclusion, we believe there are a few things all of us in the digital environment and economy agree upon. Above all: we strongly support Europe’s goal to ensure development of its digital economy, society and digital capabilities. There is no doubt about that. But we must also encourage European start-ups, SMEs and other companies to address challenges of today, such as the pandemic, lack of digital competences and the lack of resilience in our supply chains. We must maintain cross-border data and technology sharing in order to be globally competitive. Our industrial players must have all the tools to assert their position and to promote open markets, European values and international standards reflecting those values. Only by promoting a clear, united, competitive, collaborative and transparent European regulation and overall position in the global digital arena shall we have the potential to strengthen European digital society and our industry not only during the next digital decade, but for the decades to come.

LITERATURE

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[6] <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32018L1972&from=EN>

[7] Figure is taken from the research done by University of Maribor for DIH Slovenia in 2021 and because of the original text it is kept in Slovenian language, where the "odstotek podjetij" means "the percent of the companies" and "pričakovana rast" means "expected growth".