

The background of the top section is a composite image. It features a cityscape with a river and a bridge, overlaid with a network of blue lines and various digital icons. These icons include a brain, a cloud, a shopping cart, a smartphone, a location pin, a car, a person, a Wi-Fi signal, a factory, a bar chart, and a building. The overall theme is digital technology and urban development.

TALKS ABOUT EUROPE

# *Digitalization of cities and regions*

What are the benefits for the citizens?



European  
Commission

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***The aim of the Digital Europe Programme, adopted by the Council of the EU on 16<sup>th</sup> March 2021, is to extend Europe's autonomy in key technologies and increase its competitiveness. Above all, however, it strives to create efficient, secure, and modern digital services for all citizens and companies in the Union. The EU will allocate for this purpose 7.6 billion euro in years 2021-27.***



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*How can these measures really improve the quality of life of Europeans in cities and regions? Panelists of the debate "Digitalization of cities and regions. Benefits for Citizens", organized on July 1<sup>st</sup> 2021 as part of the "Talks about Europe" series conducted by THINKTANK and the Representation of the European Commission in Poland, tried to find an answer to this question.*

Among the panelists, there were: **professor Dominik Batorski** – sociologist and data scientist, University of Warsaw, THINKTANK expert; **Katarzyna Gruszczyńska-Spychała** – Gdynia's vice-president for economy, co-author of innovative urban projects awarded in the international competition "Innovations in Politics"; **Tomasz Klekowski** – digital transformation expert, team coordinator at GovTech in the Chancellery of the Prime Minister. The discussion was moderated by **Małgorzata Bonikowska**, PhD, president of THINKTANK, member of Team Europe.





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### 1. MAIN POINTS

#### Europe's digital strategy

In this decade, green transformation, the acceleration of the digitalization of the economy, public services, and social life are all crucial goals for the European Union. The EU's digital transformation is expected to contribute to a technologically sovereign Europe, and its benefits should benefit citizens, businesses, and the environment. At the same time, this process is to be conducted with respect for current European values.

The Digital Europe program, is part of the "[Internal Market, Innovation and Digital Agenda](#)" chapter of the European Union's Multiannual Financial Framework, which is currently being finalized. It is one of the 6 priorities of the current European Commission's strategy, "[A Europe fit for the digital age](#)". Its main goal is to accelerate and shape the digital transformation in Europe. It focuses on developing the EU's strategic digital skills, and supporting the advancement of technologies for the needs of European citizens and businesses.





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### The Digital Europe Programme

This [programme](#) will provide financial means for initiatives in 5 fields:

1. **Supercomputing.** The approximate sum of 2.2 billion euro<sup>1</sup> will be allocated to projects destined to create European supercomputers, capable of processing plenty of data. Thus, the EU will have its own independent and competitive technology assets able to meet the challenges posed by the development of artificial intelligence and other new technologies. This is crucial for the development of modern digital services, from healthcare and renewable energy, to car safety and cybersecurity.

2. **Artificial intelligence.** 2.1 billion euro<sup>2</sup> will be allocated to the development of artificial intelligence throughout the European economy and society. This amount is intended to enable public authorities and enterprises, especially the smallest ones, to have better access to research facilities and to conduct experiments in the field of AI in the Member States. The European Commission is planning to develop, among other things, common "European libraries" of algorithms, accessible to the public and private sector. Open-access platforms and AI industrial data spaces will be made available across the EU through Digital Innovation Hubs.

<sup>1</sup> <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/digital>

<sup>2</sup> <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/digital>



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3. **Cybersecurity.** 1,6 billion euro<sup>3</sup> have been designated to support this area, i.e. to protect the digital economy, society and democracy in the EU. Under the programme, cyber defence will be built, an EU cybersecurity sector will be created, the most modern equipment and infrastructure will be financed, and the development of the necessary skills and knowledge will be supported.

4. **Advanced digital skills.** With the financial aid of 580 million euro<sup>4</sup>, current and future workers in the EU will be able to acquire advanced digital skills through long- and short-term training and internships, with digital innovation centres there to help them. They will support small and medium enterprises together with public administration institutions in training their employees so that they are able to take advantage of the new opportunities offered by supercomputers, artificial intelligence, and cybersecurity services.

5. **Ensuring wide use of digital technologies in the economy and by society.** 1.1 billion euro<sup>5</sup> will support the digital transformation of public administration and services of general interest and their interoperability across the EU. It is also intended to facilitate access to technology and know-how for all enterprises, especially small and medium-sized ones. These digital innovation centres will be service points for SMEs and public institutions. They will

<sup>3</sup> <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/digital>

<sup>4</sup> <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/digital>

<sup>5</sup> <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/digital>



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provide knowledge and advise on any digital transformation project. The network of Digital Innovation Hubs is to be accessible across the whole of Europe.

### **Smart cities and smart communities**

Digitalisation understood in such a way will fundamentally change cities and local communities. By 2050, around two-thirds of the world's population will live in urban agglomerations. Therefore, in the upcoming decades the demand for more efficient city management and improvement of the quality of life of their inhabitants will increase. As a result, more energy, water, efficient transport, and waste disposal systems will be needed. At the same time, the conditions for sustainable development must be met.

It is impossible to achieve all of this without innovative digital technologies. They should be used to deliver traditional and future services more efficiently, and serve citizens and businesses alike. Smart cities must have an interactive and flexible city administration, safer public spaces, and be ready to respond to the needs of an ageing population.

## 2. COMMENTS OF THE PANELISTS

### **Karolina Gruszecka-Spychala**

- The primary goal of digitalization should be to improve the citizens' quality of life. Both by offering them services that directly facilitate official and private matters, and





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- indirectly, by more effective management of various spheres of urban life. We still have a lot of backlogs, and the basis of digitalization is reliant on access to high-speed internet services. It's not bad in Gdynia, but there is still more work needed. We are also part of a large metropolis that connects 59 local governments, and in this structure, it is an issue that hinders effective cooperation.
- For us, local government officials, it is extremely important to build and develop domain systems such as cybersecurity. Although local governments are strongly lobbying for decentralization in Poland, in this area we would be happy to see a bit of centralization, or at least unification of solutions and standards. The point is to have the e-administration systems working together and easily exchange data. So that the citizen does not have to register the same data for the 50<sup>th</sup> time in every office and in every case.
  - Today people move around a lot, and the pandemic has exacerbated this trend even more. Their data, known to one local office, should not be kept there locked in a closet. Therefore, we would like to use cloud-based solutions. And in that, we see space for the central government to act. Because different e-government systems should be common. Otherwise, we will be building silos instead of demolishing them.
  - Pomeranian Science and Technology Park is the largest technology park in Poland, and one of its specializations is IT. There have already been numerous success stories, and the greatest achievement is *Iwona*, a speech translator that later became *Alexa*, and with whom Amazon conquered world markets.



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#### **Dominik Batorski**

- Digitalization is one of the key challenges of our time and will have a direct impact on the quality of life of everyone in the world, and on the future of our communities. This has been especially true during the pandemic. Technology and digital infrastructure already play a key role in everyday work and entertainment, in healthcare, in communication, in the development of science, and this influence will increase significantly.
- Digitalization also has a huge impact on the competitiveness of economies. Digital technologies are changing entire industries and this process will also continue. The EU should significantly support it to help make the European economy a leader in digital transformation over others. At the same time, it is necessary to mitigate the negative effects related to the pace of technological changes. For example, those related to the adaptation of employees' competences on the labour market.
- Europe has the strongest regulations of personal data protection, and as such it makes it difficult, but not impossible, to build systems that exchange data with each other. And although the European pressure on privacy and security issues can be limiting, it can ultimately become an advantage as an important element of a satisfactory quality of life and protection of rights and freedoms.





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#### **Tomasz Klekowski**

- Currently, there are three major world digital ecosystems: American, Chinese, and European. The US and EU markets are interconnected closely. However, American companies play a bigger role than companies from Europe. We are now observing a very dynamic development of the Chinese ecosystem. It already has a size and influence comparable to the English-based system. This is a challenge for Europe and the EU is rightly trying to change this power structure.
- Among the top twenty largest companies in the world contributing to the digital transformation, the first ten positions are occupied by American companies such as Google, Microsoft, Apple, and Facebook. But in the remaining ten most companies are Chinese. All of these enterprises rely on data processing and cloud services. This is an important tip for Europe.
- It is not that Europe does not have its own areas of expertise. European companies reach globally in the telecommunications services market. It is also difficult to imagine an industrial robotics market without the contribution of German companies. As it is commonly known, Spotify is a Swedish streaming service that offers access to music and podcasts. In these areas, Europe is competitive, and has a good chance to remain so. But if it wants to expand its presence in other areas of digitization, it needs to be able to quickly achieve the scale effect for its products.



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- The global market promotes the economy of scale. In Europe, due to the linguistic and cultural dispersion, it always takes more time for products to secure a strong position on the market. This process comes easier for American and Chinese companies, and then the way up to the global market becomes simple.
- Over 90 percent of data needed for the development of artificial intelligence or High-Performance Computing systems is not subject to the regime of personal data protection. For example, there is a lot of data in the smart city model that many companies could use to create interesting digital products for cities.

### 3. CONCLUSIONS

- The Covid-19 pandemic has highlighted the importance of making digital technology easily accessible. **It is now evident that Europe should not be dependent on key systems or solutions originating from other regions of the world.**
- A European approach to privacy protection should be maintained as it is an important tool of defence against political manipulation and disinformation. From this point of view, **the European model of artificial intelligence, trustworthy and safe, is also appropriate.** But data generated by machines, computer systems, and the Internet of Things are crucial as well to accelerate Europe's digital transformation. Access to them should be immediately released.



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- **In the process of digitization, Europe must first and foremost provide universal access to high-speed internet.** We have relatively good infrastructure in large cities but still underdeveloped infrastructure in other parts of the countries. Instead of investing in fibre optic Internet, we settle only for wireless access, but that does not offer the stability necessary to benefit from advanced digital services.
- **When expanding e-government services, many citizen service processes will have to be redesigned.** Some of them are archaic to such an extent that digitization will only exacerbate their disadvantages. Transformation is an opportunity to look at the tasks of the administration in a completely different way, and to make sure that the sense of its existence is not procedures, but citizens. This is now a key task for legislators.
- **We cannot forget about those who are digitally excluded,** and their position is unlikely to change due to their age. We cannot redesign all processes to be fully digital. We need to deliver certain services in two or maybe three different ways so that everyone can benefit from them.
- **Public procurement law and EU operational programs should be more flexible** and should focus on enabling local governments to support innovative initiatives of local enterprises in a more effective way.