

DIGITALIZATION AND ENTREPRENEURSHIP – IMPACT ON THE ECONOMY AND SOCIETY

Emina Jeremić Marković^{1*} , Milan Janković² , Doloris Bešić-Vukašinović³ 

¹Center for Globalization Studies (CGS), Belgrade, Serbia, e-mail: eminajeremic@gmail.com

²Faculty of Business Studies and Law, University "Union - Nikola Tesla", Serbia, e-mail: milan.jankovic@fbsp.edu.rs

³Academy of Technical and Art Applied Studies – Textile School for Design, Technology and Management, Belgrade, Serbia, e-mail: doloris.besic@yahoo.com

Abstract: In a world emerging from the devastating COVID-19 pandemic, where everything has become increasingly volatile and change appears to be the only constant—occurring, it seems, more rapidly and intensely than ever before—the development and implementation of new technologies and digital transformation have become key drivers of economic growth and the development of society as a whole. Within this process of digital transformation, entrepreneurship represents a driving force of economic growth and societal development, acting as a catalyst for innovation, job creation, and social transformation. As the lifeblood of market dynamics, entrepreneurs inject vitality into the economy by introducing groundbreaking products and services, stimulating competition, and increasing efficiency. Their ventures contribute to gross domestic product, expand employment opportunities, and foster resilience during periods of economic crisis. We are witnessing how the process of digitalization affects the effectiveness and efficiency of companies' operations, leading to the development of new products and services in the market, the transformation of business models and other elements of business operations, as well as improvements in work processes and production systems. Taken together, these developments shape the overall market performance and competitiveness of enterprises. However, it must be borne in mind that the mere implementation of new technologies and the digitalization of business operations, without an adequate understanding of these technologies and proper employee training in their application, as well as without socially responsible conduct on the part of enterprises themselves, cannot lead to sustainable business practices or contribute to the overall progress of the economy and society. By properly recognizing the significance and challenges of digitalization, considering both its positive and negative aspects, learning from past experience, and maintaining a strong commitment to the continuous improvement of employees' knowledge, skills, and competencies—without which no meaningful change would be possible—entrepreneurship and digitalization can make a significant contribution to improving the quality of life, while simultaneously fostering the advancement and development of the economy and society as a whole.

Keywords: digitalization, entrepreneurship, sustainable growth and development, economy, society.

Field: Social Sciences

1. INTRODUCTION

Digitalisation and entrepreneurship have become important determinants of contemporary economic and social development. The aim of this paper is to examine their impact on the economy and society, their mutual relationship and their contribution to economic growth and improvements in the quality of life. The importance of these processes became particularly evident during and after the COVID-19 pandemic, when enterprises, entrepreneurs, employees and consumers were required to adapt rapidly to significant changes in the business environment.

Digitalisation has transformed the way enterprises operate, communicate with consumers, organise production and provide products and services. At the same time, entrepreneurship represents one of the mechanisms through which technological opportunities are transformed into new products, services, markets and business models. Digital entrepreneurship therefore combines entrepreneurial initiative with the opportunities created by information and communication technologies (Simović & Ilić, 2021).

The COVID-19 pandemic accelerated processes that had already been taking place in the global economy. Businesses increasingly relied on digital communication, online sales, electronic payments and new organisational models. These developments generated new requirements regarding labour, management, education, knowledge, skills and technologies. As a result, digitalisation should not be understood exclusively as the introduction of technological solutions, but as a broader transformation of business and society.

The relationship between entrepreneurship and economic development has long attracted the attention of economic researchers. Audretsch et al. (2002) examine the relationship between industrial restructuring, entrepreneurial activity and economic performance, while Van Stel et al. (2005) analyse the

*Corresponding author: eminajeremic@gmail.com



effect of entrepreneurial activity on national economic growth. These studies indicate that entrepreneurship represents an important component of the processes that shape economic development.

Entrepreneurship is also closely associated with innovation. Drucker (2002) considers innovation a fundamental instrument of entrepreneurship, while Bessant and Tidd (2011) emphasise the close relationship between entrepreneurship, innovation and the transformation of ideas into economic opportunities. Consequently, the development of entrepreneurship in a digital environment requires not only technological resources but also knowledge, creativity, innovative capacity and the willingness to respond to change.

Data from the Statistical Office of the Republic of Serbia illustrate the increasing importance of entrepreneurship in Serbia. The number of entrepreneurs increased from 228,680 in 2010 to 232,765 in 2015, 272,969 in 2018 and 298,279 in 2020. These figures indicate a continuous increase in entrepreneurial activity and support the view that entrepreneurs constitute an important element of the Serbian economy.

2. MATERIALS AND METHODS

The paper is based on a qualitative and descriptive research approach. The research combines a review of relevant literature with an analysis of secondary statistical data. The theoretical framework is based on literature dealing with entrepreneurship, innovation, digital entrepreneurship, technological change and economic growth.

The theoretical foundations of entrepreneurship are considered primarily through the works of Joseph A. Schumpeter (1911, 1934, 1939, 1942), whose understanding of entrepreneurship places innovation and economic change at the centre of entrepreneurial activity. These foundations are complemented by the contributions of Drucker (2002), Bessant and Tidd (2011), Penezić (2009), the National Knowledge Commission (2008), Audretsch et al. (2002), Van Stel et al. (2005), Miletić and Jeremić Marković (2018), and Simović and Ilić (2021).

The empirical part of the analysis relies on secondary statistical data published by the Statistical Office of the Republic of Serbia. The selected indicators relate to the number and structure of enterprises and entrepreneurs, innovative activities and the use of information and communication technologies.

The research on information and communication technology use presented in the original paper was conducted according to Eurostat methodology. The household survey covered 2,800 households and 2,800 individuals, while the enterprise survey was conducted on a sample of 1,839 enterprises, stratified according to size and economic activity.

The collected data are analysed descriptively and interpreted in relation to the theoretical concepts identified in the literature. The objective is to identify major trends and illustrate the relationship between entrepreneurship, innovation, digital technologies and economic and social development.

3. RESULTS

3.1. Entrepreneurship and digitalisation

The concept of entrepreneurship has evolved considerably throughout economic history. One of the most influential theoretical approaches was developed by Joseph Schumpeter, who associated entrepreneurship with innovation and economic change. In his theory of economic development, the entrepreneur performs an important function by introducing new combinations into economic activity (Schumpeter, 1911, 1934).

Schumpeter's approach identifies several forms of entrepreneurial innovation, including the introduction of new products, new production methods, new sources of supply, new markets and new forms of industrial organisation (Schumpeter, 1942). The entrepreneur is therefore not merely the owner or manager of an enterprise but an economic actor who introduces change and contributes to economic transformation.

This interpretation remains highly relevant in the digital economy. Digitalisation provides new technological opportunities, but entrepreneurial activity is necessary to transform these opportunities into marketable products and services. Digital entrepreneurship consequently represents an important contemporary form of entrepreneurial activity, based on the application of digital technologies in the creation, development and management of business ventures (Simović & Ilić, 2021).

Entrepreneurship can also be understood as the application of knowledge, skills and competences and the commercialisation of ideas through the establishment of new enterprises or the development of existing ones. Its objectives include growth, wealth creation, employment and social benefits. Entrepreneurial activity is therefore associated with initiative, innovation and the willingness to undertake

new business activities and accept risk (National Knowledge Commission, 2008).

Penezić (2009) similarly considers entrepreneurship from the perspective of contemporary economic and market conditions, emphasising the importance of entrepreneurial initiative for business development. Miletić and Jeremić Marković (2018) connect entrepreneurship with economic development and emphasise the importance of entrepreneurial potential and education.

3.2. Innovation as a driving force of entrepreneurship

Innovation represents one of the principal connections between entrepreneurship and digitalisation. According to Drucker (2002), innovation constitutes an important entrepreneurial instrument through which changes can be transformed into opportunities. Bessant and Tidd (2011) similarly connect innovation and entrepreneurship through the processes of recognising opportunities, developing ideas and implementing them in practice.

Throughout economic history, technological innovations have transformed production and business activities. The development from relatively simple forms of production to mechanisation, mass production, automation, robotics, 3D printing and digital technologies demonstrates the continuous importance of innovation.

However, an innovative idea by itself does not necessarily generate economic value. For an innovation to affect the market, it must be developed, implemented and commercialised. Entrepreneurship has a crucial role in this process because entrepreneurs identify opportunities and transform ideas into products, services or new forms of business organisation.

The statistical indicators for Serbia provide an important illustration of this relationship. According to the Statistical Office of the Republic of Serbia, the share of business entities with at least one type of innovation was 51.14%. More than 67% of large business entities, approximately 56% of medium-sized enterprises, and around 50% of small business entities were innovative. Approximately half of both manufacturing and service enterprises introduced innovations.

Regional differences were considerably greater. Product and process innovations accounted for 48.2% in the Belgrade Region, compared with only 8% in the Region of Southern and Eastern Serbia. The highest proportion of innovative business entities was recorded in accommodation and food services (64.5%) and wholesale and retail trade and motor vehicle repair (61%). Mining recorded the lowest share, at 23.3%.

These results suggest that the innovative capacity of Serbian enterprises differs considerably according to their size, sector and geographical location. Consequently, policies aimed at encouraging digitalisation and entrepreneurship should also take structural and regional differences into consideration.

3.3. Digital technologies and business transformation

The development of information and communication technologies has significantly transformed contemporary entrepreneurship. Digital technologies enable entrepreneurs to communicate more rapidly, access information, reach customers, organise production and introduce new business models.

Digitalisation has also enabled the expansion of electronic business activities. Electronic payments, online trade, remote purchasing, digital marketing, automated production and logistics systems have become increasingly important components of contemporary business.

Traditional industries have also been transformed by these processes. Automation, digital systems and robotics increasingly complement or replace certain forms of manual work, while simultaneously creating demand for employees with new knowledge and skills. These changes affect manufacturing as well as communications, health care, agriculture, banking, transport, media and trade.

Digital technologies therefore influence not only the internal organisation of enterprises but also their relationships with consumers. The increasing use of the internet, mobile technologies and digital platforms has changed consumer behaviour and created demand for products and services that can be accessed online.

Data from the Statistical Office of the Republic of Serbia illustrate the extent of this transformation. According to the 2023 indicators used in the paper, 100% of enterprises in Serbia had an internet connection and 85.1% had a website. In 2022, 28.2% of enterprises sold products or services via the internet.

Digitalisation is also widespread among households. In Serbia, 85.6% of households had internet access, representing an increase of 2.4 percentage points compared with 2022 and 4.1 percentage points compared with 2021. A computer was present in 75.9% of households, a mobile phone in 94.4%, and a laptop in 55.0%.

The same research showed that 75.4% of individuals used a computer, 95.7% used a mobile phone and 85.4% used the internet. More than 82% of the internet population had an account on social networks.

These indicators demonstrate the significant presence of digital technologies in Serbian enterprises and society and provide an important basis for the continued development of digital entrepreneurship, e-commerce and online services.

3.4. Knowledge, skills and human capital

One of the most important consequences of digital transformation is the increasing importance of knowledge and human capital. Entrepreneurship has become important not only as a form of economic activity but also as a particular way of thinking and identifying opportunities (Bessant & Tidd, 2011).

As enterprises introduce new technologies, the structure of their resources changes. Investment in physical capital remains important, but knowledge, skills and competences increasingly determine whether technologies can be used effectively. Digitalisation therefore creates a growing need for education, training and continuous professional development.

The development of digital entrepreneurship requires employees and entrepreneurs capable of using new technologies and adapting to new business models. Simović and Ilić (2021) place digital technologies within the context of entrepreneurial development, indicating the growing significance of digital competencies in contemporary entrepreneurship.

This transformation also affects the education system. Education needs to respond to scientific and technological development and provide individuals with knowledge and skills that can be applied in contemporary economic activities. At the same time, existing employees require opportunities for retraining, reskilling and continuous professional development.

Knowledge is particularly important because the implementation of technology without adequate human capabilities cannot automatically generate higher productivity or sustainable development. Digital transformation is therefore simultaneously a technological, organisational and human process.

4. DISCUSSIONS

The analysis demonstrates that entrepreneurship and digitalisation are closely interconnected processes. The theoretical foundations established by Schumpeter (1911, 1934, 1939, 1942) emphasise innovation and economic transformation as fundamental characteristics of entrepreneurial activity. These ideas remain applicable in contemporary digital economies because digital technologies continuously create opportunities for new combinations of products, processes, markets and organisational models.

Drucker's (2002) approach further highlights innovation as an instrument of entrepreneurship, while Bessant and Tidd (2011) emphasise the relationship between innovation and entrepreneurial action. Within the context of the digital economy, this means that technological change alone does not generate entrepreneurial success. Technologies create possibilities, but entrepreneurs must recognise, develop and commercialise those possibilities.

The connection between entrepreneurship and broader economic performance is also supported by the literature examining entrepreneurial activity and economic growth. Audretsch et al. (2002) consider entrepreneurship in the context of industrial restructuring and economic performance, while Van Stel et al. (2005) analyse the relationship between entrepreneurial activity and national economic growth. Entrepreneurship can therefore be viewed as an important component of structural economic change.

The Serbian statistical indicators examined in this paper provide additional insight. The growth in the number of entrepreneurs, the significant proportion of innovative enterprises and the widespread use of internet technologies demonstrate that important preconditions for digital entrepreneurship exist in Serbia.

At the same time, regional differences in innovation and differences between small, medium-sized and large enterprises show that the process is not uniform. The existence of digital infrastructure does not automatically mean that every enterprise possesses the same ability to innovate or use digital technologies productively.

The findings therefore point to the importance of human capital. Knowledge, education, skills and entrepreneurial capabilities represent essential elements of successful digital transformation. This is consistent with the emphasis placed by Miletić and Jeremić Marković (2018) on entrepreneurial potential and education and with the broader approach to digital entrepreneurship presented by Simović and Ilić (2021).

Digitalisation should consequently be understood as more than the technological modernisation of enterprises. It changes organisational structures, labour-market requirements, consumer behaviour, production processes and communication. Its effects therefore extend from individual enterprises to the economy and society as a whole.

5. CONCLUSIONS

The analysis presented in this paper indicates that entrepreneurship and digitalisation represent important drivers of economic and social transformation. Their interaction contributes to innovation, the introduction of new products and services, the development of new business models, changes in production processes and the creation of new opportunities for economic activity.

Entrepreneurship has historically been associated with innovation and the introduction of new combinations into economic activity (Schumpeter, 1911, 1934, 1942). In contemporary conditions, digital technologies expand the possibilities available to entrepreneurs and accelerate the process through which ideas can be developed and brought to the market.

The available statistical indicators demonstrate that Serbia has experienced significant development in entrepreneurship, innovation and digital connectivity. The increasing number of entrepreneurs, substantial proportion of innovative enterprises and widespread use of the internet by enterprises and households provide an important foundation for further digital economic development.

However, technological infrastructure alone cannot ensure sustainable development. The successful application of digital technologies requires appropriate knowledge, skills, education, entrepreneurial initiative and organisational adaptability. Continuous investment in human capital is therefore necessary to ensure that technological development produces positive economic and social effects.

Entrepreneurs must be prepared to respond to technological change, adopt innovations and continuously improve their knowledge and skills. Entrepreneurial education is particularly important in this respect. As Miletić and Jeremić Marković (2018) emphasise, entrepreneurial tradition and education are important drivers of entrepreneurial potential.

Digitalisation and entrepreneurship should therefore be considered complementary components of sustainable economic and social development. Their successful integration can contribute to productivity, competitiveness, employment, innovation and improvements in the quality of life. At the same time, enterprises, educational institutions and society must remain capable of adapting to rapid technological change.

Ultimately, the future impact of digitalisation will depend not only on technological progress itself but also on the ability of entrepreneurs, employees and society to use technology effectively and responsibly. Continuous learning, innovation, adaptability and entrepreneurial initiative therefore represent essential foundations for sustainable growth and development in an increasingly digital economy.

ACKNOWLEDGEMENTS

The authors would like to express their gratitude to the institutions and colleagues who supported the preparation of this paper and contributed through professional discussions and constructive suggestions. The authors also acknowledge the Statistical Office of the Republic of Serbia for providing publicly available statistical data used in the analysis.

REFERENCES

- Audretsch, D., Carree, M., Van Stel, A., & Thurik, R. (2002). Impeded industrial restructuring: The growth penalty. *Kyklos*, 55(1), 81–98. <https://doi.org/10.1111/1467-6435.00178>
- Bessant, J., & Tidd, J. (2011). *Innovation and entrepreneurship* (2nd ed.). John Wiley & Sons.
- Drucker, P. F. (2002). The discipline of innovation. *Harvard Business Review*.
- Miletić, D., & Jeremić Marković, E. (2018). Neki aspekti odnosa ekonomskog razvoja i preduzetništva. In *Preduzetništvo vs. rentijerstvo* (pp. 217–225). Institut društvenih nauka.
- Milić Beran, I. (2025). Psychological capital as an intangible driver of economic growth. *SCIENCE International Journal*, 4(4), 39–44. <https://doi.org/10.35120/sciencej040439m>
- National Knowledge Commission. (2008). *Entrepreneurship*. Government of India.
- Penezić, N. (2009). *Preduzetništvo – savremeni pristup* (2nd ed.). Fakultet poslovne ekonomije, Univerzitet Edukons.
- Republički zavod za statistiku. (2020). *Preduzeća po veličini i preduzetnici u Republici Srbiji, 2016–2018*. Republički zavod za statistiku – Preduzeća po veličini i preduzetnici
- Premović, J., Dimić, M., & Premović, T. (2025). Entrepreneurship education in the function of entrepreneurship development in the Republic of Serbia. *SCIENCE International Journal*, 3(4), 59–65. <https://doi.org/10.35120/>
- Republički zavod za statistiku. (2023). *Indikatori inovativnih aktivnosti*. Republički zavod za statistiku – Inovacije
- Republički zavod za statistiku. (2023). *Preduzeća po veličini i preduzetnici u Republici Srbiji, 2019–2021*. Republički zavod za statistiku – Preduzeća po veličini
- Republički zavod za statistiku. (2023). *Upotreba informaciono-komunikacionih tehnologija u Republici Srbiji, 2023*. Republički zavod za statistiku – Upotreba IKT u preduzećima
- Schumpeter, J. A. (1911). *The theory of economic development*. Harvard University Press. (Reprinted 1961).
- Schumpeter, J. A. (1934). *The theory of economic development: An enquiry into profits, capital, credit, interest and the business*

- cycle. Oxford University Press.
- Schumpeter, J. A. (1939). *Business cycles* (Vol. 1). McGraw-Hill.
- Schumpeter, J. A. (1942). *Capitalism, socialism and democracy*. Harper & Row.
- Simović, V., & Ilić, M. (2021). *Digitalno preduzetništvo*. Institut ekonomskih nauka.
- Stanisavljević, B. (2023). Perspectives and problems of the development of women's entrepreneurship in Serbia. *KNOWLEDGE - International Journal*, 60(1), 119–124. <https://doi.org/10.35120/kij6001119s>
- Van Stel, A., Carree, M., & Thurik, R. (2005). The effect of entrepreneurial activity on national economic growth. *Small Business Economics*, 24(3). <https://doi.org/10.1007/s11187-005-1996-6>