

DIGITAL ECONOMY: AN ENTREPRENEURSHIP APPROACH

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ABSTRACT

This article aims to explore the role of the digital economy in the field of entrepreneurship. The approach of this research is qualitative with the Systematic Literature Review (SLR) method. The conclusion of this article, (i) the digital economy has driven innovation in the field of entrepreneurship, such as addressing global challenges and creating new markets. (ii) Digital Economy creates digital entrepreneurship which plays an important role in improving the welfare of business actors. (iii) The digital economy creates social inclusion in the Society.

Keywords: Digital economy, Entrepreneurship, Digital entrepreneurship, Social inclusion

I. INTRODUCTION

The digital economy is defined as part of economic output, especially from digital technology with a business model based on digital goods or services, consisting of the digital sector plus digital services and emerging digital platforms. (Bukht & Heeks, 2017). The digital economy has become part of economic activities that use digital technology as the main foundation in its operations (Schmid, 2001; Limna et al., 2023). The advent of the digital economy has fundamentally changed the current global economic landscape, especially redefining the businesses in which it operates, product innovation, and accelerating business growth. This transformation has an impact on the entrepreneurial sector, especially in expanding into new markets through collaborations with digital platform providers. Entrepreneurship is a person's ability to create, manage, and grow a business with the aim of generating added value and profits. Entrepreneurship requires stages through the process of identifying business opportunities, taking risks, creating innovations in the business, and creativity is needed to manage existing resources.

The convergence of the digital economy in the field of entrepreneurship presents a strong synergy that has the potential to encourage economic and social growth (Borowiecki et al., 2021; Yoo & Yi, 2022). Utilizing digital technology in the field of entrepreneurship, entrepreneurs can develop innovative solutions to global challenges, create new economic opportunities, and contribute to a more inclusive and resilient economy (Nations, 2021; Usman et al., 2024). In realizing this potential, careful risk management related to digitalization and joint efforts are needed to ensure the benefits of the digital economy are widespread to improve the welfare of people in a country.

However, the rapid digitalization also presents significant challenges that must be addressed to ensure the growth generated by a sustainable digital economy. Issues such as the digital divide, cybersecurity risks, and ethical use of data pose serious threats to the equitable distribution of digitalization benefits (Khan et al., 2024). In addition, the environmental impact of digital technologies, including energy consumption and e-waste, must be managed carefully so as not to undermine sustainability efforts.

Based on the theoretical background, the hypothesis of this article is the Digital economy hypothesis creating digital entrepreneurship and social inclusion.

II. METHODOLOGY

The research method employed in this study is qualitative, utilizing a Systematic Literature Review (SLR) approach to examine relevant literature on the digital economy in the context of entrepreneurship. The Systematic Literature Review (SLR) method minimizes bias compared to other approaches by reviewing both theoretical frameworks and empirical evidence from previous studies published in relevant journals that align with the research questions (Rauf et al., 2021).

The Systematic Literature Review (SLR) method was conducted in a systematic and structured manner to identify, evaluate, and synthesize findings from previous studies. The implementation process of the SLR in this study consisted of the following stages:

1. Literature Search Strategy

The literature search was conducted systematically in several stages:

- a. Identification: Collecting literature based on predetermined keywords.
- b. Screening: Selecting literature based on the relevance of titles and abstracts.
- c. Eligibility: Reviewing the full text of articles to assess their relevance and quality.
- d. Inclusion: Including articles that meet the criteria into the analysis process.

2. Databases Used

To obtain credible and relevant literature, several international and national databases were utilized, including peer-reviewed journals indexed in Scopus and accessible through Google Scholar.

3. Search Keywords

The keywords were determined based on the main concepts of the research topic, namely digital economy and entrepreneurship. The search was also limited to articles published in English and Indonesian between 2021 and 2024, or within the last five years, to ensure the relevance and currency of the information.

4. Inclusion and Exclusion Criteria

- a. Inclusion:
 - Peer-reviewed scholarly articles.
 - Studies discussing the relationship between the digital economy and entrepreneurship.
 - Articles focused on digital innovation, technology, and business development.
- b. Exclusion:
 - Non-academic articles, editorials, and news reports.
 - Studies not relevant to the main research topic.

5. Literature Data Analysis Method

Data analysis was conducted through thematic analysis and manual coding of the selected articles. Each article was examined based on the following aspects:

- a. Research objectives and focus
- b. Methodology employed
- c. Key findings
- d. Implications for the development of digital entrepreneurship

Based on this analysis, the emerging key themes were categorized and narratively synthesized to address the research questions. In addition, a mapping of research trends, research gaps, and the theoretical contributions of each article was conducted.

III. RESULTS AND DISCUSSION

1. Articles were classified based on article title, Author and year of publication, journal name, publisher.

After selecting articles based on digital economy and entrepreneurship indicators in creating digital entrepreneurship and social inclusion, the authors determined five articles that represented this theme.

Table 1. Journal identity analyzed

Article title	Author and year of publication	Journal name	Publisher
1. Digital innovation and entrepreneurship: a review of challenges in competitive markets (A1)	Kreiterling, (2023)	Journal of Innovation and Entrepreneurship	Springer
2. Digital sustainable business models: Using digital technology to integrate ecological sustainability into the core of business models. (A2)	Böttcher et al., (2024)	Information Systems Journal	Wiley
3. Assessing the impact of digital payment infrastructure accessibility on the social impact of microenterprises in Barranquilla, Colombia: An experimental study. (A3)	Marcelo & Ortega, (2024)	Journal of Infrastructure, Policy and Development	EnPress
4. Social capital and household economic welfare: Do entrepreneurship, Financial and digital literacy matter (A4)	Prayitno et al., (2022)	Sustainability	Multidisciplinary Digital Publishing Institute (MDPI)
5. Digital entrepreneurship in developing countries: The role of institutional voids (A5)	Soluk et al., (2021)	Technological Forecasting & Social Change	Elsevier

Source: Author, 2025

A summary of five journals in Table 1 in answering the problem formulation, namely how the digital economy creates digital entrepreneurship and social inclusion. Digital entrepreneurship has a positive impact on the field of entrepreneurship because it encourages innovation and creates new markets (A1). Government policies support entrepreneurial and entrepreneurial activities in starting new businesses (Igwe et al., 2021).

The digital economy enables organizations to leverage advanced technologies in business such as the use of the Internet of Things (IoT), cloud computing, and data analytics to improve operational efficiency, improve customer experience, and drive product innovation. By integrating digital technology and entrepreneurship, organizations can optimize their businesses, increase competitiveness, and meet the needs of a market that is increasingly aware of changing environments. This combination creates innovative solutions for various business activities, for example by utilizing the digital economy to provide an effect on the operational efficiency of the organization in using resources, as well as the data used to be more accurate.

With the digital economy, organizations can optimize their operations, minimize waste, and improve efficiency, all of which support business sustainability. Combining the digital economy and entrepreneurship, organizations can create a resilient and sustainable business model in the long run. It not only supports the survival of the company but also meets the demands of consumers and stakeholders for more socially and environmentally responsible business practices.

The digital economy provides strong evidence of the positive influence of the accessibility of digital payment infrastructure on the social relations of micro-businesses (A3). With a digital

payment infrastructure, increasing trust in transactions against fraud risk, expanding customer reach, and optimizing business operations, ultimately leads to sustainable growth.

The use of the digital economy has an impact on social capital and improves household economic welfare. Entrepreneurship plays a role as a moderation between the digital economy and sustainable growth, especially boosting the household economy (A4).

Entrepreneurship as a key means of addressing the ongoing challenges of poverty among rural populations in developing countries. Support from a wide range of stakeholders, especially families, communities, and business partners, helps to address institutional gaps and encourage entrepreneurship in micro-enterprises. The digital economy, especially the adoption of digital technology, for example in the form of smartphone applications, can strengthen these relationships (A5). Utilizing the digital economy in the field of entrepreneurship, especially micro, small, and medium enterprises, business actors find ways to build a stronger and more independent economic foundation. Thus, entrepreneurship is a means to overcome poverty, but also a tool to create economic sustainability in the future.

The effects of the digital economy have a direct impact on the digital environment itself, for example the quality, efficiency, and suitability of digital entrepreneurship (new product development, cost-effectiveness, and internationalization). The moderation effect is the digital environment (data security, customer privacy, and search engine optimization algorithms between disruptive technologies and digital entrepreneurship). The digital economy in developed countries offers a highly supportive environment for product innovation because it is supported by the availability of digital infrastructure, consumer acceptance of the use of digital platforms in transactions, supportive regulations, and the ability to use digital platforms.

2. Digital Economy Creating Digital Entrepreneurship and Social Inclusion.

The digital economy creates digital entrepreneurship and social inclusion depending on two important factors, namely:

a. Access to Digital Infrastructure.

Good and equitable digital infrastructure is essential to support the development of the digital economy. This includes extensive and stable access to the internet, technological devices, and supporting communication networks. If people have adequate access to technology and the internet, they can be more actively involved in various sectors of the digital economy, such as e-commerce, fintech, online education, or other digital services.

Without adequate infrastructure, the digital divide between urban and rural areas or between different social groups can widen, hindering the development of digital entrepreneurship and reducing social inclusion.

b. Digital Literacy.

In addition to access, digital literacy is also crucial to ensure that people not only have access to technology, but can also use it effectively. Digital literacy includes the ability to use technology well, understand information in cyberspace, and participate productively in the digital economy.

Without adequate digital literacy, people may find it difficult to take advantage of the opportunities that exist in the digital economy, such as doing business online, working remotely, or even understanding evolving technology issues. This can hinder the achievement of social inclusion, as groups that are less digitally literate will be left behind in various aspects of social and economic life.

Overall, the success of the digital economy in creating digital entrepreneurship and social inclusion is heavily influenced by how policies, technology, and education can be integrated to

ensure that digital access and capabilities are evenly distributed across all walks of life. Without both, the potential for social inclusion and digital entrepreneurship will not be maximized.

In some countries with high digital access and literacy, digital entrepreneurship is more likely to reduce social inequality thereby creating social inclusion. Social inclusion refers to the process or effort to ensure that all individuals or groups in society, especially those who are marginalized or disadvantaged, have an equal opportunity to participate in social, economic, and political life. This includes the acceptance, award, and fulfillment of the rights of all people without discrimination, as well as the granting of equitable access to basic services, such as education, health, employment, and social justice. Social inclusion aims to reduce social inequality and create a more just and equitable society, where everyone, regardless of their background, identity, or condition, can feel accepted and valued.

The case in countries such as Colombia, the digital economy drives the social effects of micro-enterprises and offers valuable insights for policymakers and practitioners who aim to promote inclusive economic development in the region, especially promoting financial inclusion by expanding digital payment systems in various aspects of economic activities and strengthening social support networks (Marcelo & Ortega, 2024). The digital economy offers many opportunities, but its impact on entrepreneurship also depends on spatial factors, such as location, infrastructure, access to technology, as well as government policies that support or hinder digital development in a region. (Huang et al., 2025)

Other research conducted in Indonesia is to examine the impact of social capital and household economic welfare, as well as to understand the role of entrepreneurship, digital, and financial literacy mediation. The role of social capital affects several household literacy in Indonesia, including digital literacy, financial literacy, and entrepreneurial literacy. Financial literacy, digital literacy, and entrepreneurial literacy all play an important role in mediating the relationship between social capital and household economic well-being (Prayitno et al., 2022; Rauf et al., 2024).

From the results of several previous studies and theories and research, the digital economy does have a significant impact, especially in terms of strengthening social relations for micro businesses. For example, the use of online payment platforms has created great opportunities for businesses, such as:

- a. Ease of Access to Markets.
- b. Increased Customer Trust.
- c. Collaboration Between Entrepreneurs.
- d. Increased Operational Efficiency.
- e. Socio-Economic Empowerment.

IV. CONCLUSION

Based on the results of the systematic review, it can be concluded that the digital economy plays a significant role in driving entrepreneurial innovation, particularly in addressing global challenges and opening up broader and more efficient market opportunities. This development has also given rise to a new form of digital entrepreneurship, which not only enhances business competitiveness but also contributes meaningfully to the improvement of entrepreneurs' welfare through access to technology and operational efficiency. Furthermore, the digital economy plays a crucial role in promoting social inclusion by reaching marginalized communities previously excluded from economic participation, thereby strengthening social equity and participation in entrepreneurial activities.

1. Theoretical and Practical Implications

a. Theoretical Implications

The present study contributes to the theoretical discourse on entrepreneurship by highlighting the necessity of integrating traditional entrepreneurial paradigms with the evolving landscape of digital transformation. The digital economy facilitates the emergence of novel entrepreneurial models characterized by increased flexibility, technological orientation, and global connectivity. These findings reinforce the relevance of digital entrepreneurship theory as a core framework within contemporary entrepreneurship studies and underscore the centrality of digital innovation in value creation processes, shifting it from a supporting role to a fundamental element of modern entrepreneurial practice.

b. Practical Implications

From a practical standpoint, the findings provide actionable insights for micro, small, and medium-sized enterprises (MSMEs) and startups to leverage digital technologies as a strategic instrument for business growth, market expansion, and operational efficiency. For policymakers, this study underscores the critical importance of enhancing digital infrastructure, fostering digital literacy, and formulating supportive regulations to develop an inclusive and sustainable digital entrepreneurship ecosystem. Additionally, for educational institutions, the results advocate for the integration of digital entrepreneurship into formal curricula, with the goal of producing agile and innovation-oriented entrepreneurs equipped to thrive in the digital economy.

2. Recommendations For Future Research and Policy

Based on the findings and analysis conducted in this study, future research is recommended to focus on empirical investigations using primary data to assess the direct impact of the digital economy on business growth and the well-being of entrepreneurs across various sectors. Further studies should explore the development of community- and locality-based digital entrepreneurship models, ensuring that digital transformation does not remain concentrated in urban areas but also reaches underserved and rural regions. Additionally, it is essential to examine the roles of gender and vulnerable groups within the digital economy to ensure equity and social inclusion are adequately addressed.

From a policy perspective, governments are encouraged to enhance equitable digital infrastructure development, provide technology-based entrepreneurship training, and create incentive schemes for digital startups and MSMEs to strengthen their global competitiveness. Moreover, adaptive and collaborative regulations are needed to sustain digital entrepreneurship practices, particularly in areas such as consumer data protection, digital payment systems, and fintech-based financing support. These policies should aim to foster an inclusive, competitive, and economically equitable digital ecosystem.

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