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Europe's Digital decade: Game on

Welcome to the Digital Age

After the coronavirus crisis, what if the next endless nightmare scenario for the European Union (EU) would be to be turned into a digital colony by foreign powers? In the Digital Age there is now a clear consensus on the Europe's lagging behind the USA and China. This leads to a wide range of strategic weaknesses – overdependency on foreign technologies, risks of interference in domestic political outcomes, unfair competitiveness, and declining influence worldwide. The OECD characterizes the Digital Age as “the increasing migration of socio-economic activities to the Internet and the decline in the cost of data collection, storage and processing, are leading to the generation and use of huge volumes of data [...]. These large data sets are becoming a core asset in the economy, fostering new industries, processes and products, and creating significant competitive advantages.”² As a preliminary point, we can stress that big tech companies that are able to largely collect, analyse and exploit data do have a major asset over their competitors. This explained the model's emergence of digital firm so-called “platform”. The GAFAM (Google, Apple, Facebook, Amazon, Microsoft) and their Chinese equivalents, (Baidu, Alibaba, Tencent et Xiaomi), as well as the NATU (Netflix, AirB&B Tesla, Uber) are types of platform dominating digital markets, thanks to their technological capacities to deal with large amount of data and their appropriate business models.³ It enables them to develop data-driven services such as social networks, e-commerce platforms as well as artificial intelligence systems. Furthermore, data they collect are translated into a significant number of insights (also called “data-power”) which allows these tech companies to behave as “gatekeepers” on digital markets. Indeed, they can collect data power about the operations of companies which sell products/-services through the platforms themselves. Platforms can therefore better advertise their own products and compete with the businesses they host.

In parallel, due to technological innovations, a significant number of devices are embedded with sensors, software, and other technologies for the purpose of exchanging data. Consequently, the value of things does not only reside in goods as such

anymore, but also in the data themselves generated by users. This is the reason why retail companies are for instance more and more associating with data analytics enterprises while car companies tend to partner with software companies. Considering that tech innovations are often linked to each other there is a risk for the European Union to fall even further behind in the forthcoming years. In the Digital Age, grasping the opportunities offered by data revolution represents therefore a key issue for the sustainability of the European companies' competitiveness and, more broadly, for European growth. Last but not least, concerns are also rising concerning European citizens' control over their personal data and on the ability of policymakers to shape and enforce legislation as big tech companies do not always comply with European rules⁴.

European Digital Sovereignty as a new leitmotiv

Time for a European response seems finally to have come: the 2020-2030 decade is going to be Europe's digital one⁵. Indeed, Commission President Ursula von der Leyen has identified digital policy as one of the key political priorities of her 2019-2024 term in office to make Europe “fit for the Digital Age”⁶. To this end, the so-called Iron Lady of Brussels, who forced Apple to pay billions in taxes a few years ago, Margrethe Vestager, has been appointed *Commission's executive Vice-President* to chair the Commissioners' Group on a Europe Fit for the Digital Age. Commission President von der Leyen also appointed Thierry Breton, former CEO of Atos, as *Commissioner for Internal Market*, whose responsibilities encompass notably the achievement of Europe's technological sovereignty. It is worth noting there that the concept of digital - or technological - sovereignty has gained weight in EU literacy over the past few years. To give a few examples, *A New Industrial Strategy for Europe* underscored that “Europe's digital transformation, security and future depends on our strategic digital infrastructures”⁷ while the European Commission's communication *Shaping Europe's Digital future* stated that: “European technological sovereignty starts from ensuring the integrity and resilience in our data infrastructure, networks, and communications”⁸. The EPSC strategic note *Rethink strategy in the digital Age* made it also clear: “Europe should do more to identify, promote and protect its

interests [...] Digital technologies need to be front and centre in this important endeavour.”

The purpose of this article is to provide an overview of the ongoing European strategy to achieve its digital sovereignty. Focus will be put on the EU strategy for data, the Digital Services Act and Digital Markets Act and the financial resources deployed to boost EU research in critical technologies.

Winning the next battle: Unleashing the full potential of industrial data

It is a fact that the EU missed the first data revolution wave and failed to give birth to digital champions which would have competed with foreign rivals in the personal data harvesting field. Seizing industrial data's opportunities appears then to be the next battlefield, as stated Commissioner Thierry Breton at Hannover Messe Digital Days in July 2020⁹. As a world leader in many traditional manufacturing industries such as automotive and mechanical engineering, chemicals and pharmaceuticals, the EU could still achieve its strategic autonomy when it comes to industrial data. According to the *Report from the Strategic Policy Forum on Digital Entrepreneurship* issued by the EU¹⁰, there is a high growth potential: a full digitisation of the European manufacturing industry would imply a growth of 15-20% by 2030. Free flow of industrial data between governments, big companies, SMEs and researchers could indeed foster growth and innovation.

To this end, the “European Strategy for Data” unveiled in February 2020 aims to create a single market for industrial data in line with the 2020 European industrial strategy. It encompasses a proposal for the creation of nine common EU data spaces across sectors such as industry, mobility, health-care, agriculture, finance, energy, and skills. Additionally, as a key part of the European strategy for data, the European Alliance for Industrial Data and Cloud has been launched in December 2020. It aims to develop an EU Cloud Rulebook and an EU Cloud Marketplace to foster the development of cloud computing in Europe. To quote Commission President Ursula von der Leyen: “We all know that the more data we have, the smarter our algorithms. This is a very simple equation. And therefore, it is so important to have access to the data that are out there.”¹¹ The long-term goal is indeed to increase data processing capabilities that would give the EU an edge over American and Chinese cloud infrastructures. To get a global picture of the current

situation, cloud and data storage market is indeed currently dominated by Amazon (45%), Microsoft (18%), Alibaba (9,1%) and Google (5,3%) and more than 90% of data generated in the EU is currently stored in the USA¹². In this context, the Gaia-X project is one of the first initiatives to come out of Europe's cloud push. First as a French-German initiative, it is currently turning into a much wider European project to achieve digital sovereignty in the field of cloud infrastructure. It notably intends to share and to store data under European data protection standards.

Getting out of the Wild West – Making the Digital Age fit for Europe

Time has come to update and upgrade the 20-year-old e-commerce legislation to strengthen the Commission's digital competition arsenal. Or, more prosaically said, “The Internet cannot remain a ‘Wild West’: we need clear and transparent rules, a predictable environment and balanced rights and obligations [...]” in the words of Thierry Breton to Alphabet CEO Sundar Pichai. As part of the European Digital Strategy, the Digital Services Act (DSA) and the Digital Markets Act (DMA) are the two legislative initiatives aiming to curb the excesses of a “Wild West” internet. They cover a comprehensive set of new rules for all digital services, including social media, online marketplaces and platforms that operate in the EU. These legislative initiatives are far from being final as they follow the co-legislative procedure. Many years could pass before their implementation and the intense lobbying from stakeholders across the digital policy field will undoubtedly intensify.

The DSA sets a range of rules about advertising transparency, illegal content removal, disinformation, and data access. The DSA does not define what an “illegal content” is but impose on platforms to conduct annual risk assessments detailing how they have dealt with it. Moreover, the terms and conditions should also state in “comprehensible language” whether its moderator is an algorithm or not. Concerning advertising transparency, users of online platforms would get at the outset information about the sources of the targeted advertising they see online. A Digital Services Coordinator will be appointed to oversee enforcement of the regulation and supervise compliance with the new regulations. Intended obligations vary according to platform's size as “very large platforms” (meaning platforms with more than 10 percent of EU citizens, i.e 45 million users) do have a huge impact on European societies as the DSA notes. In the case of

extremely serious violations, the penalties provided for in the DSA are up to 6 percent of annual turnover.

Complementary to the DSA, the DMA's purpose is to prevent large online platforms from engaging in practices deemed to be detrimental to "contestability and fairness" in online markets. The underlying idea is that the massive data power they own undermines fair competition within the EU digital market. The DMA's rules will apply to digital giants that have generated at least €6,5 billion across the European Economic Area over the last three years, have a self-reported market value of at least €65 billion, and provide core platform services in at least three EU countries. In case of non-compliance with the DMA's rules about unfair data-merging practices, competition, and self-preferencing of services, fines could represent up to 10% of the annual turnover for the firm, which could even be broken up if it relapses.

Financing the next digital revolution wave

Achieving European digital sovereignty also implies for the EU to develop a European capacity in emerging technologies. Indeed, observers agree that the second digital revolution will be fuelled by key-enabling technologies based on deep tech such as artificial intelligence, big data, additive manufacturing, robotics, the Internet of Things (IoT). Funding infrastructure and research projects is thus a key issue to foster innovation across the Member States. In this regard, three funding programmes will play a major role: the well-known EU's biggest research and innovation funding framework Horizon Europe (€81,4 billion for the period 2021-2027), the Connecting Europe facility (€1.832 billion for the period 2021-2027) which is the EU fund for projects ensuring to "the proper functioning of the EU internal market and territorial cohesion among Member States in the transport, energy and digital sectors"¹³ and Digital Europe (€6,761 billion). Digital Europe is a part of the Commission's plan to increase investment in key digital tech and emerging technologies such as artificial intelligence, supercomputing, blockchain, and quantum technologies.¹⁴

Conclusion

Overcoming dependence on foreign digital services, ending unfair competition in digital markets and providing right incentives for supporting R&D in deep tech are the first steps to sustain Europe's competitiveness and prosperity. Meeting these challenges will enable the EU to pursue its objective of digital sovereignty during its "digital decade". It clearly appears that being fit for the Digital Age is one of the key elements to ensure European strategic autonomy. Other issues still need to be tackled such as the deployment of 5G networks as well as the regulatory frameworks that will shape the development and use of artificial intelligence.

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