USE OF DIGITAL TECHNOLOGY TO SUPPORT THE ENTREPRENEURSHIP EDUCATION PROCESS

Sulistianingsih1
1STKIP Kusuma Negara, Jl. Raya Bogor, Jakarta, Indonesia
Email: sulistianingsih1960@stkipkusumanegara.ac.id

Abstract. Entrepreneurship education is an important part of preparing individuals to develop the insights, skills, and attitudes needed to create and manage successful business ventures. This research aims to examine more deeply the use of digital technology to support the entrepreneurship education process. This research is a literature review that uses a qualitative method approach, which means it will analyse and interpret data by relying on information and text from special sources, namely Google Scholar and Google search engine. The study results show that the use of digital technology in entrepreneurship education has brought fundamental changes in the way students learn, interact and prepare themselves to become successful entrepreneurs. From easy access to information to virtual business simulations, global collaboration to digital marketing, technology has become a driving force in changing the approach to entrepreneurship education.

Keywords: Digital Technology, Entrepreneurship Education, Qualitative


INTRODUCTION

The inclusion of entrepreneurship education is of significant importance as it effectively equips individuals with the necessary skills and knowledge required to proficiently initiate and oversee a prosperous company endeavor (Atrup et al., 2023). Education provides individuals with the chance to expand their knowledge and perspectives, acquire pertinent abilities, and
develop attitudes that serve as a solid basis for establishing and overseeing competitive commercial organizations (Rukman et al., 2023). The significance of entrepreneurial education is seen in the transformative change that has taken place. In contrast to previous conceptions, the definition of entrepreneurship has evolved to encompass a more comprehensive and inclusive perspective, moving beyond the mere creation of entrepreneurs. Entrepreneurship education not only cultivates resilient, creative, and inventive qualities in persons within the conventional business setting, but it has also expanded its scope to foster an entrepreneurial mindset across many professional domains (Harahap, Ausat, et al., 2023).

Therefore, it can be said that the scope of entrepreneurship education has evolved far beyond simply aiming to provide knowledge and skills related to the process of establishing new companies (Ismail & Sawang, 2020). Instead, education in this field now has a more profound role, encouraging the development of a variety of skills that are inventive, adaptable to changing situations, and progressive-minded (Lase, 2019). These are skills that can later be applied flexibly in addressing the ever-changing challenges and opportunities in different professional domains.

Through the latest entrepreneurship education programmes, participants are not only equipped with the competencies to run an efficient company management, but are also encouraged to have the capacity to make significant contributions to the progress and development of the industry and the economy as a whole (Ferreras-Garcia et al., 2019). Thus, the goal of this education is not only limited to the formation of strong entrepreneurs, but also to the formation of individuals who have a broad outlook, are able to innovate, and have a positive impact in facing the dynamics of change in various professional sectors.

The rapid advancement of digital technology has significantly transformed all facets of life, encompassing the realm of education. The incorporation of digital technology into the realm of entrepreneurship education has a significant prospect for enhancing the efficacy, availability, and appeal of the educational experience. Within the present situation, the research background highlights the significant matter of how the utilization of digital technology might effectively impact and bolster the process of entrepreneurship education. In a study undertaken by (Smith, 2020), the primary objective was to examine the impact of digital technology, namely online learning platforms, on the process of entrepreneurship education. The study was carried out by means of case studies undertaken at multiple universities that have implemented online learning platforms for entrepreneurship courses. The study employed research methodologies that encompassed the administration of surveys to students already enrolled in the courses, alongside conducting interviews with professors. The findings of the study indicate
that incorporating digital technology into entrepreneurship education has the potential to improve students' learning outcomes, support the acquisition of pertinent skills, and equip them for the evolving digital landscape of future business issues.

Johnson (2022) conducted a study examining the potential benefits of incorporating digital technology, specifically online learning platforms, in the context of entrepreneurship education. The present study was undertaken to examine the perceptions and experiences of students and instructors on the utilization of online platforms in entrepreneurship courses across many universities. The findings of this study suggest that the incorporation of digital technology in entrepreneurship education yields notable advantages in terms of enhancing student involvement, facilitating access to educational resources, and fostering the acquisition of pertinent skills. This assertion further substantiates the claim that the strategic incorporation of digital technology has the potential to enhance the efficacy of entrepreneurship education. Nevertheless, certain prior investigations have failed to comprehensively explore comparable subjects using qualitative methods, thereby limiting the depth and richness of the current body of literature. Therefore, it is imperative to reexamine the subject matter utilizing an alternative methodological framework.

However, this research possesses a robust basis owing to multiple underlying elements that contribute to its significance. The advent of the digital era has significantly transformed the corporate landscape, leading to a fundamental shift in the conduct of commercial operations. Given the dynamic nature of the global market, it is imperative for organizations to possess a heightened level of reactivity and creativity. Hence, it is imperative for entrepreneurship education to cultivate individuals who possess the capacity to effectively adjust and thrive within a dynamic and fiercely competitive business landscape. In addition, the accessibility of information is a significant contributing component. The advent of digital technology has facilitated convenient and expeditious access to diverse repositories of information (Harahap, Sutrisno, et al., 2023). For individuals studying entrepreneurship, this implies that they can effectively and expediently gain knowledge regarding current business trends, market research, and pertinent case studies.

In addition, innovation holds significant importance within the realm of education. The advent of digital technology has revolutionized educational approaches (Wahyoedi et al., 2023). Technology-based learning offers a more interactive and engaging learning experience that can be tailored to accommodate the unique learning styles of individuals (El-Sabagh, 2021). Moreover, the development of digital abilities is an imperative factor that must not be overlooked. In the contemporary day, possessing digital abilities has become indispensable.
The incorporation of digital technology in entrepreneurship education enables learners to cultivate both entrepreneurial and contemporary digital abilities (Lesinskis et al., 2023).

The concept of self-empowerment holds significant importance as well. The utilization of digital technology enables learners to engage in autonomous learning, affording them the flexibility to determine their preferred time and location for acquiring knowledge (Dhawan, 2020). This fosters the cultivation of a proactive and self-reliant mindset that is important within a rapidly changing entrepreneurial context. The ability to access a global audience facilitated by digital technology is a significant advantage. The establishment of global networks and partnerships in the field of entrepreneurship education can provide learners with valuable opportunities to engage with business practitioners, mentors, and experts in entrepreneurship across diverse geographical locations (Prastyaningtyas, Sutrisno, et al., 2023). This phenomenon facilitates the expansion of individuals' perspectives and professional connections, which holds significant value in the progressively interconnected realm of entrepreneurial endeavors.

This study aims to assess the potential benefits of incorporating digital technology into entrepreneurship education. Specifically, it seeks to evaluate the extent to which the utilization of digital technology can enhance the quality of learning and equip students with the necessary skills to thrive in a corporate environment characterized by extensive digital connectivity. By acquiring a more profound comprehension of the significance of digital technology within the realm of entrepreneurship education, educational establishments might formulate enhanced and pertinent approaches to cultivate proficient and inventive prospective entrepreneurs.

**METHOD**

This study constitutes a literature review that employs a qualitative methodology, hence entailing the analysis and interpretation of data through the utilisation of information and texts derived from diverse sources. The primary objective of a qualitative literature review is to compile, assess, and incorporate pre-existing knowledge pertaining to the subject of investigation, namely the use of digital technology to support the entrepreneurship education process. This study will gather data from several sources that are pertinent to the subject matter, including scientific journals, books, research papers, and other scholarly materials. The temporal scope of the data encompasses the years 2010 to 2023, affording the researcher the opportunity to observe and analyse the various advancements, trends, and alterations that have transpired during this timeframe. Firstly, collecting research related to digital technology and entrepreneurship education. Second, summarising related research and explaining the
conceptions of digital technology, entrepreneurship education, and how they can be used in entrepreneurship-related education. Utilising the vast database of Google Scholar and Google search engine, a thorough search was conducted to find related papers and data published from 2014 to 2023. To ensure the search for relevant research, the following keywords were used: digital technology, entrepreneurship education, and an appropriate combination of the above. The initial reference collection contained 77 articles. After all the data were collected through critical screening, the researcher finally used only 42 references that were credible and relevant to the topic of discussion in this study.

The utilisation of the qualitative technique in conducting a literature review enables researchers to provide a more comprehensive and detailed description and characterization of intricate and multifaceted matters (Elo et al., 2014). Furthermore, the utilisation of this approach facilitates the incorporation of numerous information sources and encompasses a diverse array of perspectives, hence enhancing the depth of research and bolstering the credibility of the results. The data gathering procedure will entail a rigorous examination of textual material, a thorough search for pertinent information, and the systematic categorization of important data pertaining to the research subject. Following this, the author intends to organise the gathered material in a systematic manner, conduct a comparative analysis of the findings from various sources, and discern recurring patterns, themes, and trends that arise from the amassed data.

One notable benefit of employing a qualitative literature evaluation lies in its inherent adaptability to comprehend and elucidate intricate phenomena, as it is not constrained by numerical or statistical limitations (Rahman, 2016). This approach additionally enables researchers to acquire profound insights on the temporal evolution of the subject matter being investigated, as well as the transformations and shifts in thoughts and understandings pertaining to the subject matter throughout different time periods. In the present study, it is imperative to thoroughly examine the dependability and veracity of the sources employed, while also engaging in a rigorous analysis of the gathered material. According to (Bradshaw et al., 2017), while employing a qualitative technique, it is crucial for the researcher to communicate their findings in an impartial and reflective manner, offer clear and correct interpretations, and acknowledge the limits inherent in the methodology and data utilised. The anticipated outcome of this research endeavour is to offer a detailed analysis of the evolution of the subject matter within the specified timeframe of 2010 to 2023. Additionally, it is expected that this study may yield suggestions for future research endeavours that can enhance the comprehension of matters pertaining to the subject.
RESULTS

The field of entrepreneurship education has experienced significant transformations in tandem with the swift and transformative progress of digital technology (Gavrila Gavrila & De Lucas Ancillo, 2022). The advent of digital technology has had profound effects on multiple facets of human existence, notably within the realm of education (Korte, 2020). Within the realm of entrepreneurship education, the advent of digital technology has presented novel avenues for the cultivation and enhancement of learning, the facilitation of collaborative efforts, and the stimulation of prospective entrepreneurs to refine their skills and foster their visionary capabilities. One of the primary impacts of digital technology on entrepreneurship education is the enhanced accessibility to knowledge (Tóth-Pajor et al., 2023). Historically, individuals with aspirations of becoming entrepreneurs were dependent on printed literature and a restricted number of seminars as their primary sources of knowledge acquisition in the field of entrepreneurship (Boldureanu et al., 2020). In light of the advent of the internet and digital technologies, it is now feasible to readily obtain knowledge pertaining to entrepreneurship via online platforms. The advent of digital resources, including e-books, articles, video tutorials, and e-learning platforms, has significantly transformed the learning landscape in the field of entrepreneurship (Lubis, 2019). These tools have revolutionized the acquisition of knowledge on diverse entrepreneurial topics, spanning from business planning to marketing techniques.

Furthermore, the utilization of digital technology also facilitates the implementation of simulation-based methodologies and practical learning opportunities within the realm of entrepreneurial education. Entrepreneurial individuals have the opportunity to utilize business simulation software as a means to establish a virtual business environment that closely resembles real-world conditions (Zulfiqar et al., 2019). Individuals have the ability to engage in business decision-making, confront obstacles, and assess the consequences of these decisions without the necessity of operating a tangible corporate entity. This provides individuals the chance to acquire knowledge from errors and cultivate enhanced business methods prior to engaging in real-world endeavors.

The advent of digital technology has facilitated enhanced collaboration as well. Online platforms provide aspiring entrepreneurs with the opportunity to engage in communication and collaboration with individuals from diverse geographical locations (Ausat, 2022). Individuals have the opportunity to participate in discussion forums, webinars, and collaborative projects, unhindered by limitations imposed by geographical location. This phenomenon not only
enhances the multiplicity of perspectives and concepts, but also fosters the development of useful networks within the progressively interconnected realm of entrepreneurship.

The advent of digital technology has significantly transformed the strategies employed by prospective entrepreneurs in building their brands and engaging with clients in the realm of marketing and promotion. Social media, websites, and e-commerce platforms provide individuals the opportunity to establish a robust digital footprint (Subagja et al., 2022). Organizations have the ability to employ digital marketing tactics, including paid advertising, innovative content creation, and viral campaigns, in order to attract the interest of their intended audience. Not only does this approach demonstrate greater efficacy compared to conventional approaches, but it also offers a more cost-effective solution for nascent companies.

The advent of digital technology has led to a more personalized approach in entrepreneurship education. By utilizing data analytics and machine learning techniques, educational platforms have the capability to discern and evaluate the specific areas of proficiency and deficiencies in an individual's learning process (Ingkavara et al., 2022). This enables the customization of curricula to cater to the unique learning requirements of individual students, hence enhancing the efficacy of their entrepreneurial skill development. Nevertheless, despite the numerous advantages associated with digital technology, it is imperative to acknowledge and tackle certain obstacles. The accessibility of entrepreneurship education might be limited by the digital divide, as not all individuals have equitable access to these tools (Diawati et al., 2023). Moreover, an excessive dependence on technology can potentially diminish the opportunities for social connection and hinder the development of creativity that can be fostered through traditional face-to-face educational experiences. The utilization of digital technologies has significantly transformed the domain of entrepreneurship education (Sudewa et al., 2023). The utilization of technology in several aspects of the entrepreneurial world, such as information accessibility, virtual business simulations, worldwide collaboration, and digital marketing, has emerged as a significant driver for the enhancement of skills and knowledge (Rizvanović et al., 2023). Through effectively resolving the obstacles and strategically using the capabilities of digital technology, entrepreneurship education may persist and generate ambitious entrepreneurs who possess the preparedness to confront forthcoming difficulties.

**DISCUSSION**

The recognition of the significance of adopting a comprehensive and enduring strategy is crucial when incorporating digital technologies into entrepreneurship education. The primary
objective of this integration is to facilitate and enhance the learning process in a manner that is both effective and efficient. There exist numerous crucial factors that necessitate consideration in the ongoing advancement of utilizing digital technology to facilitate the procedure of entrepreneurship education:

**Teacher Training and Debriefing**

Educators or pedagogical practitioners play a pivotal role in the development of efficacious learning encounters utilizing digital technologies (Johnston, 2019). Hence, it is imperative that individuals are provided with sufficient training in utilizing technology for the purpose of entrepreneurship education. This will facilitate the integration of diverse digital technologies into the curriculum and offer students help in effectively utilizing these resources.

**Development of Relevant Content**

The digital content that is offered should possess relevance, informativeness, and engagement for pupils (Puspitarini & Hanif, 2019). There are multiple manifestations of this phenomenon, including instructional videos, interactive business simulations, and authentic case studies. It is imperative to ensure that the curriculum is meticulously crafted in order to facilitate a comprehensive understanding of entrepreneurial principles among students, enabling them to effectively apply these concepts within a suitable environment.

**Technology Infrastructure**

The presence of sufficient technological infrastructure within educational institutions holds significant importance (Zengin, 2023). Ensuring consistent and reliable internet connectivity, sufficient hardware such as PCs or tablets, and appropriate software support are crucial factors in facilitating seamless access and utilization of digital resources by students.

**Measurement and Evaluation**

The utilization of digital technology enables the acquisition of more precise data pertaining to the progress and growth of students (Vial, 2019). In this particular setting, it is imperative to incorporate suitable measuring and assessment instruments inside the learning process. This feature will facilitate educators and learners in monitoring their advancement, discerning domains that require further focus, and adapting instructional strategies accordingly.

**Creativity and Collaboration**

The utilization of digital technology ought to foster and promote both creativity and collaboration (Sutrisno et al., 2023). It is imperative to provide students with many opportunities to engage in creative endeavors and collaborate with their peers within a digital setting. Promoting creativity and fostering teamwork within a digital context can be effectively
achieved through the utilization of team-based projects, collaborative platforms, and virtual entrepreneurship challenges.

Addressing Accessibility Challenges

The issue of ensuring continuity in technology access necessitates attention and resolution (Prastyaningtyas, Ausat, et al., 2023). The implementation of accessibility programs and activities aimed at promoting technology access for students from economically disadvantaged backgrounds or remote regions should be given due consideration.

Teaching Digital Ethics

In addition to the utilization of digital technology, it is imperative to provide pupils with instruction on digital etiquette, encompassing aspects such as privacy, online safety, and responsible engagement within virtual communities.

Keeping Up with Technology

The field of technology is characterized by its perpetual evolution, necessitating a corresponding alignment of learning methodologies in entrepreneurship education with these dynamic developments. It is imperative for educational institutions to remain abreast of the most recent advancements in technology that can be effectively integrated into the educational process. Given the prospect of a progressively interconnected future and the constant evolution of technology, it is imperative for entrepreneurship education to persistently innovate and adjust. Digital technology is employed as a means to enhance outcomes in the education of aspiring entrepreneurs, equipping them to effectively confront global challenges and provide a beneficial influence on society. The utilization of digital technology in the context of entrepreneurship education presents numerous advantages, although it also entails several obstacles that necessitate resolution in order to attain the most favorable outcomes. The primary obstacle lies in the disparity in technological access. Insufficient availability of devices and unreliable internet connectivity pose challenges for certain pupils. Educational institutions must explore innovative strategies to tackle this matter, such as furnishing electronic devices within the educational setting or offering data packages to students who lack access. The over dependence on digital technology may lead to the disregard of the significance of social connection in the process of acquiring knowledge. The presence of direct, in-person engagements among teachers and students, as well as among students themselves, holds significant value in fostering the acquisition of social and collaborative proficiencies that are also vital within the realm of entrepreneurship (Coman et al., 2020). Furthermore, the utilization of digital technologies yields significant student data. Nevertheless, it is imperative to guarantee the safeguarding and confidentiality of this data. It is imperative for educational
institutions to adhere to privacy legislation and establish the requisite safeguards to safeguard the personal information of students.

In addition, it is important to note that although digital business simulations offer excellent experiential learning opportunities, they are unable to fully replicate the authentic experience of managing a tangible corporate entity. Hence, it is imperative to guarantee that students are afforded the chance to acquire knowledge through hands-on experiences beyond the confines of the digital realm. It is widely acknowledged that the rapid evolution of digital technology necessitates a reconsideration of current learning methodologies, as their effectiveness may diminish in the near future. Educational establishments necessitate the capacity to modify their learning curricula in accordance with contemporary technology advancements (Twining et al., 2021).

Entrepreneurship education encounters various problems that necessitate a combination of dedication and foresight. Given the intricate nature of these difficulties, it is evident that there exist several intriguing prospects for leveraging digital technology to enhance entrepreneurship education. First and foremost, there is an opportunity to develop Industry Partnerships as the door is open. This implies that educational institutions collaborate with technological corporations or accomplished entrepreneurs. This sort of collaboration extends beyond a mere exchange of information, as it offers significant insights into the practical application of technology within the realm of entrepreneurship (Zhang et al., 2023). In addition to the aforementioned benefits, it is worth noting that students can also avail themselves of internship possibilities and mentoring programmes, which serve to further enrich their educational journey. Additionally, the concept of Continuous Training is worth considering. This encompasses not only the student population, but also include instructors and other members of the education staff. Equipping educators with technological proficiency and digital competencies enables them to cultivate novel and inventive educational encounters (Ertmer & Ottenbreit-Leftwich, 2010). Consequently, this will have a beneficial impact on kids.

Additionally, a proposal has been made for the development of a Customised App. Educational institutions are focused on developing applications or platforms that are specifically designed to facilitate entrepreneurial learning. This approach not only addresses the specific requirements of the curriculum but also affords greater autonomy in shaping the educational experience offered to students. Moreover, Artificial Intelligence (AI) technology emerges as a prominent factor in this context (Ausat, Massang, et al., 2023). The integration of artificial intelligence (AI) enables the customization of the learning experience to align with the individual features of students (Fauzi et al., 2023). Through the analysis of learning data,
artificial intelligence (AI) has the capability to offer suitable recommendations that can assist students in achieving their maximum capabilities (Ausat, Suherlan, et al., 2023). In addition to the instruction of entrepreneurial skills, the curriculum also encompasses training in Digital Skills. Given the growing integration of technology in the business landscape, it is imperative for students to possess a comprehensive grasp of programming, graphic design, digital marketing, and data analysis. The primary objective of these efforts is to enhance individuals’ readiness to confront competition within an evolving corporate landscape that is being progressively digitalized.

Ultimately, the integration of technology in entrepreneurship education promotes an emphasis on innovation. Educational institutions provide a crucial function in fostering students' creative thinking, facilitating the development of innovative solutions, and equipping them to confidently confront the obstacles encountered in the realm of entrepreneurship. Digital technology offers an expansive platform for the exploration of boundless discoveries. By implementing intelligent strategies, educational institutions have the ability to leverage digital technology in order to shape a cohort of adaptable entrepreneurs who are equipped to traverse a world that is becoming progressively intricate and reliant on digitalization. This strategy will not only serve to increase the talents of students, but also establish a robust basis for subsequent innovation and economic advancement.

CONCLUSION

The integration of digital technology in entrepreneurship education has resulted in significant transformations in the learning process, student engagement, and the development of skills necessary for entrepreneurial success. The utilization of technology has significantly influenced the paradigm of entrepreneurship education, including several aspects such as convenient information retrieval, virtual business simulations, global collaboration, and digital marketing. Nevertheless, similar to any transformative process, there exist obstacles that must be surmounted, such as disparities in access, excessive dependence, and the swift evolution of technology. By using an appropriate approach, it is possible to transform these obstacles into favorable circumstances that can enhance the quality of entrepreneurship education in the era of digitalization.
RECOMMENDATIONS

Suggestions that can be given for the results of this study include: 1) Holistic Integration: It is imperative for educational institutions to comprehensively incorporate digital technologies inside the entrepreneurship education curriculum. This entails the provision of teacher training, the creation of pertinent content, and the careful selection of technology tools that align with the desired learning outcomes. 2) Understanding Digital Ethics: The instruction of digital ethics to pupils is of paramount importance, encompassing the concepts of responsible use, safeguarding data privacy, and exhibiting courteous behavior within digital contexts. 3) Focus on Creativity and Collaboration: The promotion of creativity and collaboration should be prioritized in the utilization of digital technology, rather than its substitution for social connection. It is imperative to foster an environment that promotes creativity and collaboration among students within a digital context. 4) Importance of Practical Learning: In conjunction with virtual encounters, it is imperative for students to acquire hands-on experience in managing a tangible enterprise. In order to better equip individuals for real-world challenges, it is imperative to adopt a balanced strategy that incorporates both virtual and practical experiences. 5) Industry Partnerships: Educational institutions have the potential to establish collaborative alliances with technological businesses and accomplished entrepreneurs, thereby facilitating the provision of practical insights and real-world experiential learning opportunities to students. 6) Flexibility and Innovation: The utilization of technology ought to maintain a malleable nature and persistently adjust to the swift advancements in technology. Educational institutions ought to embrace novel developments in pedagogical methodologies. 7) Accessibility and Equity: Addressing barriers in access to technology is of utmost importance. In order to promote equitable access to educational technology, it is imperative to establish comprehensive accessibility programs that cater to the needs of all students. 8) Continuous Monitoring and Evaluation: Educational institutions must to consistently assess and appraise the efficacy of integrating technology into entrepreneurship education, and thereafter implement requisite modifications in accordance with feedback and contemporary advancements. In conclusion, the use of digital technology within the realm of entrepreneurship education is important in order to adequately equip future generations of entrepreneurs. Educational institutions can cultivate a comprehensive, creativity-oriented methodology and facilitate the acquisition of skills that align with the demands of an ever more interconnected corporate landscape, by comprehending the corresponding advantages, obstacles, and prospects.
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