Application of Zoom E-learning Management System in Business Education in Universities Nigeria

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Abstract

The study examined the application of the Zoom e-learning management system, in the context of Business Education in Nigerian universities. The study employed a descriptive survey design. The sample consisted of 801 lecturers. A questionnaire consisting of 39 items was utilized for data gathering. The instrument demonstrated face and content validity, with reliability indexes of 0.86, 0.91, and 0.84, respectively. The data analysis was conducted using the measures of statistical mean. The results indicated that the majority of participants expressed their preference for the Zoom management system as the primary method of instruction in university business education in this era of ICT worldwide dominance. Several obstacles have been identified that have impeded the complete integration of Zoom into teaching and learning in Nigerian universities. The challenges encompass insufficient infrastructure for Zoom utilization, exorbitant subscription fees, and insufficient digital proficiency among teachers and students. Consequently, the study recommended the necessity of the government for enhanced financing to provide the necessary equipment and readily available internet subscriptions in universities. School authorities are anticipated to establish the integration of the Zoom platform as a mandatory policy.

Keywords: Zoom E-learning Management System, Business Education, Universities, Nigeria

INTRODUCTION

From primordial times, man has always depended on information not only to educate the young ones but also to guard against environmental degradation. In contemporary times, the ICT prevalence and unprecedented internet network have greatly provoked man’s ingenuity. Options that had hitherto been considered not feasible have easily yielded themselves. According to Eze and Chinedu-Eze (2018), the ameliorating cost of accessing technologies has enabled establishments to make huge investments in ICT platforms with the intention of building a comparative advantage.

In the education setting, academics and other stakeholders are advancing from use of simple teaching aids into the dynamics of interactive learning environments. According to Al-Gahtani (2016), ICT is an agent of socio-economic change and a platform with much prospect for human creativity. Higher learning institutions in both developed and developing nations now embrace diverse online and technology oriented programmes. Hu & Hui (2012) opine that these ICT– based innovations have revolutionized the competitive landscape of tertiary institutions. This situation, according to these authors, has enhanced the dramatic evolution of teaching and learning from an easily depictable brick and mortar affair to a more complex phenomenon.

Greenberg & Zenetis (2012) observe that video has the highest patronage. Videos refer to recorded contents that have sound and motion which can be delivered live or stored (Woolfitt 2015). They have come to the point of utmost importance in education. They promote learning interest and scientific experimentation while, at the same time, helping learners relate their experience with content being taught. Benavot (2018) establishes that over half of higher institution students in developed countries are able to create video. Video with its streaming viability has gained reputation as a means for higher institutions to survive dwindling funds emanating from the current economic recession in many nations of the world.

The commonplace internet accessibility and technological advancements such as smart phones with digital cameras have also brought zoom into the limelight. Zoom platform is a video conferencing software that allows individuals meet and work with users, as it were, face-to-face when physical meeting with persons is not feasible. Meetings become more human as users stay connected and get any help they need (Baharu, 2020). The video

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conferencing capacity of zoom can provide conferencing solution for the challenges of one-on-one meeting, by being able to hold a class of many learners and instructors with ease. Zoom application is not only used for teaching and learning, it is very much applicable to interactions and chats, breakout rooms, polls, content sharing, white boarding and annotations (Akpomi & Anirah, 2022). The platform enables one initiate meetings, solicit students’ participation and share resources (Akpmi & Bupo, 2019).

Zoom application gives an instructor the opportunity of exploring the eclectic approach to pedagogy by involving many of the teaching methods that can only be used one at a time in face-to-face classroom environment (Betaineh, Atoum, Alsmadi & Shikhali, 2020). Instructors and students have the flexibility to alternate between several instructional approaches, including lectures, small group discussions, question and answer sessions, resource sharing, utilisation of whiteboards, and feedback. Instructors and students have the option to alternate between several instructional styles, such as lectures and small group discussions, question and answer, resources sharing, use of white board as well as use of feedback. Zoom brings online teaching and learning experience very close to what obtains in face-to-face learning (Ohiwerei & Ndem, 2022). Zoom technology has helped institutions of higher learning overseas in effective promotion of globalization strategies, thereby easily reaching out to a wider spectrum of students without regional barriers. Ayub, Tarmizi, Jaafar, Ali & Luan (2010) maintain that video streaming is sustainable because of its cost and time effectiveness.

Although numerous institutions are already exploring the use of zoom technology for different user services, Fasae and Adegilero-Iwari (2015) note that only a few are actively embracing the potential transformative impact that this advanced platform can have on user communities. With the increasing use of modern technology, higher educational institutions are now developing portals and websites to enhance accessibility. With the continuous advancement of technology, the zoom application has become increasingly popular due to its ubiquitous use and is gradually supplanting conventional methods of teaching and learning.

The emergence of the covid-19 epidemic, known for its deadly reputation, has significantly increased the usage of zoom technology in numerous countries worldwide. Zoom has continued to be highly effective for teaching, learning, and accessing online information and communication, even in the post-COVID-19 environment. The Zoom application is revolutionising global education, communication, entertainment, and decision-making processes.

Currently, zoom technology can operate intricate software that provides learners and instructors with a platform for sophisticated engagement. Additionally, it utilises novel hardware and cutting-edge technology, like the global positioning system. The utilisation of Zoom technology has greatly facilitated the ease and timeliness of virtual communication and access to information for learners, regardless of their location, be it their homes, offices, or while using their phones. The zoom platform provides significant versatility for both learners and instructors who wish to utilise e-learning, particularly during difficult periods (Erasmus, 2020). Learning can be made more convenient with a basic 3G or 4G connection. Zoom provides a substantial and important platform for individuals to express themselves and make academic contributions (Ohiwerei & Ndem (2022).

Okoro & Okoro (2009) argue that ICT, particularly zoom utilisation, is crucial for business education courses in higher institutions. Business education is a specialised curriculum aimed at cultivating the skills, expertise, and mindset necessary for achieving success in the professional realm. According to Alharbi & Drew (2014), they view it as a course that provides individuals with attitudes, practical skills, and values essential for successful operation in a commercial setting.

Business education refers to the educational process that focuses on the study and understanding of business principles and practices. Education training equips individuals with the necessary knowledge, abilities, and proficiency to achieve success in their work endeavours (Okoro, 2020). It could also be described as education for entrepreneurship i.e. to own and manage business effectively without failure (Okoro, 2021). Business education also provides the needed training for recipients to become competent consumers and wise spenders of resources as well as develop functional skills for the management of one’s own business (Ogbu & Amahi, 2022). Utilisation of zoom management system is therefore an apt tool. Alijarrah, Ababneh and Cavus (2021), ascertain that some tertiary institutions and universities successfully deploy this platform for lectures and easy collaboration.
Many other universities in Nigeria and other counties have followed suit in adopting zoom for seamless teaching and learning. However, considering the impromptu way the platform is adopted in universities and in the Business education programme, it becomes necessary to take a closer look at it with a view to ascertaining the inherent factors that could make it more successful and beneficial. It is therefore pertinent to look at the inherent features of the technology relating to deployment, accessibility, cost, challenges, implication to educational equity and sustainable development of education (Canvus, Sani, Haruna & Lawan 2021).

Statement of the Problem
The utilisation of the Zoom management system at universities worldwide is crucial for enhancing learning results (Roy, Ray, Saha & Ghosal, 2020). By utilising Zoom, universities may enhance the learning environment and hence provide a higher quality of service. Nevertheless, it is evident that numerous universities have not adopted electronic learning, including Zoom. As previously held, several universities have implemented zoom technology hurriedly, without conducting thorough test runs or trials, and without comprehending the intrinsic aspects that could contribute to the technology's success and benefits. The problem addressed in this paper is the utilisation of the Zoom Management System in the context of business education in Nigerian universities.

Purpose of the Study
To determine features of zoom.
To assess relevance of zoom.
To assess challenges of zoom.

RQs
What are the features of zoom?
What are the relevance of zoom?
What are the challenges of zoom?

Research/Study Significance
The study/research findings will be of benefit or advantageous to students, libraries, instructors/educators, government, and stakeholders.
The study will also help students develop zoom application skills.
It will stir librarians to seek best ways of making zoom accessible to library users.
It will sensitize instructors towards acquiring the necessary zoom application skills.

REVIEW OF RELATED LITERATURE
Awareness of Zoom Technology
Mahamat and Rahim (2012) assert that the widespread acceptance of ICT has positioned the zoom platform as a key driver of learning. Furthermore, the modern world of the 21st century heavily relies on electronic technology, and the use of Zoom is highly valued from this perspective (Oye, Mahamat, & Rahim, 2012). The advent of virtual technology has brought about substantial transformations in all domains of existence. Research has demonstrated that in the current era of abundant information, relying just on face-to-face lectures is insufficient for cultivating students' requisite global awareness (Febrianto, Mas’Udhah & Megasari, 2020). It is necessary to investigate innovative approaches that align with the varied expectations of students and to inspire learners to develop proficiency and knowledge in emerging technologies. Nevertheless, due to some obstacles in the procedure, instructors do not prioritise the use of the Zoom platform. The issues encompass insufficient deployment of ICT, particularly in the context of overcrowded classrooms, inadequate training, insufficient learning support resources, and undue pressure on lecturers to enhance research output (Oye, Mahamat, & Rahim, 2012).
The level of familiarity with zoom technology among university students will significantly influence Nigeria's potential to cultivate a greater number of self-directed learners who possess problem-solving skills and may make constructive contributions towards enhancing practices in Nigeria and other countries globally. A significant number of university students possess mobile phones and other digital gadgets that have the capability to access the Internet. Additionally, a considerable portion of these students have access to laptops that are also Internet-enabled. According to Prensky (2011), a significant number of individuals from the current generation has sufficient proficiency in managing information technologies. The question at hand is whether they effectively utilise digital capabilities to get educational advantages. However, it is challenging to determine this due to the little empirical information primarily derived from industrialised countries such as the Australia, Germany, USA, China, Britain and so on.

According to Haqien & Rahman (2020), the zoom application relies heavily on technological devices and a well-functioning library system, particularly one that offers online resources accessible to users worldwide. In the majority of underdeveloped nations, education is primarily conducted through traditional methods, such as in-person instruction. Therefore, the integration of zoom technology would necessitate a specific adjustment in behaviour for both students and educators in order to effectively utilise it. This becomes increasingly significant as not all lecturers and students possess expertise in the zoom application. Therefore, the way students and facilitators view the resources available on Zoom may promote their acceptance and use as a valuable supplementary learning approach (Haqien & Rahman, 2020).

In recent times, numerous global research undertaken on the subject of zoom management system. However, there is a dearth of research specifically focusing on the perception and preparedness of business education students in Nigeria towards zoom technology.

**Effect of Zoom for Classroom Instruction**

utilising zoom for instruction, as asserted by Julius, Patric, Robert & Simeon (2021), offers several advantages. It helps in reducing costs, alleviating overcrowding in workshops, mitigating travel risks, allowing learning from the comfort of one's home, and providing a chance for everyone without the need for institutional funding. Participating in virtual seminars from home offers both financial savings and mitigates the potential hazards associated with commuting.

In their research, Ogwunte et al (2020) explored the impact of Zoom on classroom instructional. The findings indicate that Zoom provided teachers with the ability to engage in instantaneous communication with students situated in various locations, utilising computers and mobile phones. It also allows for the secure recording and storage of sessions without relying on other software. Additionally, It allows for the development of personalised user authentication, immediate encoding of meetings, and the capability to save recordings on an internet server network. Furthermore, Zoom Cloud technology facilitates synchronous connection with students through video and audio, screen sharing, and the ability for students to collaborate in groups. The survey additionally indicated that WhatsApp provides educators with a means to establish communication with their pupils, exchange ideas, share images, messages, and relevant information.

**Benefits of Utilising Zoom for Classroom Instruction**

People favour online technology for improved communication and educational outcomes, as it offers positive and constructive results (Ohiwerei & Ndém, 2022). There are other online learning tools available, but researchers favour Zoom as a substitute for in-person meetings due to its easily accessible video conferencing feature for students and instructors ((Fitriyani, Febriyeni & Kamsi, 2020). Zoom Meetings is an extremely useful alternative tool for remote meetings, allowing communication or interaction with several individuals beyond physical touch while also catering to educational requirements in the current digital age (Pratiwi, Afandi & Wahyuni, 2019). The application can be loaded on devices such as computers, laptops, and smartphones that meet the necessary requirements. This allows students to receive assistance through the chat capabilities in case of audio issues.
Zoom greatly facilitated the instruction process in challenging settings by enhancing access to information and conversation. According to Shadat, Sayem, Taylor, Meclanachan & Mumtahina (2017), utilising zoom for remote learning among Engineering students enhances interactivity, fosters contentment, and facilitates pleasant learning experiences. The advancements of Zoom enhance learning outcomes for diverse groups and pupils. A separate study, Brahma (2020) investigated the utilisation of Zoom for students specialising in Citizenship Education, namely in the fields of Sociology and Anthropology. The findings indicate that the courses have grown more participatory and sought after due to the usage of internet media, and the recorded meetings are more secure. In contrast, Haqien & Rahman (2020) found that the usage or utilisation of Zoom Meeting by lecturers is deemed ineffective for university students. This is primarily due to network issues or poor internet reception/signal, particularly for students without access to Wi-Fi. Consequently, the quality of their learning experience is negatively affected.

Guzacheva (2020) notes that online learning has gained popularity in medical education and meets the requirements of contemporary learners. Distance education is widely prevalent across various domains. Language instruction is a domain that has been revolutionised by technology, enhancing the methods of learning.

Challenges in the Utilisation of Zoom for Classroom Instructions

For Julius, Patric, Robert, and Simeon (2021), participants in online Zoom meetings identified the high cost of purchasing internet data bundles as a significant barrier that can lead to frustration. Utilising the zoom platform necessitates sufficient bandwidth, posing difficulties for players with weak internet connections, low data plans, or without access to a computer or Android phone.

For Agbo, Olawiemi, Oyelere, Kologo, Olalaye, Ajei & Olawuni (2020), possessing desktops, laptops, and smartphones is a prerequisite for utilising social media. Additionally, there is the issue of insufficient proficiency. According to Al-Neklawy (2017), the utilization of Web 2.0 tools is stalled by factors such as insufficient skills, power outages, limited time, inadequate facilities, and the negative attitude of certain Zoom users. Julius, Patric, Robert, and Simeon (2021) conducted a study on the difficulties and advantages of using the Zoom for classroom instruction, from the viewpoints of lecturers and students. The research involved a sample the participation of 50 students enrolled in Mathematics courses and 10 professors who taught Mathematics courses. The challenges associated with utilising the zoom management system for mathematics instruction and learning encompass the app's restricted capacity to accommodate a larger number of participants during the educational process, inadequate network connectivity, power outages, insufficient technological proficiency, substantial data consumption, and a dearth of devices like such as smartphones, PCs, smart TVs, and tablets for learning online. The study found that the zoom app offers various advantages for teaching and learning mathematics.

Related Studies

Studies conducted by Cohari (2013) and Crompton (2013) and indicate that improper use of zoom in education might lead to orientation and cognitive overload, which may hinder learning rather than improve it. Regardless of the potential drawbacks associated with the improper use of Zoom cloud technology and Whatsapp, the research conducted by Chipunza (2013) and Mbah & Umurhurhu (2016) has verified that incorporating zoom classroom instruction approach would offer teachers/instructors an efficient means of imparting students with skills and knowledge, likewise enabling students’ learning in a better and more fruitful manner.

Studies have also discovered that girls exhibit lower levels of confidence when it comes to computer proficiency compared to boys (Braak, 2004). The study conducted by Gonzalez-Gomez, Marlia-Rodriguez and Montero-Alonso (2012) aimed to investigate gender disparities in e-learning and identify areas of teaching that may be enhanced to increase the satisfaction of both female and male students. Gonzalez-Gomez, Marlia-Rodriguez & Montero-Alonso (2012) discovered that girls placed greater value on teaching strategies/ methods, active classroom participation compared to boys. This finding adds to the existing evidence of notable differences between male and female students' satisfaction with e-learning in teaching. A study conducted over a period of time including 484 students studying Business Education discovered that gender disparities were also evident.
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in their attitudes and intents towards technology usage (Padilla-MeleNdez, Garrido-Moreno & Aguila-Obra, 2013).

Hind and Hassan (2021) elucidated that certain studies have indicated the absence or minimal presence of gender disparities in technology use. There were small and consistent gender differences in computer-activity-related behaviours across all populations studied by Whitley (1997). A study by Terzis and Economides (2011) on female students' intent to utilise a computer and network based evaluation, it was discovered that both males and females are inclined to the utilization of the system if it had a playful interface and regarding the course, the material was both pertinent and simple to grasp.

METHOD

This study utilised a descriptive survey design. The study evaluated the implementation of the zoom management system in Nigerian universities. The study's sample consisted of 801 lecturers from all business education degrees universities. Sampling was unnecessary due to the manageable size of the population. The questionnaire served as the instrument for data gathering. The questionnaire contained two sections. Part A consisted of four demographic data for the respondents: institution name, gender, rank, and work/employment experience. Part B consisted of a total of 35 items, distributed across the three Research Questions (RQs) as follows: RQ1 had 14 items, RQ2 had 12 items, and RQ3 had 9 things. The questionnaire was designed with a 4-points scale of replies, ranging from Very High Extent (4) to High Extent,( 3), Low Extent (2), and Very Low Extent (1). The item underwent both face and content validity assessments. In order to maintain internal consistency of the instrument, 13 copies of the questionnaire were distributed to 22 lecturers in the department of Vocational Education, inside the faculty of education at Ahmadu Bello University in Zaria. The acquired data underwent analysis using Cronbach's alpha, resulting in the following reliability coefficients: Research question 1 (r= 0.86), Research question 2 (r= 0.91), and Research question 3 (r= 0.84). Eight hundred and one (801) questionnaires were distributed to 801 instructors in business education throughout all universities in Nigeria that offer Business Education Programmes. A total of seven hundred and sixty-nine (769) surveys were successfully completed and returned within a six-week timeframe, with the assistance of 88 research assistants at each university. The return rate was 96.00%. The generated or attained data were analysed utilising the measures of mean. In the decision/benchmark rule, an item with a mean/average of 2.50 or more is classified as having a high extent, while any item with a mean/ average below 2.50 is classified as having a low extent.

RESULTS AND DISCUSSION

RQ1: To what extent are the following features of zoom Management System in Business Education programme?

Table 1: Mean Ratings of Lecturers on the features of Zoom Management System. N = 769

<table>
<thead>
<tr>
<th>S/N</th>
<th>Items on features of ZoLM</th>
<th>Mean</th>
<th>SD</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Zoom technology provides a user friendly interface for effective teaching and learning</td>
<td>2.83</td>
<td>0.92</td>
<td>HE</td>
</tr>
<tr>
<td>2</td>
<td>The platform allows participants to join the session from any device with no Virtual Private Network (VPN)</td>
<td>2.94</td>
<td>0.91</td>
<td>HE</td>
</tr>
<tr>
<td>3</td>
<td>The platform can host unlimited one-on-one meetings with the paid version</td>
<td>2.98</td>
<td>0.86</td>
<td>HE</td>
</tr>
<tr>
<td>4</td>
<td>The platform allows hosting conferences of up to 50 minutes with up to 90 participants</td>
<td>2.85</td>
<td>0.79</td>
<td>HE</td>
</tr>
<tr>
<td>5</td>
<td>The paid version allows scalable one-on-one meetings.</td>
<td>2.82</td>
<td>0.81</td>
<td>HE</td>
</tr>
<tr>
<td>6</td>
<td>Quickly and easily set up audio and video conferences with just one click.</td>
<td>2.75</td>
<td>0.88</td>
<td>HE</td>
</tr>
<tr>
<td>7</td>
<td>Instant messaging, voting, group work, file sharing, whiteboarding, and annotations are all part of the package.</td>
<td>2.89</td>
<td>0.78</td>
<td>HE</td>
</tr>
<tr>
<td>8</td>
<td>Keyboard shortcuts and closed captioning guarantee effortless accessibility for every learner.</td>
<td>2.79</td>
<td>0.94</td>
<td>HE</td>
</tr>
<tr>
<td>9</td>
<td>The platform allows integration of Canvas, Course Web slide shearing and outlook add-on.</td>
<td>2.80</td>
<td>0.77</td>
<td>HE</td>
</tr>
<tr>
<td>10</td>
<td>Meetings and events can be recorded in zoom platform.</td>
<td>3.15</td>
<td>0.98</td>
<td>HE</td>
</tr>
<tr>
<td>11</td>
<td>Zoom is the proffered platform for teaching and learning</td>
<td>3.05</td>
<td>0.72</td>
<td>HE</td>
</tr>
<tr>
<td>12</td>
<td>Students would like all courses blended using both face-to-face and zoom platform for learning delivery</td>
<td>2.86</td>
<td>0.87</td>
<td>HE</td>
</tr>
</tbody>
</table>
On table 1, the mean score of the items on the features of zoom management system in Business Education programme ranges from 2.79 to 3.15. All the 14 items have a mean score of 2.5 and above. This means the responses are to a HE (high extent).

**RQ2:** To what extentare the following relevance of using zoom Management System in Business Education programme?

<table>
<thead>
<tr>
<th>S/N</th>
<th>Items on relevance of using ZmLM</th>
<th>Mean</th>
<th>SD</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Zoom saves-time by scheduling a session in one platform</td>
<td>3.18</td>
<td>0.86</td>
<td>HE</td>
</tr>
<tr>
<td>2</td>
<td>Zoom automatically notifies learners when enrolled</td>
<td>3.12</td>
<td>0.91</td>
<td>HE</td>
</tr>
<tr>
<td>3</td>
<td>Zoom records all data in a single system</td>
<td>3.02</td>
<td>0.77</td>
<td>HE</td>
</tr>
<tr>
<td>4</td>
<td>Zoom is easy to set up</td>
<td>2.97</td>
<td>0.88</td>
<td>HE</td>
</tr>
<tr>
<td>5</td>
<td>Zoom platform is online-based and is good for remote learning</td>
<td>3.21</td>
<td>0.85</td>
<td>HE</td>
</tr>
<tr>
<td>6</td>
<td>Zoom platform provides means for carrying on with teaching outside the classroom</td>
<td>3.25</td>
<td>0.93</td>
<td>HE</td>
</tr>
<tr>
<td>7</td>
<td>Zoom platform permit the use of many same instructional strategies that are employed in a face-to-face classroom?</td>
<td>3.31</td>
<td>0.78</td>
<td>HE</td>
</tr>
<tr>
<td>8</td>
<td>Zoom enables seamless transitions between various pedagogical approaches, including lectures, small group activities, and discussions.</td>
<td>3.05</td>
<td>0.87</td>
<td>HE</td>
</tr>
<tr>
<td>9</td>
<td>Zoom platform allows multimedia connectivity with smart phones, computers and other electronic devices</td>
<td>2.71</td>
<td>0.94</td>
<td>HE</td>
</tr>
<tr>
<td>10</td>
<td>Zoom enables us in sharing of educational resources and material via intranet, internet and extranet.</td>
<td>2.88</td>
<td>0.93</td>
<td>HE</td>
</tr>
<tr>
<td>11</td>
<td>Zoom provides means of getting feedback and in real time.</td>
<td>2.96</td>
<td>0.81</td>
<td>HE</td>
</tr>
<tr>
<td>12</td>
<td>Zoom allows the use of technical assistant (TA) to help with the task of teaching and learning.</td>
<td>2.66</td>
<td>0.98</td>
<td>HE</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Mean</strong></td>
<td><strong>2.81</strong></td>
<td><strong>0.85</strong></td>
<td><strong>High Extent</strong></td>
</tr>
</tbody>
</table>

On table 2, the mean score of the items on relevance of Zoom Management System ranges from 2.66 to 3.31. All the 12 items has a mean score of 2.50 and above. This means the responses are to a HE (high extent).

**RQ3:** To what extent are the following challenges of using Zoom Management System technologies in Business Education programme?

<table>
<thead>
<tr>
<th>S/N</th>
<th>Items on Challenges of using ZmLM</th>
<th>Mean</th>
<th>SD</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Poor ICT infrastructure</td>
<td>2.92</td>
<td>0.89</td>
<td>HE</td>
</tr>
<tr>
<td>2</td>
<td>Lack of Management System in Universities.</td>
<td>2.86</td>
<td>0.77</td>
<td>HE</td>
</tr>
<tr>
<td>3</td>
<td>Equal access to the technology (smart phones and computers by all students)</td>
<td>2.44</td>
<td>0.92</td>
<td>LE</td>
</tr>
<tr>
<td>4</td>
<td>Poor internet connectivity</td>
<td>2.97</td>
<td>0.81</td>
<td>HE</td>
</tr>
<tr>
<td>5</td>
<td>Technophobia among students without computer background</td>
<td>2.65</td>
<td>0.94</td>
<td>HE</td>
</tr>
<tr>
<td>6</td>
<td>Cost of subscription for the paid version of the programme may not be affordable</td>
<td>3.11</td>
<td>0.96</td>
<td>HE</td>
</tr>
<tr>
<td>7</td>
<td>Cost of data in accessing internet in Nigeria is still very high</td>
<td>3.28</td>
<td>0.82</td>
<td>HE</td>
</tr>
<tr>
<td>8</td>
<td>Poor privacy</td>
<td>2.87</td>
<td>0.88</td>
<td>HE</td>
</tr>
</tbody>
</table>
On table 3, the mean score of the 8 items on obstacles/challenges of using zoom management system ranges from 2.65 to 3.28. All the 8 items have a mean score of 2.50 and above. This means the responses are to a HE (High Extent) except one item which has a mean score of 2.44 which is to LE (Low Extent).

**DISCUSSION**

The results of this study confirm that both earlier studies on the zoom management system (e.g. Oye Mahamat and Rahim, 2012; Al-Gahtani, 2016) and participants in this survey/study agree that the zoom management system is the preferred choice. The study also identified notable characteristics of the zoom management system in Business education curricula. These features encompass a user-friendly design that facilitates excellent instruction and students’ learning, unrestricted one-on-one meetings with the subscription version, and a simple and intuitive one-click connection, among other benefits. Despite its advantages, the study revealed that the zoom management system has not been prioritised as it should be in the teaching/learning of Business education in Nigerian university/colleges. This finding aligns with the previous study conducted by Oye Mahamat and Rahim (2012), which demonstrated that the intense demand on lecturers to enhance their research outputs has hindered their ability to devote sufficient attention to incorporating zoom management system into classroom instruction environment. This study additionally revealed that participants see Zoom as both pertinent and highly handy, particularly in the context of remote learning and self-paced education. This discovery aligns with Ray’s (2020) research, which asserts that zoom management system has greatly facilitated virtual communication and information access for learners, regardless of their location. This convenience extends to learners who are at home, in the office, or on the go, using their mobile phones or Personal Digital Assistants (PDAs).

This study has identified some limitations of the Zoom management system in teaching and learning. These challenges have caused lecturers and students in Business education to choose traditional face-to-face classroom settings. The hurdles encompass issues such as the expense of subscribing, insufficient digital proficiency among instructors and learners, and a lack of necessary resources, among other factors. Participants also acknowledged the presence of inadequate ICT infrastructure, expensive subscription and data costs, and technophobia, among other obstacles. These difficulties have hindered the effective utilisation of the zoom management system. This discovery is also consistent with the investigations conducted by Agbo, Olawumi, Oyelere, Kolog, Olaleye, Agjei, and Olawuni (2020), which identified comparable difficulties. Overall, this study concluded that it is essential to adopt zoom management system in Nigerian Universities due to its advantages surpassing its limitations.

**CONCLUSION**

This study has investigated the utilisation of zoom management system. It drew 769 lecturers of Business Education from 11 universities offering the programme in Nigeria. The results revealed that most of the participants affirm that zoom management system is an inclusive and very viable platform for teaching and learning in universities, especially in skills-inculcating programmes like Business education. The paper identified the features that make zoom a preferred choice for teaching and learning. In spite of the relevance and convenience of zoom application, the study identified some challenges which have been the deterrent to the way of full integration of zoom platform into the teaching and learning situation. It was therefore realized that a lot still needs to be done if zoom management system is to be adequately utilized in teaching and learning of Business education programmes in Nigerian Universities.

**RECOMMENDATIONS**

Government and university stakeholders should ensure adequate funding for the provision of zoom management system infrastructure.
A lot of training is required of Nigerian Universities to equip lecturers and students with adequate knowledge of the features of zoom as well as the requisite digital skills for its full utilization.

Since the cost of subscription has been a major deterrent, the Nigerian government through the Tertiary Education Trust Fund TETFUND should provide unflinching internet subscriptions in all universities and other higher institutions for easy access to the zoom platform.

It is also important that school authorities should make the integration of zoom management system a policy in every faculty.

**Data availability Statement**

Datasets that were generated and analyzed in the course of the study are available in the main body of the manuscript and can be requested on demand.

**REFERENCES**


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Application of Zoom E-learning Management System in Business Education in Universities Nigeria


