

## EMERGING ISSUES ON DIGITAL TRANSFORMATION IN BUSINESS EDUCATION PROGRAMMES AT SA'ADATU RIMI UNIVERSITY OF EDUCATION FOR SUSTAINABLE WORKFORCE DEVELOPMENT IN KANO STATE

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### Abstract

*This paper investigated the emerging issues of digital transformation in business education programmes at Sa'adatu Rimi University of education Kano for sustainable workforce development in Kano State. Two research objectives, research questions and hypotheses, respectively guided the study. The hypotheses were tested at 0.05 level of significance. A descriptive survey design was employed. The population was 1,066 business education students at SRUE during the 2022/2023 session. A sample of 474 (292 male, 182 female) was chosen. A structured questionnaire, validated by experts, collected data. Reliability was established through a pilot test, with Cronbach's Alpha yielding a 0.694 correlation coefficient. Regression analysis was used to analyze the data ( $p < 0.05$ ). Regression analysis was used to analyse the data at 0.05 level of significance. The findings of the study showed that sufficient digital resources and infrastructure play a significant role in effectively supporting digital learning in Business Education programmes. Since SRUE has sufficient digital resources and infrastructure readily available, the study concluded that this effectively supports digital learning in Business Education programmes and the integration of digital technology skills. This, in turn, has led to an increase in the development of a sustainable workforce in Kano State. It was recommended that the Business Education Department should prioritize upgrading internet connectivity, establishing well-equipped computer labs, and ensuring software licensing covers educational use.*

**Keyword:** Business Education Programmes, Emerging Issues, Digital Transformation, Sustainable Development.

### Introduction

Globally, businesses were operated manually before the advent of machines. The introduction of machines in businesses enhanced its operation from manual to combination of manual and machines. Presently, the advancement in technologies has further made business operations to be digitalized. According to Bloomberg (2018) Digitalization is the use of digital technologies to change a business model and provide new revenue and value-producing opportunities. It is the process of employing digital technologies and information to transform business operations". Also, Spacey (2020) defined digitalization as the process of transforming an organization business model, processes, data processing, marketing, communication etc using new possibilities offered by digital technologies. Digitalization is therefore, the use of computers and other information technologies to transform processes or roles that make up business operations. Digitalization has brought transformation in business operations. Annacone (2019) noted that the areas of digital transformation in business include business process - technologies offered business organizations new ways of carrying out business processes throughout the organizations like heads up display glasses to improve the quality of human inspection of airplanes in Airbus company, food ordering process, use of robotic process automation; business model – how value is delivered in business organizations like video distribution; domain – using new technologies to market products and services like Amazon that deals on online retailing;

and cultural/ organizational transformation – promoting a culture of innovation in an organization; and shifting company values to focus on customer – centricity.

In addition, Spacey (2020) outlined the following examples of digitalization: business models – transforming your products, services or the way you sell like using digital channels, digital products, digital services and E-commerce; processes – using information technology to improve productivity and process efficiency like process integration, productivity tools, systems and workflow; data – the acquisition, integration and use of data; cost reduction – reducing cost by using digital ways of doing things like self-service, E-procurement ; marketing – digital tools for marketing and sells; knowledge – capturing knowledge and using it efficiently with digital tools; and communication – using digital communication to improve communication such as meetings and external communication such as public relations. It can be concluded that the areas of digital transformation in business organizations include, business model, process, data processing like keyboarding, accounting etc, marketing, knowledge, communication, self-service, E-commerce, E-procurement, cultural/organizational transformation among others. The advantages of digital transformation in business organizations cannot be over-emphasized. Annacone (2019) explained that digital transformation lowers costs, reduces cycle times, increases quality, creates significant value, use of robots to carry out works that are dangerous to humans, creates significant opportunities for growth, reveals new businesses, provide opportunities to create new values, makes business growth cheap and efficient, creates new source of revenue, job-site activity coordination, remote equipment tracking, situational awareness, and supply chain optimization, promotes a culture of innovation. Moreover, Bloomberg (2018) noted that digitalization increases process efficiency, improves data transparency, boost business top line, creates more customer value. In addition, digitalization creates new and more employment opportunities in the technological sector, through supply of production materials, production, marketing of finished products, parts and accessories, installation, maintenance and servicing, software engineers. It promotes wider coverage in marketing through online marketing, increase the number of customer base, promotes effective and efficient communication both internally and externally, promotes quick, accurate and efficient processing of data, storage , retrieval and presentation, allows easy preparation of accounting information, creates good platform for business supervision and management, reduces fraud , increases profit through increased sales among others.

Digitalization being the transformation of the processes and roles in an organization through digital technologies, has created a situation where workers have to drop their manual tools and use computer controlled equipment and other digital technologies to carry out their duties. As a result, the acquisition of digital skills is imperative for individuals to operate successfully in a business either as the owner or part owner of the business or as a paid personnel. Moreover, business organizations must hire workers with the right digital skills to be able to meet up with the changing needs created by technological advancement in order to compete favourably with their counterparts globally together with meeting the needs of digital and non-digital customers for profit maximization and sustainability. Digitalization as a global phenomenon has resulted to the pursuit of the teaching and acquisition of digital skills in the educational systems of the countries of the world including Nigeria to produce graduates that are capable of participating effectively and efficiently in the digital organization of the country in particular and the world in general. Among the educational programmes in Nigeria that serves as means for teaching and acquisition of skills, Business education is not left out. Mahmoud (2020). Noted that business education is a training system that encourages the beneficiary to acquire skills that will enable him fit into the world of work digital skills that enables them fit into the world of work and improve sustainable workforce in a given an organisation of the achievement of its goals.

Zango (2020) defines business education as a programme of instruction which consists of two parts (1) Office education, a vocational programme of office careers through initial, refresher and upgrading education and (2) General business education a programme to provide students with information and competences which are needed by all in managing personal business affairs and in using the services of the business. Adeshina (2017) sees business education as a training system that encourage the beneficiary to acquire skills into the world of work. He further goes ahead that business education encompasses with attitude, knowledge and skills needed by all citizens in order to function effectively in managing their personal business and economic system. Bupo (2019) viewed that business education is a programme of study geared towards the acquisition of knowledge and skills needed in the world of work and in the educational spectrum. Furthermore, Ohada and Onuoha (2017) added that being a core aspect of general education, Business Education is that type of education that is predicated on equipping its target audience with distinctive skills, knowledge, aptitude and attitudes requisite for occupational competence in the areas of education and business.

Technology for business education is promoting individual learning and mobile learning, both teachers and students are benefiting from this new technology for education. Some of the barriers in education have been broken down by this new technology for education; students can learn from anywhere, teachers can easily reach their students from anywhere. Technology is helping to change education in a positive way; it is part of the modern world. New technology for business education is improving grades for students and it prepares them for the future. The integration of computers and communications offers unprecedented opportunities to the education systems with its capacity to integrate, enhance and interact with each other over a wide geographic distance in a meaningful way to achieve the learning objectives.

In order to clearly explain the concept of sustainable development, it is important to define, first the terms, “sustainable” and “development”. According to the Oxford Dictionary of English, sustain means to strengthen or support physically or mentally, cause to continue for an extended period or without interruption. On the other hand, it defined development as a specified state of growth or advancement. Therefore, putting the two meanings of sustainable and development together, sustainable development implies a continuous state of growth or advancement for an extended period. Sustainable development has also been defined as the development that meets the needs of me present without compromising the ability of future generations to meet their needs (Data Revolution World, 2020). It is important to emphasize here that sustainable development stems from the present to project the future. The desired result of sustainable development is a state of human living conditions in society and the use of resources to meet human needs while preserving the ability of future generations to meet their own needs. Sustainable development as described by Umezulike and Okoye (2013) is a state of having well balanced, steady and effective use of human, material and capital resources for total economic independence and development of a nation. They however maintained that suitable and sustainable development can only be achieved if government and economic policy makers should be transparent in their dealings.

Sustainable workforce is one where the work environment is caring and supports employee wellbeing. Employees are not seen as primarily resources that can be deployed (depleted) to serve employers economic ends. Their skills, talent and energies are not overused or overly depleted. They are neither faced with excessive workload nor with a relentless pace of work for weeks or years on end. During times of crisis (e.g., sickness, natural disasters) employees are given time to recover or seek the extra resources they need to be able to perform in the future. Sustainable workforce development are the practices that ensure a skilled and engaged workforce over time. It focuses on both the capabilities of the organization to adapt to change

and the well-being of employees (Gutu & Tanasa, 2023). Onnis, (2019) stressed that the personal aspects and development as enhanced by the companies; for this reason, the spirit of community where camaraderie is encouraged is an workforce environment was proved to be productive, while the active members feel responsible toward each other and develop maturity and competency within the field for providing the digital technologies that enhanced the students productivities (Murray, 2021).

### **Statement of the Problem**

Sa'adatu Rimi University of Education (SRUE) Kano, Nigeria, faces challenges in equipping graduates with the digital skills needed for a sustainable workforce in Kano State. This is due to emerging issues surrounding the integration of digital transformation into the university's Business Education programmes. Business Education programmes Sa'adatu Rimi University of Education not adequately cover the latest digital tools, technologies, and trends relevant to the Kano State business landscape, insufficient access to hardware, software, and other learning resources required for effective digital skills development and traditional teaching methods may not be suitable for fostering critical thinking, problem-solving, and innovation in a digital environment. These emerging issues create a disconnect between the skills graduates acquire through their Business Education programmes and the digital competencies demanded by the modern workforce. This skills gap hinders the ability of Kano State to develop a sustainable workforce capable of thriving in the digital age.

### **Objectives of the study**

The major objective of this study is to investigate the emerging issues of digital transformation in business education programmes at Sa'adatu Rimi University of education Kano for sustainable workforce development in Kano State. Specifically, the study tends to:

1. Evaluate the adequacy of the availability of digital resources and infrastructure to support effective digital learning business education programmes at Sa'adatu Rimi University of Education for sustainable workforce development.
2. Evaluate the relevance of integrating digital technology skills into business education programmes at Sa'adatu Rimi University of Education for sustainable workforce development.

### **Research Questions**

The following research questions guided the study:

1. To what extent are digital resources and infrastructure available at Sa'adatu Rimi University of Education to support effective digital learning in Business Education programmes for sustainable workforce development?
2. How relevant is the integration of digital technology skills in Business Education programmes at Sa'adatu Rimi University of Education for sustainable workforce development in Kano State?

### **Hypotheses**

1. There are sufficient digital resources and infrastructure readily available at SRUE to effectively support digital learning in Business Education programmes.
2. The integration of digital technology skills in Business Education programmes at SRUE has no significant impact on the development of a sustainable workforce in Kano State.

### **Methods**

Descriptive survey research design was adopted for the study. This research design is deemed appropriate because the researcher sought to test the relationship between the variables under investigation. The population of the study was one thousand and sixty-six of Business education

students of Sa'adatu Rimi University of Education, Kano State during the 2022/2023 academic session. Sample size of 474 (Male 292 & Female 182) students were selected using research advisor's table. The instrument used to collect data for this study is the structured questionnaire developed by the researcher. The instrument was vetted by three experts in the field of business education. The reliability of the instrument was established using pilot-test and calculation of data using Cronbach method yielded correlation coefficient of 0.694. Regression analysis was used to analyse the data at 0.05 level of significance. Mean rating was used to answer the two research questions while regression analysis statistics at 0.05 level of significance was used to test the null hypotheses.

## **Results**

### **Research Question 1**

To what extent are digital resources and infrastructure available at Sa'adatu Rimi University of Education to support effective digital learning in Business Education programmes for sustainable workforce development?

**Table 1: Mean Score of Respondents on Digital Resources and Infrastructure Available at Sa'adatu Rimi University of Education to Support Effective Digital Learning in Business Education Programmes for Sustainable Workforce Development.**

| S/N                    | Items                                                                                                                                  | Mean | SD   | Remark |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------|------|------|--------|
| 1                      | The university provides adequate access to computers with up-to-date software for students in the Business Education program.          | 2.86 | 0.46 | Agreed |
| 2                      | The Business Education program has sufficient software licenses for students to complete required coursework.                          | 2.89 | 0.48 | Agreed |
| 3                      | There are a reliable and consistent internet connection available in classrooms and computer labs used by Business Education students. | 2.96 | 0.56 | Agreed |
| 4                      | The university offers training workshops or programmes to help Business Education students develop their digital literacy skills.      | 2.96 | 0.56 | Agreed |
| 5                      | The number of computers available in computer labs is sufficient to accommodate all Business Education students.                       | 2.94 | 0.57 | Agreed |
| <b>Cumulative mean</b> |                                                                                                                                        | 2.92 | 0.52 | Agreed |

Source: Field survey, 2024

The data presented in Table 1 shows that the respondents agreed with all items on the availability of digital resources and infrastructure at Sa'adatu Rimi University of Education to support effective digital learning in Business Education programmes for sustainable workforce development. Means, ranging from 2.80 to 3.52, and standard deviations, ranging from 0.48 to 0.57, indicate agreement on all items.

### **Research Question 2**

How relevant is the integration of digital technology skills in Business Education programmes at Sa'adatu Rimi University of Education for sustainable workforce development in Kano State?

**Table 2: Mean score of Respondents on Integration of Digital Technology Skills in Business Education Programmes at Sa'adatu Rimi University of Education for Sustainable Workforce Development in Kano State.**

| S/N                    | Items                                                                                                                                                                         | Mean        | SD          | Remark        |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|---------------|
| 1                      | Integrating digital technology skills into the Business Education program helps students develop critical thinking and problem-solving skills needed in the modern workplace. | 3.52        | 0.52        | Agreed        |
| 2                      | The digital technology skills taught in the Business Education program are relevant to the current needs of businesses in Kano State.                                         | 2.80        | 0.57        | Agreed        |
| 3                      | By learning digital technology skills, students are better prepared to adapt to the changing demands of the job market.                                                       | 2.92        | 0.50        | Agreed        |
| 4                      | The Business Education program equips students with the necessary digital skills to be competitive for jobs in the digital economy.                                           | 2.92        | 0.48        | Agreed        |
| 5                      | Integrating digital technology skills into the Business Education program positively contributes to the overall quality of the program.                                       | 3.04        | 0.51        | Agreed        |
| <b>Cumulative mean</b> |                                                                                                                                                                               | <b>3.52</b> | <b>0.52</b> | <b>Agreed</b> |

Source: Field survey, 2024

The data presented in Table 2 shows that the respondents agreed with all items on the integration of digital technology skills in Business Education programmes at Sa'adatu Rimi University of Education for sustainable workforce development in Kano State. The means, ranging from 2.80 to 3.52, and standard deviations, ranging from 0.48 to 0.57, indicate agreement on all items.

**Hypotheses**

**Null Hypothesis One:** There are no sufficient digital resources and infrastructure readily available at SRUE to effectively support digital learning in Business Education programmes.

**Table 3: Regression Analysis on significant influence of Sufficient Digital Resources and Infrastructure readily Available at SRUE to Effectively Support Digital Learning in Business Education Programmes.**

| Summary Model                         | B     | Standard Error | T     | Rical | R <sup>2</sup> | Adjusted R | Sig   |
|---------------------------------------|-------|----------------|-------|-------|----------------|------------|-------|
| 1 (Constant)                          | 1.439 | 0.166          | 8.654 | 0.455 | 0.207          | 0.204      | 0.000 |
| Digital resources and infrastructures | 0.468 | 0.056          | 8.355 |       |                |            |       |

Source: Field survey, 2024

P&lt;.05

The result from the Regression Analysis presented in table 3 revealed a constant Beta value (sufficient digital resources and infrastructure readily available at SRUE) of 1.439 with a t-value of 8.654 against the coefficient value of 0.468 (effectively support digital learning in Business Education programmes). The  $r^2$  value was 0.207 and adjusted  $r^2$  of 0.204 with a p-value of 0.000. This translates to a 20.7% variance ( $r^2 = 0.207$ ) in effectively supporting digital learning in Business Education programmes when sufficient digital resources and infrastructure are readily available at SRUE. This implies that there is sufficient digital resources and infrastructure play a significant role effectively in supporting digital learning in Business

Education programmes. Hence, the null hypothesis was rejected based on the p-value which is less than alpha level of significance.

**Null Hypothesis Two:** The integration of digital technology skills in Business Education programmes at SRUE has no significant impact on the development of a sustainable workforce in Kano State.

**Table 4: Regression Analysis on significant Impact of Integration of Digital Technology Skills in Business Education Programmes at SRUE for the Development of a Sustainable Workforce in Kano State.**

| Summary Model             | B     | Standard Error | T      | Rical | R <sup>2</sup> | Adjusted R | Sig   |
|---------------------------|-------|----------------|--------|-------|----------------|------------|-------|
| 1 (Constant)              | 2.551 | 0.082          | 31.120 | 0.203 | 0.410          | 0.037      | 0.001 |
| Digital technology skills | 0.084 | 0.025          | 3.380  |       |                |            |       |

Source: Field survey, 2024

P<.05

The result from the Regression Analysis presented in Table 4 revealed a constant Beta value (integration of digital technology skills in Business Education programmes) of 2.551 with a t-value of 31.120 against the coefficient value of 0.084 (development of a sustainable workforce in Kano State). The  $r^2$  value was 0.410 and adjusted  $r^2$  of 0.203 with a p-value of 0.000. This translates to a 41% variance ( $r^2 = 0.410$ ) in the development of a sustainable workforce in Sa'adatu Rimi University of Education, Kano State with an increase in the integration of digital technology skills in Business Education programmes. This suggests that as the integration of digital technology skills increases, there is a positive impact on the development of a sustainable workforce in Sa'adatu Rimi University of Education, Kano State by 41%. This means that there is an integration of digital technology skills in Business Education programmes which has a significant influence on the development of a sustainable workforce at Sa'adatu Rimi University of Education, Kano State. Hence, the null hypothesis was rejected based on the p-value that is less than the alpha level of significance.

### Discussion of Findings

The findings of the study in Table 3 related to null hypothesis one revealed that there is sufficient digital resources and infrastructure play a significant role effectively in supporting digital learning in Business Education programmes at Sa'adatu Rimi University of Education, Kano State. This finding of this research backs with the findings of Bakare et al. (2018) who stresses that students supposed to be supplied with the accessible digital technologies in accordance with the features of the students, their cognitive potentials, interests, and prior experiences. In the same vein Onnis, (2019) stressed that the personal aspects and development as enhanced by the companies; for this reason, the spirit of community where camaraderie is encouraged is an workforce environment was proved to be productive, while the active members feel responsible toward each other and develop maturity and competency within the field for providing the digital technologies that enhanced the students productivities (Murray, 2021)

The findings of the study in Table 4 related to null hypothesis two revealed that there is an integration of digital technology skills in Business Education programmes that had a variance of 41% ( $r^2 = 0.410 \times 100$ ). This means that for any increase in the integration of digital technology skills in Business Education programmes, there was an increase in the development of a sustainable workforce in Saadatu Rimi University of Education Kano State by 41%. This implies that there is an integration of digital technology skills in Business Education

programmes which has a significant influence on the development of a sustainable workforce of students at Saadatu Rimi University of Education Kano State. This study is in line with the study of Drydakakis (2022), who found that digital training and the adoption of new technologies can be envisioned as a critical strategy of business competency that could determine the direction and sustainability of small and medium firms. This is in line the opinion of Mahmoud (2020) who the noted that business education is a training system that encourages the beneficiary to acquire digital skills that enables them fit into the world of work and improve sustainable workforce in a given an organisation of the achievement of its goals.

## Conclusion

Since SRUE has sufficient digital resources and infrastructure readily available, the study concluded that this effectively supports digital learning in Business Education programmes and the integration of digital technology skills. This, in turn, has led to an increase in the development of a sustainable workforce in Kano State,

## Recommendations

Based on the findings of the study, the researcher recommended that:

1. **The Business Education Department and Sa'adatu Rimi College of Education Management could collaborate with other universities, NGOs, or educational technology companies to develop online courses and access additional resources for their programmes.**
2. The Business Education Department should prioritize upgrading internet connectivity, establishing well-equipped computer labs, and ensuring software licensing covers educational use.
3. National or state governments could encourage college managements to research the digital skills most sought-after by regional businesses for their business graduates. This could involve analysing trends in job descriptions to identify in-demand skills like data analysis, social media marketing, and digital communication.
4. Partner with local businesses to offer internship or project-based learning opportunities that involve applying digital skills in real-world scenarios.

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