AJEMATES
African Journal of Educational Management, Teaching and Entrepreneurship Studies
VOL.13 (3), September-December, 2024 https://ajemates.org

WEB 2.0 TECHNOLOGY ADOPTION AND THE PERFORMANCE OF SMALL AND MEDIUM SCALE ENTERPRISES IN LAGOS STATE, NIGERIA

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ABSTRACT

The study examined Web 2.0 technology adoption and the performance of small and medium scale enterprises in Lagos state, Nigeria. It was guided by two research questions. A correlational research design was used. The population of the study comprised small and medium scale enterprises (SMES) in Lagos State, Southwest, Nigeria. A two-stage sampling consisting of simple random and stratified sampling techniques were adopted in selecting a total of 248 SMEs as sample size. Self-designed instrument tagged 'Small and Medium Scale Enterprises Performance and Adoption of Web 2.0 Technologies Questionnaire (SMESAW2TQ) was used for data collection with 0.96 as reliability coefficient. Descriptive and inferential statistics were used for answering and presenting research questions. The findings of the study revealed that increased brand awareness, boosted sales volume and outputs, enhanced customers services/relationship, revenue, affordable advertising price for the enterprises were among the contribution of web 2.0 technologies adoption towards improving small and medium scale enterprises performance. There was positive relationship between SMEs performance and Facebook utilization (r = 0.372, p <.05). SMEs need more training and engagement in adopting Web 2.0 technologies for products and services awareness in the form of advertising on their different sites.

Keywords: Small and Medium Scale Enterprises, Performance, Web 2.0

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Introduction

Currently, the world is global, any businesses wishing to remain in business and compete vividly must be ready to market its products and services online to create awareness and show case the usefulness. Such businesses must move towards the utilization of internet corridor such as Web 2.0 technologies create popularity of its products brand. Web 2.0 technologies are internet applications that speed up interactive information creation, sharing, and collaboration on the World Wide Web (www) (Melek *et al.*, 2023). Web 2.0 technologies are becoming a global concept that is used to support business activities; this is so because these technologies have the potential to create a more awareness to a product and services to the global word (Ayooluwa *et al.*, 2022). Kateri (2021) reiterated that of the viable gain of Web 2.0 technologies is that today firms are adopting it to create awareness of the services globally. This is making the business environment more dynamic than ever with new emerging technologies that are affecting the existing business models. These changes help in achieving good performance of SMEs regardless of their size, and the needs to deal with external environmental changes.

It has been said in various outlets that information and technological growth have necessitated organizations to seeks to adjustment to change in the way of doing businesses in order to experience sustainability in the market (Kaplan & Haenlein, 2022). Because, these changes have brought the need for the organization to go digital. Going digital, Stan (2023) said that this will enhanced organization to jump-up their sales outputs and customers relationship. Web 2.0 technologies are group of Internet based applications that were built on the ideological and technological foundations that allow the creation and exchange of user generated contents (Kaplan & Haenlein, 2022).

However, the use of Web 2.0 technologies such as Facebook has been utilized by enterprises in many ways; because it has been confirmed that this mechanism promotes what the company is doing, make their activities to go global and create value-chain in the form of cordial relationship between the industry and the customers (Guesalaga, 2016). Chaffy (2020) also argued that Web 2.0 technology such as Facebook and other social media sites have been adopted by company both small and large to engaged their clients to the extent that they function as engine for the increases in outputs sales in the market.

In most cases, small enterprises, employed greater numbers of employees in an

economy. For instance, in the United States, employer SMEs contribute 43% (The Organization for Economic Cooperation and Development (OECD), SMEs and Entrepreneurship outlook, 2019). In China, the second largest economy of the world, SMEs constitute an overwhelming majority of the enterprises in the country and are key to its economic development. Around 50 per cent of the nation's tax revenue and 60 per cent of China's gross domestic product (GDP) come from SMEs. In 2022, the total number of micro, small and medium-sized enterprises in China exceeded 52 million (China SMEs Policy Environment, 2023). According to the World Bank (2023), the role played by SMEs in the global economies cannot be overemphasis as this sector contributed immense benefits towards employment generation which leads to income growth and reduction in rate of poverty.

According to the Nigerian, Small and Medium Enterprises Development Agency (SMEDAN), SMEs in Nigeria account for more than 50% of industrial employment and contribute approximately 48% to the country's GDP (SMEDAN, 2023). These analyses seem to show that SMEs are very important sector in the economy, more reason every government of the nations are doing everything possible to sustain their performance. The portion SMEs contribution is meaningful as its enhance development of creative ideas to business development, employment creation that leads to income and revenue growth (Mahmudova & Kovacs, 2019). SMEs performance defined as the extent to which the target task of the enterprises was accomplished in comparison to the final output at the end of a business period (Yıldız *et al.,* 2020). SMEs performance can be described depending on the success level of the firms in fulfilling their objectives. On the enterprise level performance is a multi-dimensional concept which consists of integration of marketing, overall management, accounting, economics, sociology and psychology (Mahmudova & Kovacs, 2019). The growth of the firms can be evaluated from the view point of the reviewer, no matter if this is a customer's or shareholder's view point (Anning-Dorson, 2018). Along with this approach each industry has its own set of definitions for performance. The SMEs performance must be sustainable, so that they can remain in the business for wealth generation, employment creation and poverty reduction, however, for that to take place, SMEs need to make their goods and services known globally.

The performance of SMEs in Nigeria has been facing series of issues such as poor nature of infrastructure, multiple taxation, insecurity, multiple inflow of foreign goods,

attitudes of Nigerian towards locally made goods, poor electricity supply among others. These aforementioned issues seem to be playing significant role in low performance and early collapsed of SMEs in country. Personal observations by the authors indicated that some SMEs in Nigeria despite quality products brand, they never know how best or strategies to adopt towards creating local and global awareness of their products and services. Nigeria government and stakeholders in the sector have taken steps towards ensuring SMEs performance in country (establishment of Bank of Industry among others), despite that their performance still not encouraging and revealed that most of SMEs failed to celebrate their fifth-year birthday before collapse in Nigeria. This study was an attempt to examine the likely relationship as well as contribution of Web 2.0 technologies adoption in improving small and medium scale enterprises performance in Lagos State, Nigeria.

The following research question guided the study:

1. What are the contributions of Facebook utilization (web 2.0 technologies) towards improving small and medium scale enterprises performance?
2. Would there be any relationship between SMEs performance and Facebook utilization (web 2.0 technologies)?

The main objective of the study was to examine Web 2.0 technology adoption and the performance of small and medium scale enterprises in Lagos state, Nigeria. Specifically, the study sought to:

1. Examine contribution of Facebook utilization (web 2.0 technologies) towards improving small and medium scale enterprises performance;
2. Determine the relationship between SMEs performance and Facebook utilization (web 2.0 technologies).

Review of Related Literature

Small and Medium Scale Enterprises

Berger and Udell (2018) defined SMEs performance as the rate of the enterprises success in sales and turnover overtime. The authors also opined that SMEs performance represented their sustainability rate and turnover that guarantee profitability. SMEs performance encompasses organization that time to time recorded growth in output sales, reduction in cost and increases in employment creation ability. Oluwaremi *et al.*, (2016) see SMEs performance as those enterprises that have been in operation for more than a decade and such enterprises must has been making profit, expanding in plant, acquiring more hands in terms of

employment generation; while Bolton (2017) defined SMEs performance in terms of increases in share value price, increases in liquidity at hand, working expenses reduction and maintaining cordial customers relationship. In view of Bolton (2017), SMEs performance relates to the extent to which an enterprise increases the size and volume of its employees, ability to maintain customer relationship as well as sustainability nature in terms of profit making consistently.

Web 2.0 Technologies

Web 2.0 technologies or W2.0 tools make advantage of the online platform, which consists of several websites and apps that allow people to exchange interests, ideas, and information (Padayachee & Moodley, 2018). According to Boyd and Ellison (2017), W2.0 technologies includes social network services, online and virtual communities, collaborative software, and e-communities. Millions of users' daily lives, both personal and professional, are now dominated by W2.0 technology. A relatively small part of W2.0 technology is Facebook. Facebook is a website that enables users to interact online with friends, co-workers, and strangers after creating a free profile (Virikus, 2018). Users may share their own ideas and views with as many people as they want, in addition to sharing images, movies, music, and articles (Tyagi, 2021).

Theoretical Review

Technology Acceptance Model (TAM)

TAM was originally postulated by Davis *et al.*, (1989). The theory focused on manner organization or employee can adopt to change of work in terms of new innovation and utilization for new inventions to foster the goal of the organization to success. TAM also indicated that organization or employee served as user of the new invention and the adoption of this technique could better improved goal achievement. The implications of this theory to the current study was that for enterprises in Nigeria to achieved their goal in form of sustainable performance, there is the need for them to engagement in new innovation that can made them drive their goal with lesser cost. Thus, the utilization of Web 2.0 technology among enterprise is a good welcome decision for the performance.

Empirical Review

In Tanzania, Nzoja *et al.*, (2023) examined the extent to which the usage of social media relates to SMEs performance. A total of 336 sample size of SMEs participated in the questionnaire administration of the study. The findings indicated that SMEs performance increases when adopted social media like Web 2.0 technologies. It was also found that the utilization of Web 2.0 technologies positively influences SMEs performance. In Nigeria, Ibrahim and

Mustapha (2019) examined factors that drove the performance of SMEs. However, their focus was on support from government. They utilized self-questionnaires to elicit data from a total of two hundred and forty SMEs. They found that Nigeria government support to SMEs was at low level. In Zambia, Sianjase and Libati (2016) determined how ICT tools influence SMEs performance. Researcher self-developed instrument through the use of Microsoft was used in collecting information for the study. These authors' findings indicated that information communication tools have been proven to influence SMEs performance in terms of reduction in expenditure, increases in sale-volume and quick delivery of service. In Kano state, Nigeria, Kateri (2021) focused how SMEs performance is influence by the usage of social media in the like of web 2.0 tools. The findings of the paper indicated that utilization of social media outlets influence performance of SMEs. It was also indicated that marketing expenses reduction, SMEs and customer relationship increases, more information based on marketing were among the extent to which social media outs influence SMEs performance in Kano metropolis.

Research Method

A descriptive type of correlational research design was used for the study. The population of the study comprised a total of 598 registered small and medium scale enterprises (SMES) in Lagos State, Southwest, Nigeria (Source: Lagos state Ministry of Commerce). A two-stage sampling consisting of simple random and stratified sampling techniques were adopted in selecting a total of 248 SMEs from the selected Lagos West and East Senatorial districts. However, 113 SMEs were selected from Lagos West Senatorial district and 135 from East Senatorial district. Self-designed instrument tagged 'Small and Medium Scale Enterprises Performance and Adoption of Web 2.0 Technologies Questionnaire (SMESAW2TQ) was used for data collection. SMESAW2TQ apportioned into 2 sections such as A and B. Section A focused on demographic characteristics of the respondents such as gender, highest qualifications and experience. While section B entailed the items on the SMEs performance and the contribution of web 2.0 technologies adoption towards improving small and medium scale enterprises performance. The questionnaire was based on 4 Likert scales such as Strongly Agreed (SA), Agreed (A), Strongly Disagreed (SD) and Disagreed (D).

Copies of the instrument SMESAW2TQ were given to an expert in the Department of Computer Science and Business Education for content corrections. After all the identified corrections have been made and

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corrected by the researchers, the final drafts were used to gather the required data for the study. Alpha Cronbach was adopted to get the reliability coefficient after the instruments were administered on SMEs operators in Port Harcourt, River State that are not part of the sample size within three weeks interval. The collected data from the exercises were subjected to Alpha Cronbach. The reliability estimate was reported as 0.96. This implied that the instrument (SMESAW2TQ) was reliable and can elicit required data for the study. A total of 248 copies of the questionnaires were administered and only 232 copies were retrieved and retrieval rate was 93.5% used for analysis. Descriptive and inferential statistics were used for answering and presenting research questions.

Data Analysis and Discussion of Findings

Results

Research Question 1: What are the contributions of Facebook utilization (web 2.0 technologies) towards improving small and medium scale enterprises performance?

Table 1: Descriptive statistics on the contribution of Facebook utilization (web 2.0 technologies) towards improving small and medium scale enterprises performance

Items	Mean	Remarks
Increased brand awareness	3.23	Agreed
Boosted sales volume and outputs	3.05	Agreed
Enhanced customers services and relationship	3.11	Agreed
Enhanced marking strategy	3.02	Agreed
Improved revenue for the enterprises	3.28	Agreed
Provide affordable advertising price for the enterprises	3.24	Agreed
Drastically reduction in cost of sales promotion	3.09	Agreed
Enhanced viable marking research	3.16	Agreed
Enhanced enterprises and customers engagement	3.13	Agreed
Promote direct contact with customers and loyalty	3.21	Agreed
Cluster Mean	3.15	Agreed

Source: Field Survey, 2024

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Figure 1: Bar-chart showing the contribution of Facebook utilization (web 2.0 technologies) towards improving small and medium scale enterprises performance

Table 1 revealed that cluster mean was 3.15 which found greater than 2.50 bench mark mean value of 2.50 (3.15 > 2.50). The implication of this result was that increased brand awareness, boosted sales volume and outputs, enhanced customers services/relationship, marking strategy, revenue for the enterprises, affordable advertising price for the enterprises, reduction in cost of sales promotion, viable marking research, customers engagement and promotion of direct contact with customers and loyalty were among the contribution of Facebook utilization (web 2.0 technologies) towards improving small and medium scale enterprises performance.

Research Question 2: Would there be any relationship between SMEs performance and Facebook utilization (web 2.0 technologies)?

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Table 2: Relationship between SMEs performance and Facebook utilization (web 2.0 technologies)

Variables	Mean	Std. Dev	df	r_{value}	p_{value}
SMEs performance	38.6616	3.93556			
Facebook utilization	32.1298	3.53233	246	.372	.0031

Source: Field Survey, 2024

Table 2 revealed that there was relationship between explanatory and dependent variables in the order of ($r = .372$, $p < .05$). Thus, the researchers concluded that there was positive relationship between SMEs performance and Facebook utilization (web 2.0 technologies adoption).

Discussion

The findings of the study revealed that increased brand awareness, boosted sales volume and outputs, enhanced customers services/relationship, marking strategy, revenue for the enterprises, affordable advertising price for the enterprises, reduction in cost of sales promotion, viable marking research, customers engagement and promotion of direct contact with customers and loyalty were among the contribution of Facebook utilization (web 2.0 technologies adoption) towards improving small and medium scale enterprises performance. There was positive relationship between SMEs performance and Facebook utilization (web 2.0 technologies adoption). This further implied that the adoption of Web 2.0 technologies tools by SMEs have tendency in enhancing the performance of SMEs. These findings were agreement with Kateri (2021) indicated that viable gain of Web 2.0 technologies is that today firms are adopting it to create awareness of the services globally. Sianjase and Libati (2016) that SMEs adoption of Web 2.0 technologies such as Facebook page, email and website have the most impact on costs/time reduction compared to sales/revenue increase.

Conclusion

The world all agreed that SMEs are the engine-block enterprises for achieving sustainable economic development through employment creation, wealth improvement and poverty reduction. The realization of these goals largely depends on the performance of SMEs. However, the following conclusions were made based on the findings of the study that increased brand awareness, boosted sales volume and outputs, enhanced customers services/relationship, marking strategy, revenue for the enterprises, affordable advertising price for the enterprises,

reduction in cost of sales promotion, viable marking research, customers engagement and promotion of direct contact with customers and loyalty were among the contribution of web 2.0 technologies adoption as measured by Facebook utilization towards improving small and medium scale enterprises performance.

Recommendations

Based on the findings of the study, the following recommendations are proposed:

1. SMEs need more training and engagement in adopting Web 2.0 technologies for products and services awareness in the form of advertising on their different sites.
2. Government and stakeholders in the sector should improve on cyber-security to safeguard the activities of SMEs on internet and brand image.

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