

# Sustainable Development: A Connection between Technology, Economy, and Society

Preminger, Ambrose

Amity University

15 February 2021

Online at https://mpra.ub.uni-muenchen.de/116385/MPRA Paper No. 116385, posted 18 Feb 2023 15:32 UTC

## Sustainable Development: A Connection between Technology, Economy, and Society

Ambrose Jude Preminger

Amity University Madhya Pradesh, Gwalior

E-mail: ambrose.preminger@s.amity.edu

#### **Abstract**

In countries around the world, it is becoming more and more apparent that sustainable growth models are inextricably linked to the use of digital technology. This is in order to achieve sustainable growth. A new impetus for sustainability is provided by the digital economy, and there can be no doubt about this. Keeping in mind that the Sustainable Development Goals of the United Nations have been announced in 2020, sustainable development is believed to be a fundamental goal of the world within the next few decades, and it is expected to be achieved by 2030. The Sustainable Development Goals (SDGs) that have been established for the European Union (EU) to achieve have been determined as a result of the adoption of Sustainable Development Goals (SDGs) and their progress, which has long been measured through the Sustainable Development Goals Index (SDGI), have been adopted by the Council of the European Union. Sustainable development, as well as the digital economy, have become a priority of governments around the world, and there is no doubt that it is one of the biggest challenges we face today. Companies that have strong financial stability have access to more resources, which can then be used to invest in research and development, which can lead to a more sustainable economy. It also allows them to manage the risks associated with economic downturns and other events that can lead to a decrease in economic activity. Additionally, companies with financial stability can better manage their cash flow, which is essential for any business that wants to remain competitive.

Keywords: Sustainable Development, Sustainable Economy, Technology, Economy and society, spillover, entrepreneur

#### Introduction

The digital economy can cultivate more entrepreneurial opportunities by influencing market scale, by understanding spillovers, and by identifying the factors that contribute to growth, all of which contribute to a sustainable development of the economy. Moreover, it contributes to the enrichment of entrepreneurial resources by increasing the interaction between information and ideas, which leads to an enrichment of entrepreneurial resources. The dissemination of ideas will be facilitated by this, thus promoting entrepreneurial activities, which play a crucial role in the development of sustainable communities. Gartner defines

sustainable development as an approach that meets the needs of present generations without compromising the ability of future generations to meet their own needs in the future, as defined by Gartner.

As a means of extending economic growth, which is, in turn, an important part of the concept of sustainable development, academics and researchers have come to the conclusion that the digital economy could be treated as an instrument that could be used to enhance economic growth in order to extend economic growth. Although not all researchers are interested in such a broad phenomenon as economic growth, it is important to keep in mind that some are more interested in specific areas of research within this field that are more narrowly confined. In terms of the concept of the digital economy, it can be understood in a very general sense or in terms of its very specific meaning. Since the explosion of new technologies and their rapid adoption in recent years, there has been a new wave of discussions about the digital economy. This is as a result of the explosion of new technologies. Having said that, the narrow definition only refers to the ICT sector, which includes telecommunications, the internet, IT services, hardware and software, etc. There are several aspects of the ICT sector that have been integrated with digital technology as part of traditional sectors which are included in the broad definition. It has been defined by scientists that the digital economy is a broader concept that encompasses a broad array of economic activities, including the use of digitized data and knowledge as a key factor of production, and modern information networks as an important activity space.

There is no doubt that regardless of how this new technological development was introduced, it inevitably resulted in economic growth in one way or another. Researchers are studying the digital economy from the point of view of its impact on the business world as well as assessing its readiness for sustainable development in the future in terms of its impact on the business world. Several researchers have suggested that the digital economy could play a key role in ensuring that companies' financial stability in the future will be based on the digital economy. I would argue that the state of financial stability itself plays a key role in the growth of the economy, the reduction of poverty, and the reduction of income inequality on the whole. It is in agreement with scholars that the more stable the financial environment, the greater the likelihood that the economy will be able to sustain itself in the long run. Furthermore, it's well known that financial stability can be a powerful means for businesses to overcome financial crises, which in turn can lead to a continuous, sustainable growth of the business, without any doubt. Another way to put it would be to say that one can consider the digital economy as a driver of sustainable development, a development that, in turn, will be achieved by the financial stability of the companies that operate in the digital economy.

Even though there have been plenty of scientific studies conducted on the indirect links between the digital economy and sustainable development, the majority of them come to the same conclusion - the digital economy and society both contribute to sustainable development in a positive manner. Despite this, there are only a limited number of research studies that have

studied the direct impact of the digital economy on sustainable development, and this is the topic that we will explore in this paper as part of our efforts to find out more about this topic.

#### Critical Literature Review

Alternatively, some scientists focus on examining the impact of different variables on economic growth, such as trade, taxation, and e-commerce, in order to gain a better understanding of economic growth. In my opinion, all of these could be considered to be a part of the digital economy. It is through the use of digital technologies that these issues can be managed. A number of economists have claimed that trade has an important role to play in economic growth, such as Vijay Sharma and Sekhar. A high level of taxation could be a significant factor in stimulating economic growth, so it is worth mentioning that trade is related to taxation issues. The importance of ecommerce, as well as the link up with trade and taxation, is worth mentioning as well. It can therefore be argued that the above-mentioned phenomena indirectly contribute to the development of sustainable communities. The concept of sustainable development is becoming increasingly relevant in a time when digital technologies are transforming and disrupting industries, economies, and societies all over the world. In addition to providing access to new technologies, such as the Internet, artificial intelligence, big data, and cloud computing, these technologies can also help bridge the gap between developed and developing countries, combat global challenges such as poverty, hunger, and climate change, to name a few, and accelerate human development.

The link between the diffusion of information and communication technologies (ICTs) and economic growth is another topic that deserves to be analysed in a broader sense. In the context of sustainable development, ICT could undoubtedly be considered to be a part of the digital economy. It could be researched as a variable with both direct and indirect impacts on sustainable development. The problem however is that there are only a few economists who are investigating this issue, most of them are focusing on the economic impact of ICT, and there are different points of view when it comes to the mentioned influence.

### **Current Perspectives and Opportunities**

A question that is increasingly being addressed by international, regional as well as non-state actors is how digital technologies can fundamentally help us realize the sustainable development goals. This is an important question that is increasingly being addressed by international, regional, and non-state actors alike. Today, the concept of a sustainable digital economy is considered one of the most powerful and significant concepts in world economics, as it can lead a country out of crisis and towards a path of sustainable development and establish plans and objectives that span a broad spectrum of digital economies. It is now well recognized that digital economies encompass a broad range of technologies and services related to information, communication, and technology (ICTs) that are expected to make significant technical advances in order to achieve digital sustainability in the future. Additionally, globalization and the digital economy have had a significant impact on the expansion of all

private and public sectors, and have created a world market that is accessible to all. The importance of government and the private sector working together to create a new digital ecosystem is to be emphasized, since a connected nation may be able to transform a digital economy with more effective and convenient public and private sectors. There is no doubt that the digital economy is reshaping conventional transactions both individually and collectively, and enabling new forms of transactions as well.

There has been a global consensus that governance approaches are required in order to appropriately balance the potential advantages and risks of digitalization and maintain a sustainable digital economy as a result of digitalization. The various perspectives and ideas that have been presented have been related to the appropriate governance techniques needed in the digitalized economy, the process of governing the digitalization process, and the effects of the digitalization process. There are still many issues that need to be addressed in order to ensure the sustainability of our planet in the modern age. In the age of rapid technological advancement, as well as their increasing complexity and scale, government and industry face new challenges in promoting the long-term growth of digital technology, especially in terms of recent work, responsible consumption, and reducing inequalities. There are numerous Sustainable Development Goals outlined by the United Nations. Furthermore, it seems to be the result of a major trend in environmental policy and economic growth as well.

As a matter of public administration, good governance refers to the process of maximizing public interests through public administration. A key feature of the new type of public administration is the collaborative nature of the administration of public affairs, which is carried out by both citizens and the state, and the new interaction between civil society and the political system. The fundamentals of good governance can be summarized by considering six fundamentals: transparency, rule of love, legitimacy, accountability, effectiveness, and responsiveness: these are the six fundamentals of good governance. In order to achieve good governance, it is necessary to have a free and democratic political system in place because it cannot be accomplished without these things. Researchers have shown in previous research studies that individuals are happier with their lives in countries with higher levels of quality in their governance. It is essential that authorities engage in the business of political administration in order for good governance to be sustained, since it is the result of effective and constructive collaboration between citizens and the state. Moreover, good governance can also be viewed as one of the crucial components of effective economic policy since it contributes to the maintenance of an environment that facilitates the growth of the economy in a balanced and equitable manner.

#### **Conclusion**

The impact of ICT on economic growth could be positive or negative, depending on the level of development of the country. For example, in high-impact countries, this effect is widely supported, whereas it is not feasible in middle-income and low-income countries. Observations made by Vijay Singh, who conducted research on the UNDP, i.e., high-income countries, show that these countries have experienced significant and positive economic growth as a result of the high penetration of ICT, and these findings are in line with the findings of Singh's research. On the other hand, Sohail Singh conducted a study in middle-income countries, and his findings showed that in the long run, the development of ICT infrastructure stimulates economic growth in these countries. In spite of this, there seem to be different perspectives on the impact of ICT, for example, ICT can negatively impact the labor productivity, which is part of the economic growth process. As such, it is fair to say that ICT can both positively and negatively affect economic growth, and in this way, contribute to the sustainability of the economy in a variety of ways. It has become increasingly important for regional economic structural upgrading and coordinated development through modern technology and innovation as the digital economy becomes a new engine of economic growth. In view of this, the digital economy could be considered as a development trend and as a basis for sustainable economic growth, therefore overall sustainable development, as stated by eminent technologist Siddhartha Paul Tiwari in his book, "The Impact of New Technologies on Society: A Blueprint for the Future".

#### References

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

Batie, Sandra S. "Sustainable development: Challenges to the profession of agricultural economics." American Journal of Agricultural Economics 71.5 (1989): 1083-1101.

Brundtland, Gro Harlem. "What is sustainable development." Our common future 8.9 (1987).

Caldwell, Lynton K. "Political Aspsects of Ecologically Sustainable Development." Environmental Conservation 11.4 (1984): 299-308.

Jessop, Bob. "Regulation theories in retrospect and prospect." Economy and society 19.2 (1990): 153-216.

Kornai, Janos. Contradictions and dilemmas: Studies on the socialist economy and society. Mit Press, 1986.

Long, Wayne. "The meaning of entrepreneurship." American Journal of small business 8.2 (1983): 47-59.

Miller, Peter, and Nikolas Rose. "Governing economic life." Economy and society 19.1 (1990): 1-31.

Munn, R. E. Towards sustainable development: An environmental perspective. Springer Netherlands, 1989.

Myers, Norman. "The environmental basis of sustainable development." The Annals of Regional Science 21 (1987): 33-43.

Norgaard, Richard B. "Sustainable development: a co-evolutionary view." Futures 20.6 (1988): 606-620.

Pearce, David. "Economics, equity and sustainable development." Futures 20.6 (1988): 598-605.

Pearse, Andrew. "Seeds of plenty, seeds of want: social and economic implications of the green revolution." Revisiting Sustainable Development 139 (1980).

Rees, William E. "The ecology of sustainable development." Ecologist 20.1 (1990): 18-23.

Simon, David. "Sustainable development: theoretical construct or attainable goal?." Environmental Conservation 16.1 (1989): 41-48.

Tiwari, Siddhartha Paul. "Information and communication technology initiatives for knowledge sharing in agriculture." Indian journal of agricultural science 78.9 (2008): 737-747.

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, and S. P. Tiwari. "Is export-oriented and currency dynamics-based Indian soybean revolution environment-friendly?." CURRENT SCIENCE 114.8 (2018): 1604.

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

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

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

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. "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. Vol. 1. 2016.