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Digital Technologies and the Transformation of Europe

Modernizing Digital Public Institutions in Times of Turmoil

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INTRODUCTION

In the last decade, there has been unprecedented global cooperation in the pursuit of open, efficient, and legitimate government delivery. The global uptake and continuing success of the Open Government Partnership (OGP) exemplifies this. OGP brings together government reformers and civil society leaders to create action plans that make governments more inclusive, responsive, and accountable.[1] This has occurred among both more and less developed nations.

We are also seeing a race to reposition states and economies to reap the rewards available for successful early adopters of new digital tools for both public and private actors. Digitalization is changing everything, at different speeds—the way businesses operate, the way states are governed, and the way people socialize and communicate with each other. Economic activity as well as the creation and delivery of public goods will depend more and more on data. In order to seize the opportunity, Europe has to prepare itself for this digital transformation.

Since 2014, the Digital Single Market (DSM) strategy has guided the work of the European Union and its Member States in the digital domain. It speaks to both sets of goals—economic and social.

The European Parliament (EP) elections in May, and the subsequent renewal of the European Commission will bring a fresh look at digital technologies. Legislative and budgetary decisions on a wider and more ambitious digital agenda will be completed by the new EP. It must be hoped that the newly elected EP, which takes over in summer 2019, can appoint the new College of European Commissioners before the end of the year, although delays into 2020 would not be unprecedented.

This policy brief seeks to highlight the key issues in the

1 About OGP, https://www.opengovpartnership.org.

coming years for government and corporate actors at the national and EU levels, as well as for those in the rest of the world. Three core challenges are identified: the creation of overarching strategic governance of digital technologies at national and EU levels; the parallel creation of effective global regulatory cooperation; and a more plural and participative approach to the management of data tools, so that users can better trust the new opportunities on offer.

THE DIGITAL SINGLE MARKET

Adopted in 2015, the DSM's objective is to eliminate the existing barriers that hinder Europe's digital development. The creation of the DSM is supposed to help European businesses expand their activity on a global scale, and provide consumers with a larger selection of products and services of higher quality and lower prices. The DSM is a market with a huge potential for economic growth and exceptional value. According to the estimates of the European Commission, it encompasses more than 500 million people and can bring profits exceeding €415 billion each year.[2]

The DSM strategy includes a set of specific activities and guidelines in three main areas:

- Access—improving access for consumers and businesses to digital goods and services across Europe.
- Environment—creating a level playing field and conditions in which digital networks and innovative services can flourish.
- Economy and society—maximizing the growth potential of the digital economy and the benefits to society.

The DSM strategy is not the first effort that the European Commission has made to try to increase growth in the European Union's digital economy. It has arguably been one of the most focused and successful in a quarter of a century.[3] The mid-term review of the DSM strategy was published in May 2017. In this review, the European Commission took stock of its achievements, described the current state of affairs, and announced the next course of action. In the next phase, significant efforts will go toward supporting the EU's data economy. The European Commission estimates that in 2020, the value of the European Union data market will increase from €361 billion to €739 billion (2.3–4 percent of the European Union's GDP).[4]

The essential precondition for the European Union to benefit from its scale in the global data market is that EU data should constitute a single pool of assets. The free movement of non-personal data within the European Union has become a major goal of the DSM, given the ever-growing relationship between trade and data flow, as well as the future development of technologies based on the transfer of data. By focusing on non-personal data at this stage, the European Commission hopes to set the example of a pan-European pool of data. It has quite wisely left to one side the free flow of personal data, which is already governed by the General Data Protection Regulation (GDPR), which entered into force in May 2018. If this is successful, free flow of non-personal data might be even more important to the European economy. Many data flows and datasets include both types of data, though, which might be challenging from a legal perspective.

The creation of free data flow across legal hurdles will focus on fields where the pay-off for citizens are clearest, and health is one such field. According to a 2015 RAND report on the European Commission, Europe will have the oldest population in the world by 2030, with an average age of 44.[5] People over 65 will account for close to 23 percent of the European Union's population then, compared with 16 percent today. It is an undeniable fact that Europe is aging. Empowering that segment of the population with digital technologies might make a great difference in the management and functioning of healthcare systems across the globe, providing more personalized, targeted treatment, integrated digital health and social care, and scientific progress in early diagnoses, prevention of diseases, and the development of telemedicine.

Recent surveys have shown, however, that people are still reluctant to share their data with health authorities. More work needs to be done to give patients trust in the system and encourage them to share data with health care services. In the last year, 18 percent—fewer than one in five respondents to a pan-EU survey—have used online health and care services, while 52 percent would like online access to their medical and health records. Respondents are much more willing to share their health data with doctors and healthcare professionals (65 percent) than with companies (14 percent) or with public authorities (21 percent).[6]

BEYOND THE LOGIC OF THE DIGITAL SINGLE MARKET

Issues relative to digital progress are permeating all spheres of economic activity and social life. The economy and society

2 Data presented in the European Commission staff working document "A Digital Single Market Strategy for Europe - Analysis and Evidence," SWD(2015) 100.

3 *New Direction*, "Poland going Digital. Then, now and tomorrow," Autumn 2017, https://newdirection.online/publication/nd-magazine-05-poland-going-digital-then-now-and-tomorrow.

4 Communication from the European Commission (EC), "Building a European data economy," COM(2017) 09.

5 Rand Europe report to ESPAS 2015, http://ec.europa.eu/epsc/sites/epsc/files/espas-report-2015.pdf.

6 Special Eurobarometer 460 survey from the European Commission, March 2017.

of Europe need to make the most of digital technology, but 47 percent of the European Union's population is not digitally skilled[7] enough to take advantage of these developments. It is estimated that 90 percent of jobs in the European Union will require some level of digital skills.[8]

As a result, in June 2017, under the leadership of Polish Prime Minister Beata Szydło, seventeen EU leaders submitted a letter to Donald Tusk, the President of the European Council, stressing the need to emphasize digital matters at the highest political level of the European Union. The document was signed by the premiers of Belgium, the Czech Republic, Denmark, Estonia, Finland, Hungary, Ireland, Latvia, Luxembourg, the Netherlands, Portugal, Slovakia, Slovenia, Sweden, and the United Kingdom, as well as the president of Lithuania. This initiative led to the first summit of the European Council that was dedicated solely to digital matters, which was organized by Estonian President Kersti Kaljulaid and took place on 29 September 2017 in Tallinn.

This first "digital" European Council saw the heads of government of the 28 member states pushing the Commission to take a positive, future-oriented approach to emerging technologies and stressing that the European Union should see the digital agenda as a necessary plank for any global economic ambitions. The European Council also signalled a willingness to ensure a coordinated approach among themselves, so that together they can help Europe become a leader in digital technology.

In response, 'delivering on the commitment to implement a connected Digital Single Market' was successfully included by the European Commission as one of the top seven most pressing issues of the Joint Declaration on the European Union's legislative priorities for 2018–2019. This document was signed on 14 December 2017 by the European Commission President, as well as the President of the European Parliament, and the head of the rotating presidency of the Council of the European Union.

The spring European Council, which met on 22–23 March 2018, focused strongly on growing the digital economy and implementing elements of the DSM, especially within the areas of privacy and personal data in the context of social networks and digital platforms. The trend to digital activism receives encouragement from public opinion, too. According to a 2017 Eurobarometer survey, most respondents are positive about the impact that digital technologies have had on society, the economy, and their quality of life.[9]

GOVERNANCE FOR A HOLISTIC DIGITAL AGE

The wide range of issues covered by digital transformation requires a coordinated and coherent representation between state actors and non-state stakeholders at global and regional levels, as well as strong coordination on the national level.[10]

One of the most important principles at the national level is to locate procedural coordination as close as possible to the head of state's office and to ensure full support from other leaders in the state system and in society. There are currently very different models for digital transformation across Europe, from digital ministers and government plenipotentiaries in charge of overseeing the DSM, to more outward-facing "technology ambassadors," appointed by national and local governments to raise digital awareness among businesspeople and key figures in society. This is a good time to reflect on how the European Union is governing the DSM, and what is the best model for the future. The 2019 European Commission election will open a rare window of opportunity to rethink and redesign a more centralized digital commissioner's dossier, so that all interested parties have a single champion and a single point of entry to the labyrinth of power.

At a global level, there have been tensions between the nongovernmental instincts of the Internet's established governance on the one hand, and the increasing salience of Internet-borne challenges for open national societies on the other. Up until now, efforts in the direction of connected governance conversations for the Internet, for example at the Deauville Digital G8, have created some positive agreement on principles. But their implementation has been hampered since 2011, both by the resistance of some major state players, for example Russia, and by issues of mutual mistrust among the leaders of the free world, notably triggered by the Snowden revelations. Recently, around the challenges of artificial intelligence (AI), there have been more coherent steps to create local conversations and to network them, and established multilateral players such as ITU[11] seem to be developing closer relations with ICANN.[12] The announcement by the French hosts of the 2019 G7 that the central theme will be AI shows once again that the G7 process can offer a chance for a significant small-group conversation. But, as with the Sarkozy-hosted G8 of 2011, the main challenge will be for successor hosts to carry forward the work that will be done this year.

There is a striking range of recent initiatives that imply

7 Communication from the EC "Digital Skills & Jobs," https://ec.europa.eu/digital-single-market/en/policies/digital-skills.
8 Communication from the EC, https://ec.europa.eu/digital-single-market/en/economy-society.
9 Special Eurobarometer 460 survey from the European Commission, March 2017.
10 Speech by Emmanuel Macron at the Internet Governance Forum, https://www.elysee.fr/emmanuel-macron/2018/11/13/discours-du-president-de-la-republique-emmanuel-macron-lors-du-forum-sur-la-gouvernance-de-linternet-a-lunesco.
11 About ITU, https://www.itu.int.
12 About ICANN, https://www.icann.org.

increased citizen engagement and growing participation in digital governance, from the 2017 Royal Society and British Academy report on AI and data ethics to the recent launch of a private-private collaboration, "AI for People," which has an Oxford professor as chair of the Scientific Steering Committee, to the serious efforts to involve civil society in the European Commission's own group of AI experts.[13] These initiatives deserve strong and sustained support. It is helpful that even in time of Brexit, UK initiatives are welcomed into the wider networks. The literature on "Responsible Research and Innovation" has long underlined the benefits to innovators of involving lay people in their endeavours; these people ground new efforts in societal concerns, which technical experts neglect too often, and which need to be defined by society itself.

One thing is for certain—the progress of digital technology will continue, and governments need to become more agile at adapting their strategies on implementing digital change. The European Union needs to keep up with this transformation, and it will require courage to move forward with smart and innovative ideas.

INCLUSIVE GOVERNANCE AND TRUSTWORTHY DATA PRACTICE

Inclusive governance approaches to these changes are useful not only for policymakers and innovators, but also for all other sectors. An inclusive process can build trust, accelerate learning, and increase the use of new solutions in many areas for many participants. In health systems delivery, for example, they might even resolve concerns about citizens trusting that their privacy regarding personal health data will be respected.

One leading global pharmaceutical company, Takeda, has created a wide buy-in by chronic patients for the collection and anonymized use of their individual health data by vesting governance of the system in the relevant patient organizations and advocacy groups, thus ensuring that ultimately the patients decide how their information will be used. This sort of step beyond mere compliance with the EU legal requirements for consent and safe custody will be worth replicating in other fields beyond health. Furthermore, such approaches will be essential given the continuing series of negative news stories about poor custody of data, even by major global social media companies. Regulatory innovation can create resilience in societies that face increasing speeds of innovation and diminishing trust in the established guardians. Rules alone, even GDPR, will not completely eradicate poor practices and imperfect data custody.

13 British Academy and Royal Society report "Data Management and Use: Governance in the 21st Century," https://www.thebritishacademy.ac.uk/data-governance.

6. BRIDGING THE BREXIT GAP

For the first time, a member state of the European Union has chosen to leave the organization. At the time of writing, the UK Parliament is still discussing its response to the Withdrawal Agreement that had been negotiated. If an agreement is concluded before the date of Brexit, there will be on balance a legal framework for relatively smooth management of separation. Even in these circumstances, the settled regime for EU27-UK relations will still have to be negotiated. And the questions of technological importance that confront the United Kingdom, the members of the European Union and the rest of the European economy alike will remain intractable: on what terms, and with what consequences for continuing cooperation in matters of digital policy and research?

Those in business and government who want or need EU-wide digital momentum to be maintained will have to keep in mind the strength of the UK role in the DSM and the importance of keeping a prominent British voice involved in future policy discussions, as well as maintaining close international cooperation in the area of digital technology.

In AI, for example, UK initiatives to create a vision and a public institutional framework for AI and data ethics put the country on a par with France and the European Commission. It is stated policy by the responsible ministerial department that post-Brexit, the United Kingdom will be open to the input of EU members in this policy domain, and that EU members are more than welcome to continue collaboration with the United Kingdom.

Similarly, in the field of research, there already seems to be a clear consensus that the United Kingdom's research ecosystem should remain capable of staying connected with the rest of Europe, and vice versa. It is still too early to say exactly how far toward downstream innovation and how close to the market any publicly funded cooperation can extend, and whether UK talent will continue to compete not only with the European Union, but also with the best of research and innovation worldwide. The key to achieving success, however, will not be the extent of continued access of the United Kingdom to EU research governance and funding, but whether and to what extent UK researchers and institutions can continue to play the strong role in thought leadership and coordination that they have shown in recent decades.

The prospects for generally effective collaboration in the overall digital policy realm, however, remain less clear than these two areas might suggest. Much digital policy is made at the levels of worldwide international institutions—the United Nations, the International Telecommunications Union, and the World Trade Organization. The United Kingdom will still rank high, alongside the European Union and its member states. If policy is made in the corridors of

EU power, though, to what extent can a recent ex-member remain an insider, and for how long after that will it have less-than-equal outsider status? Much will depend on the policies and attitudes of the UK government, most notably regarding issues that mark out EU exceptionalism versus other global powers, especially in the most powerful developed countries. Should the United Kingdom be increasingly perceived as a proxy for U.S. views, or as the economic platform for a forward position from which to advance anti-EU or even merely non-EU thinking, the strength of UK advocacy in Brussels and Strasbourg would correspondingly diminish. If, on the other hand, the United Kingdom can maintain a role as an honest broker and trusted source of good ideas, then the relationships will continue to benefit all parties, regardless of Brexit.

One important issue will be whether the European Union grants to the United Kingdom recognition of its domestic data protection, sufficient to allow the free two-way flow of personal data, and whether UK data supervisory authorities enjoy a high level of international cooperation with the European Union, post-Brexit. It is clear that the work of UK data protection authorities is highly regarded among the EU27, and that the European Union would see little doubt as to the adequacy of core GDPR-compliance legislation in the United Kingdom. The issues of security and investigative powers could be a stumbling block, however, either during the Brexit end-game or further down the road.

In the world of intelligence, there have been public statements both by UK officials now retired and by others from countries party to the so-called Five Eyes network of intelligence (Australia, Canada, New Zealand, the United Kingdom, and the United States). The overall suggestion has been that the United Kingdom should not necessarily cleave too close to the data protection and human rights norms of the European Union. Nor do all voices in UK government want to adopt EU data norms after Brexit. In recent filings to the U.S. Supreme Court, the United Kingdom itself, according to some readings, positioned itself on the security-first wing of even U.S. law and policy. If the EU27 were forced to conclude that UK policy on data protection was 'inadequate,' it would be precisely because they judge that in some circumstances the security needs of the UK would be allowed greater leeway to operate than the GDPR itself would, on their reading, allow. If this were to happen, it would be a costly decision for both sides, given the clear quality of UK delivery in the field of internet safety and data protection. But it is by no means certain that a negative finding on 'GDPR adequacy' and a cross-Channel divide in data policy can be avoided.

CONCLUSION

This policy brief summarizes some of the complex but rich possibilities that the coming digital decade offers for those who would like to see an international system of policy and governance that works best for the twenty-first century.

The European Union's agenda will take some decisive turns in the next few months, and there is much at stake. The risks are equally high for the post-Brexit United Kingdom. In order to make the most of technological advances, the European Union needs to be open to transformation and have the courage to push forward with smart ideas. Globalization is the answer more now than ever, and UK cooperation must continue and grow, and not be abandoned in the face of the current wave of populism.

Digitalization is quickly spreading throughout almost every aspect of daily life. It is becoming an integral part of trade, audio-visual services, copyright law, education, foreign policy, and healthcare. The number of public entities involved in the process of digitalization will only continue to grow. In the end, the digital transformation is about people, not technology. Despite the policy changes required to implement Brexit, the United Kingdom must make sure that its citizens are not left behind in the technological realm. Whoever learns to use new tools and shows the courage to make the most of them, and creates the best and bravest ways to innovate, will benefit in all areas: social, economic, and political.

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The Centre serves as a bridge between researchers and the worlds of technology and policymaking to impact policy in the resolution of pressing problems across six technological dimensions: Artificial Intelligence, Robotics, Cyber Issues, Blockchain, Outer Space, and Nuclear Issues.

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