

**Committee:** Economic and Financial Committee (GA2)

**Issue:** Evaluating the Challenges and Opportunities of Transitioning to a Digital Economy

**Student Officer:** Nick Efthimiadis

**Position:** Co-chair

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## **PERSONAL INTRODUCTION**

Dear Delegates,

My name is Nick Efthymiadis, and I am an IB1 student at Anatolia College. This year I have the utmost honor of serving as a student officer, and more specifically as one of your Co-Chairs in the Economical and Financial Committee of the 6th DSTMUN. To start with, I would like to welcome each and everyone of you to the 6th DSTMUN conference and furthermore applaud you on your wonderful committee choice. During the course of the three-day simulation of a United Nations Conference, each and every one of you will have the chance to debate upon global issues, collaborate with your fellow delegates, find solutions to the issues at hand and form lifelong friendships.

The first topic of this committee focuses on ensuring the future of the economy, by evaluating the fruitful opportunities that arise from digitalization while taking into consideration the challenges that are tied to it. This Study Guide should provide you with the necessary information to understand such a broad topic, and form clauses and draft resolutions with innovative ideas. In any case, though, you are encouraged to do independent research as well, which will help you get a better, and well-rounded understanding of the topic moving forward. At the end of the study guide, you will find a bibliography, which can be used as a stepping stone, to start your own research on the issue at hand.

If you have any questions concerning the topic, the committee, or the conference, please do not hesitate to contact me via email at [20191005@student.anatolia.edu.gr](mailto:20191005@student.anatolia.edu.gr)

I am looking forward to meeting you all!

Sincerely,

Nick Efthymiadis

## TOPIC INTRODUCTION

In this day and age, electronic devices and the internet are an integral part of our daily lives. No one can even imagine a world without checking their phone constantly, laying back and watching TV, or even writing and sending emails. Hence, it was inevitable for the digital world to merge with the economy. The rapid advancement of technology in recent decades has ushered in a new era—the digital economy. This digital landscape encompasses a wide array of activities and transactions conducted through digital platforms, transforming the way we live, work, and interact. As with any significant shift, the digital economy brings both challenges and opportunities that must be carefully navigated to fully harness its potential.

The impact of digitalization has been evident in the last few years, with millions of people becoming interested in cryptocurrency transactions, all across the globe, investing in mining and trading. In addition, the recent emergence of Artificial Intelligence (AI), has sparked concern about its capabilities, and the chance that it will limit human labor. However, many economists view the rise of AI as a positive step towards the future, since its groundbreaking technology can even be part of a new industrial revolution, where less creative or demanding jobs are being filled with such AI. When companies saw the opportunities that digitalisation has to offer, such as lower costs, they all rushed to make their service available from the web. It was a revolutionary move, providing more comfort for the customer, reducing costs and creating more jobs related to Information Technology (IT).

However, there are negative repercussions that both corporations and nations should take into consideration, before transitioning to a digital economy, in order to avoid massive unemployment rates and even inequalities in the workforce. Although it will be challenging to overcome such pressing matters, solutions must be found in order for the economy to stabilize. At the end of the day, transitioning to a digital economy is a lengthy, yet inevitable, process that will change the way we operate on a daily basis, and open up doors for businesses and corporations, to enhance efficiency and relations with the customer.

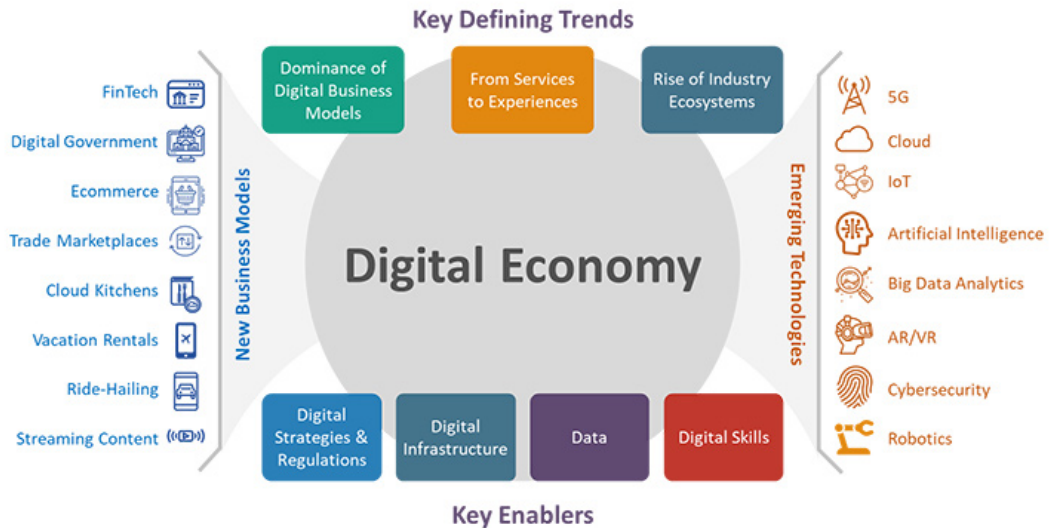


Figure 1: The components of digital economy<sup>1</sup>

## DEFINITION OF KEY TERMS

### Digital transformation

“The integration of digital technologies into various aspects of a business, leading to fundamental changes in how it operates and delivers value to customers.”

### E-commerce

“Refers to the buying and selling of goods and services over the Internet or electronic networks.”<sup>2</sup>

### Cryptocurrency

“Digital or virtual currencies that use cryptography for secure financial transactions, control the creation of new units and verify the transfer of assets.”<sup>3</sup> Transactions of cryptocurrencies would not be possible without blockchain, which is “a decentralized and distributed digital ledger technology that records transactions across multiple computers, ensuring transparency, security, and immutability.”

<sup>1</sup> “Accelerating the Digital Economy: Four Key Enablers.” *Huawei Enterprise*, 28 July 2021, [e.huawei.com/kz/eblog/industries/insights/2021/accelerating-digital-economy](https://e.huawei.com/kz/eblog/industries/insights/2021/accelerating-digital-economy).

<sup>2</sup> Bloomenthal, Andrew. “E-Commerce Defined: Types, History, and Examples.” *Investopedia*, 14 June 2023, [www.investopedia.com/terms/e/ecommerce.asp](https://www.investopedia.com/terms/e/ecommerce.asp).

<sup>3</sup> Frankenfield, Jake. “Cryptocurrency Explained with Pros and Cons for Investment.” *Investopedia*, 24 July 2023, [www.investopedia.com/terms/c/cryptocurrency.asp](https://www.investopedia.com/terms/c/cryptocurrency.asp).

### **Big data**

“Large and complex data sets that require advanced tools and techniques to capture, store, manage, and analyze, enabling organizations to gain insights and make data-driven decisions.”

### **Artificial intelligence (AI)**

“The simulation of human intelligence in machines, allowing them to perform tasks that typically require human intelligence, such as visual perception, speech recognition, and decision-making.”

### **Internet of Things (IoT)**

“A network of physical devices, vehicles, appliances, and other objects embedded with sensors, software, and connectivity, enabling them to collect and exchange data.”<sup>4</sup>

### **Cloud computing**

“The delivery of computing services, such as storage, processing power, and software, over the internet, allowing users to access resources on-demand from anywhere.”

### **Cybersecurity**

“Measures and practices are designed to protect computer systems, networks, and data from unauthorized access, theft, or damage.”

### **Fintech**

“The application of technology and innovation to enhance and automate financial services, including mobile payments, online banking, peer-to-peer lending, and digital currencies.”

### **Digital divide**

“The gap between individuals, communities, or regions with access to digital technologies and those without, leading to disparities in opportunities and resources.”

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<sup>4</sup> Gillis, Alexander S. “What Is IOT (Internet of Things) and How Does It Work?: Definition from TechTarget.” *IoT Agenda*, 1 Aug. 2023, [www.techtarget.com/iotagenda/definition/Internet-of-Things-IoT](https://www.techtarget.com/iotagenda/definition/Internet-of-Things-IoT).

## BACKGROUND INFORMATION

### Towards a new digital era

Since the establishment of the Tunis Agenda for the Information Society in 2005, digitalization has advanced at a rapid pace. For the first time, the number of people utilizing the Internet exceeded 50% of the global population in 2018. Since the World Summit on the Information Society, the capabilities of digital networks and devices have grown significantly, and many new technologies and services have been invented, deployed, and become ubiquitous. As a result, the stakes for development are larger as well. The ability of countries to access, gather, and refine digital data is increasingly determining the efficacy with which frontier technologies may be implemented to meet the SDGs.

It is widely acknowledged that digitization has unleashed a new wave of innovation with far-reaching consequences for humanity, altering interactions between citizens, governments, and corporations, and altering the structure of communities and economies. The extent of integration with the digital economy will increasingly affect growth, productivity, and human development. Indeed, digitization and frontier technologies not only generate new business opportunities but also introduce new problems and hazards.

Digital technology and platforms can help firms cut transaction costs and gain access to new customers in both domestic and international markets. Suppliers that rely more on e-commerce, for example, may be able to reduce delivery costs, particularly for digitally delivered content. Furthermore, digitalization has the potential to boost company productivity while also creating new opportunities for entrepreneurship, innovation, and job creation. It can assist firms, particularly micro-, small-, and medium-sized enterprises (MSMEs), in overcoming expansion constraints and enabling them to engage in peer-to-peer innovation collaboration and employ alternative funding channels such as crowdfunding. Similarly, new cloud-based solutions can lessen the requirement for investment in information technology equipment and associated in-house skills. E-commerce can help such businesses grow by providing financing alternatives and the ability to create verifiable online transaction records that can be used to attract new clients and business partners.

Digitalization also plays an important role in extending the reach and influence of frontier technologies, many of which have the potential to facilitate the attainment of the Sustainable Development Goals (SDGs). The frontier technologies that are to be further flourished include big data, artificial intelligence, cloud

computing, machine learning, and algorithmic decision-making which are all strong change agents.

The implementation of digital technologies brings with it new obstacles, costs, and risks. Inequitable distribution of benefits might result from unequal access to affordable digital technologies and inadequate capacity to use them effectively. It may, in particular, bypass those with poor education and low levels of literacy; people living in rural regions; persons with restricted connectivity capability or rights; and micro-, small-, and medium-sized businesses. There is concern that the widespread adoption of new technologies, automation, and online platforms may result in job losses, increased income disparity, and more concentration of market power and wealth. It may also have a detrimental impact on users', consumers', and workers' bargaining power, as well as result in a loss of privacy. Moreover, businesses, organizations, governments, and individuals must be prepared to respond to digital forms of undesired behavior, some of it criminal, that will migrate to the digital world. Finally, the increasing decision-making capability of gadgets and algorithms leveraging machine learning and large-scale data analysis raises legal, regulatory, and ethical concerns.

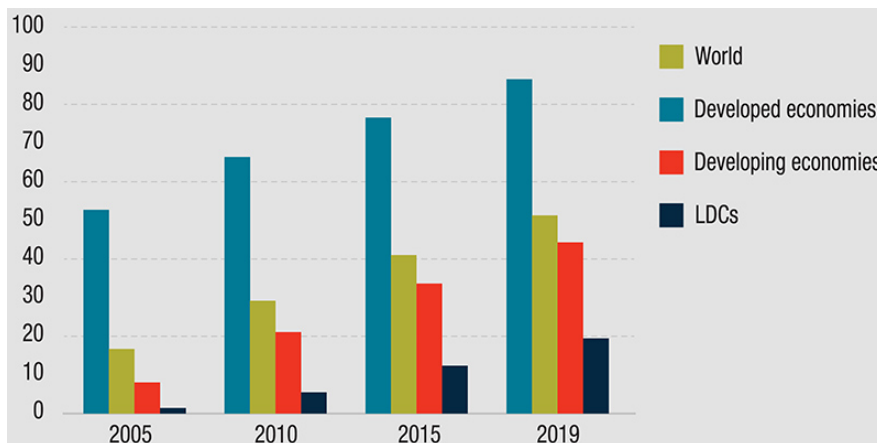


Figure 2: The imbalances of a data-driven digital economy<sup>5</sup>

### Productivity growth

Manufacturing, services, transportation and even agriculture are turning to an expanding variety of digital technologies. Underlying technologies and processes have far-reaching implications for the organization of work, production and trade, extending existing organizational and geographic fragmentation into knowledge-intensive business functions and job categories. Companies that engage in digitalization can make their organizations more efficient, reach and serve customers more easily, speed up product development, and invent products and

<sup>5</sup> DE Editors. "Digital Economy Report 2021." UNCTAD, May 2021, [unctad.org/page/digital-economy-report-2021](https://unctad.org/page/digital-economy-report-2021).

services at lower cost, without the need for extensive system-level expertise or in-house information technologies skills.

However, quantifying the impact of digitalization on productivity remains difficult, and different research finds conflicting conclusions. According to several studies, selling online increases productivity, with the biggest impact on small businesses and services. Other research emphasizes the significance of scale and network effects, as well as complementary aspects like skills and organizational change. Other research, nonetheless, has failed to discover significant productivity effects, raising the possibility that the world is witnessing the return of the productivity paradox.<sup>6</sup>

When trying to quantify the impact of digitalization on productivity, there are significant statistical gaps and other problems. It also takes time for innovations to spread and advantages to become obvious and quantifiable. So yet, only a small number of businesses have fully embraced digitalization, with micro-, small-, and medium-sized businesses in developing nations lagging far behind. As a result, the full productivity effects of the digital economy will not be seen in statistics until governments and enterprises move from the installation phase to the deployment phase.

### **Expanding global trade**

Digital platforms are creating new opportunities for companies to engage in trade, including MSMEs. They can facilitate efficiency gains through lower transaction costs and reduced information asymmetries supported by rating systems. This results in lower consumer prices, increased market access, more competition, better use of underutilized resources and increased flexibility for service providers. Both individuals and enterprises ordering or selling goods and services online across borders contribute to international trade and cross-border e-commerce.

Global e-commerce sales increased by 13% in 2017, reaching an estimated \$29 trillion, according to UNCTAD estimates. Similar growth was evident in the number of online shoppers, which climbed by 13% to 1.3 billion persons, or one-quarter of the global population. Though the majority of Internet shoppers acquired goods and services from domestic vendors, the proportion of individuals purchasing from abroad increased from 15% in 2015 to 21% in 2017. As a result, cross-border business-to-consumer sales totalled \$412 billion, accounting for over

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<sup>6</sup> Borowiecki, M., et al. (2021), "The impact of digitalisation on productivity: Firm-level evidence from the Netherlands", OECD Economics Department Working Papers, No. 1680, OECD Publishing, Paris, <https://doi.org/10.1787/e800ee1d-en>.

11% of total business-to-consumer e-commerce, up from 7% in 2015. While business-to-business e-commerce remained dominant, accounting for 88% of all online e-commerce, the business-to-consumer segment grew the most, expanding by 22% to \$3.9 trillion in 2017.<sup>7</sup>

Another illustration of the impact of digitalization on global trade is the expansion of exports of services that can be delivered digitally, such as insurance, business processes or 3 UNCTAD, 2015, Information Economy Report 2015: Unlocking the Potential of E-commerce for Developing Countries (United Nations publication, Sales No. E.15.II.D.1, New York and Geneva).<sup>8</sup> Calculations based on UNCTAD research. TD/B/66/5 4 financial services. In the past decade, they grew annually by 7–8 per cent and amounted to \$2.7 trillion in 2017<sup>9</sup>.

### **The Impact of Digitalization on Employment and Skills**

Increased digitization and the utilization of cutting-edge technology are predicted to disrupt occupations and skills. It will result in the creation of new employment and professions in a variety of industries, particularly in the manufacture of new goods and services or the modification of existing items. Simultaneously, there is a possibility that many functions will be automated and/or outsourced, rendering other employment redundant and significantly altering the nature of labor. Finally, digitalization may alter working conditions. Online labor platforms, for example, that match activities across the entire skill spectrum are predicted to revolutionize labor markets by favoring more flexible contracts and increasing competition among workers, potentially resulting in lower wages and social security.

Opinions differ widely on what will be the likely overall impact of digitalization on aggregate employment, and whether job creation will outweigh job destruction. There are also some signs of job market polarization due to technological innovation, and some studies point to a higher relative risk of unfavorable impacts on women. However, while all sectors will undergo change, implications will vary considerably between sectors and countries, depending on their level of digitalization and the structure of their economies.

In any case, as digitalization increases the value of adaptive abilities, all governments will face the difficulty of providing lifelong learning so that workers can

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<sup>7</sup> Information Economy Report 2017 - UNCTAD, [unctad.org/system/files/official-document/ier2017\\_en.pdf](https://unctad.org/system/files/official-document/ier2017_en.pdf). Accessed 3 Aug. 2023.

<sup>8</sup> Information Economy Report 2015 - UNCTAD, [unctad.org/system/files/official-document/ier2015\\_en.pdf](https://unctad.org/system/files/official-document/ier2015_en.pdf). Accessed 3 Aug. 2023.

<sup>9</sup> Information Economy Report 2017 - UNCTAD, [unctad.org/system/files/official-document/ier2017\\_en.pdf](https://unctad.org/system/files/official-document/ier2017_en.pdf). Accessed 3 Aug. 2023.



transition between occupations throughout their careers. To fully capitalize on the opportunities presented by new technologies, new skills are required, ranging from sophisticated data analysis and algorithm development skills to computer skills required to adapt systems and develop services for local markets, to digital and media literacy required by individuals to find information, assess its quality and value, and use online resources. Women's increased engagement in the field of science, engineering, and mathematics disciplines, where they are now underrepresented, would aid in gaining more value from digitalization.

### **Risk of widening inequalities**

Digitalization brings about both opportunities and risks in terms of bridging gaps in developing countries. A positive view of the growing digital economy can highlight the pervasiveness and democratization of information, ushering in a new, equitable, and ecologically sustainable economic model focused on human empowerment and well-being rather than profits. Companies that embrace digitalization may profit from new business prospects and decrease market entry costs, potentially enhancing the potential for economic development.

At the same time, there is rising concern that new technologies could disrupt entire industries, worsen existing income disparities, and lead to an increase in power and wealth concentration. More vocations and tasks may disappear as the capacity for computerization, automation, and the application of artificial intelligence expands, even as output and productivity rise, bringing larger returns to capital. 18. Winner-take-all dynamics in platform-based sectors such as Google, Uber, Facebook, and WeChat, where network effects accrue to early adopters and standard setters, can amplify industrial base polarization. Furthermore, a greater ability to utilize new technologies relative to others with access to the same resources and technology will increasingly boost digital economy competitiveness and benefits. Key digital enterprises are today geographically concentrated in a few nations, led by China and the United States of America.

## **MAJOR COUNTRIES AND ORGANIZATIONS INVOLVED**

### **China**

China has been at the forefront of digitalization, particularly in areas like e-commerce, mobile payments, and fintech. Companies like Tencent and Baidu have played a crucial role in shaping the digital landscape in China and beyond. In addition, China has revolutionized public security and cybersecurity, with the usage of cameras and tracing, which can be viewed by many as government overreach.

### **United States of America (USA)**

As a major tech hub, the United States has invested heavily in digital technologies and infrastructure. Silicon Valley, located in California, is home to some of the world's leading tech companies, driving innovation across various sectors. Furthermore, the U.S. is trying to make it easier for employees to work from the comfort of their own homes, or anywhere else, in all of its economic sectors.

### **South Korea**

Known for its advanced telecommunications infrastructure and high internet penetration rates, South Korea has made substantial investments in digitalization. It has a strong focus on areas like 5G networks, artificial intelligence, and smart cities. In addition, the government, while also retaining a free digital market in contrast with its northern neighbors, is helping the electronics giant Samsung, reach its innovative goals.

### **United Kingdom (UK)**

The UK has been actively promoting digital technologies and has initiatives to foster digital innovation. The country has a thriving tech startup ecosystem and invests in areas like cybersecurity and data analytics. In addition, following the footsteps of the EU's GDPR, the United Kingdom passed an array of legislation from 2017 onwards, to make a digital transition viable and safe.

### **Estonia**

Often considered one of the most digitally advanced nations, Estonia has heavily invested in e-governance, digital identity, and online public services. It has pioneered digital initiatives in various sectors, making it a global leader in digitalization. Since the digitalisation of all economic sectors was prevalent from even the previous century.

### **Singapore**

Singapore is known for its smart city initiatives and digital infrastructure. The country has invested in technologies like the Internet of Things (IoT) and AI to enhance its economic competitiveness. Since the country is considerably smaller than its neighbors, its advancement of technology and the acclimation of it in its society is what puts Singapore on the macroeconomic map.

### **Sweden**

Sweden has made significant strides in digitizing its economy, with a focus on fostering digital startups and promoting digital transformation across industries. The newly elected government has committed to investing 1 billion dollars in infrastructure related to the digitalisation of the country's public sector and economy.

### **Germany**

As one of Europe's leading economies, Germany has been investing in Industry 4.0 initiatives to drive digitalization in manufacturing and other sectors. As a member of the EU, it was one of the initiators of the GDPR legislation passed in 2016, which led the way for more legislation to pass in other regions of the world, concerning digitalisation.

### **European Union (EU)**

The EU has been actively involved in advancing the digitalization of the European economy. It has launched initiatives such as the Digital Single Market Strategy, which aims to remove barriers to the digital economy within the EU. The EU has also introduced regulations and policies to promote digital innovation, data protection, and cybersecurity.

### **World Economic Forum (WEF)**

The WEF is an international organization known for its annual meeting in Davos. It focuses on shaping global, regional, and industry agendas. The WEF has worked extensively on digital transformation, including initiatives on the Fourth Industrial Revolution and the digital economy.

### **Organization for Economic Co-operation and Development (OECD)**

The OECD is an intergovernmental organization comprising 38 member countries. It provides a platform for governments to discuss, coordinate, and collaborate on economic and social issues, including digitalization. The OECD has published reports, policy guidelines, and recommendations on digital economy topics.

### **International Telecommunication Union (ITU)**

The ITU is a specialized agency of the United Nations responsible for issues related to information and communication technologies (ICTs). It works to promote

the development and adoption of digital technologies worldwide, including initiatives on broadband connectivity, digital skills, and regulatory frameworks for the digital economy.

**Digital Economy Group (DEG)**

The DEG is a coalition of countries that focuses on advancing the digital economy agenda. It includes countries such as the United States, Japan, South Korea, and Australia. The DEG aims to promote digital trade, innovation, and economic growth through international cooperation.

**Digital Impact Alliance (DIAL)**

DIAL is a global alliance hosted by the United Nations Foundation that aims to accelerate the digital transformation of development and humanitarian sectors. It works to identify, fund, and scale digital solutions that address key challenges in various sectors, including health, agriculture, and education.

**BLOCS EXPECTED**

This division is necessary because cybersecurity and privacy are an integral part of digitalisation. Therefore, countries, where the government is in control of the economic activity of their nation, or government surveillance, is concurrent, should be placed in the same bloc. Whereas, countries with free markets and more freedom on the web, should be put together in another bloc, due to their similar stance on economic activity, within the internet. In practice:

**Bloc A**

The first Bloc could primarily consist of countries that are generally for government control over the digital space (government overreach) as mentioned above. It could include countries such as: Russia, China, India, Turkey, North Korea.

**Bloc B**

The second Bloc could consist of countries that are generally for a rather free digital market. It could include countries such as: the USA, Canada, Mexico, the UK, Australia, Japan, South Korea.

**TIMELINE OF EVENTS**

Date	Description of event
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March 4, 1983	The first eCommerce company was Boston Computer Exchange. It was primarily an online market that served people who wanted to sell their used computers, having their first server launched in 1983.
June 1989	The invention of e-cash, which started allowing consumers to send money anonymously over the internet, using cryptographic technology and blind signatures to keep interactions secret and safe.
November 18, 2005	Adaptation of the Tunis Agenda for the Information Society
September 15, 2008	The Global Financial Crisis starts in the USA and spreads to a significant portion of the world. In 2009 Bitcoin was created, allowing for global, decentralized transactions.
February 11, 2011	BM's Watson, the AI platform that gained widespread recognition for its appearance on the quiz show "Jeopardy!".
June 23, 2012	Coinbase GlobalInc, one of the world's most recognised exchanges, was launched.
March 24, 2015	The Information Economy Report was released
April 14, 2016	The General Data Protection Regulation (GDPR), which is a comprehensive data protection and privacy regulation, was enacted by the European Union (EU).
20 May, 2017-Now	The OECD going digital project, helps legislative bodies to strategize for the future

### RELEVANT RESOLUTIONS, TREATIES AND EVENTS

#### Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement):<sup>10</sup>

The TRIPS Agreement, part of the WTO system, establishes international standards for the protection of intellectual property rights, including those related to digital technologies and the internet

<sup>10</sup> "World Trade Organization." *WTO*, [www.wto.org/english/tratop\\_e/trips\\_e/intel2\\_e.htm](http://www.wto.org/english/tratop_e/trips_e/intel2_e.htm). Accessed 4 Aug. 2023.

### **Trans-Pacific Partnership (TPP).<sup>11</sup>**

Although the United States withdrew from the TPP in 2017, the remaining 11 countries (Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam) signed the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) in 2018. The agreement includes provisions related to digital trade and e-commerce

### **United Nations Guidelines for Consumer Protection in the Digital Economy<sup>12</sup>**

These guidelines, adopted by the UN General Assembly in 2015, aim to protect consumers in the digital economy by addressing issues such as online transactions, privacy, and unfair practices.

### **African Union Convention on Cyber Security and Personal Data Protection<sup>13</sup>**

This convention, adopted by the African Union in 2014, focuses on cybersecurity and the protection of personal data in Africa. It seeks to establish a legal framework to address digital threats and promote confidence in the digital economy.

### **Digital Markets Act (DMA)<sup>14</sup>**

The DMA is a legislative proposal that the European Commission presented in December 2020. It focuses on reducing huge online platforms' market strength and promoting a fair and competitive digital market by putting particular requirements and restrictions on such platforms.

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<sup>11</sup> "Overview of TPP." *United States Trade Representative*, [ustr.gov/tpp/overview-of-the-TPP](https://ustr.gov/tpp/overview-of-the-TPP). Accessed 4 Aug. 2023.

<sup>12</sup> "United Nations Guidelines for Consumer Protection." *UNCTAD*, [unctad.org/topic/competition-and-consumer-protection/un-guidelines-for-consumer-protection](https://unctad.org/topic/competition-and-consumer-protection/un-guidelines-for-consumer-protection). Accessed 4 Aug. 2023.

<sup>13</sup> "African Union Convention on Cyber Security and Personal Data Protection." African Union Convention on Cyber Security and Personal Data Protection | African Union, 12 Sept. 2023, [au.int/en/treaties/african-union-convention-cyber-security-and-personal-data-protection](https://au.int/en/treaties/african-union-convention-cyber-security-and-personal-data-protection).

<sup>14</sup> "The Digital Markets Act: Ensuring Fair and Open Digital Markets." *European Commission*, [commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/digital-markets-act-ensuring-fair-and-open-digital-markets\\_en](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/digital-markets-act-ensuring-fair-and-open-digital-markets_en). Accessed 4 Aug. 2023.

### European Data Strategy<sup>15</sup>

Published in February 2020, the European Data Strategy outlines the EU's vision for a data-driven economy. It highlights initiatives to enhance data sharing, promote data-driven innovation, and ensure trustworthy and secure data usage across various sectors.

### Artificial Intelligence Act

Proposed by the European Commission in April 2021, the Artificial Intelligence Act aims to regulate AI systems' development and deployment within the EU. It sets forth requirements for high-risk AI applications, addresses transparency and accountability, and seeks to ensure fundamental rights and safety.

## PREVIOUS ATTEMPTS TO SOLVE THE ISSUE

### Information Economy Report 2015: Unlocking the Potential of E-commerce for Developing Countries<sup>16</sup>

As the digital economy expands and affects more commercial operations, it is critical to evaluate how legislation might aid in harnessing e-commerce for long-term development. This report investigated the developing countries' ability to participate in and benefit from the expansion of e-commerce. It gave recent estimates of global e-commerce value, discussed relevant potential and difficulties, assessed the e-commerce divide, and considered the readiness of countries to engage in e-commerce. Finally, it identified key policy areas to be addressed in national e-commerce strategies and highlights the need for more concerted policy efforts to support developing countries in this area. It discussed how to create synergies and greater scale in the overall efforts of the international community to enable more countries to engage in and benefit from e-commerce, and considered how aid for trade can support the strengthening of e-commerce readiness in developing countries. The paper allowed for countries to proceed with passing legislation in order to regulate digitalisation, and to make the transition to a digital economy a smooth one, such as the aforementioned GDPR, but also the Digital Economy Act of 2017 in the UK, the Cybersecurity Law of 2017 in China e.t.c.

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<sup>15</sup> "European Data Strategy." *European Commission*, [commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-data-strategy\\_en](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-data-strategy_en). Accessed 4 Aug. 2023.

<sup>16</sup> Information Economy Report 2015 - UNCTAD, [unctad.org/system/files/official-document/ier2015\\_en.pdf](https://unctad.org/system/files/official-document/ier2015_en.pdf). Accessed 3 Aug. 2023.

## General Data Protection Regulation (GDPR)<sup>17</sup>

The General Data Protection Regulation (GDPR) is a piece of legislation that updates and harmonizes data privacy rules throughout the European Union (EU). On April 14, 2016, the European Parliament enacted GDPR, which went into force on May 25, 2018.

GDPR replaces the 1995 EU Data Protection Directive. The new guideline focuses on making corporations more transparent and expanding data subjects' privacy rights. When a severe data breach is discovered, the GDPR requires the organization to notify all impacted individuals and the supervising authority within 72 hours. Mandates in the GDPR apply to all data produced by EU citizens, regardless of whether the company collecting the data is situated inside the EU, and to all people whose data is stored within the EU, regardless of whether they are EU residents. Penalties for non-compliance are also defined under the GDPR.

The GDPR's goal is to safeguard individuals and the data that characterize them, as well as to ensure that enterprises that acquire such data do so responsibly. The GDPR also requires that personal data be stored securely; the rule states that personal data must be protected against "unauthorized or unlawful processing, as well as accidental loss, destruction, or damage."

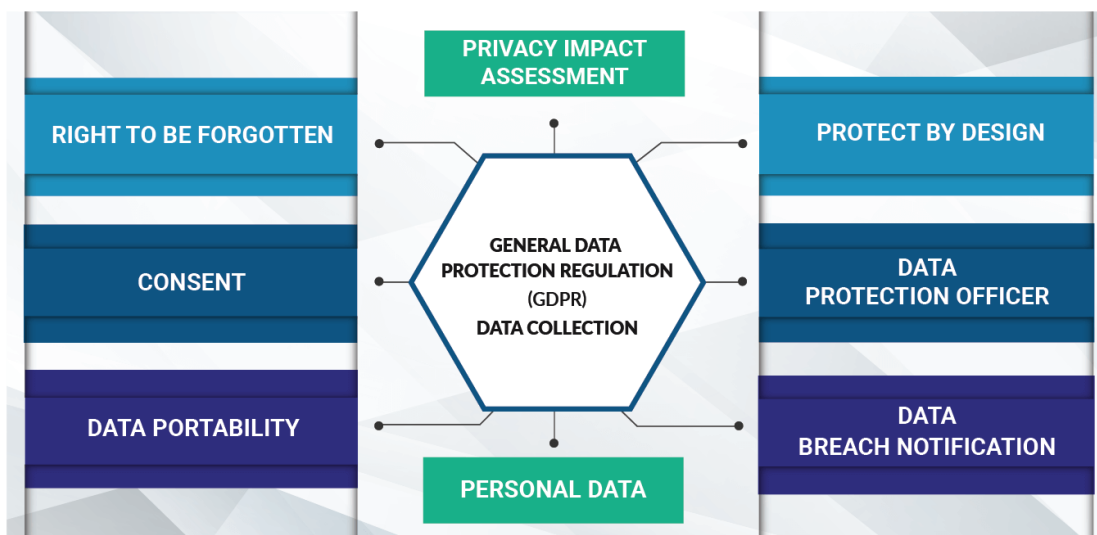


Figure 3: A visual representation of the contents of GDPR<sup>18</sup>

## POSSIBLE SOLUTIONS

<sup>17</sup> "What Is GDPR, the EU's New Data Protection Law?" *GDPR.Eu*, 26 May 2022, [gdpr.eu/what-is-gdpr/](https://gdpr.eu/what-is-gdpr/).

<sup>18</sup> Inc, QuestionPro. "GDPR Compliant Surveys: GDPR Data Processing for Surveys." *QuestionPro*, 15 July 2019, [www.questionpro.com/gdpr/](https://www.questionpro.com/gdpr/).



The digital economy is creating new opportunities and challenges for trade and development, and net gains are neither automatic nor likely to be evenly distributed. The Trade and Development Board may wish to consider the following policy recommendations:

### **Digitalisation policies for inclusive development**

Governments should take a holistic approach that includes multi-stakeholder interaction to secure the benefits of digitalization while reducing the hazards. Furthermore, national policies and goals should emphasize the use of digital data for development by building the necessary infrastructure, skills, and regulations.

### **Global Cooperation in digital economy governance**

The importance of regional and international policy responses to concerns such as competition, consumer protection, data ownership and protection, privacy, taxation, and trade in the digital economy should be examined further.

### **Gender equality through digital inclusion and opportunities**

Women's access to the digital economy's opportunities should be expanded in order to close the digital gender gap and allow more women the opportunity to make additional income, increase employment options, and access information.

### **Balanced digital growth through equity and accessibility**

To prevent the evolving digital economy from exacerbating digital divides and income inequalities, more concerted efforts should be made to assist countries in strengthening their readiness to capitalize on digitalization opportunities, including through effective donor dialogue and leveraging the UNCTAD-led eTrade for All initiative, as well as rapid eTrade readiness assessments.

## **BIBLIOGRAPHY**

"The Circular Economy and Trade - Friedrich Ebert Foundation." *Unlocking the Potential for E-Commerce in Developing Countries*, [https://geneva.fes.de/fileadmin/user\\_upload/documents/2016/2016\\_02\\_16\\_E-commerce\\_Program.pdf](https://geneva.fes.de/fileadmin/user_upload/documents/2016/2016_02_16_E-commerce_Program.pdf) Accessed 3 Aug. 2023.

Admin. "Short History of Manufacturing: From Industry 1.0 to Industry 4.0." *KFactory*, 30 July 2023, [factory.eu/short-history-of-manufacturing-from-industry-1-0-to-industry-4-0-2/](https://factory.eu/short-history-of-manufacturing-from-industry-1-0-to-industry-4-0-2/).

Ashmarina, S. I., et al. *Digital Transformation of the Economy: Challenges, Trends and New Opportunities*. Springer International Publishing, 2020.

European Parliament,  
[www.europarl.europa.eu/RegData/etudes/STUD/2023/733739/IPOL\\_STU\(2023\)733739\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2023/733739/IPOL_STU(2023)733739_EN.pdf). Accessed 4 Aug. 2023.

*Digital Economy, Innovation and Competition - OECD*,  
[www.oecd.org/daf/competition/digital-economy-innovation-and-competition.htm](http://www.oecd.org/daf/competition/digital-economy-innovation-and-competition.htm).  
Accessed 4 Aug. 2023.

Zhang, Jinzhu, et al. "The Impact of Digital Economy on the Economic Growth and the Development Strategies in the Post-Covid-19 Era: Evidence from Countries along the 'Belt and Road.'" *Frontiers*, 18 Mar. 2022,  
[www.frontiersin.org/articles/10.3389/fpubh.2022.856142/full](http://www.frontiersin.org/articles/10.3389/fpubh.2022.856142/full).

Batsaikhan, Uuriintuya Batsaikhan Uuriintuya, et al. "Cryptoeconomics – the Opportunities and Challenges of Blockchain." *Bruegel*, 30 Oct. 2018,  
[www.bruegel.org/blog-post/cryptoeconomics-opportunities-and-challenges-blockchain](http://www.bruegel.org/blog-post/cryptoeconomics-opportunities-and-challenges-blockchain).

"DE4LAC Digital Economy Framework." *World Bank*,  
[www.worldbank.org/en/programs/de4lac/digital-economy-framework](http://www.worldbank.org/en/programs/de4lac/digital-economy-framework). Accessed 4 Aug. 2023.

"Digital Transformation Challenges: Strategies Emerging from a Multi-Stakeholder Approach." *The TQM Journal*,  
[www.emerald.com/insight/content/doi/10.1108/TQM-12-2019-0309/full/html](http://www.emerald.com/insight/content/doi/10.1108/TQM-12-2019-0309/full/html).  
Accessed 4 Aug. 2023.

"African Union Convention on Cyber Security and Personal Data Protection." *African Union Convention on Cyber Security and Personal Data Protection | African Union*, 12 Sept. 2023,  
[au.int/en/treaties/african-union-convention-cyber-security-and-personal-data-protection](http://int/en/treaties/african-union-convention-cyber-security-and-personal-data-protection).

Bloomenthal, Andrew. "E-Commerce Defined: Types, History, and Examples." *Investopedia*, 14 June 2023,  
[www.investopedia.com/terms/e/ecommerce.asp](http://www.investopedia.com/terms/e/ecommerce.asp).

"The Digital Markets Act: Ensuring Fair and Open Digital Markets." *European Commission*,  
[commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/digital-markets-act-ensuring-fair-and-open-digital-markets\\_en](http://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/digital-markets-act-ensuring-fair-and-open-digital-markets_en). Accessed 4 Aug. 2023.

"The Digital Services Act Package." *Shaping Europe's Digital Future*,  
[digital-strategy.ec.europa.eu/en/policies/digital-services-act-package](http://digital-strategy.ec.europa.eu/en/policies/digital-services-act-package). Accessed 4 Aug. 2023.

“European Data Strategy.” *European Commission*, [commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-data-strategy\\_en](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-data-strategy_en). Accessed 4 Aug. 2023.

Frankenfield, Jake. “Cryptocurrency Explained with Pros and Cons for Investment.” *Investopedia*, 24 July 2023, [www.investopedia.com/terms/c/cryptocurrency.asp](https://www.investopedia.com/terms/c/cryptocurrency.asp).

Gillis, Alexander S. “What Is IOT (Internet of Things) and How Does It Work?: Definition from TechTarget.” *IoT Agenda*, 1 Aug. 2023, [www.techtarget.com/iotagenda/definition/Internet-of-Things-IoT](https://www.techtarget.com/iotagenda/definition/Internet-of-Things-IoT).

“Home.” *The Artificial Intelligence Act*, 28 July 2023, [artificialintelligenceact.eu/](https://artificialintelligenceact.eu/).

*Information Economy Report 2015* - UNCTAD, [unctad.org/system/files/official-document/ier2015\\_en.pdf](https://unctad.org/system/files/official-document/ier2015_en.pdf). Accessed 3 Aug. 2023.

“Overview of TPP.” *United States Trade Representative*, [ustr.gov/tpp/overview-of-the-TPP](https://ustr.gov/tpp/overview-of-the-TPP). Accessed 4 Aug. 2023.

“United Nations Guidelines for Consumer Protection.” *UNCTAD*, [unctad.org/topic/competition-and-consumer-protection/un-guidelines-for-consumer-protection](https://unctad.org/topic/competition-and-consumer-protection/un-guidelines-for-consumer-protection). Accessed 4 Aug. 2023.

“What Is GDPR, the EU’s New Data Protection Law?” *GDPR.Eu*, 26 May 2022, [gdpr.eu/what-is-gdpr/](https://gdpr.eu/what-is-gdpr/).

“World Trade Organization.” *WTO*, [www.wto.org/english/tratop\\_e/trips\\_e/intel2\\_e.htm](https://www.wto.org/english/tratop_e/trips_e/intel2_e.htm). Accessed 4 Aug. 2023.

Kagan, Julia. “ECash: Overview, Rise and Fall.” *Investopedia*, 16 June 2023, [www.investopedia.com/terms/e/ecash.asp](https://www.investopedia.com/terms/e/ecash.asp).