

THE IMPACT OF THE DIGITAL ECONOMY ON MACROECONOMIC DEVELOPMENT

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Abstract

The recurrent approach is an integrated approach that is a synthesis of existing studies of cyclical processes in the study of modern macroeconomic processes, taking into account the nature of their intercylic and interphase dependencies. Based on its main provisions, the digital economy is a natural phase of depression (an interphase transition from a neo-industrial to an information-innovative economy) within the framework of the modern transformation cycle. The recognition of the depression phase significance in the phase structure allowed us to assert that the digital economy is two-fold in nature, it intertwines the processes characteristic of the neo-industrial economy, and also forms processes that provide a “breakthrough” to the information-innovative economy. In other words, it is formed under the influence of the completeness of neo-industrial processes, implying increased digitalization. However it also becomes the basis for the formation and development of different forms of economic development within the post-industrial cycle.

Taking into account the objectivity of the dual nature of the digital economy, it can be argued that it is a special type of economic system that accumulates the emerging processes of science-intensive technotronic industrialization of the economy, the generation of its own (national) innovations, not borrowed ones, investment support of the innovative sector and the creation of new business models.

Digital economy Overview

The world as we know it is continually changing, and one of the fundamental drivers is digital transformation. At its core, digital transformation isn't about Internet "unicorns." It's about using the latest technology to do what you already do – but better.

What is a unicorn you ask? A unicorn is a privately held startup company whose valuation is over \$1 billion. Venture capitalist Aileen Lee coined the term in 2013 in reference to a mythical animal as a representation of such lucrative ventures which were highly rare at the time - with only 39 companies listed, whereas today there are over 450 worldwide with a combined valuation of over US\$1.5 trillion...

For the rest of us, digital transformation refers to the adoption of digital technology to transform services or businesses. This is achieved by replacing manual (non-digital) processes with digital ones or replacing outdated digital technology with upgraded digital technology.

The global economy is undergoing a digital transformation as well, and it's happening at breakneck speed.

So, what is the digital economy?

The digital economy is the economic activity that results from billions of everyday online connections among people, businesses, devices, data, and processes. The backbone of the digital economy is hyperconnectivity which means growing interconnectedness of people, organisations, and machines that results from the Internet, mobile technology and the internet of things (IoT).

The digital economy is taking shape and undermining conventional notions about how businesses are structured; how firms interact; and how consumers obtain services, information, and goods.

Professor Walter Brenner of the University of St. Gallen in Switzerland states: “The aggressive use of data is transforming business models, facilitating new products and services, creating new processes, generating greater utility, and ushering in a new culture of management.”

Recently, TechCrunch, a digital economy news site, noted, “Uber, the world’s largest taxi company, owns no vehicles. Facebook, the world’s most popular media owner, creates no content. Alibaba, the most valuable retailer, has no inventory. And Airbnb, the world’s largest accommodation provider, owns no real estate... Something interesting is happening.”

What is it about these companies that allows them to re-imagine the traditional boundaries and value proposition of their industry? What can these young companies teach you about leading a digital transformation in your industry? How will you adapt to the emerging fluidity found in traditional roles?

There are some fundamental areas of digital transformation central to business success in the digital economy.

Future of work

People regularly work from different offices, their home, or a local coffee shop – now even more so since the pandemic has pushed remote working to the fore. While where we work has changed, we all expect the same level of connectivity experienced in the physical office. The emergence of this flexible, global enterprise requires organisations to manage a dynamic ecosystem of talent and enable next-generation digital business processes that prove to be effective, even when distributed across various places and time zones.

The 2020 pandemic has certainly fast tracked this transition in some respects, at least in the short term, but has also highlighted the need for organisations to adopt a more open minded approach to longer term digital enablement of the workforce.

Customer experience

In the digital economy, all customers – business-to-business as well as business-to-consumer alike – want to interact with businesses when and where they want and in a fashion that is most convenient for them. Additionally, customers desire engagement with brands through experiences that are seamless, omnichannel, direct, contextual, and personalised. It has become crucial to give all customers a personalised and unique journey right from the minute they land on a business’s website, all the way to making a purchase in your store and beyond.

The Internet of Things (IoT)

The Internet of Things (IoT) connects the digital and physical worlds by collecting, measuring, and analysing data to predict and automate business processes.

As sensor prices continue to drop, we are on the cusp of an era where everything can be connected – people, businesses, devices, and processes – to each other. The melding of the physical and digital world brings every asset into a digital domain where software dominates.

IoT solutions enable businesses to analyse data generated by sensors on physical objects in a world of intelligent, connected devices. This data can transform businesses, revealing hidden patterns and insights that can help you make more informed decisions and take action more quickly

When an organisation can understand its physical and digital asset inventory at any given moment, it can operate with precision previously unimaginable, paving the way for the ultimate lean enterprise. This will not be a nice-to-have differentiator, but an imperative for any digital business within the next two years.

Digital supply networks

While the global middle class is expected to expand threefold by 2030, there is increasing pressure on essential business resources, which are growing at a slower rate of 1.5 times. The answer to this mismatch lies in how enterprises securely share data in real time to enable next-generation commerce applications to thrive.

The digitisation of everything is creating new intelligent digital networks of networks that fundamentally change the way commerce is managed, optimised, shared, and deployed.

DATA ANALYSIS AND METHODOLOGY

The literature review carried out focused on the relationship between economic growth and the digital economy. There is still no consensus on the indicators that best measure the digital economy and the impact of each of these measures on economic growth. This leads to heterogeneity in econometric methods, results and conclusions, and different suggested policies

This study considers a sample of the 36 countries of the OECD: Germany, Australia, Austria, Belgium, Canada, Chile, South Korea, Denmark, Slovakia, Slovenia, Spain, United States, Estonia, Finland, France, Greece, Hungary, Ireland, Iceland, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Mexico, Norway, New Zealand, Netherlands, Poland, Portugal, United Kingdom, Czech Republic, Sweden, Switzerland, and Turkey. To achieve the main objective of analyzing the impact of the digital economy on economic growth, we carried out a comparative analysis of the OECD countries, having divided the countries into two groups according to their degree of development. For this division, the GDP per capita of each country in 2019 was used as a criterion, as suggested by [Schwab \(2018\)](#) and [Stoica et al. \(2020\)](#) in the global competitiveness report. The classification of countries according to their degree of development based on GDP per capita is as follows: < 2,000 USD for the factor-driven economies; between 2,000 USD and 2,999 USD for the economies in transition from stage 1 to stage 2; between 3,000 USD and 8,999 USD for the efficiency-driven economies; between 9,000 USD and 17,000 USD for the economies

in transition from stage 2 to stage 3; and > 17,000 USD for innovation-driven economies. All OECD countries have a GDP per capita of more than 9000 USD in 2019 and are therefore classified into two groups: 1. economies in transition from stage 2 to stage 3, i.e., economies in transition between efficiency and innovation, which will be called transition countries; and 2. innovation-driven economies which will be called innovation countries (Table 1). Economies in transition refer to countries that are more competitive than those classified as efficiency-driven economies and, as such, productivity is higher. Companies must develop more efficient production processes and increase product quality to promote higher wages. This group includes Chile, Latvia, Mexico, and Turkey. All other countries are classified as innovation-driven economies. Innovation countries are economies that pay higher wages and have higher standards of living. Maintaining higher wages and higher living standards is only possible if companies compete in the market through new products and/or more sophisticated and innovative production processes.

Level of economic development			
Transition countries		Innovation countries	
GDP per capita (2019) \$9000 - \$17000		GDP per capita (2019) > \$17000	
Chile	\$ 15 091,45	Australia	\$ 57 186,62
Latvia	\$ 16 722,10	Austria	\$ 50 552,91
Mexico	\$ 10 267,50	Belgium	\$ 47 618,30
Turkey	\$ 15 135,39	Canada	\$ 51 588,76
		Czech Republic	\$ 34 365,90
		Germany	\$ 47 446,73
		Denmark	\$ 65 820,34
		Spain	\$ 33 392,53
		Estonia	\$ 20 856,02
		Finland	\$ 40 397,23
		France	\$ 44 317,39
		United Kingdom	\$ 43 711,71
		Greece	\$ 24 024,23
		Hungary	\$ 17 572,31
		Iceland	\$ 51 332,14
		Ireland	\$ 79 703,41
		Israel	\$ 35 278,92
		Italy	\$ 35 680,16
		Japan	\$ 49 187,83
		Korea, Rep.	\$ 28 675,03
		Lithuania	\$ 19 609,72
		Luxembourg	\$ 111 062,34
		Netherlands	\$ 55 488,97
		Norway	\$ 92 556,32
		New Zealand	\$ 38 997,97
		Poland	\$ 17 406,55
		Portugal	\$ 24 653,50
		Slovak Republic	\$ 20 990,13
		Slovenia	\$ 27 426,79
		Sweden	\$ 58 012,96
		Switzerland	\$ 79 406,66
		United States	\$ 55 753,14

Uzbekistan’s Experience in the Development of the Digital Economy

In recent years, Uzbekistan has been actively implementing digital transformation reforms to accelerate macroeconomic development and improve economic efficiency. One of the most important initiatives is the “Digital Uzbekistan – 2030” strategy, which aims

to modernize public administration, expand digital infrastructure, develop electronic commerce, and increase the share of information technologies in the national economy.

The rapid growth of fintech services has become one of the key drivers of the digital economy in Uzbekistan. Digital payment systems such as Click, Payme, and Uzum have significantly increased cashless transactions and improved financial accessibility for the population. As a result, the transparency of financial operations has improved, while the size of the informal economy has gradually decreased. This process positively affects tax revenues and supports macroeconomic stability.

Another important factor is the activity of IT Park Uzbekistan, which plays a significant role in the development of the national IT sector. IT Park supports startups, software companies, and young programmers by providing tax incentives and modern infrastructure. Consequently, the export of IT services has increased, new jobs have been created, and youth employment opportunities have expanded.

In addition, the introduction of electronic government systems has improved the efficiency of public services. Through online government platforms, citizens and businesses can access various services remotely, reducing bureaucracy and administrative costs. Digitalization also contributes to higher labor productivity, increased investment attractiveness, and sustainable economic growth.

General Conclusion

In the modern world, the digital economy has become one of the main drivers of macroeconomic development and global economic transformation. The rapid development of digital technologies, artificial intelligence, fintech systems, electronic commerce, and internet-based services has significantly changed the structure of national economies and created new opportunities for sustainable growth. Digitalization increases productivity, improves the efficiency of business operations, reduces transaction costs, and enhances the quality of public services.

This study demonstrated that the digital economy has a direct impact on important macroeconomic indicators such as GDP growth, employment, investment activity, labor productivity, and international competitiveness. Countries with a high level of digital infrastructure and innovation capacity achieve stronger economic performance and higher living standards. The comparative analysis of OECD countries also showed that innovation-driven economies benefit more from digital transformation due to advanced technologies, modern institutions, and effective economic policies.

Furthermore, the experience of Uzbekistan proves that digital reforms can accelerate economic modernization and strengthen macroeconomic stability. The development of fintech platforms, IT services, electronic government systems, and digital business models contributes to increased financial inclusion, transparency, and investment attractiveness. Government initiatives such as digital infrastructure development and support for innovative industries create favorable conditions for long-term economic growth.

At the same time, the digital economy also creates several challenges, including cybersecurity risks, technological inequality, unemployment caused by automation, and the growing demand for highly skilled labor. Therefore, governments should implement balanced macroeconomic and technological policies aimed at supporting education, innovation, digital infrastructure, and social protection.

Overall, the digital economy should be considered not only as a technological transformation but also as a strategic factor of macroeconomic progress. In the future, countries that successfully adapt to digital transformation will gain stronger competitive advantages, achieve higher economic efficiency, and ensure sustainable socio-economic development.

References

<https://www.linkedin.com/pulse/what-digital-economy-syed-shozab-abbas-1t13f>

https://www.researchgate.net/publication/355200163_Digital_Economy_as_an_Independent_Phase_of_the_Macroeconomic_Cycle_Modern_Transformation

https://www.oecd.org/digital/?utm_source=chatgpt.com

https://www.statista.com/topics/871/digital-economy/?utm_source=chatgpt.com

https://unctad.org/topic/e-commerce-and-digital-economy/digital-economy-report?utm_source=chatgpt.com