



RESEARCH ON DIGITAL ENTREPRENEURSHIP IN THE ERA OF DIGITAL TRANSFORMATION: TRENDS AND OPPORTUNITIES

Huynh Thi My Dieu^{1*}, Huynh The Nguyen¹, Tran Nguyen Khanh Hai¹

¹University of Finance - Marketing, Vietnam

ARTICLE INFO	ABSTRACT
DOI: 10.52932/jfmr.v17i1enes.1253 <i>Received:</i> March 07, 2026 <i>Accepted:</i> May 14, 2026 <i>Published:</i> August 08, 2026 Keywords: Bibliometric Analysis, Digital Entrepreneurship, Systematic Literature Review, VOSviewer Article classification: Research paper JEL codes: M1, M13	Purpose – This study presents a bibliometric overview of digital entrepreneurship (DE) and digital entrepreneurship intention (DEI). Design/methodology/approach – Using VOSviewer software, the authors analyzed 650 articles from the Scopus database covering the period 2010-2025, applying co-citation and co-occurrence analysis to identify key research trends. Findings – The results indicate a sharp increase in DE-related studies since 2019, with six clusters on digital entrepreneurship and ten topic groups on digital entrepreneurship intention. Originality/value – Prominent themes include digital technology and transformation, academic startups, 3D printing, knowledge management, the digital and sharing economy, fintech, and financial inclusion. Practical implications – The study underscores the growing diversity of research in this field and highlights opportunities for further work to refine theoretical frameworks and integrate modern media technologies into entrepreneurial processes.

*Corresponding author:

Email: mydieu@ufm.edu.vn

1. Introduction

Startup activities are gaining popularity in today's practical context. Advancements in technology, evolving business perspectives, and support from government and non-governmental organizations have created opportunities and challenges for those interested in entering the startup arena. Entrepreneurship activities is one of the key economic sectors that greatly contributes to promoting national economic growth, solving unemployment problems and creating jobs for society (Wibowo et al., 2023). In the digital transformation economy, digital technology startups, especially in developing countries, are attracting significant attention (Nathani & Dwivedi, 2019).

The development of digital technology has led to a changing living environment characterized by rapidly evolving technology, openness to new solutions, changing work environments, and progressive thinking. According to Yáñez-Valdés et al. (2023), the development of digital technology and external factors has presented entrepreneurs with new opportunities and challenges. The emergence and application of digital technology in the business sector have impacted the appeal of entrepreneurship as a career choice (Youssef et al., 2021). This raises questions about digital entrepreneurship (DE) at the intersection of entrepreneurship intention and digital technology. Digital entrepreneurship is a branch of entrepreneurial activities, where a traditional organization is either partially or fully digitized (Hull et al., 2007). Alternatively, it can be defined as the buying and selling of online products or digital technology services (Guthrie, 2014). According to Le Dinh et al. (2018), digital entrepreneurship is the process of starting a business based on technological assets such as the internet, information technology, and communications. Therefore, digital entrepreneurs face greater pressure compared to traditional one, as the

product, marketing, and workplace are the primary distinguishing criteria between them (Kraus et al., 2019).

Numerous studies have shown that digital entrepreneurship has revolutionized various sectors, including media, entertainment, advertising, retail, and transportation. Innovations in business models, such as digital marketplaces, social media, e-commerce, and software as a service, have played a significant role in driving this transformation (Zaheer et al., 2019). The digital economy has expanded gradually, thanks to business activities enabled by digital technologies. Giants like Facebook, Google, Alibaba, and Amazon, etc. have emerged as startups in the digital technology field. Consequently, the digital economy is widely regarded as one of the most significant economic developments since the industrial revolution, with digital entrepreneurship leading the way (Kraus et al., 2019; Nambisan, 2017).

The integration of theories from social psychology has strengthened the theoretical and methodological aspects of these contributions (Ajzen, 1991; Bandura, 1986). While alternative theoretical models have emerged, some evidence supports the compatibility of intention-based models (Boyd & Vozikis, 1994; Krueger et al., 2000). However, many of these studies lack organization and tend to replicate previous studies, resulting in outdated and unrealistic research in the field of entrepreneurship (Fayolle et al., 2014). Therefore, there is a need to systematically develop new theories and empirical studies for this field. This will not only help identify the main themes in existing data sources but also address current gaps and explore new research directions.

2. Background

The concept of entrepreneurship has attracted the attention of researchers since the 19th century. Since Shapero introduced

highly influential research results on the topic of entrepreneurship (Shapero 1985; Shapero & Sokol 1982), studies on entrepreneurial intention (EI) have attracted the attention of such scholars. There are two research directions that appear related to the topic of entrepreneurship. The first direction comes from social psychology with aims to analyze behavior in general and clarify the process from intention leading from attitudes and beliefs to effective action. Ajzen (1991) developed the Theory of Planned Behavior (TPB) which has become one of the most widely used theories in social psychology in general. The study of Krueger and Carsrud (1993) is said to be of great significance in turning TPB into the “reference” theory in most studies on entrepreneurship intention. Krueger and Brazeal (1994) attempted to reconcile the TPB with the event entrepreneurship theory (EEM) of Shapero and Sokol (1982). The second direction is specific to the business sector (Shapero, 1984; Shapero & Sokol, 1982; Bird, 1988). The intersection of both lines is largely due to compelling contributions applying tools and theories from psychology to the study of entrepreneurship intention (Shaver & Scott, 1992). Since then, research on entrepreneurship intention has expanded, and has been focusing on many different aspects.

There are many different theories applied when studying entrepreneurship intention, such as Entrepreneurial Event Model – EEM (Shapero & Sokol, 1982), Theory of Planned Behavior - TPB (Ajzen, 1991), etc. Some models are derived from earlier models called Theory of Planned Behavior Business Model – TPBEM (Krueger & Carsrud, 1993) which was built from Ajzen’s TPB theory; The Entrepreneurship Intention Model – EIM (Boyd & Vozikis, 1994) is an extension of the Bird model (Bird, 1988) and the entrepreneurial potential model – EPM (Krueger & Brazeal, 1994) was developed from the EEM model of Shapero and Sokol (1982). Douglas and Shepherd (2002) proposed a new

model called the Entrepreneurship Intention Model (DEIM) to examine the impact of individual attitudes on entrepreneurship intention. In 2003, the Structural Theory of entrepreneurship intention (SEMI) proposed by Lüthje & Franke pointed out the importance of personality traits in explaining an individual’s entrepreneurial attitude and behavior. In addition, with the emergence of more research based on the concept of entrepreneurship intention, new applications in many different fields lead to the results of many studies that are no longer relevant to the current situation (Carsrud & Brännback, 2011; Krueger & Day 2010) (*see Appendix 2 online*).

3. Methodology

The Scopus database is used to search for journal articles published in within 15 years duration (2010-2025) that contain keywords like “digital/technology entrepreneurship*”, “digital/technology intent/startup*”, and “digital entrepreneurial*”, like field research (Cornelius et al., 2006) (*see Appendix 2 online*).

The article selection process followed the PRISMA guidelines to ensure transparency and reproducibility. Initially, 1,422 records were identified from the Scopus database using relevant keywords related to digital entrepreneurship and digital entrepreneurship intention. After removing duplicate and irrelevant records, 922 articles remained for screening. Titles and abstracts were then reviewed to assess relevance to the research objectives. Subsequently, full-text evaluation was conducted, excluding studies that did not focus on digital entrepreneurship or digital entrepreneurship intention, lacked bibliometric data, or were non-peer-reviewed. Finally, 650 articles met the inclusion criteria and were retained for bibliometric analysis using VOSviewer software. This method is said to be an approach that seeks to find insights into the historical development of fields,

which in turn can enable or validate research problems for scientists using mathematical statistics to record publications in research journals (Raina & Gupta, 1998). Furthermore, forward-thinking bibliographic visualization mapping and clustering can assist in providing a systematic overview and organization of research papers (Gillani et al., 2022). There are different types of analysis in applied bibliometric such as co-authorship, co-occurrence, citation analysis, bibliographic coupling and co-citation. Among them, co-citation techniques Based on the advantages, the authors use a combination of them to analyze research on digital entrepreneurship and identify potential future research topics (Leydesdorff et al., 2013). Besides, the study conducted an in-depth analysis of the contents of the articles through finding keywords related to the research topic.

4. Findings and discussions

4.1. Year, country and publication on digital entrepreneurship and digital entrepreneurship intention

In the period from 2010 - 2025, research on digital entrepreneurship has increased dramatically since 2019 and the remarkable pick up in 2025 with 728 articles. This shows that research on digital entrepreneurship is a trend that many scholars are quite interested in (see Appendix 4 online). In general, research on digital entrepreneurship is conducted on different continents, such as America and European countries. Besides, there are also Asian countries with many research articles including India, China and Indonesia (Figure 1).

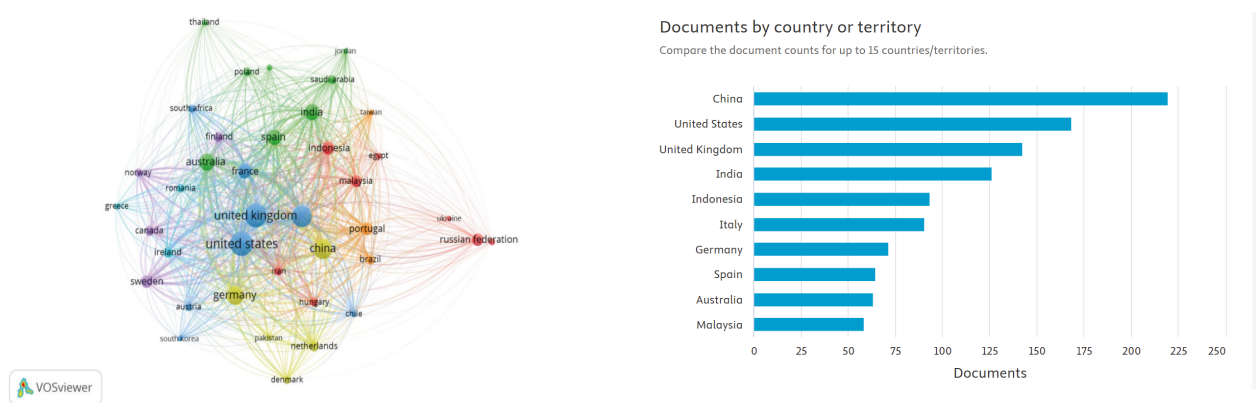


Figure 1. Map of countries conducting research on digital entrepreneurship

Among 650 papers related to research on digital entrepreneurship, there are 44 articles related to digital entrepreneurship intention (see Appendix 1 online). In the period from 2010-2025, research on digital entrepreneurship intention has been conducted by some authors mostly belongs to India, Saudi Arabia, United Kingdom and Indonesia. The number of studies on digital entrepreneurship intention is relatively quite small. Among them, there are

several countries with a large amount of research such as America and European countries.

4.2. Co-citation analysis

The authors selected a cut point to identify the most influential publications following the method of McCain (1990). In order to narrow down the citations from 650 articles with 42.254 citations, the authors selected a threshold by which the minimum number of citations

of a cited reference was at least 5. The final sample included 304 publications. Appendix 5 (*see Appendix 5 online*) shows the most cited publications.

Furthermore, the co-citation analysis results show that the articles on digital entrepreneurship have formed five themes as shown in Appendix 6 (*see Appendix 6 online*) corresponding to the five color groups represented in the co-citation networks shown in Figure 2. The first theme is the different concepts of digital entrepreneurship and related issues, focusing on the emergence and development of digital entrepreneurship, comparing it with other related concepts such as technology entrepreneurship, academia, new

business establishment, etc. The second theme refers to the synthesis of related studies on digital entrepreneurship and provides research directions. The third theme presents the process from opportunity identification to digital entrepreneurship entrepreneurship intention and practice. In addition, in this group, the opportunities and factors for successful entrepreneurship in this field are also described. The fourth theme refers to the formation and construction of a digital entrepreneurship-related entrepreneurship ecosystem for social innovation and the creation of more social values. The last theme refers to new business models in the digital entrepreneurship field.

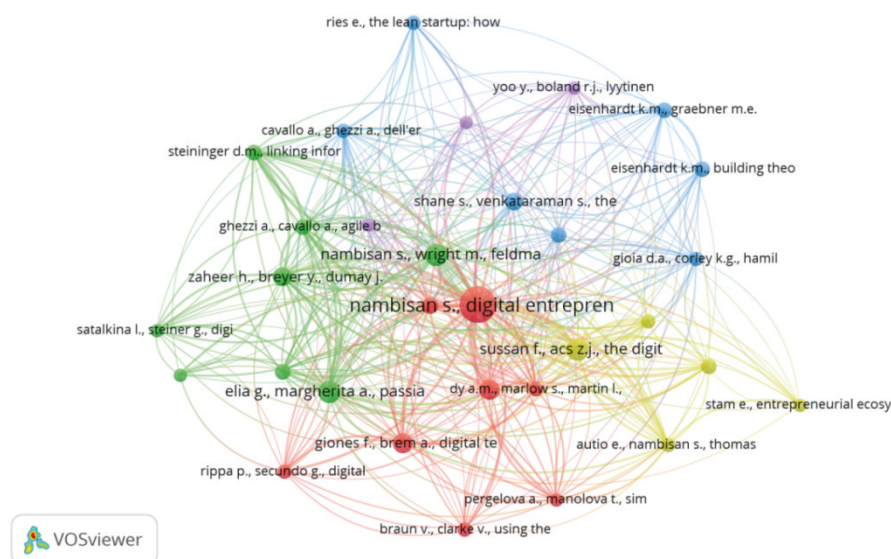


Figure 2. Visualized co-citation network

4.3. Co-occurrence analysis

The authors applied VOSviewer software with technique of co-occurrence analysis by author keywords, with minimum number of occurred of a keyword is 5. Author keyword co-occurrence analysis aims to evaluate the frequency of keyword occurrence and the co-occurrence of author keywords in the same document, helping to gain an overview of a research field, adjust the research direction and

discover the most interesting research topics. The results show that for research on digital entrepreneurship, keywords are classified with various small topics but can be grouped into six main clusters: (1) Innovative business model, (2) digital entrepreneurship process, (3) Digital platform, (4) digital entrepreneurship ecosystem, (5) digital entrepreneurship intention, and (6) Digital finance.

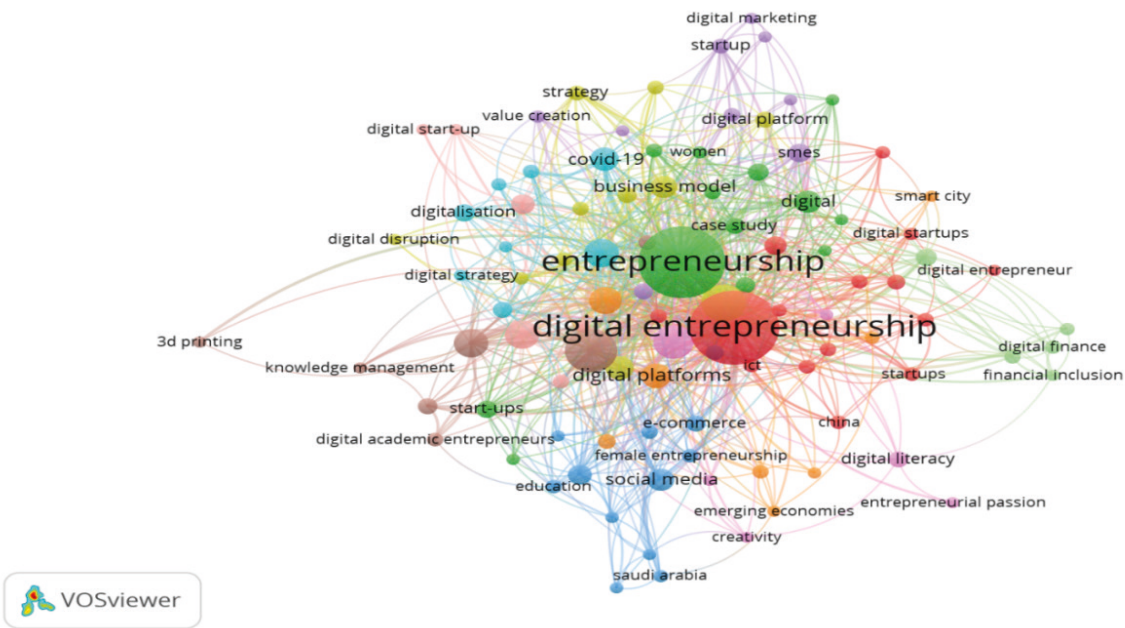


Figure 3. Map of topics conducting research on digital entrepreneurship

Besides, in terms of digital entrepreneurship intention, the co-occurred analysis by author keywords revealed such clusters but can be group into 10 groups: (1) Digital entrepreneurship intention, (2) TPB related

factors, (3) Contextual environment factors, (4) Personal characteristics, (5) Other factors, (6) Country, (7) Research methodology, (8) Research subjects, (9) Research context, and (10) Digital eco-system.

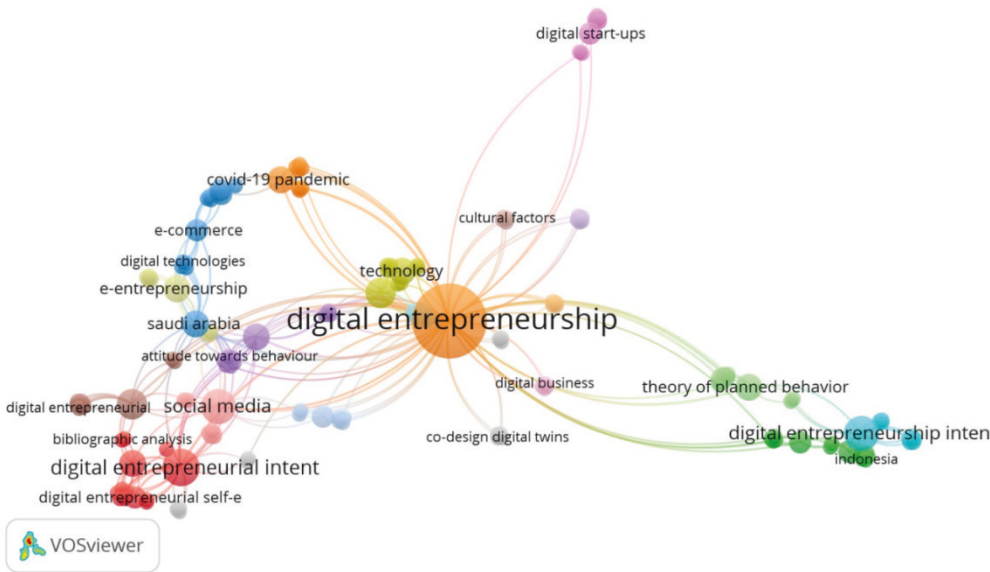


Figure 4. Map of research on digital entrepreneurship intention

The dual methodology provides complementary insights into the intellectual foundations and topical evolution of digital entrepreneurship and digital entrepreneurship intention. Co-Citation Analysis revealed the intellectual structure of the field, identifying five major themes: (1) conceptual foundations of digital entrepreneurship and related issues, (2) synthesis of prior studies and research directions, (3) the entrepreneurial process from opportunity recognition to practice, (4) ecosystem formation for social innovation, and (5) emerging business models. These clusters highlight how scholars have framed digital entrepreneurship conceptually, synthesized knowledge, and advanced theoretical perspectives. Besides, Co-Occurrence Analysis, by contrast, mapped emerging topical trends through keyword associations, producing ten thematic groups: digital transformation, academic startups, 3D printing, knowledge management, digital and sharing economy, fintech and financial inclusion, social media, policy support, sustainability, and globalization. These themes emphasize the practical orientations and diverse contexts in which digital entrepreneurship intention is studied, reflecting the dynamic expansion of the field. Taken together, the two approaches demonstrate that while co-citation analysis captures the intellectual lineage and theoretical underpinnings of digital entrepreneurship, co-occurrence analysis highlights the contemporary issues and applied directions shaping digital entrepreneurship intention. This dual perspective strengthens the contribution of the study by linking the conceptual evolution of digital entrepreneurship with its emerging practical domains, thereby offering a more holistic understanding of the research landscape.

4.4. Discussion

Theory applied in research related to digital entrepreneurship and digital entrepreneurship intention

In summarize, evidence shows that the most frequently used theoretical framework is the TPB. Based on TPB, intention towards entrepreneurship is determined by three components: attitudes towards entrepreneurship (ATE), subjective norms (SN), and perceived behavior control (PBC) (Ajzen, 1991). Intention is a state of capturing the motivating factors that influences the behavior, subjective probability of a person committing certain acts, or represents the motivation that an individual tries to perform a planned action or a decision made (Armitage & Conner, 2001). The ultimate intention may not be fulfilled, but in reality, no one can launch a business or involve in start-up activities without prior intention (Ita John et al., 2014).

Remarkably, this extinct body of knowledge is dominantly by Western and European (Dutot & Van Horne, 2015; Richter et al., 2017; von Arnim & Mrozewski, 2020; Youssef et al., 2021). Recently, this theory was applied to research on the topic of digital entrepreneurship intention in the context of Asia, such as India (Ghatak et al., 2020; Shukla et al., 2021), Indonesia (Widiasih & Darma, 2021) and Thailand (KrischananKampanthong, 2021). Besides, The SEE model of Shapero defined entrepreneurship intention based on three components which are perceived desirability, perceived feasibility and the propensity to act (Van Gelderen et. al., 2008). According to Liñán et al. (2013), perceived desirability means be given by the attraction for specific behaviour, desirability is being a result of social and cultural influences, and perceived feasibility is the degree to which

people consider themselves personally able to carry out certain behaviour. Therefore, the intention to start a business is the procedure of the interaction between an individual's perception and the contextual factors (i.e. cultural and social factors) that influence this perception. Contextual factors form the awareness, support or have impact on turning an idea into a specific action. In addition, barriers to administrative procedures or start-up costs will impact an individual's start-up effort (Dvouletý, 2017).

In addition, understanding the link connection of behaviour with entrepreneurship intentions, ideas and actions is critical to deeply understanding the start-up process (Ajzen, 1991; Krueger & Carsrud, 1993), whereas intention-based model is the best predictor of planned behavior since they offer opportunity to enhance our understanding and predictive ability for entrepreneurship (Krueger et. al., 2000). Norris and Alan (1994) indicated that planned behaviors (such as starting a business) is intentional job predicted by the intent to lead to the behavior, not by attitudes, beliefs, personality or demographic factors. In this context, attitudes toward the behavior refer to the awareness of an individual's desire to perform specific behavior which depends on expectations and beliefs about the personal impact of behavioral outcomes. Kolvereid (1996) said that attitude to entrepreneurship refers to an individual's desire to become an entrepreneur. Consequently, more expectation and confidence in self-employment reflects a favorable attitude towards entrepreneurship (Nguyen, 2018).

Concept of digital entrepreneurship and digital entrepreneurship intention

Entrepreneurship is a multi-dimensional concept in academic research. According to Shepherd et al., (2019), entrepreneurship consists of initiating, engaging in and

carrying out entrepreneurial endeavors tied to environmental conditions, where entrepreneurship is the investment of resources (i.e. awareness, behavior, financial and other resources) into the pursuit (exploration or exploitation of) potential opportunities. From an individual perspective, basically entrepreneurship can be interpreted as starting a business by an individual (by alone or in a group) taking advantage of available market opportunities to create and start a new business (Bird, 1988; Kuckertz & Wagner, 2010), in other words, as self-employment. For businesses organization, entrepreneurship often refers to companies in the start-up phase those including a series of business activities related to the process of designing and organizing to provide new products and services. Entrepreneurship in the conventional sense is starting a new business and simply pursuing future risky decisions.

Digital entrepreneurship is understood as a sub-branch of entrepreneurship in general in which some or all of what is physical in a traditional organization has been digitized (Hull et al. 2007). According to Le Dinh et al. (2018), digital entrepreneurship is a startup process based on technology assets such as the internet, information and communication technology. So digital entrepreneurs are under more pressure than traditional ones, where products, marketing activities and workplace are the main distinguishing criteria between them (Kraus et al., 2019). Digital entrepreneurship is becoming an interesting study that attracts the attention of scholars in developed and developing countries because it plays a fundamental role in changing the economic landscape and facilitating entrepreneurial efforts creative and innovative force for the development of new entrepreneurs (Wibowo et al., 2023). Digital entrepreneurship seems to be related to the characteristics of traditional entrepreneurship with specific characteristics of the digital sector, with greater sensitivity to risk, creativity or agility (von Arnim & Mrozewski, 2020).

Recent studies have adopted the concept of entrepreneurship intention in the digital context to define a new construct of digital entrepreneurship intention. So that, digital entrepreneurship intention is entrepreneurship intention related to digital, which core terms are the Internet's interactive nature known as "Internet Entrepreneurship", "digital entrepreneurship", or "IT based entrepreneurship". Therefore, digital entrepreneurship intention is described how entrepreneurs intend to create opportunities by digital media and other information and communication technology (KrischananKampanthong, 2021). In summary, whether studied about entrepreneurship intention or digital entrepreneurship intention, three indicators of TPB have been checked frequently (Sobaih & Elshaer, 2022; Widiasih & Darma, 2021; Ghatak et al., 2020; Yaghoubi Farani et al., 2017; Dutot et al., 2015).

Trendy research in digital entrepreneurship and digital entrepreneurship intention

Compared with traditional business, digital business implies entrepreneurship or new value creation, involving a new business model based on digital goods or services, distribution digital, digital workplace, digital marketplace, or a combination of these above (Esmaeeli, 2011; Hafezieh et al., 2011). A wide range of personal Digital Capabilities such as technical, behavioral, physical, managerial, and relational have been studied before (Garrison et al. 2015), but are rarely exploited in the context of entrepreneurship intention. On the other hand, in mainstream entrepreneurship literature, scholars have mainly used cognitive-based models to examine the impact of cognitive factors on motivating an individual to decide career determination (Krueger & Carsrud, 1993). A small number of researchers have identified factors that influence an individual's intention to start a business in the digital domain (Sitaridis & Kitsios, 2023, Elnadi & Gheith,

2023; Akhter et al., 2022; Youssef et al., 2021; Yaghoubi Farani et al., 2017). Although these studies are relevant to the formation of business intentions in the context of digitalisation, the literature is still very fragmentary. Furthermore, scholars use TPB, without incorporating other important theoretical perspectives in the field of digital entrepreneurship intention research.

Based on the most relevant research on digital entrepreneurship, Kraus et al. (2019) have provided six categories on implementing research programs and topics in digital startups, including (1) Digital technology business model, (2) Digital technology startup process, (3) Platform strategy, (4) Digital technology ecosystem, (5) Entrepreneurship education and (6) Digital technology startup. Referring to factors that promote the intention to start a digital business, some studies mention factors of characteristics and skills of entrepreneurs (Quick Agility, Risk Taking, Control Opportunities, Entrepreneurial Alertness, Social Experience, Digital Experience, Empathy, Moral Obligation, Self-Efficacy on Social Issues), Digital Technology Business Processes, Digital Perspectives, Society and Culture (Dutot & Van Horne, 2015; Younis et al., 2020); Perceived feasibility of digital technology solutions, Perceived desirability (Ghatak et al., 2020; Widiasih & Darma, 2021). Other factors such as Cultural Characteristics (Garcez et al., 2022), Support (Education, Relationships, Structure) (Youssef et al., 2021), Community Support (Widiasih & Darma, 2021), perceived university support (Alkhalaileh et al., 2023), Environmental policies (Alzamel, 2024), role models/digital entrepreneurial role models (Aloulou et al., 2024; Mir et al., 2023), digital entrepreneurship education (Gillani et al., 2022; Wibowo et al., 2023), Family background (Nguyen & Nguyen, 2024; Dieu et al., 2022), digital policy cognition and perceived social support (Xin & Ma, 2023; Al Halbusi et al., 2023).

A review of related studies on digital entrepreneurship intention shows that the most frequently used theory is TPB theory (Al Halbusi et al., 2023; Aloulou et al., 2024; Yaghoubi Farani, 2017). In addition, the studies also used affordance theory (Ballerini et al., 2023), Uses and Gratifications Theory (Chakraborty & Biswal, 2023) and TAM (Abaddi, 2023; Wibowo et al., 2024). Researchers used methods in studying digital entrepreneurship intention such as qualitative methods (Calandra et al., 2024; Schiavone et al., 2020), quantitative methods (Sobaih & Elshaer, 2022) or combined both (Ballerini et al., 2023), cause-and-effect relationships analysis (Ladeira et al., 2019) or mediating role (Sobaih & Elshaer, 2022), and bibliometric analysis (Gillani et al., 2022; Lungu et al., 2024).

Regarding research context, past studies focus on the context of technological development (Yáñez-Valdés et al., 2023), digital transformation (Ballerini et al., 2023; Lungu et al., 2024), digital technology platforms (Le Dinh, 2018; Abaddi, 2023), artificial intelligence (Abaddi, 2023; Lungu et al., 2024), social media (Abaddi, 2023; Lungu et al., 2024; Wibowo et al., 2023) with many activities such as digital business, healthcare and patient innovation (Calandra et al., 2024; Schiavone et al., 2020; Wibowo et al., 2023).

In addition, researchers also mention the development of a set of digital technology startup ecosystems that including digital technology business models (Fernandes et al., 2022) with innovative business strategies, digital technology sharing (Fernandes et al., 2022), business development (Le Dinh et al., 2018), digital transformation startups (Ballerini et al., 2023) focuses on marketing trends in entrepreneurship and online game entrepreneurship education to create a digital technology startup ecosystem like a smart city (Fernandes et al., 2022; Xin & Ma, 2023).

From the results of co-citation and co-occurrence analysis show that the studies have the same topic or related fields as well as the research trends in this field. The studies on the topic of digital technology startups are related to social media issues, requiring human and social capital resources, big data, information technology, and knowledge about startups in an internationalized environment. Moreover, the studies focus on startup activities on digital technology platforms such as artificial intelligence, blockchain technology, smart cities and digital marketing.

The research trends on entrepreneurial intentions are related to e-commerce, online startups, requiring digital technology competencies, which related to the topic of digitalization, technology, internet, focusing on female startups, crowdfunding, and articles systematizing the theory of related studies. There are many studies focusing on the startup ecosystem, including business models, higher education institutions, technological innovation and disruptive technological innovation to ensure sustainable development and sustainable startup activities.

In addition, it can be seen that studies on the topics of digital technology and digital transformation, academic startups, 3D printing techniques and management knowledge along with bibliometric analysis methods, focus on the digital economy and the sharing economy, including the startup process, social entrepreneurship startups and digital startups, focusing on financial technology, digital finance and financial inclusion in this startup ecosystem.

Opportunities in digital entrepreneurship and digital entrepreneurship intention research

Theoretical Opportunities: Existing theoretical frameworks such as TPB, EEM, and SCT have been widely applied but are often

replicated without innovation. Therefore, future research could develop new theoretical models that integrate digital-specific factors such as platform affordances, digital capabilities, and online behavioral dynamics. At the same time, there is potential to extend intention-based models by incorporating theories such as the Technology Acceptance Model (TAM) into entrepreneurship contexts.

Empirical Opportunities: Research on digital entrepreneurship intention remains limited, with only a small proportion of studies compared to digital entrepreneurship. This presents an opportunity for future research to conduct empirical studies in emerging economies, where digital transformation is rapidly accelerating. At the same time, leveraging large-scale datasets, startup case studies, and cross-country comparisons can help validate and refine theoretical models.

Policy Opportunities: Digital entrepreneurship has been proven to play an important role in addressing unemployment and promoting economic growth. This creates an opportunity to design policies that support digital startups, particularly in the fields of fintech, the sharing economy, and education. Moreover, the integration of digital entrepreneurship intention into entrepreneurship education programs can help strengthen digital entrepreneurship intention among students and young professionals.

Business Model Opportunities: Research on digital entrepreneurship has underscored the significance of innovative business models such as Software-as-a-Service (SaaS), digital marketplaces, and platform-based enterprises. Building upon these insights, there exists considerable potential to expand scholarly inquiry into digital ecosystems and the sharing economy, with the aim of identifying business models that are both scalable and socially impactful. Furthermore, future research may

profitably explore emerging models that leverage advanced technologies, including AI, blockchain, the IoT, and 3D printing.

Interdisciplinary Opportunities: Digital entrepreneurship and digital entrepreneurship intention are situated at the intersection of business, technology, and social psychology. This presents an opportunity to advance interdisciplinary research that integrates behavioral science, data analytics, and innovation management. Such cross-disciplinary collaboration can generate deeper insights into digital entrepreneurial behavior and the development of digital ecosystems.

5. Conclusion and implementation

Entrepreneurs who can incorporate digital technology in their businesses are said to be more successful in developing new products and services, reaching a wider audience, and achieving higher profitability than traditional ones, thus creating more jobs and benefits to the economy. Nambisan (2017) proposed to more clearly theorize concepts and constructs related to digital technology, such as the digital technology perspective, to study entrepreneurial phenomena in world digitizing. Thus, digital technology is not simply a context in the study of entrepreneurship intentions. Instead, the impact of digital technologies forces a rethinking and new theorization of business and management models in a digitalized world, thereby opening more research opportunities for future scholars.

This study presents a systematic review of empirical studies on digital entrepreneurship intentions in the last fifteen years. The authors used rigorously evaluated data sources from Scopus with 650 empirical articles related to digital entrepreneurship and 44 articles related to digital entrepreneurship intention. The results provide the most comprehensive overview of research related to digital entrepreneurship, and

the factors that drive digital entrepreneurship intention. The results of the assessment of digital entrepreneurship intention can clearly be seen as crucial in developing the potential of young people as digital entrepreneurs. In addition, the authors also suggest that further studies need to discover many other factors to contribute to the theoretical framework in the field of digital technology or take advantage of modern media technology into start-up processes.

Studies on digital entrepreneurship using theory and empirical research have shown that cognition has an impact on motivating an individual to make career decisions. A handful of researchers have identified factors that influence an individual's intention to start a business in the digital technology sector or related to entrepreneurship intention formation in the context of digitalization. However, the documents are still very primitive and are only suggestive. Furthermore, scholars rely on TPB, with not much application or introduction of other important theoretical perspectives in the field of digital entrepreneurship intention research. There are also many controversies and inconsistencies in the use of the term digital entrepreneurship, multidisciplinary development, and the lack of relevance to practice in the scope and results of research on entrepreneurship. Therefore, the authors believe this topic offers many academic opportunities to integrate disparate theories and help better understand the phenomena of digital technology entrepreneurship. Furthermore, the factors that determine the success of digital entrepreneurship are still unclear, as is how they are related to each other (Ladeira et al., 2019). Future research should fill this gap by developing theory and proposing a model of digital entrepreneurship intention that is appropriate to the current situation. This study is also not without limitations. First, through the search engine, the author uses the

Scopus data source, which is said to be the most comprehensive and complete of studies on the same topic. Therefore, the lack of published articles during the search process is inevitable. Therefore, synthetic studies can expand search sources to have more complete analytical data sources. Although the use of bibliometric methods provides certain quantitative results for the research review, it is not a substitute for qualitative evaluation methods. The authors recommend that should be taken aware of using data appropriate to the research purpose. Scientific decision making must be based on a combination of quantitative and qualitative evidence because each evidence is objective, high quality procedures are based on the highest quality data. However, the author recommends that you only use reputable, public data sources to have the most scholarly overview later.

Although bibliometric analysis has enabled scholars to map the trends in digital entrepreneurship and digital entrepreneurship intention, the true value lies in transforming these trends into actionable opportunities. Therefore, future research should prioritize advancing theoretical frameworks, expanding empirical evidence, formulating supportive policies, innovating business models, and fostering interdisciplinary collaboration to fully harness the potential of digital entrepreneurship in the era of digital transformation.

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Data Availability

Data available in appendices.

AI Usage Statement

The authors declare no generative AI tools were used in this research or writing.

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