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Examining Students' Awareness of Digital Learning Management Tools for Digital Marketing Education in Higher Institutions

Madu, Jude E[†1]| Ahmed, HibatAlla Faisal[2]

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Abstract

There is high demand for marketing graduates because marketing is the engine that drives every economy. Unfortunately, many marketing graduates in Nigeria are unable to gain and retain employment for marketing-related functions because of weak knowledge of marketing education. The objective of this study is to examine the impact of learning management tools for executing marketing education in Nigeria universities. To realize this objective, the Descriptive research design was adopted. A structured questionnaire was administered through online Google Form to 87 respondents selected from a population of 112 students in the department of Business Management and Marketing of Baze University Abuja. Data obtained was analyzed with descriptive statistics. The findings reveal that: learning management tools such as Google Classroom streaming and Emails have very effective impact on marketing education, while Google Turnitin and classwork have low impact on marketing education; and environmental factors such as faulty devices, Network connectivity problems, attitude of students and Noise affect the execution of digital marketing education. The study recommends that higher institutions should emphasis more on the utilization of Google Classroom streaming and Google email interaction and ensure steady and cheap internet connectivity of digital education tools.

Introduction

The unique relevance of marketing to an individual or organization and even the economy is traceable to the unique roles of marketing. The roles of marketing are described as Bread-wining role; Gap-bridging role; and Economic-developmental roles (Madu and Handu, 2022). The breadwinning roles represents the role that the marketing department plays in an organization and even in an individual's life. Among all the major departments in an organization including the production or procurement, finance, or accounting; and

affiliation: [1,2]Department of Business Management & Marketing, Baze University, Abuja
emails: Jude.madu@bazeuniversity.edu.ng; Judemadu71@gmail.com; Hibafaisal84@gmail.com

† *corresponding author*

administration or human resources, marketing department ensures that the products of the organization are converted into cash through sales and remitted to the organization (Madu, 2010).

This cash or revenue generated by the marketing department is what the production or procurement department will depend on for purchase of raw materials and stocks needed for production and sales; the same revenue generated by the marketing department is what the finance or account will record and report to the management; and this same revenue presented by the marketing department is what the human resources and administration department utilize to remunerate all staff (Madu and Okoli, 2022). The gap-building role of marketing represents the ability of marketing to bridge the gap between the producer and market. This gaps can be in the nature of geographical gaps, which are bridged by marketing activities such as; retailing; wholesaling; transportation and personal selling; information gaps, which are bridged by marketing activities such as market research, advertising, sales promotion; personal selling, public relations, social media marketing and packaging; and ownership and utility gaps which are also bridged by marketing activities such as product assortments, grading, pricing, retailing and customer relationship management (Madu, 2022).

The economic developmental role of marketing represents the roles that marketing play which ensures the economic development of a state or nation. Marketing is the engine room that operates the economy of every nation through its economic-developmental role. The economic developmental roles performed by Marketing are: enhancing the optimum utilization of a nation's scarce resources by first identifying the need or market for such resources and then specifying how to realise optimum satisfaction; encouraging or attracting demand for products produced in an economy so as to realise full capacity utilization of existing industries and even attract new industries; developing the country's trade and merchant sector for growing the entrepreneurial and managerial sector; stimulating the accumulation of capitals needed for industrialization through merchandizing and auxiliary functions; creating of markets by linking less developed markets to the outside world; and providing Government with the needed capital to provide social welfare through taxes and other revenues generated by the Government from Companies and Organizations involved in Marketing activities (Madu, 2012).

The above roles of marketing means that marketing education is important and therefore should be thought adequately so that students at all levels studying marketing will learn marketing adequately to realize the purpose of marketing education. It is evident that for the past three decades of the inception of marketing education in Nigeria, many graduates and post graduate students have been produced by various higher institutions in Nigeria including Universities and Polytechnics (Madu & Amadi, 2023). Despite these thousands of marketing graduate produced, the essence of marketing education is still not yet realized because marketing activities are still being dominated by graduates of other disciplines (Madu, 2018). In addition, the Nigeria economy is almost at the point of collapsing because of dearth of marketing practice and non-enabling marketing environment. For these three decades, marketing education have been executed through the analogue or physical education (Teaching and learning) method. Given the digital revolution all over the world, which is currently applicable in the education system, there

is the need to implement the application of digital marketing education in higher institutions in Nigeria.

Digital marketing educations comprise of all activities involved in executing marketing education through digital means. It is also referred to as Online Marketing Education and E-learning (Madu and Amadi, 2023). Digital marketing education represents all activities that involves technologically mediated form of teaching and learning that utilizes hardware (such as personal computers, tablets, printers, smart boards, digital videos and overhead projectors), software (such as operating systems, cloud technologies, applications, writing, editing MS office), and online teaching aid (such as online books and journals, CD textbooks that are in the form of course ware), that are either utilized through the internet or face to face classroom interaction between the teacher and the students. Onyeukwu et al., (2022) state that Google software or tools for the actualization of the above digital marketing education functions include: Google classroom, class work meet, account, Gmail, drive, docs, sheets, slides, calendar, chat, forms, sites, contacts and furniture. For this study, the Google meet, Google classwork, Google mails and Google Turnitin have been considered for this study.

The objective of this study is to identify and recommend Digital Learning Management tools for digital marketing education that can be utilized by higher institutions in Nigeria for executing Digital marketing education. Other specific objectives of the study include to:

1. Identify the impact of Google classroom meeting and streaming on marketing education of students in higher institutions.
2. Examine the impact of Google classwork on marketing education of students in higher institutions.
3. Determine the impact of Google Turnitin on marketing education of students in higher institutions.
4. Discover the relevance of Google mails and interactions on marketing education of students in higher institutions.

Literature Review

Digital Marketing Education

Digital marketing education represents all activities that involves technologically mediated form of teaching and learning marketing that utilizes hardware (such as personal computers, tablets, printers, smart boards, digital videos and overhead projectors), software (such as operating systems, cloud technologies, applications, writing, editing MS office), and online teaching aids (such as online books and journals, CD textbooks that are in the form of course ware), that are either utilized through the internet or face to face classroom interaction between the teacher and the students (Marikyan and Papagiannidis, 2023). From the above definitions, Digital marketing educations means all activities involved in executing marketing education through digital means (Madu and Amadi, 2023). Many software and applications have been developed for education purpose. Dansaet.al (2023) reveal different digital tools that learners can utilize; these tools include:

i. Learning management systems. These are tools that encourage the management of educational courses. They are also referred to as virtual learning environment and they are mainly used for distance learning
ii. Video conferencing tools. These tools allow users (teachers and learners) who are geographically distant from each other to connect and interact through the internet. In addition to video calls, the tools are used to communicate with others through text messages or traditional voice calls screen sharing during video conferencing and content presentations.
iii. Digital exam assessment tools. They are used to create and assess digital exams. These can comein the form of multiple-choice questions or test for problem-solving.
iv. Data exchange and cloud system. They are used to secure the exchange of all types of data. In this system, data is not stored locally on hard drive device, but in logical pools.
v. Document collaboration tools. These enables several people to work on the same or different documents at the same time. The aim is normally to introduce a final version of a document or file together.
vi. Game-based learning tools: These tools summarize the popularity of video games to make learning interactive and motivating for learning in modern days. The tools combine learning content with game elements to achieve a didactic effect
vii. Digital library and data base tools. These tools are mainly used to store electronic media centrally on a data server. These store resources are always made accessible through the internet or through the institution's internet.
viii. Virtual and remote laboratory tools: This are tools mainly used to allow experiments to be carried out remotely. They are the translation of real-world equipment into the virtual world where experiments can be carried out and a computer simulation calculates the result of the experiment
ix. Digital whiteboard devices. These tools enable the users to transfer the familiar whiteboard used in classes into the digital world. They enable users write notes on a virtual whiteboard. This can be achieved through appropriate input devices such as computer mouse or pen, and pen touch-sensitive display
x. Digital notebooks: They are mainly used by teachers to record activities in classes, and to save assignments and their grades. It also enables users to view their timetable.

The use of all these tools has been made easy and possibly by Google software for learning purposes. From the authors experience, Google software or tools for the actualization of the above digital education functions include Google classroom, class work meet, account, Gmail, drive, docs, sheets, slides, calendar, chat, forms, sites, contacts and Turnitin. To this research effort, the Google meet, Google classwork, Google mails and Google Turnitin have been considered for this study (Onyeukwu et al., 2022). Google meet involves live streaming and classroom interactions through the digital means. The application is also used to send messages such as announcements and lecture slides and other lecture materials to the students and other participants in the class (Bosu, 2019). Google classwork is used to send questions such as examinations, assignments questions (Picciano, 2017) and other related assessment needs such as submission and grading of assessment materials.

Google Turnitin is used to test for plagiarism of the answers submitted by the students. It is used to proof the originality of submissions (Madu and Hibert, 2024).
Google mails are used to ensure easy interactions between lecturers and students or among lecturers involved in that class (Madu et al., 2024). These Google applications are presented in the conceptual framework shown in figure 1.1 below

Digital Learning
The international Bureau of education department of UNESCO, 2022 defines learning as a "process and influence for acquiring, enriching or modifying one's knowledge, skills, value, attitudes, behavior and word views. Learning has also been described as the process of attaining a change in behavior because of an experience (Jacob and Musa, 2020). The implication of the definitions of learning is that for learning to occur, two things must be observed (i) There must be the presence of a stimulus in the environment; and (ii) There must be the innate disposition such as emotional and instructional dispositions.

Manna and Kalan (2021) state that the presence of stimulus means a motive to learn marketing. This requires that the knowledge for marketing must be such that can contribute to the learner's economic emancipation (wealth). The inmate disposition like emotional and instructional dispositions represents the digital means of learning marketing and the environmental factors that impact on the ability of learning marketing education through digital means (Jurkowitsch et al., 2006). A combination of these situations establishes the three important elements of learning. These elements include that (i) Learning involves a behavioral change which can be good or bad, better or worse (ii) the said behavioral change must occur as a result of practice and experience and not changes as a result of maturity or growth; and (iii) The said behavioral change must be relatively permanent and must also last for a reasonably long time (Pacciano, 2017).

Digital learning is referred to as e-learning where the "e" represents electronics (Egielewa et al., 2022). From the definition above, digital learning has shifted the citadel of learning from traditional to middle drive, ICT-based customized, adaptable, and synergistic learning that attracts learners, instructors, facilities and specialists (Eze et.al, 2008). On his part, Richmond (1997) as sited in Eze et.al 2018 states that there is a connection between education programs and ICT which is driven through digital devices. The study also notes that there are three fundamental methods that technology can impact on learning. These ways are in the form of presentation, exhibition and execution of information utilizing efficiency devices; use of educational modules; and use of information and assets on CD-ROM, online references book, intuitive maps, chart books, electronic devices and different references (Kamba, 2009).

Environmental Factors that affect Digital Learning
Realizing digital marketing education through digital learning management tools is not devoid of the impact of environmental factors. Prominent among these environmental factors that affect the realization of the objectives of digital marketing education through digital learning management tools are students' attitude during teaching and learning, lecturers' attitude, network issues, unsteady electricity, cost of data, timetable for lectures and noise during digital education.

Theoretical Review and framework

Theories abound for digital education and learning. But for the purpose of this study. The Unified Theory of Acceptance and use of Technology (UTAUT) and the Theory of Cognitive Development have been reviewed and employed as Theoretical framework that underpin this study.

The Unified Theory of Acceptance and use of Technology (UTAUT)

This theory was made popular by Venkateshet al., (2003). This theory postulates that the acceptance of technology as a means of doing things in modern education is determined by four major factors. These factors include performance expectation, effort expectancy, social influence and facilitating conditions. Performance expectation means the level of an individual realize his/her expectation, social influence and facilitating conditions. Performance expectation means the level of an individual's believe that using the technology such as digital education will help the individual realize his/her expectation. Effort expectancy means the ease of usage of technology to enable the user to realize his/her expectation. Social influence describes the ability of an individual to see the importance of others as contributors to the use of the technology. While facilitating conditions means the ability of an individual to believe that an organization's technical infrastructure or resources exists to support the use of the technology (Marikyan and Papagiannidis, 2003). Explaining further, Bosu, 2023 states that the theory suggest that the use of digital means of teaching and learning is based on the importance attached to it, the roles it plays in teaching and learning abilities and the benefits that are attracted from it through the support of others and availability of technical resources in the higher institution. This theory is relevant to our study because it explains how to appreciate and attract the interest of participants in Digital Education.

The Theory of Cognitive Development

This theory was made popularly, Jean Piaget in 1919.This theory is one of theories of learning which deals with the nature of knowledge and how human beings strategically try to acquire, construct, and utilize it. By so doing, the theory postulates that students at different stages make mistakes because of the study and the quantity of their intelligence and the environment of learning. This means that internal thoughts and external factors are both important aspects of the cognitive process. Therefore, as students understand how their thinking impact their learning and behavior, they are able to have more control over it. The implication of this this theory to our study is that students should be exposed to pictorial demonstrations during lectures; all students involved in lectures through digital means must be engaged and made to participate in the discussion stages of the lecture. In subsequent lectures, student must be made to remember and rehearse what was discussed or learnt in the previous lectures as recapitulation before a new topic will commence.

This theory is relevant to our study because it explains how to capture student's attention during teaching and learning through digital means. This is better realized by recapitulating previous lectures before starting a new topic.

Empirical Review

In a study titled "The utilization of e-learning facilities in the educational delivery system of Nigeria: A study of M-Unversity; Ezeet;al, (2018) examined the adoption and

utilization of e-learning facilities by lecturers in Nigeria private territory institution. The study adopted the qualitative approach and employed structured interview with the academic staff. Data gathered was analyzed with the data driven Matic-approach. The study findings reveal that the university's facilities are adequate and accessible to users, and most teachers are comfortable with utilization of various facilities during classes compared to most public tertiary institutions; and that attitude of users, inadequate internet facility, and inadequate training of users affect the smooth adoption of the concept. Based on the findings; the study recommends the upgrading of e-learning facilities and continuous training of the staff to cope with the improvement of e-learning facilities. This study is relevant to our study because it emphasized the need for e-learning (digital teaching and learning) and identified the environmental factors that affect the success of utilization of digital education.

In a related study titled "Problems, Challenges and Benefits of implementing e-learning in Nigeria universities: An empirical study", carried out by Kambaa, (2009) examined the problems, challenge, and benefit of implementing e-learning in Nigeria universities. The study utilized questionnaire that was distributed to staff of eighteen selected universities in the country. The study findings reveal that awareness of e-learning is very high but the investment in the needed facilities is poor; most of the staff and student only use internet related e-learning site for the sake of information search and not for teaching and learning; most of the universities have web page and use it only for advertisement; there is lack of sufficient supply of electricity and lack of steady internet connectivity. Based on these findings, the study recommends that there is need for the government to develop the needed infrastructure with good degree of internet connectivity. This study is relevant to our study because it succinctly identified the problem militating against the implementation of digital education in Nigeria and the probable solutions.

In a study titled "Covid-19 and digitalized education: Analysis of online learning in Nigeria Higher Education" carried out by Egielewa et al, (2021) investigated the perception of Nigeria students in institutions of higher learning using the new digital culture induced by the Covid-19 pandemic. The study utilized the quantitative survey methods and distributed questionnaire to 1134 students selected from universities, polytechnic and colleges of education. The study findings reveal that students are not satisfied with the nature of virtual learning introduced by many higher institutions during the covid-19 lockdown period. This was due to poor internet infrastructure and lack of electricity. Based on these findings, the study recommends that Nigeria should engage students more interactively through videos discussions and spend more money and time on online learning activities. This study is relevant to our study because it also identified the factors that discourages the adoption of digital learning and also the possible solutions.

In a related study, Onyeukwu et al., (2022) conducted a study titled "Teaching and Learning in Post-COVID-19 Era: An Evaluation of Digital Transformation Experience". The study aimed at ascertaining how digital technologies have impacted teaching and learning capabilities in private universities post COVID-19 experience. The study adopted a descriptive research design and obtained the response of 229 lecturers from private universities in Abuja through a structured questionnaire. Findings from the study reveals

that learning capabilities measured through content assimilation and skill acquisition is a function of Zoom teaching and learning; Google meet and Classroom teaching and learning; and Social Media teaching and learning modes. Based on the findings, the study recommends that private universities should: utilize a combination of virtual and physical teaching and learning methods; motivate lecturers to develop the culture of online teaching and learning; provide the needed technical apparatus for online teaching and learning; and carryout constant training for lecturers on how to use digital tools for teaching and learning. This study is relevant to our study because it exposed the need for the utilization of digital education in the universities to avert circumstances such as COVID-19 pandemic and its devastating circumstances.

Methodology

To realize the objectives of this study, the Descriptive research design was adopted. By so doing, a structured questionnaire was administered through online Google Form to 87 respondents selected convenient sampling method from a population of 112 students in the department of Business Management and Marketing of Baze University Abuja. The categories of students accessed include Ph.D students, M.Sc, MBA and PGD students, and undergraduate students in three hundred and four hundred levels. The questions were based on their awareness and familiarity with the use of digital learning management tools including Google Meet, Google Classroom, Google Turnitin and Google mails. The questions were also used to elicit the respondent's opinion on the effectiveness of these digital learning management tools. A Likert scale with five levels of intensity was used to evaluate the data collected from the field. The levels of intensity were as follows: (VHE) Very High Extent (5), (HE) High Extent (4), (ME) Moderate Extent (3), (LE) Low Extent (2), and (VLE) Very Low Extent (1). Decisions were made based on responses with highest percentage with 50% as benchmark.

The validity test of the research instrument was executed by distributing ten copies of the questionnaire to ten students in a three hundred level marketing promotions class. The reliability test was executed with the Cronbach Alpha and the items are all reliable. Thereafter, all the 87 copies of the questionnaire produced for the study were distributed. The students were accessed through their university email addresses. 74 (85%) copies of the questionnaire were properly filled and returned and were subsequently analyzed with descriptive statistics. Concepts and published articles relevant to the variables that form the study topic were reviewed. The Unified Theory of Acceptance and use of Technology (UTAUT) and the Theory of Cognitive Development were reviewed and adopted as the theoretical framework for this study.

Results

Table 1 showing Questionnaire Distribution

Number of Questionnaire Distributed	Number of Questionnaires Retrieved	Number of questionnaires used	Percentage of Questionnaire used
87	74	74	85.0

Source: Researchers effort, 2024

Table 4 above shows that out of 87 copies of questionnaire distributed, 74 copies representing 74% were properly filled and retrieved. Therefore, the analysis for this study was based on the opinion of these 74 respondents.

Table 2 showing Age of respondents

S/No	Option	Response	Percentage
1	Less than 18 year	0	0.0
2	18-25 years	49	66.7
3	26-35 years	0	0.0
4	36-45 years	0	0.0
5	46-55 years	25	33.3
6	56 and above	0	0.0
	Total		100.0

Source: Researchers effort, 2024

The result of the data analysis in table 2 above shows that 33.3% of the respondents are between the ages of 46-55 years, while 66.7% are between the ages of 18-25 years. This means that majority of the respondents are within the youthful ages who are still very eager to utilize the internet through the digital means.

Table 3 showing category of students

S/No	Options	Response	Percentage
1	Postgraduate	25	33.3
2	Undergraduate	25	33.3
3	Researcher (Ph.D.)	25	33.3
	Total	74	100.0

Source: Researchers effort, 2024

On the category of students of the respondents, 33.3% are postgraduates; another 33.3% are undergraduates, while another 33.3% are researcher. This shows that students at all levels and even researchers who are mostly academics and non-academic staff of universities need digital education means for their job responsibilities.

Table 4 showing Years of Experience in the University system

S/No	Options	Response	Percentage
1	Less than one year	0	0.0
2	1-5 years	49	66.7
3	6-10 years	25	33.3
	Total	74	100

Source: Researchers effort, 2024.

On the number of years of experience of the respondents as students in higher institutions, 33.3% have 10 years' experience, while 66.7 % have 1-5% years' experience. This means that that the respondents are familiar with the environment of higher institutions and can explain their need for digital education.

Table 5 showing Familiarity with Digital Learning Management Tools

S/No	Options	Response	Percentage
1	Google Classroom Streaming	49	66.7
2	Google Classwork	0	0.0
3	Google Turnitin	0	0.0
	Google Mail	0	0.0

Source: Researchers effort, 2024.

On the digital learning platforms that the respondents are familiar with in the higher institutions they attended, 33.3% are familiar with Google mails and interactions, while 66.7% are only familiar with Google classroom streaming. This means that higher institutions mainly utilize Google classroom streaming for lectures and Google mail and interactions. The respondents are not familiar with, or do not utilize Google classwork and Turnitin.

Table 6 showing Effectiveness of Google classroom streaming digital learning management tool

S/No	Options	Response	Percentage
1	Very effective	0	0.0
2	Effective	49	66.7
3	Undecided	25	33.3
4	Ineffective	0	0.0
5	Ineffective	0	0.0
6	Very ineffective	0	0.0
	Total	74	100.0

Source: Researchers effort, 2024.

On effectiveness of Google classroom streaming digital learning management tool, 66.7% of the respondents claim it is effective, while 33.3% are undecided. This means that the effectiveness of other Google Classroom for learning is mostly utilized because it is effective.

Table 7 showing Effectiveness of Google classwork digital learning management tool

S/No	Options	Response	Percentage
1	Very effective	0	0.0
2	Effective	49	66.7
3	Undecided	25	33.3
4	Ineffective	0	0.0
5	Ineffective	0	0.0
6	Very ineffective	0	0.0
	Total	74	100.0

Source: Researchers effort, 2024.

On the effectiveness of Google classwork digital learning management tool, 66.7% of the respondents claim it is effective, while 33.3% are undecided. This means that the effectiveness of Google Classwork for learning is mostly not utilized and not effective.

Table 8 showing Effectiveness of Google Turnitin digital learning management tool

S/No	Options	Response	Percentage
1	Very effective	0	0.0
2	Effective	25	33.3
3	Undecided	25	33.3
4	Ineffective	25	33.3
5	Ineffective	0	0.0
6	Very ineffective	0	0.0
	Total	74	100.0

Source: Researchers effort, 2024.

On Effectiveness of Google Turnitin digital learning management tool, 33.3% of the respondents claim it is effective, 33.3% claim it is not effective, while another 33.3% are undecided. This means that the effectiveness Google Turnitin for learning is mostly not utilized because it is not effective.

Table 9 showing Effectiveness of Google Email digital learning management tool

S/No	Options	Response	Percentage
1	Very effective	0	0.0
2	Effective	49	66.7
3	Undecided	25	33.3
4	Ineffective	0	0.0
5	Ineffective	0	0.0
6	Very ineffective	0	0.0
	Total	74	100.0

Source: Researchers effort, 2024

On Effectiveness of Google Email digital learning management tool, 66.7% of the respondents claim it is effective, while 33.3% are undecided. This means that the effectiveness of other Google email or learning is mostly utilized because it is effective.

Table 10 showing Environmental factors that affect usage of Digital learning management tools

S/No	Options	Response	Percentage
1	Attitude of Lecturers	25	33.3
2	Attitude of students	25	33.3
3	Network and connectivity problems	25	33.3
4	Cost of data	0	0.0
5	Unsteady electricity	0	0.0
6	Noise	0	0.0
	Total	74	100.0

Source: Researchers effort, 2024.

Result from Table 10 above shows that 33.3% of the respondents attribute Environmental factors that affect usage of Digital learning management tools attitude of lecturers, 33.3% indicated students' attitude, while 33.3% indicated Network and connectivity problems.

Conclusion and Recommendations

The findings above depict obvious facts that Digital Marketing Education through Google Classroom streaming or meet, and Google Mails and Interactions have more potentials for realizing learning for marketing education so as to achieve the needed content assimilation and skill acquisition that will transform to profitable marketing practice and economic growth of the individual, organization, state or nation. This is because, marketing practice is the engine that drives the economy of every individual, organization, state, or nation.

Recommendations

Based on the findings and conclusions, this study recommends as follows. First, higher institutions should emphasis more on the utilization of Google Classroom streaming or meet and Google email interaction for digital marketing education. Second, Higher institutions should create more awareness on the utilization of Google Classwork and Google Turnitin for digital marketing education. Third, government and relevant agencies should make adequate provisions to ensure steady and cheap internet connectivity and other relevant devices for digital marketing education. Fourth, government and relevant agencies should create adequate awareness to encourage the use of digital education tools for executing marketing education. Finally, teachers and students utilizing digital education tools should be given periodic training on how to use the digital instruments and how to avoid Noise.

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