

# Digital Economy and Its Components: A Brief Overview and Recommendations

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## Digital Economy and Its Components: A Brief Overview and Recommendations

### Oliver Nguyen

#### **Abstract**

The term "digital economy" refers to the use of information technology to create, adapt, market and consume goods and services that are based on the use of information technology, in order to make money. A number of digital research areas have been explored in the past few years, including digital banking, e-commerce, virtual education, smartphone apps, and collaboration platforms. During the past few decades, there has been no doubt that the world we live in has been changing steadily in many ways. Among the key factors that have driven these changes has been the Digital Revolution, which is one of the key drivers of these changes. It would be more accurate to say that the purpose of digital transformation is not to search for unicorns on the Internet, but rather to use the newest technology to do what you do already in a more efficient and effective manner. As a result of digital technologies, many countries are in a position to enhance their competitiveness and promote economic growth by increasing their use of these technologies. As a definition, the digital economy refers to the economic activity that results from billions of online connections that occur every day between people, businesses, devices, data, and processes. A key component of the digital economy is hyperconnectivity, which is the increasing interconnection of people, organizations, and machines that is a result of the Internet, mobile technology, and the internet of things (IoT). There is no doubt that the digital economy is taking shape and upending conventional notions about how businesses are structured; how they interact; and how they provide services, information, and goods to consumers.

**Keywords:** Digital economic development, digitisation and economic impact, digitisation for competitiveness, Economy and digital journey

#### Introduction

A growing number of technologies, such as the "Internet of Things", artificial intelligence (AI), virtual reality, blockchain, self-driving cars, and other forms of technology, are expected to contribute to the growth of the digital economy in the future. Among the many advantages that it

has to offer, there are a few that I would like to mention. In consequence, consumers have more access to information than they used to have, not just from manufacturers and business owners, but also from other consumers in forums and reviews in order to be able to make informed purchase decisions in the future.

#### What is the difference between a digital economy and an internet economy?

When the digital economy first came into existence, it was sometimes referred to as the Internet economy, the new economy, or the web economy. Because it relies heavily on the Internet for connectivity, this has led to it being referred to as the Internet economy, as it relies so heavily on Internet connectivity for its survival.

It is undeniable that the digital economy is more advanced and complex as compared with the internet economy, which is unquestionably more advanced. Many economists and leaders in the business world, however, believe that there is more sophistication and complexity within the digital economy. As a result of this, it is important to note that the digital economy can be easily defined in terms of economic activity. This is because the value derived from the Internet when it comes to economic activity.

Currently, we live in an era when the digital economy is a reflection of the changes that have taken place from the third industrial revolution to the fourth industrial revolution, and we are in the midst of this change. There is a third industrial revolution, also known as a digital revolution. This is characterized by the shift from analog electronics and mechanical devices to digital ones as a result of the development of digital technologies. These technologies are sometimes referred to as the digital revolution. As a result of this shift, we are experiencing a shift in society as a result of this shift. I think it is safe to say it is undeniable that the digital revolution has contributed significantly to the fourth industrial revolution. Considering that technology today continues to bridge the divide between the physical and cyber worlds in the same way that it did in the past, this is not surprising.

#### Impact of digital revolution

As a result of the digital revolution in farming, the following are some of the impacts that it will have in the future on farm productivity and income:

As a result of technological interventions, farmers have now been able to gather, view, and
evaluate crop and soil conditions at various stages of production in an efficient, cost-effective,
and convenient manner in an efficient and convenient manner. A number of methods are used in
order to achieve the benefits described in the paragraph above, including remote sensing, ground
sensors, unmanned aerial photography, market analysis, and others. It is obvious that the use of all

- these digital technologies helps increase the productivity of farms and the income of farmers as well.
- The first step in dealing with potential problems in an effective manner is to identify potential problems at an early stage. This will enable us to solve them in a timely manner. Taking action in a timely manner will allow us to be able to address them in a way that will prevent problems from arising in the future. Consequently, this is based on preliminary evidence, which can be used as a basis for identifying problems and addressing these as quickly as possible based on the preliminary evidence that exists at the moment.
- It is expected that the impact of digital Asia in the near future will have a significant impact on the market in terms of better market pricing and lower transaction costs. There is no doubt about the fact that. This is due to a lower transaction cost and better market pricing as a result of a lower transaction cost as a result of a lower transaction cost. Using the Internet as a medium for connecting with every corner of the country has made it possible for every farmer in the country to have access to every corner of the country at all times. Keeping them up-to-date with the happenings on the ground will be a great way for them to stay in the know. As a result, farmers will be able to save more money as a result of this, because they will not have to pay a lot of money to intermediaries, and as a result, they will be able to reduce the amount of money they have to spend on them. It is also likely that they will be able to increase their income as a result of doing so, as a result of doing so, as a result of doing so.
- As artificial intelligence/machine learning (AI/ML) algorithms become more sophisticated in the future, it will become easier for them to provide real-time, actionable insights to businesses as they become more sophisticated. It is believed that this technology will be able to assist farmers in improving crop yields, controlling pests, providing them with actionable data, helping them with soil screenings, and reducing their workload in the process by providing actionable data and assisting in soil screenings.
- There are many advantages that can be realized through the use of blockchain technology, including tamper-proof and accurate information about farms, stocks, as well as fast and secure transactions and food traceability, to name just a few. Due to the fact that there is no longer any need for farmers to rely on documents or files to record and store important data so that they are able to perform their daily operations, it is no longer necessary for them to rely on documents or files. This must be considered to be one of the key focus areas of the digital asia revolution. It must be one of the key focus areas of the revolution.
- The use of digital technology can also be utilized by the government in order to improve the efficiency and effectiveness of current policies and revolutions through the use of digital technology. In order to achieve better economic growth, we need to enhance the efficiency and effectiveness of policies. In addition, we need to implement revolutions in order to increase the effectiveness of policies and policies. One of the best examples of this is the possibility of

monitoring a wide range of agricultural activities for free and that too with the help of high-quality satellite images that are freely available online and that anyone can use at any time in order to monitor. Thus, the government may be able to move towards a more targeted policy in the future that would pay (or penalize) farmers based on their performance. We need to move towards a more targeted policy that will pay farmers based on what they do to protect the environment in order to move toward a more targeted policy that will pay farmers based on what they do to protect the environment in order to move towards a more targeted policy that will pay farmers based on how they protect the environment.

- By replacing agricultural subsidies with a direct cash system, digital Asia will be able to reach a
  greater number of underprivileged and needy farmers. The result of this would be an increase in
  agricultural productivity as a result of this, as well as a reduction in the amount of farmer debt as
  a result of this.
- Due to the use of mobile money, customers in rural areas have an incredibly large number of options at their disposal as a result of the widespread use of the system. It is now possible for farmers to receive credit through digital channels as a result of the development of digital channels in order to support savings as well as receive credit. The advantage of this is that it allows them to avoid the substandard banking infrastructures and the associated costs that go along with them. This is one of the ways in which online banking contributes to the productivity of farms, as well as to the incomes of farmers.
- By facilitating the connection between private sector suppliers and the market, digital technologies will eventually be able to support trade in agricultural and food products by facilitating the process of connecting suppliers and buyers. Also, they could also prove to be a useful tool for governments in terms of monitoring and enforcing standards more efficiently as a result of their use. A better quality control system can also ensure a quicker turnaround time for perishable goods, and they can also improve the process of moving perishable goods, as well as provide faster and more efficient borders, and processes that are necessary for the transportation of perishable goods.

#### Recommendations

There are a number of sectors of the economy that are being transformed by the digital economy. The agricultural sector has already begun to reap the benefits of technological innovations in recent years. Using mobile apps, farmers are able to get real-time updates on crop quality, soil, and irrigation, so that they can make informed decisions about crop management in the future.

Despite the fact that some organizations and individuals may rely on technology to simply execute existing tasks on their computers, the digital economy is far more advanced than that. There is more to it than just using a computer to perform tasks that would have previously been performed manually. Or, it

could help to use analog devices if they had not been automated. It is therefore because of this that the digital economy has highlighted the need and the opportunity for organizations and individuals to use technologies to carry out their tasks in a better, faster, and different fashion than they did before the arrival of the digital economy.

There has been a great deal of disruption caused by the digital economy. In the last few years, there have been many new companies and new ways to interact with each other. There have, however, been many companies and industries that have failed to take advantage of the technologies to transform their operations. As a result, they have suffered declining sales, declining market share or even a complete collapse as a result. A number of content rental shops, such as Blockbuster and others, have closed their doors because they failed to adopt streaming technologies quickly enough. As a result, the taxi industry is now struggling to compete with Uber and Lyft, who are finding it easier to use their services. As smartphones and social media platforms replaced film and photo albums, Kodak, and other camera equipment companies that did not make the move to digital formats and online sharing platforms greatly shrank their product offerings.

Consequently, the term is being used in a variety of contexts to refer to leveraging technologies in order to accomplish tasks. This is in order to engage in activities that were previously not possible as a result of the advancement of technology. There are several terms used to describe the opportunities that exist for existing entities to improve their capabilities, to do things in a different way, and to do things in a new way and to do things in a new way, as well as to improve their performance by digital transformation.

#### Conclusion

The digital economy comprises many things, and digitization and automation are just two examples of some of those things. In contrast to the traditional paradigm, this new paradigm relies on a multitude of advanced technologies rather than relying on only one platform of technology. This is what was used in the traditional paradigm. There are a number of technologies and platforms that are involved in this project, such as hyperconnectivity, the internet of things (IoT), big data, advanced analytics, wireless networks, mobile devices, and social media, which are only some of them. Throughout the digital economy, a combination of these technologies is being used to rework traditional exchanges in order to enable new exchanges through reworking and enabling new ones through the use of these technologies. Due to the fact that these technologies are being used, this is the result. Depending on the application, we can use these technologies both separately as well as in conjunction with one another.

It is essential for any organization, whether it is a for-profit company, an entity that provides a service such as a healthcare system, or a nonprofit or government institution, to have both employees and leaders who are capable of being innovative in order to remain competitive in the future. The result of this is that they will need to take advantage of today's emerging technologies, such as the Internet of Things and prescriptive analytics. This will enable them to better connect with their existing customers, respond more quickly, and also be more efficient and effective in terms of customer service. Besides that, they will also have to be prepared to explore what is the best way to utilize or develop emerging technologies in order to prevent themselves from being left behind as the digital economy as a whole continues to develop.

#### References

Bailey, Geoff. "Concepts, time-scales and explanations in economic prehistory." *Economic archaeology* 96 (1981): 97-117.

Baisya, Rajat K., and Siddhartha Paul Tiwari. "E-governance Challenges and Strategies for Better-managed Projects." *Emerging Technologies in E-Government* (2008): 203-208.

Buiter, Willem H., and James Tobin. "Fiscal and monetary policies, capital formation, and economic activity." (1978).

Burchinal, Lee G. "The communications revolution: America's third century challenge." *European Conference on Information Literacy (ECIL)*. 1976.

Connor, Denis J. "Network Distribution of Digital Television Signals." *Digital Video Volume 3: 14th SMPTE Television Conference*. SMPTE, 1980.

Douglas, David H. "Experiments to locate ridges and channels to create a new type of digital elevation model." *Cartographica: The International Journal for Geographic Information and Geovisualization* 23.4 (1986): 29-61.

Feld, M. D., et al. "Revolution and Reaction in Early Modern EuropeCapitalism and Material Life: 1400-1800The Dutch Rural Economy in the Golden Age, 1500-1700. The German Military Entrepreneur and his Work Force: A Study in European Economic and Social History. The Modern World System: Capitalist Agriculture and the Origins of the European World Economy in the Sixteenth Century. The Imperial Theme in the Sixteenth Century." *Journal of the History of Ideas* 38.1 (1977).

Goddard, John B., and Andrew E. Gillespie. "Advanced telecommunications and regional economic development." *Geographical Journal* (1986): 383-397.

Hepworth, Mark E. "Geography of the information economy." *NETCOM: Réseaux, communication et territoires/Networks and communication studies* 4.1 (1990): 266-267.

Hirschman, Albert O. *Journeys toward progress. Studies of economic policy-making in Latin America.* WW Norton, 1973.

Jager, F. de, and C. Dekker. "Tamed frequency modulation, a novel method to achieve spectrum economy in digital transmission." *IEEE Transactions on Communications* 26.5 (1978): 534-542.

Kauffman, Robert J., and Peter Weill. "An evaluative framework for research on the performance effects of information technology investment." (1989).

Kundi, Ghulam Muhammad, and Bahadar Shah. "eBusiness in Pakistan: opportunities and threats." *The Journal of Internet Banking and Commerce* 12.3 (1970): 1-23.

Lucas Jr, Henry C., and Jon A. Turner. "A corporate strategy for the control of information processing." (1981).

Lynn, P. A. "Recursive digital filters for biological signals." *Medical & biological engineering* 9.1 (1971): 37-43.

Mahmoud, M. "Experience results and techno-economic feasibility of using photovoltaic generators instead of diesel motors for water pumping from rural desert wells in Jordan." IEE Proceedings C (Generation, Transmission and Distribution). Vol. 137. No. 6. IET Digital Library, 1990.

Murota, Kazuaki, and Kenkichi Hirade. "GMSK modulation for digital mobile radio telephony." *IEEE Transactions on communications* 29.7 (1981): 1044-1050.

National Research Council. Population growth and economic development: Policy questions. 1986.

Nabona, N., and L. L. Freris. "Optimisation of economic dispatch through quadratic and linear programming." *Proceedings of the Institution of Electrical Engineers*. Vol. 120. No. 5. IET Digital Library, 1973.

Ordeshook, Peter C., Randall Calvert, and Thrainn Eggertsson. *Perspectives on positive political economy*. Cambridge University Press, 1990.

Raja, John, and A. Seetharaman. "E-payments: Problems and Prospects." *The Journal of Internet Banking and Commerce* 13.1 (1970): 1-17.

Tiwari, Siddhartha Paul. "Information and communication technology initiatives for knowledge sharing in agriculture." *arXiv preprint arXiv:2202.08649* (2022).

Tiwari, Siddhartha Paul. "Organizational Competitiveness and Digital Governance Challenges." *Archives of Business Research* 10.3 (2022).

Tiwari, Siddhartha Paul. "Strengthening E-Commerce Product Launches-Improving Efficiencies from Development to Production." *Project And Technology Management Foundation (A Non-Profit Organization) Member of Asia Pacific Federation of Project Management* 1.2 (2015): 4-6.

Tiwari, Siddhartha Paul. "Emerging Technologies: Factors Influencing Knowledge Sharing." *World Journal of Educational Research* (2022).

Tiwari, Siddhartha Paul. "Re-emergence of Asia in the New Industrial Era." *Technium Soc. Sci. J.* 29 (2022): 471.

Tiwari, Siddhartha Paul. "Covid-19: Knowledge Development, Exchange, and Emerging Technologies." *International Journal of Social Science Research and Review* 5.5 (2022): 310-314.

Tiwari, Siddhartha Paul. "Knowledge Enhancement and Mobile Technology: Improving Effectiveness and Efficiency." *arXiv preprint arXiv:2208.04706* (2022).

Tiwari, Siddhartha Paul. "Knowledge Management Strategies and Emerging Technologies--An Overview Of the Underpinning Concepts." arXiv preprint arXiv:2205.01100 (2022).

Tiwari, Siddhartha Paul. "Emerging trends in soybean industry." (2017).

Tiwari, Siddhartha Paul, and S. P. Tiwari. "Is export-oriented and currency dynamics-based Indian soybean revolution environment-friendly." *Current Science* 114.08 (2018): 1604-1605.

Tiwari, Siddhartha Paul, and Rajat K. Baisya. "E–governance and its impact on enterprise competitiveness: Trends, Status and Challenges." *MDI, Gurgaon INDIA in Association with Australian Centre for Asian Business, University of South Australia, Adelaide, AUSTRALIA* 1 (2014).

Tiwari, Siddhartha Paul. "The Potential Impact of COVID-19 on the Asian Rural Economy: A Study Based on Asian Countries." *Journal of Education, Management and Development Studies* 2.3 (2022): 1-7.

Tiwari, Siddhartha Paul. "Business: Innovation & Survival, by a Googler." (2015).

Tiwari, Siddhartha Paul. "Diversity and its importance in today's corporate environment." (2015).

Tiwari, Siddhartha Paul. "Exploring the Linkage between a Successful Digital Campaign and Gaming." *Casual Connect, Asia Pacific, Singapore* 1.1 (2014): 5-6.

Tiwarim, Siddartha Paul. "Knowledge Enhancement and Understanding of Diversity." *Technium Soc. Sci. J.* 30 (2022): 159.

Tiwari, Siddhartha Paul. "Editorial: Project and Technology Management Foundation (PTMF) Newsletter (June, 2015)." (2015).

Tiwari, Siddhartha Paul. "Editorial: Project and Technology Management Foundation (PTMF) Newsletter (December, 2014)." (2014).

Tiwari, Siddhartha Paul. *The Impact of New Technologies on Society: A Blueprint for the Future*. Scholarly Publisher RS Global Sp. z OO, 2022.

Tiwari, Siddhartha Paul. "Knowledge Sharing and Content Creator Best Practices Online." (2015): 5-12.

Tiwari, Siddhartha Paul. "Workshop on Digital Marketing: Credit Course, IIM, Indore." (2010): 1-24.

Tiwari, Siddhartha Paul. "External factors which shape and influence an organisation's operating environment." *Syngenta Workshop on Social, economic, political, technological & environmental trends, Singapore* 1.1 (2016): 1-5.

Wang, Cun. "The development of information activities in the Special Economic Zones of China." *Journal of information science* 16.6 (1990): 393-398.

Wang'ombe, Joseph K. *Industrial market structure and development in East Africa*. Diss. University of Nairobi, 1975.

Wang, P. Y. "Economic insect fauna of China. Fasc. 21. Lepidoptera: Pyralidae." *Economic insect fauna of China. Fasc. 21. Lepidoptera: Pyralidae.* (1980).

Wang, Paul P. "The optimality of variable sampling schemes for a digital encoder." *International Journal of Control* 17.3 (1973): 587-596.

Yates, J. B. "Power engineering for the new cross-Channel link." Electronics & Power 28.1 (1982): 77-81.

Yates, I. R. "Investment for the future." The Aeronautical Journal 85.846 (1981): 286-300.