Redesigning Business Education Curriculum: Harnessing Social and Technological Systems in the Digital Age

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Abstract
The research examined the contribution of social and technological systems to the curriculum development of business education programs in a digital context. The study employed a descriptive survey design comprised of 149 participants. The instrument for data collection was a self-designed questionnaire, structured on a 4-point Likert scale (Very High, High, Low, and Very Low), administered through Google Forms to reach the target audience. The researcher adopted Cronbach's Alpha to examine the internal consistency of the instrument, which yielded a reliability index of 0.85. Data analysis was done using descriptive statistics of t-test and Analysis of Variance (ANOVA). The

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hypotheses were tested at a significance level of 0.05. The results revealed that social systems, such as collaboration platforms and peer networks, alongside technological advancements like digital tools and online resources, significantly impact the design and development of business education curricula. The study emphasizes the need to integrate social and technological systems into the business education curriculum to foster digital literacy and entrepreneurial skills. It is recommended that institutions should continuously update their curricula to reflect technological innovations and social trends, ensuring that business education students are adequately prepared for the demands of the digital age.

Keywords: Business Education Curriculum, Digital Age, Social Systems, Technological Integration

Introduction

In recent times, technology has brought in unparalleled innovations within the global education system. These changes are impacting a wide range of stakeholders, including students, business educators, school administrators, parents, employers, and the broader society, who are now placing greater emphasis on the education sector that encompasses modern technology. Including digital tools in the educational system may no longer be sufficient; they must fully integrate into lesson preparation, assessment and delivery to students. Social and technology are now at the heart of 21st-century education, which is not only sharpening how they learning about the content but also the way students access information and display their comprehension. These transitions are now altering the classroom experiences, making teaching and learning more interactive, relevant, and flexible to real-world demands. Achieving this goal, it is imperative to review and re-access the curriculum to ensure that it meets the ensuring that it meets the emerging needs and societal expectations.

As technologies continue to transform how businesses operate, conventional business practices are gradually losing their effectiveness. However, the growing interconnectedness of the global market, which has shifted customer demands, and the rapid pace of technological advancement are continuously reshaping the dynamic and constantly changing business ecosystem. Responding effectively to the pace of today's business world requires a transformation of the curriculum of business education to be structured and developed in line with practical skills, digital literacy, and adaptability needed to succeed in an increasingly tech-driven global economy. The persistent advancement of business education as a program has significantly influenced the need to equip the recipient with corporate world skills required for technological expertise, agility, and data-informed decision-making (Zahay et al., 2022). With the swift evolution of technologies such as blockchain, cloud computing, and big data analytics, businesses are continually adapting to a shifting and unpredictable environment to keep students competitive, educators in business must also refresh their teaching strategies to incorporate essential digital skills (Xu & Loang, 2024).

Sujon & Dyer, (2020) postulated that to effectively meet the needs of both individuals and societies, business education curriculum be restructured to reflect current social dynamics and technological advancement, to ensure that the content remains responsive and relevant to the evolving academic and economic expectations with the community, higher institutions in Nigeria must offer quality training to equips students with the

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skills and knowledge essential for real-world applications. To achieve this goal, it is imperative to continuously review the curriculum, ensuring that it aligns with societal expectations. Such curriculum updates should integrate social and technological components that can impart the necessary skills to learners, enhancing their employability and relevance in the constantly evolving business landscape.

The business landscape has undergone substantial changes with the integration of physical, digital, and biological technologies (Kaggawa et.al, 2024). To remain effective, aspiring business leaders and educators must enhance their technological and analytical skills. The rapid shifts in social and technological trends are prompting crucial updates to business education curricula, which require moving away from traditional teaching practices. This holistic approach will better prepare graduates to succeed in the fast-paced digital economy, where acquiring skills to navigate a more interconnected business environment is essential. However, these technical competencies should be at the core of business education programs instead of being treated as optional extras (Ayinla, 2024).

Social media and online networks are growing in importance, influencing how companies function and engage with their customers. Platforms like Instagram, WhatsApp, Facebook, and LinkedIn have significantly altered how businesses relate to their audiences, market their brands, and manage public relations. Nigeria's education sector is under significant pressure to adapt to the rapidly changing landscape of the fourth industrial revolution as it works to enhance its position in the global economy (Seyi & Abiola, 2022). Technology such as blockchain, machine learning, artificial intelligence, and big data analytics has evolved considerably in this modern day, and as a consequence, there is an increasing demand for curricula that not only address traditional business principles but also prepare students to deal with this changing environment. Etoma et al. (2025) emphasize the significance of Artificial intelligence in enhancing predictive analytics and decision making, emphasizing the necessity for a new set of entrepreneurs to become acquainted with these advances in technology.

Due to the ongoing changes in society and the global landscape, it is essential to revamp curriculum content to reflect these necessary adjustments. Such changes have introduced social and emerging technologies into education, expanding the scope of business education programs. The curriculum should be crafted to prepare individuals to be responsible citizens who can contribute positively to society, organizations, and communities. Quality programs must adapt their curricula to keep pace with technological advancements in business and the evolving demands of the job market. The content must incorporate both practical and theoretical knowledge that is vital for achieving specific job goals. Students should be equipped with strong communication skills, small business management capabilities, and a thorough understanding of the political, social, and economic context.

These advancements have enhanced the quality of the business education curriculum, aligning it with societal needs. Khoza (2024) noted that as social and technological changes occur, new job opportunities arise. He emphasized that these emerging roles require ongoing training and skill development to help individuals meet the challenges posed by rapidly changing requirements. Consequently, the curriculum needs to evolve swiftly, incorporating social and new technologies into educational settings. By mastering these skills, business education students will be better equipped to develop

effective business strategies and put them into action. As AI is transforming decision-making processes within companies, leading to greater efficiency and competitiveness. Business education programs that focus on AI will empower students to make data-driven decisions, automate routine tasks, and utilize predictive analytics.

These skills are essential for thriving in a tech-driven work environment and for understanding how these technologies affect consumer behaviour and company culture (Umar, 2024). This will also assist the students in acquiring the needed skills to prevail in a competitive digital marketplace. By providing urgent feedback and hands-on participation, these technologies can enhance the learning experience and aid students in acquiring the necessary skills for success in a fast-paced educational and professional environment. Adam (2022) postulated that the growing recognition of online education platforms has expanded access to learning opportunities, allowing institutions to connect with a wider audience and create an adaptive learning ecosystem. As a result, business education programs can benefit from various digital tools, making the teaching process more engaging and interactive. This trend highlights the growing importance of data-driven decision-making in business, emphasizing the need for programs that incorporate data analytics and information management. Equipping students with these competencies is vital for preparing them to make well-informed decisions and effectively address the challenges of contemporary business landscapes (Akande, 2022).

By focusing on these areas, educational institutions in Nigeria can develop a new generation of business leaders who are prepared to navigate the complexities of the global marketplace. This effort should include nurturing an entrepreneurial mindset, fostering creative problem-solving, and encouraging teamwork through digital platforms. Moreover, business educators need to stay informed about the social transformations driven by technological advancements. Keeping an eye on new trends and tools that affect communication and business practices is crucial. The emergence of artificial intelligence and machine learning offers new pros and cons that need to be incorporated into the curriculum framework (Ayinla, 2024). By confronting this modern trend, business educators can better prepare their students to meet the fast-evolving requirements of the job market. This process will ultimately assist the students in cultivating the habit of flexibility and responsiveness needed to flourish in the global community.

Nigeria is a nation that showcases shared values and norms, where cross-functional teamwork is key in achieving success. Incorporating these standards into the business education curriculum would better prepare the students for the real-world obstacles they might face in the workplace while echoing the rich cultural patrimony of the country. As a significant number of Nigerian companies expand into global markets, there is an urgent need for training programs that embrace global business practices. The impact of global interconnectedness of social and technological systems has substantially shaped the need for enhancement of the business education curriculum that is suited for the digital age (Adam, 2022). Incorporating digital tools such as virtual learning environments, communication platforms, and data analytics into the curriculum is essential for enhancing the students' learning experience and developing critical skills. These tools foster interactivity, provide accessibility and flexibility, and ensure that

business education remains relevant to real-world demands. By preparing students for a collaborative work environment and instilling a mindset of lifelong learning.

Gaining an understanding of these technologies is essential for business education students as they prepare to enter the workforce (Hassan et al., 2023). By including AI and machine learning in their curricula, business education curricula would give their recipients a competitive edge in the job market. Additionally, the structure of the program is increasingly shaped by contemporary social and technological developments. To keep students equipped for the evolving business landscape, educational institutions should introduce them to emerging technologies like quantum computing, blockchain, and advanced communication systems of 5G and 6G. These efforts would also assist students in building essential skills in data literacy. This is particularly apparent as social media and digital technology continue to integrate into business practices. (Umar, 2024) further revealed that for business education programs to effectively address the needs of individuals and society, they must incorporate contemporary social trends and modern technology into their curriculum, thereby aligning with the academic and economic demands of the community.

Tertiary institutions in Nigeria that offer business education must ensure that the quality of training they provide equips students with the skills and knowledge essential for real-world applications. For tertiary institutions in Nigeria that offered business education programmes to deliver on their mandates, the quality of the training given to individuals passing through a course or the other should be such that can give adequate skills and information needed in the real-world sense. If business education should serve the purpose of providing the needs of the learners and the society, there should be continuous review of its curriculum in order to ensure that the quality of education provided is in line with societal demands.

This review of the curriculum will be to integrate new technologies that can help in passing the desired and required skills to the learner to make them/her employable and relevant in the ever-changing business environment. As the digital age continues to evolve, it is crucial for business education curricula to integrate these social and technological systems, ensuring that students are equipped with the competencies required to thrive in a rapidly changing environment. By embracing these advancements, business educators can foster a more engaging and relevant learning experience that aligns with the expectations of the contemporary labor force.

Statement of the problem

In many higher institutions today, business education program still follows a conventional blueprint, largely dependent on obsolete teaching techniques and instruction focused on theoretical framework, with insignificant importance on modern digital skills and practical technological integration. Even though the business environment around the world is rapidly transforming due to breakthroughs in digital technology, artificial intelligence, and altering societal patterns, many educational curricula continue to lack meaningful revision to align with these changes. This gap highlights objections about whether the students are truly being equipped to triumph in a modern economy that increasingly values creative thinking, adaptability, digital fluency, and the ability to manage multifaceted socio-technical systems.

Beyond that, the digital age has redefined how tasks, business, and communication dynamics are conducted, demanding that education stretches beyond basic business

principles to cover skills like digital platforms, data analysis, collaborative work via digital platforms, and social media influence. If business education programs fall short of adapting to these innovations in technology and evolving social dynamics, they will continue to graduate students who lack the required skills to effectively navigate and add value in today's technology-focused and socially intricate professional environments (Nwosu & Okolie, 2021). This requires an urgent need to explore how social and technological systems can guide the redesign of the business education curriculum, ensure it remains up-to-date, adaptable, and prepares students for future challenges. Investigating this problem is crucial not just for enhancing business education graduate job preparedness but also to redefine business education programs as a driving force in sustaining innovative progress and growth within the digital economy. This transformation is not just about keeping up; it's about preparing the next generation for success in a world that is constantly evolving.

Purpose of the Study

The main purpose of this research is to examine how the business education curriculum could be redesigned through social and technological systems in the current digital landscape. The study seeks to:

1. ascertain the extent to which social systems impact the design of business education curriculum in response to the modern digital context.
2. examine how technological systems influence the design of business education curriculum in today's digital age.

Research Questions

1. To what extent do social systems impact the design of business education curriculum in the digital age?
2. To what extent do technological systems influence the design of business education curricula in the current digital age?

Hypotheses

H_{01}: There is no significant difference in the mean rating of the respondents on the extent to which social systems influence the design of business education curriculum in the digital age.

H_{02}: There is no significant difference in the mean response of the respondents on the extent to which technological systems impact the design of business education curriculum in the digital landscape.

Methodology

A descriptive survey research design was utilized for the study population of 149 individuals comprising 86 business educators and 63 key stakeholders across affiliated higher education institutions in Kwara State, Nigeria. Given the manageable size of the respondents, the study employed a census sampling method. The data for the study were gathered through a structured questionnaire titled: Redesign Business Education curriculum through social and technological systems in the digital age (RBECSTSDA). The instrument was crafted to examine targeted components of the curriculum, especially as it related to current trends in digital innovation and distributed online through Google Forms. This approach allowed for efficient data collection and ensured easy access to the respondents. The questionnaire utilized a four-point Likert scale with response options ranging from Very High Extent, High Extent, Low Extent, and Very Low Extent.

To determine the reliability of the instrument, a Cronbach's Alpha was employed, yielding a reliability coefficient of 0.83. This value reflects a high degree of internal consistency, indicating that the instrument is effective and accurate in measuring the intended constructs relevant to the subject matter. Two experienced specialists in the field of test measurement and Business Education department, who are in the rank of senior lecturers in the Faculty of Education at Kwara State University, Nigeria, assessed the instrument for its content and face validity. Their evaluations confirmed that the instrument accurately represented the intended concepts. These experts reviewed the items for completeness, clarity, representativeness, and alignment with the study objectives. Based on their feedback, ambiguous items were reworded, and some were restructured to ensure precise measurement of the intended constructs. A pilot study involving 15 Business Educators from Osun State University, Osogbo, was also conducted. This preliminary phase was vital for refining the questionnaire to ensure clarity and relevance for the target audience.

The data collected were analyzed using descriptive statistics, along with t-tests, and ANOVA to identify patterns and relationships within the dataset. The hypothesis testing was done to validate assumptions and assess the significance level at 0.05, ensuring that the findings were statistically robust. Simple linear regression analysis was additionally performed to explore the relationships between different variables and to evaluate the impact of social and technological factors on curriculum development. When analyzing the results, a mean score of 2.50 or above was designated as Very High Extent (VHE) or High Extent (HE), whereas scores below 2.50 were labeled as Very Low Extent (VLE) or Low Extent (LE). This scoring framework facilitated a nuanced understanding of respondents' attitudes toward the incorporation of social and technological systems in business education curricula in the digital age.

Result

Table 1:

Analysis of variance (ANOVA) to assess the significance of difference in social systems on the design and development of business education Curricula in the contemporary digital age

	Sum of Squares	Df	Mean Square	F	Sig.
Social system	42.63	3	14.21		
Business educators	169.2	146	1.159	12.35	0.0001
Total	211.83	149			

The analysis of variance shown in Table 1 shows that there was no significant difference in the responses of respondents regarding the extent to which social systems affect the design and development of business education curricula in the contemporary digital age, with the p-value = 0.0001, F-value = 12.35. As a result, the null hypothesis was rejected due to the fact that the p-value was below 0.05. This outcome suggests that social systems significantly influence the development and design of business education programs in the contemporary digital era. Additionally, responses from various groups highlight that social media platforms have a notable impact.

Table 2:
One-way analysis of variance to determine the extent to which technological systems impact the redesign and development of business education curricula in the digital age

	Sum of Squares	Df	Mean Square	F	Sig.
Technology system	10.25	2	3.42		
Business educators	62.50	147	0.43	5.67	0.002
Total	72.75	149			

The statistical results from the analysis of variance in Table 2 revealed no significant differences in the responses of business educators and other stakeholders on the extent to which technology systems impact the development and design of business education curricula in the digital age: F (2, 147) = 5.67, p = 0.002. Thus, Hypothesis 2 was rejected. These results indicate that participants' average responses were consistent, suggesting that technology systems significantly influence the shaping of business education curricula in the digital era.

Discussion

The analysis of research question 1, along with the corresponding hypothesis test, revealed that social systems play a significant role in the redesign and development of business education curriculum in the current digital landscape. This implies that. The evident impact of social dynamics and technological advancements on the modification of business education curriculum underscores an essential responsibility of key actors in curriculum formulation, particularly curriculum planners, policy formulators, and academic instructors, to thoughtfully integrate contemporary digital innovations, interactive platforms, and shifting societal values into the educational framework. Farayola et al. (2023) observed that social media platforms have transformed the way information is disseminated, communication is conducted, and businesses engage with their customers, prompting a shift in how business education must adapt to meet these changes. The integration of social media into business education curricula helps students develop skills in digital marketing, online brand management, and consumer engagement, all of which are essential for thriving in today's interconnected marketplace.

Similarly, Atsu et al. (2021) emphasize that social media fosters collaborative learning environments, offering students the opportunity to engage in peer-to-peer interaction and develop critical thinking skills through real-time discussions and feedback mechanisms. Furthermore, Abaddi (2024) postulated that to assist students in adjusting to shifting business trends, enhance their digital literacy, and prepare them for a profession in a rapidly changing digital economy, the social media concept must be incorporated into business education curricula. Business education programs may fall short in equipping students with the practical skills needed in today's digital world if social and technological systems are not incorporated. Business education instructors

must thus recognize how social and technological structures influence business operations and update their courses to take into account these emerging tendencies in the digital era.

Research question 2, along with the corresponding hypothesis, shows no significant difference between the mean response of business educators and other stakeholders regarding the degree to which emerging technologies influence the design and development of business education curriculum in the digital age. The convergence view of business educators and other relevant actors in the curriculum formulation, industry stakeholders, and education policymakers indicates a strong readiness for collaborative action in updating the business education curriculum. This common ground shows a growing awareness of the crucial role that digital technologies play in shaping modern teaching and learning processes. With this agreement in place, it becomes more feasible to take collective steps toward reform, with fewer barriers to acceptance and execution. Such cooperation is vital for ensuring that curriculum revisions are timely, relevant, and aligned with the practical needs of a rapidly evolving digital society. This was supported by Kurtz (2022), who observed that emerging technology systems, such as cloud-based platforms, data analytics, and artificial intelligence, are changing the skill sets needed in today's business environment and calling for a change in the way business education curricula are designed.

Conclusion

In the digital age, business education curricula must incorporate both social and technological systems to stay relevant and impactful. Social systems, encompassing values, interpersonal skills, and ethics, call for curricula that prioritize collaboration, diversity, global awareness, and responsible leadership. These elements prepare students to manage complex, culturally diverse settings while maintaining ethical integrity. Meanwhile, technological advances provide personalized, scalable, and adaptable learning, allowing institutions to meet shifting industry and workforce needs. The expansion of online and hybrid learning demonstrates how technology broadens access to business education and supports continuous professional growth. For success in a fast-evolving global market, curriculum design must balance social insights with technological innovation, ensuring graduates possess the technical, ethical, and interpersonal skills necessary to thrive in the digital era.

Recommendations

1. Business education curricula should include modules that focus on global market dynamics, cross-cultural communication, and ethical leadership. This will ensure that students are equipped to operate effectively in diverse, multicultural business environments.

2. Institutions should invest in digital tools such as online learning management systems (LMS), virtual classrooms, and collaboration platforms. These technologies will facilitate blended and hybrid learning, making education more accessible and flexible for students.

3. Institutions should continuously update their curricula to reflect technological innovations and social trends, ensuring that students are adequately prepared for the demands of the digital age. Professional development for educators is also advised to support the effective implementation of these systems.

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