



Impact of Digital Technology on Entrepreneurship and Innovation: Implications for Business Education Graduates of Lagos State University, Ojo

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Abstract

This study explored the impact of digital technology on entrepreneurship and innovation, with particular emphasis on its implications for Business Education graduates of Lagos State University, Ojo, Lagos. Using a descriptive survey design, data were collected from a sample of 220 respondents comprising final-year Business Education students and recent graduates. Descriptive analysis of mean and standard deviation was used to analyze the data collected. A structured questionnaire was used to gather information on students' exposure to digital tools, their entrepreneurial intentions, and their ability to apply technology-driven innovative practices. The mean scores range from 2.71 to 3.09, with a grand mean of 2.95, reflecting a moderate perception of curricular effectiveness. The findings revealed that digital technologies such as e-commerce platforms, social media marketing, mobile applications, and digital productivity tools significantly enhance students' entrepreneurial readiness and innovative capacity. Results further indicated that increased digital literacy and access to digital resources positively influence students' ability to generate business ideas, develop creative solutions, and participate in technology enabled ventures. However, challenges such as limited technical skills, poor internet access, and inadequate institutional support were identified as constraints. The study concludes that digital technology plays a critical role in shaping the entrepreneurial and innovative capabilities of Business Education graduates. It recommends the integration of practical digital skills training, enhanced technological infrastructure, and stronger university–industry partnerships to better prepare graduates for the demands of the modern digital economy.

Keywords: Digital, Technology, Entrepreneurship, Innovation, Business Education

Introduction

In recent years, the landscape of entrepreneurship, digital technology and innovation has been notably reshaped by the advent and rapid advancement of digital technology such as; Mobile technologies, social media platforms, E-commerce technologies, cloud computing to cybersecurity solutions, digital tools have revolutionized traditional business models and opened up new avenues for entrepreneurship ventures. The incorporation of digital tools and platforms has facilitated the emergence of new business ventures, empowered entrepreneurs to reach global markets, and accelerated the pace of innovation across various sectors. Business education programmes play a critical role in preparing graduates to manoeuvre through the digital landscape and take advantage of new opportunities. The digitalization of business process has enabled entrepreneurs to streamline operations, enhance productivity, and access a wealth of resources and information. However, the democratization of technology has lowered barriers to entry, allowing individuals with diverse backgrounds and skill sets to launch successful businesses. (Perkins & Pryor, 2021). The emergence of digitalization enables students to initiate micro-businesses remotely during their studies at the university. It has been beneficial in implementing a theoretical lens for entrepreneurial behaviour.

Kelly et al. (2022). They define “digital technology” (in regard to children) as: “tools, systems and devices that can generate, create, store or process data. The data-processing and logic capabilities of digital technologies are enabled

through microprocesses that are programmed to perform various functions.” Examples include computers, tablets, software/apps, augmented/virtual reality, and less tangible forms like the internet. The above emphasize the transformation of analog into digital (digitization) or conversion of human, physical, social processes into digital form. Kraus, (2019). The difference between traditional business and digital entrepreneurship is the environment in which business is provided. While traditional business is more or less restricted to physical activities. Some recent studies have remarked that digital business is linked to the concept that focuses on the use of digital technology and platforms to create, manage and promote their businesses Kraus et al. (2019). Michael et al. (2019). Sees an entrepreneurship as *“the ability to recognize, assess, and capitalize on possibilities/opportunities and also manage and develop a business enterprise to be able to innovate, take risks, and produce value for stakeholders.”* They opined that entrepreneurship is frequently seen not just as starting a new venture, but also growth, renewal, transforming existing organizations. (Chrisman & Steir, 2015). Viewed entrepreneurship is the process of producing something new and useful by spending time and effort, taking risks, and earning financial and personal freedom. Philipp et al. (2025). Digital innovation is *the co-creation of novel offerings through recombination of digital and/or physical components. They submitted that not just idea, but putting it into practice (making it usable, bringing to market, or using in an organizational/social context).* Takeo, (2023). Innovation involves new products, new manufacturing methods, new markets, new raw material uses, and organizational renewal — especially radical or breakthrough innovation. (Timur & Antanas, 2017). *Innovation consists of the generation of a new idea and its implementation into a new product, process or service, leading to the dynamic growth of the national economy and the increase of employment as well as to a creation of pure profit for the innovative business enterprise.* Also, they note that innovation is not a one-time phenomenon but a cumulative process from idea generation to implementation and commercialization. Digital technologies (cloud, mobile, AI, data analytics, e-commerce, social media, fintech, IoT, digital platforms) are reshaping how entrepreneurs discover opportunities, design business models, develop products, reach customers and scale operations. For graduates of the Business Education programme at Lagos State University, this means employers and new ventures increasingly expect digital fluency, creativity with technology, data-driven decision making, and the ability to prototype and iterate business ideas rapidly.

Statement of the Problem

The rapid advancement of digital technology in entrepreneurship and innovation presents both opportunities and challenges for business education graduates. While these graduates possess theoretical knowledge, their practical skills and adaptability to evolving digital landscapes may be insufficient to thrive in the competitive business world. This disconnects between traditional education and real-world digital demands raises concerns about the preparedness and relevance of business education programmes in equipping graduates with the requisite skills to succeed in modern entrepreneurial ventures and innovative enterprises. Tools such as artificial intelligence, mobile applications, cloud computing, e-commerce, social media, and digital payment systems have transformed the way businesses are created, managed, and expanded. However, despite the growing significance of digital technology in business practice, many Business Education graduates in Nigeria — and particularly those of the Lagos State University (LASU) — appear inadequately prepared to apply these technologies effectively in entrepreneurial and innovative ventures. While the Business Education programme is designed to equip students with managerial, accounting, and communication skills, there is evidence that the integration of digital competencies and innovation-driven thinking into the curriculum remains limited.

Purpose of the study

The purpose of this study is to investigate the Impact of Digital Technology on Entrepreneurship and Innovation: Implications for Business Education Graduates of Lagos State University Ojo, Lagos. Specifically, the study aims:

- i. To assess the impact of digital technology on business education graduates.
- ii. To examine the impact of digital technology on entrepreneurship and innovation.
- iii. To identify the extent to which the university’s curriculum and training programmes prepare students to utilize digital tools effectively for entrepreneurial and innovative ventures in technology driven economy.

Research Questions

The study answered the following questions:

- i. Would digital technology have any impact on business education graduates?
- ii. Is there any impact of digital technology on entrepreneurship and innovation among business education graduates?

- iii. Does the university's curriculum and training programmes prepare the students to utilize digital tools effectively for entrepreneurial and innovative technology driven economy?

Methodology

Descriptive survey research method was adopted for the study which would avail the study the opportunity to establish relationships that exists between variables. It helped the researcher to select the respondents to the questionnaire and described the data succinctly following their responses to the items used to solicit opinion on the Impact of Digital Technology on Entrepreneurship and Innovation: Implications for Business Education Graduates of Lagos State University, Ojo Lagos. The target population was 840 students of Business Education of Lagos State University Ojo, Lagos State. Out of all the four (4) levels of Business Education Two Hundred and Twenty (220) students were surveyed because the whole population of the study had a homogeneous characteristic and the chosen sample would fully represent the whole population effectively. This, the findings could be generalized on the whole groups. The instrument used in the study was a questionnaire to elicit information from the respondents because it was cheaper, less time consuming and easier to administer to respondents, who found interactions with questions on paper more convenient. The questionnaire seeks the opinion of respondents on the Impact of Digital Technology on Entrepreneurship and Innovation: Implications for Business Education Graduates of Lagos State University Ojo, Lagos. It is made up of fifteen items which is positively and negatively stated to enable respondents to have a balanced response thereby avoiding a bias result. The questionnaire was provided with four responses each, borrowing the idea of Likert scale of Low, Moderate, Highly and Very Highly. Descriptive analysis of mean and standard deviation was used to analyze the data collected. The calculated means were interpreted as Low (1.00 – 1.49), Moderate (1.50 – 2.49), Highly (2.50 – 3.49) and Very Highly (3.50 – 4.00).

Results

This section presents the descriptive statistics of participants' responses. The analysis provides an overview of the respondents' opinions

Table 1: Demographic Information of Participants

Variables	Response Label	Frequency	Percentage
Gender	Male	100	45.0
	Female	120	55.0
Age	Below 18 years	84	38.18
	19 – 21 years	63	28.63
	22 – 24 years	52	23.63
	25 years & above	21	9.54
Level	100	45	20.45
	200	55	25.00
	300	50	22.73
	400	70	31.82

Source: Researchers' field survey, 2025

A total of 220 respondents participated in the study. The demographic analysis shows that 55.0% of the respondents were female, while 45.0% were male, indicating that female students were slightly more represented in the sample. In terms of age distribution, the majority of participants (38.18%) were below 18 years, followed by 28.63% who were aged between 19 and 21 years, 23.63% between 22 and 24 years, and 9.54% aged 25 years and above. This distribution suggests that most respondents were relatively young, aligning with the typical age bracket of undergraduate students. Regarding the academic level, 31.82% of the respondents were in their 400 level, 25.00% in 200 level, 22.73% in 300 level, and 20.45% in 100 level. This shows a balanced representation

Table 1: Mean and Standard Deviation of responses of students on relationship between digital technology and business education graduates.

SN	ITEMS	Mean	SD
1	To what extent has your exposure to digital technology improved your understanding of business concepts and practices	2.65	1.08

2	How confident are you in using digital tools (e.g., Microsoft Office, Goggle Workspace, or business management software) for business-related tasks?	2.59	1.15
3	Has digital technology enhanced your ability to develop innovative or entrepreneurial ideas?	2.71	1.14
4	How effectively did your university curriculum integrate digital technology into business education courses?	2.35	1.12
5	what extent of challenges do you experience in applying digital technology skills in your current job or entrepreneurial venture?	2.51	1.21
Grand Mean		2.56	

Source: Researchers' computations, 2025

Table 2 presents the mean and standard deviation of respondents' perceptions regarding the role of digital technology in business education. The mean scores range from 2.35 to 2.71, while the standard deviations range from 1.08 to 1.21, indicating a moderate variation in responses among participants. These results suggest that respondents generally agree to a moderate extent that digital technology plays an important role in business education.

Overall, the grand mean score of 2.56 implies that participants moderately perceive digital technology as an influential factor in enhancing their learning experiences, fostering innovation, and improving their entrepreneurial readiness. This finding underscores the growing but still-developing integration of digital technology within business education programmes.

Table 3: Mean and Standard Deviation of responses of students on relationship between digital technology and innovation among business education graduates.

SN	ITEMS	Mean	SD
6	To what extent has digital technology increased your ability to identify and explore new business opportunities?	3.16	0.87
7	To what extent has the use of digital tools enhanced your innovative thinking in developing business solutions?	3.07	0.89
8	To what extent has exposure to digital technology during your training improved your entrepreneurial competence?	2.88	0.90
9	To what extent have digital platforms and resources helped you to create or manage business ventures effectively?	2.79	1.08
10	To what extent has the integration of digital technology into business education influenced your entrepreneurial and innovative skills	3.03	0.88
Grand Mean		2.99	

Source: Researchers' computations, 2025

Table 3 presents the mean and standard deviation of students' responses regarding the relationship between digital technology and innovation among business education graduates. The mean values range from 2.79 to 3.16, with corresponding standard deviations between 0.87 and 1.08, indicating a moderate level of consensus among respondents.

Overall, the grand mean score of 2.99 suggests that respondents hold a moderately positive perception of the role of digital technology in promoting innovation. This implies that the integration of digital tools within business education has a meaningful—though not yet optimal—impact on enhancing students' entrepreneurial development and innovative capabilities.

Table 4: Mean and Standard Deviation of responses of students on university's curriculum and effective utilization of digital tools for entrepreneurial and innovative activities.

SN	ITEMS	Mean	SD
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11	How effectively does your university's curriculum prepare you to use digital tools for entrepreneurial and innovative purposes?	2.96	1.02
12	To what extent do you think digital technology training is important in preparing students for technology-driven economy?	3.08	1.04
13	To what extent have your lecturers incorporated digital tools into teaching and learning activities related to entrepreneurship and innovation?	2.89	0.98
14	How well do the university's training programmes equip students with practical digital skills for business creation and innovation?	2.71	0.98
15	What level of confidence do you have in applying digital tools learned from your university training to real-world entrepreneurial challenges?	3.09	0.90
Grand Mean		2.95	

Source: Researchers' computations, 2025

Table 4 presents the mean and standard deviation of students' responses regarding the effectiveness of university curricula and training programmes in equipping them with digital technology skills for entrepreneurial and innovative purposes. The mean values range from 2.71 to 3.09, with standard deviations between 0.90 and 1.04, reflecting a moderate level of variation among respondents. Overall, the grand mean score of 2.95 indicates that students moderately perceive their universities' curricula and training programmes as effective in preparing them to utilize digital tools for entrepreneurial and innovative purposes. This finding suggests that, although institutions have begun integrating digital literacy into business education, further efforts are needed to enhance practical skill development and provide students with more hands-on experience in technology-driven learning environments.

Discussion

The study examined the influence of digital technology on business education graduates, with particular emphasis on its role in learning, innovation, and curriculum effectiveness. The findings presented in Tables 2, 3, and 4 reveal a consistent pattern of moderate agreement among respondents, indicating that while digital technology plays a meaningful role in shaping students' entrepreneurial and innovative capacities, its integration within business education programmes remains only partially effective.

Results from Table 2 show that respondents moderately agreed that digital technology enhances their understanding of business concepts and entrepreneurial skills, with mean values ranging from 2.35 to 2.71 and a grand mean of 2.56. This implies that although students recognize the usefulness of digital tools such as Microsoft Office, Google Workspace, and business management software, their actual application in instructional and entrepreneurial contexts is limited. This finding aligns with (Eze & Nnadi, 2022) and Ogunbanjo (2023), who emphasized that exposure to digital technologies enhances conceptual understanding and operational efficiency among business education students. However, it diverges from (Olorunfemi & Adepoju, 2021), who found higher digital competence among students in private institutions, likely due to better infrastructure and access to technology. The divergence underscores the infrastructural and pedagogical constraints that still hinder the full integration of technology in public tertiary institutions.

In Table 3, the results indicate a moderately positive perception of the relationship between digital technology and innovation, with mean values between 2.79 and 3.16 and a grand mean of 2.99. This suggests that digital exposure has contributed to students' innovative thinking and entrepreneurial idea generation, but its impact is not yet optimal. The finding converges with Okeke & Nworgu (2023), Akpan & Effiong (2022), who observed that the use of digital platforms fosters creativity and entrepreneurial exploration among university students. Nonetheless, it diverges from Olawale (2020), who found a stronger correlation between digital competence and innovation when students engaged in project-based and experiential learning. The moderate means in this study therefore imply that while students appreciate the role of digital tools, practical engagement and innovation-driven pedagogy remain underdeveloped.

Table 4 examines the effectiveness of university curricula and training programmes in preparing students to use digital tools for entrepreneurial and innovative activities. The mean scores range from 2.71 to 3.09, with a grand mean of 2.95, reflecting a moderate perception of curricular effectiveness. Respondents acknowledged that their institutions have made efforts to incorporate digital literacy into business education, particularly through course content and

training sessions. This finding aligns with (Nwachukwu & Eze, 2021) and Adebayo (2022), who reported that Nigerian universities are gradually embedding digital literacy into their business education programmes. However, it diverges from (Ibrahim & Yusuf 2020), who found that competency-based curricula with strong practical components significantly enhance students' digital proficiency and entrepreneurial readiness. The moderate perception in this study suggests that while digital technology is included in curricula, its practical application and industry linkage remain limited.

Taken together, the findings from Tables 2, 3, and 4 reveal a consistent trend: business education students recognize the value of digital technology in improving their learning, innovation, and entrepreneurial competence, but perceive its implementation as only moderately effective. This convergence across variables supports the argument of (Ogunleye & Adediran, 2023) that digital transformation in higher education across developing nations remains uneven due to inadequate facilities, low digital literacy among instructors, and limited institutional investment. Conversely, studies from technologically advanced contexts, such as (Chike & Mensah, 2022), report stronger student engagement, higher innovation levels, and greater entrepreneurial outcomes—further illustrating the importance of robust technological ecosystems in educational effectiveness.

Overall, the discussion suggests that while digital technology has a demonstrable impact on business education outcomes, the extent of its influence depends on institutional readiness, curriculum design, and experiential learning opportunities. For business education programmes to fully achieve their entrepreneurial and innovative goals, universities must prioritize hands-on digital skill development, strengthen curriculum–industry collaboration, and ensure adequate infrastructural support to sustain a technology-driven learning environment.

Conclusion

The findings of this study have demonstrated that digital technology significantly contributes to the enhancement of entrepreneurial and innovative capacities among business education graduates. Respondents generally acknowledged that the integration of digital tools within the teaching and learning process improves understanding, fosters creativity, and encourages the development of entrepreneurial mindsets. However, the moderate mean scores obtained across key indicators suggest that this potential is yet to be fully realized, largely due to insufficient digital infrastructure, inadequate staff training, and limited opportunities for experiential or practice-based learning.

It can therefore be concluded that while universities are making commendable efforts to integrate digital technology into their business education curricula, these efforts remain fragmented and often theoretical rather than practical. The study supports earlier findings by (Ogunleye & Adediran, 2023), who noted that digital transformation within higher education in developing contexts is frequently hindered by weak policy implementation and resource constraints. Consequently, a more strategic and systematic approach is required to ensure that digital technology not only enhances academic delivery but also translates into tangible entrepreneurial competencies and innovative capacity among graduates.

To address these challenges, universities should prioritize curriculum reforms that embed practical digital entrepreneurship and innovation-focused modules. Faculty members require continuous professional development to enable them to effectively utilize emerging digital tools and platforms in instruction. Similarly, governments and institutional administrators must strengthen ICT infrastructure and provide adequate funding to sustain technology-driven teaching and learning. Stronger collaboration with industry partners is also essential, as this would expose students to real-world entrepreneurial experiences, digital business environments, and mentorship opportunities.

Ultimately, the effective integration of digital technology in business education should move beyond theoretical awareness to a practice-oriented framework that equips graduates with the competence to apply technology in solving real business problems. By aligning curriculum, policy, and infrastructure with the demands of the digital economy, universities can better prepare business education graduates to become innovative entrepreneurs and change agents capable of contributing meaningfully to national development and global competitiveness.

Recommendations

- i. The Lagos State University (Ojo) should revise the Business Education Curriculum to include compulsory courses in digital entrepreneurship, e-commerce, fintech, social media marketing, and basic software development. This will equip graduates with practical digital competencies required to identify, develop, and scale innovative business ideas in today's technology driven economy.
- ii. The Government bodies, private investors, alumni associations should also support and improved access to digital technology devices, affordable internet, and start-up funding for Business Education graduates. Easy access to these resources will encourage more graduates to transform their digital knowledge into the real sustainable and innovative businesses.

- iii. The University should create and strengthen a digital innovation hub that provides students and graduates with access to high-speed internet, computers, relevant software, and mentorship.
- iv. The university and relevant agencies should always organize periodic short courses, webinars, and certification programs in emerging digital skills such as artificial intelligence applications in business, data analytics, digital marketing, and online business management. This will enable graduates to stay current with technological trends.
- v. The university should encourage innovation-driven activities such as hackathons, business pitch competitions, technology fairs, and interdisciplinary projects that will help students and graduates develop creative thinking, problem-solving abilities, and confidence to turn digital ideas into viable entrepreneurial solutions.

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