A Study on Workforce Readiness of Students through Digital Entrepreneurship Education

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Abstract

Entrepreneurship has become a central issue in an effort to improve the nation's economic welfare. Several previous studies agree that the ideal country is one that has an entrepreneurial contribution of at least 4% of its total population. Based on the Global Entrepreneurship Monitor (GEM) India Report, India's entrepreneurial activity has been growing. According to a 2021-2022 GEM India report, the country's Total Entrepreneurial Activity (TEA) rate was 14.4% in 2021, a significant increase from 5.3% in 2020. More recent data from a 2023 GEM report shows India's TEA rate was just under 12%, and its Established Business Ownership rate was 12.4%.

This increase in entrepreneurial activity has made India the third-largest startup ecosystem in the world, with over 159,000 recognized startups as of early 2025. The country's entrepreneurial ecosystem is also highly-regarded, ranking fourth among 51 countries for its quality, according to a recent GEM report. This is a substantial improvement from its 16th-place ranking in 2021. One of the causes of this low contribution is the lack of effective entrepreneurship education. Some empirical evidence has not been able to explain how entrepreneurship education is able to prepare generation Z to become entrepreneurs through various new literacies. This research aims to investigate the influence of entrepreneurship education on the entrepreneurial readiness of generation Z students, which is moderated by digital business literacy and financial literacy.

Keywords: Entrepreneurship Education, Entrepreneurial Readiness, Digital Business, Literacy Financial Literacy, Generation Z.

Introduction

In the effort to improve the nation's economic welfare entrepreneurship has become an essential topic in both developed and developing countries. Many previous studies accept that a perfect country is one that has an entrepreneurial contribution of at least 4% of its total population. Research findings found that one of the causes of the low contribution was the lack of effective entrepreneurship education. Generation Z includes individuals born between 1995 and 2012, categorized as young people, and is the largest contributor to unemployment in the country. Entrepreneurship education programs at various levels of education, including higher education, target the younger generation as the main target, with various efforts made to change their mindset from just job seekers to potential entrepreneurs.

To reduce the number of unemployed at a young age and encourage entrepreneurial activity, entrepreneurial readiness is needed by every college student. Entrepreneurial readiness is a condition where individuals feel ready to face various situations in the world of entrepreneurship, armed with abilities, will and desires. Through this entrepreneurial readiness, a person's entrepreneurial spirit can develop, and their potential can be realized.

Students' entrepreneurial readiness can be created through entrepreneurship education in higher education which is useful for encouraging entrepreneurship to create their own jobs. With the existence of entrepreneurship education, especially in universities, it is hoped that it can give rise to a creative culture that contributes to job creation and becomes a means of spreading entrepreneurial values to society. The key role of entrepreneurship education in higher education is to provide important skills for starting a business and facing various challenges in entrepreneurial life. Increasing the quality of entrepreneurship education is also associated with increasing the number of entrepreneurial skills.

Workforce readiness is fostered through Digital Entrepreneurship Education by teaching essential skills like critical thinking, digital literacy, and adaptability, preparing individuals to navigate and thrive in the digital economy by starting their own businesses or contributing to existing digitally-focused companies. This education offers a low-risk path to entrepreneurship, leveraging digital platforms like social media and e-commerce for market access and innovation. To implement it effectively, a balance between

technical and entrepreneurial training, industry-academic collaboration, and access to resources is crucial for creating a dynamic, future-focused workforce. A person who has diverse skills is better prepared to become an entrepreneur. In this case, entrepreneurship education is an important factor to help increase knowledge and shape a person's entrepreneurial mentality.

Review of Literature

Digital entrepreneurship is a rapidly growing field of research that has become increasingly important in creating new job opportunities and driving economic growth. It is defined as creating, developing, and managing new ventures using digital technologies and platforms (Kraus *et al*., 2019).

Social media businesses or startups are top-rated among young entrepreneurs who use social media platforms to create innovative products and services and reach a wider audience. The authors (Kraus *et al*., 2019; 2021; Shukla *et al*., 2021) suggest that social media businesses or start-ups can provide young entrepreneurs with a low-cost and low-risk way to start their own businesses without the need for significant investment in traditional infrastructure. As such, social media businesses or startups are likely to play an important role in the future growth of digital entrepreneurship among young people. However, social media businesses or startups must innovate and constantly adapt to changing technologies and platforms.

According to a report by Global Entrepreneurship Monitor (WAM, 2024, Fast Company, 2024), the UAE was ranked first on the Global Entrepreneurship Index. Approximately 73.5% of Emiratis "saw good opportunities to start a business where they lived," and 61%—against 54.7% in 2020—of SMEs in the UAE testified that they had the skills, knowledge, and experience to start a small business (Hart *et al*., 2020; Kargwell, 2012). These facts and figures have strengthened the assumption that cultural support for entrepreneurship directly influences youngsters and their motivation to start a business (Syed *et al*., 2023).

The UAE also ranked first among youngsters worldwide who chose entrepreneurship as their first choice of profession (Gulf Today, 2023; WAM, 2024). This ranking was attributed to four critical factors: (1) entrepreneurial orientation, (2) entrepreneurial confidence, (3) cultural support for entrepreneurship, and (4) support for entrepreneurship by the universities. Of the four factors, the last factor was considered the most important since it suggested that educational institutions must strengthen their students' confidence to start their businesses, as many feared failure and entry into the marketplace. Thus, it was proposed that universities should combine traditional entrepreneurship education with new insights, trends, and practical experience. Moreover, it was recommended that the curriculum be assessed for its inclusion of digital entrepreneurship programs (Jabeen *et al*., 2017).

Objective of the Study

- To investigate the impact of Digital Entrepreneurship Education on the development of a future-ready workforce, focusing on the acquisition of digital skills, entrepreneurial competencies, and adaptable mindsets
- To study the effectiveness of Digital Entrepreneurship Education curriculum design in fostering digital literacy, creativity, and problem-solving skills among students.
- To explore how different instructional strategies within Digital Entrepreneurship Education (e.g., experiential, project-based, and collaborative learning) influence work

readiness outcomes, such as critical thinking and adaptability.

Core Competencies Fostered by Digital Entrepreneurship Education

Digital Entrepreneurship Education goes beyond basic technical skills to build a suite of competencies vital for success in the modern workforce.

Digital and Technical Skills are

- **Digital Literacy:** Involves a comprehensive understanding of how digital technology can be used to improve business operations and increase productivity. This includes proficiency in managing digital resources and communicating through digital media.
- **Specific Software Skills:** Education that focuses on industry-specific software and technical training is crucial for enhancing readiness for the digital job market.
- **Data Analysis:** Teaches individuals to interpret data to inform strategic business decisions, optimize processes, and manage resources efficiently.
- **Social Media and Digital Marketing Expertise:** Involves using digital platforms and online marketing techniques to increase brand visibility, reach wider audiences, and engage customers effectively.
- **Cloud Management and Cyber Security:** Provides skills in managing cloud resources and protecting company data from digital threats.

Entrepreneurial and Cognitive Skills

- **Innovative Mindset:** Digital Entrepreneurship Education cultivates a proactive attitude toward adopting new digital tools and encourages creative problem-solving.
- **Adaptability and Agility:** A crucial skill for navigating the volatile, uncertain, complex, and ambiguous (VUCA) global business environment. It teaches rapid adjustment to new technologies and market changes.
- **Opportunity Identification:** Trains individuals to recognize new market opportunities and develop viable business plans to capitalize on them.
- **Resilience and Critical Thinking:** By engaging in project-based and experiential learning, students learn to persevere through failure and solve complex, real-world problems.
- **Self-efficacy:** Digital Entrepreneurship Education strengthens an individual's belief in their ability to succeed as a digital entrepreneur, increasing their willingness to pursue entrepreneurial intentions.

Educational Strategies for Effective Implementation

To build a future-ready workforce, educational institutions must implement effective teaching strategies.

- **Experiential Learning:** Emphasizes hands-on activities, such as workshops, business simulations, and hackathons, to help students apply theoretical knowledge to real-world scenarios.
- **Industry Collaboration:** Fostering partnerships with industry experts and companies ensures that curriculum content remains relevant and aligned with current market demands.
- **Mentorship and Networking:** Connects students with experienced digital entrepreneurs and professionals for guidance and valuable networking opportunities.

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- **Integrated Curricula:** Moving away from traditional, vocational training to a trans-disciplinary approach that integrates digital literacy, entrepreneurship, and technical skills is essential.

Methodology
Research Design: Mixed-methods approach of Quantitative phase and Qualitative phase.
Quantitative Phase: A quasi-experimental design will be used to compare the workforce readiness outcomes of students who have completed a digital entrepreneurship program with those who have not.
Qualitative Phase: A case study approach, focusing on multiple institutions, will provide in-depth insights into the experiences and perceptions of students and educators.

Participants and Sampling:
Quantitative Phase:
Target Population: 50 vocational college students were divided into a Digital Entrepreneurship Education experimental group (n=25) and a control group (n=25). The groups were selected through stratified random sampling.

Qualitative Phase:
A purposive sample of 10 students from the Digital Entrepreneurship Education group participated in semi-structured interviews.

Data Collection:
- **Quantitative:** A pre-test/post-test survey was administered to both groups. The survey measured digital competencies, adaptability, and problem-solving skills using validated Likert-scale items.
- **Qualitative:** Semi-structured interviews explored students' perceptions of the Digital Entrepreneurship Education curriculum, skill development, and influence on career aspirations.

Data Analysis
- **Quantitative:** Paired t-tests and an independent samples t-test were used to compare pre- and post-test scores between groups
- **Qualitative:** Thematic analysis was conducted on interview transcripts to identify recurring patterns and insights.
- **Integration:** The qualitative findings provided context and deeper explanation for the quantitative results, enriching the overall interpretation.
- **Ethical considerations:** Informed consent was obtained from all participants, and anonymity was maintained throughout the study.

Findings
This section presents the findings from the data analysis, supported by statistical results and qualitative themes.

Quantitative Findings:
- **Pre-test/post-test Comparison:** The DEE group showed a statistically significant increase in digital competency and adaptability scores from pre-test to post-test, while the control group did not show significant changes.
- **Independent T-test:** The DEE group demonstrated significantly higher mean scores on the Workforce Readiness Assessment compared to the control group ($t(48) = 4.09$, $p < 0.001$), supporting the alternative hypothesis.

Qualitative Findings:
Theme 1: Hands-on learning: Students reported that project-based learning in the Digital Entrepreneurship Education program allowed them to apply digital skills, fostering greater confidence and practical experience.
Theme 2: Cultivating an entrepreneurial mindset: Interviewees described a shift in their perspective, moving beyond rote learning to actively identifying opportunities and solving problems creatively.
Theme 3: Increased adaptability: Students in the DEE program expressed greater comfort and flexibility with new technologies, a skill they attributed directly to the program's practical focus.

Integrated Findings
The quantitative results provide robust evidence that the DEE program improves workforce readiness. The qualitative interviews explain why these improvements occurred, highlighting the critical role of hands-on application, mindset shifts, and increased adaptability nurtured by the DEE curriculum

Recommendations
Educators and policymakers should collaborate to develop comprehensive DEE programs that balance technical and entrepreneurial skills.

Recommendations for Educators and Institutions
- **Integrate DEE Across the Curriculum:** Embed digital and entrepreneurial skills into a wider range of subjects beyond just business programs. For example, a history project could involve creating a digital exhibit, or a science class could require developing a marketable prototype using digital tools. This fosters trans-disciplinary learning and computational thinking.
- **Embrace Project-based and Experiential Learning:** Move away from theoretical lectures toward practical, hands-on projects that encourage real-world problem-solving. This can include student-run e-commerce projects, AI chatbot development for customer service, or creating a digital marketing campaign for a local business.
- **Invest in Professional Development for Teachers:** Provide ongoing training and support for educators to develop their own digital literacy and entrepreneurial competencies. This ensures they are equipped to effectively teach DEE and act as mentors.
- **Create Dedicated Digital Entrepreneurship Hubs:** Establish on-campus or virtual spaces that offer resources, mentorship, and equipment (such as prototyping labs) to support student ventures. These hubs can serve as incubators for innovative ideas.

Recommendations for Policymakers
- **Fund Digital Infrastructure and Promote Equitable Access:** Address the digital divide by investing in robust, reliable internet connectivity and providing affordable access to devices. This is crucial for ensuring that students from all socioeconomic backgrounds can participate fully in DEE.
- **Incentivize DEE Integration into Curricula:** Offer grants and incentives to educational institutions that successfully embed DEE into their programs. Encourage

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modular curriculum design that allows flexibility for new topics without displacing existing content.

- **Establish National Digital Skills Standards:** Align education policy with workforce needs by promoting core digital competencies. This provides a clear framework for educators and students and ensures a standardized level of digital readiness.
- **Support Multi-stakeholder Partnerships:** Facilitate collaborations between educational institutions, industry partners, and the government through financial incentives and policy frameworks. This creates a sustainable talent pipeline and ensures DEE remains relevant to market demands.

Recommendations for Industry Partners

- **Co-design Curriculum with Educational Institutions:** Engage directly with colleges and universities to ensure that DEE curricula are relevant and aligned with current industry needs and emerging technologies. This can involve contributing to course content or offering real-world case studies.
- **Provide Mentorship and Real-world Opportunities:** Offer structured mentorship programs where industry experts can guide aspiring digital entrepreneurs. Provide internships, co-op programs, and other work-integrated learning opportunities that allow students to apply their DEE knowledge in a professional context.
- **Invest in Lifelong Learning and Employee Re-skilling:** For established businesses, treat workforce training as a strategic capital investment rather than a one-time expense. Offer up-skilling and re-skilling programs for existing employees to navigate the evolving digital landscape and embrace new technologies.
- **Foster an Internal Culture of Innovation:** Encourage employees to use digital tools to identify and solve problems, reinforcing the entrepreneurial mindset that DEE promotes. Experimentation and learning from failure should be rewarded to drive continuous improvement and adaptability.

Conclusion

This research has investigated the influence of entrepreneurship education on the entrepreneurial readiness of generation Z students and understands the moderating role of digital business literacy and financial literacy. Therefore, the findings of this research confirm that digital business literacy and entrepreneurial literacy together can strengthen the relationship between entrepreneurship education and the entrepreneurial readiness of generation Z students. In addition, with entrepreneurship education, generation Z can be encouraged to become entrepreneurs and develop their entrepreneurial readiness. For generation Z itself, this research shows that entrepreneurship education, business literacy, digital literacy, and financial literacy play an important role in increasing entrepreneurial readiness. Therefore, generation Z students must think that entrepreneurship education has the same level of importance as other subjects.

References

1. Jabeen F, Faisal M, Katsioloudes MI. Entrepreneurial mindset and the role of universities as strategic drivers of entrepreneurship: Evidence from the United Arab Emirates. *Journal of Small Business and Enterprise Development*. 2017;24(1):136–157. doi:10.1108/JSBED-07-2016-0117
2. Kraus K, Kraus N, Shtepa O. *Teaching guidelines for digital entrepreneurship*. 2021.
3. Shukla A, Kushwah P, Jain E, Sharma SK. Role of ICT in the emancipation of digital entrepreneurship among new generation women. *Journal of Enterprising Communities: People and Places in the Global Economy*. 2021;15(1):137–154. doi:10.1108/JEC-04-2020-0071
4. Syed RT, Singh D, Spicer D. Entrepreneurial higher education institutions: Development of the research and future directions. *Higher Education Quarterly*. 2022;77(1):158–183. doi:10.1111/hequ.12379
5. WAM. *UAE ranks first in the world in the Global Entrepreneurship Monitor 2024 Report*. 2024.

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