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APPLICATION OF LEARNING MANAGEMENT SYSTEM (LMS) AS PERCEIVED BY BUSINESS EDUCATION LECTURERS AND STUDENTS IN DELTA STATE TERTIARY INSTITUTIONS

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ABSTRACT

This study examined the application of Learning Management System (LMS) as perceived by Business Education Lecturers and Students in Delta State Tertiary Institutions. Six research questions and three null hypotheses guided the study. The study utilized a descriptive research design. The population of the study comprised all Business Education students and lecturers in Delta State tertiary institutions. The sample size comprised 79 lecturers and 260 students. The sampling techniques used for the study were proportionate stratified and convenience sampling techniques.

The data collection tool was a questionnaire. To ensure reliability of the instrument, the questionnaire was distributed to a sample of 50 lecturers and students from tertiary institutions in Edo State who were not included in the study area. The data collected from this sample were then analyzed using the Cronbach alpha reliability coefficient to assess its level of internal consistency. To address the research questions, measures such as mean and standard deviation were employed. Additionally, to test the hypotheses at a significance level of 0.05, an independent samples t-test was conducted.

The findings of the study revealed that the level of application of the learning management system is low as perceived by lecturers and students; that the benefits of the learning management system as perceived by Business Education Lecturers and students are high; that the challenges of applying the learning management system as perceived by Business Education Lecturers and students are high. The study recommended that Tertiary institutions in Delta State should prioritize efforts to enhance the application of learning management system. This could involve providing training and workshops for both Business Education Lecturers and Students to ensure they are well-equipped for effective disposition.

KEYWORDS:

Application of learning management system, business education lecturers and students.



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INTRODUCTION

Education is no longer limited within the four walls of a regular classroom setting in many countries of the world. The noticeable advancements had called for there definition of formal education in some instances. Access to formal education has continued to grow for interested persons and teachers' roles are being redefined continually from being the sage at the center of instructional system to the-guide-by the side. Students at different levels are also able to learn more facts in less time due to the embrace of technology by education Alharbi, & Drew, (2014).

The ongoing advancement of Information and Communication Technologies (ICTs) has opened up fresh possibilities in the field of education. ICTs are increasingly crucial for improving the quality of both teaching and learning, as noted by Kent et al. in 2016. Consequently, there has been a global surge in the adoption of eLearning technologies like Learning Management Systems (LMS) to introduce innovative learning methods and create a more collaborative and effective learning environment for students and instructors, as highlighted by Cavus in 2015. LMS are online applications used to manage courses, offering the capability to monitor students' progress and serving as content management systems that simplify access to necessary course materials. Since LMS are web-based, they make course resources accessible through any internet-enabled device, from anywhere and at any time.

The origins of Learning Management Systems can be traced back by some researchers to basic training management systems, which eventually evolved into e-learning platforms. These initial training management systems were developed through a process of trial and error, and the lessons learned from this process served as the foundation for computer-based learning systems. Educational technology and pedagogy are closely intertwined in the realm of teaching and learning. Consequently, the Learning Management System, a software created to streamline administrative tasks and enhance student engagement with e-learning materials, was conceived. According to Makindeet al. in 2013, this software is utilized for customizing content, managing e-learning programs, coordinating classroom and online events, monitoring and reporting on online programs, and maintaining documentation.

Turnbull, et al. (2019) claimed that Learning Management Systems establish a standardized connection between students or learners and educational content through dedicated software and programs designed for student learning. These systems handle various aspects of the learning process, including managing learning events, content, and learners, as well as overseeing and regulating learning activities and learner performance by recording computer-based activities and presenting data and plans. Frequently, the term "Learning Management System" is used interchangeably with "course management system." According to Esa *et al.*, (2017), the creation of educational resources, content delivery to students, monitoring student participation, and evaluating their performance heavily rely on Learning Management Systems. Research indicates a growing need to centralize university processes and promote consistency among educational institutions. Consequently, many learning facilities have adopted Learning Management Systems. The new developments in these software applications have shifted the educational focus towards economic objectives rather than social goals, emphasizing the discourse of free market competition.

In Nigeria, the National Policy on Information and Communication Technology (ICT) acknowledges the significance of ICT within the education sector, as indicated by NITDA in 2012. In the higher education landscape of Nigeria, various stakeholders have started recognizing the effectiveness of incorporating technology into teaching and learning, as observed by Yakubu et al. in 2019. Nonetheless, similar to many developing nations, the adoption of ICTs, particularly Learning

Management Systems (LMS), for educational purposes, has been sluggish, with only a handful of universities having integrated technology into their teaching and learning methods, as noted by Yakubu et al. in 2019. Furthermore, the few institutions that have embraced LMS have often chosen proprietary software, a trend particularly prevalent in public universities. Unfortunately, these proprietary systems are typically designed without due consideration for pedagogical aspects of eLearning or the specific learning needs of students, as highlighted by Esa *et al.*, 2017.

Furthermore, previous research has indicated persistent challenges in the implementation and adoption of Learning Management Systems (LMS) in higher education institutions in developing countries. For instance, Danner and Pessu (2013) proposed that the use of ICT applications in universities and similar higher education settings can be impeded by issues such as limited computer availability, a lack of internet connectivity, and insufficient proficiency among both students and lecturers. Ndemo (2020) also pointed out several obstacles, including inadequate online teaching infrastructure, the shortage of experience and skills among educators and learners when it comes to utilizing online platforms like Moodle, varying levels of ICT competency, and the complex home learning environment, all of which present challenges to the successful integration of technology in the classroom. Even students who have access to devices may encounter difficulties due to a lack of digital skills necessary for effective online learning. These concerns are particularly troubling because both students and educators play a vital role in driving educational advancement to meet the demands of the 21st century.

Lecturers and students are the primary participants in the learning process, and their collaborative engagement influences the productivity of educational experiences. Therefore, the effective utilization of a Learning Management System (LMS) as a learning tool relies on the active involvement of both lecturers and students. While academics are seen as significant influencers in promoting and enhancing the use of LMS Turnbull, et al. (2019), students also share an equal responsibility in fostering greater adoption of LMS.

Given the aforementioned points, conducting a comparative study to explore the perspectives of business education lecturers and students regarding the implementation, benefits, and challenges of LMS is necessary. This study aims to examine how Business Education Lecturers and Students in Delta State tertiary institutions perceive the implementation of Learning Management System (LMS).

Statement of the Problem

The unexpected onset of the COVID-19 pandemic in 2020 brought about significant changes in the educational system, creating a new normal. The traditional in-person gatherings that were integral to Nigeria's educational system became impossible due to the COVID-19 protocols implemented by the Federal Government of Nigeria to mitigate the spread of the virus. To ensure the smooth functioning of the academic calendar, most tertiary institutions in the country introduced a learning management system.

In Delta State, Nigeria, tertiary institution administrations requested lecturers to digitize and upload their lecture notes in soft copy format on the learning management system through the institutions' websites. While some lecturers were able to comply, others faced difficulties for various reasons. Additionally, it was observed that many students did not fully benefit from the system due to a range of reasons. This was because, after the relaxation of the lockdown measures and the resumption of physical classes, the utilization of the learning management system was reduced. The reasons behind this relaxation and the challenges experienced by lecturers and students that contributed to the reduction of the system are important to investigate. Furthermore, understanding the perceptions of

lecturers and students regarding the continued application of the learning management system is crucial. This study therefore, is on how Business Education Lecturers and students perceive the application of the learning management system in tertiary institutions in Delta State.

Research Questions

The following research questions guided the study:

1. What is the level of application of the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State?
2. What is the level of application of the learning management system as perceived by Business Education Students of tertiary institutions in Delta State?
3. What are the benefits of the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State?
4. What are the benefits of the learning management system as perceived by Business Education Students of tertiary institutions in Delta State?
5. What are the challenges of implementing the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State?
6. What are the challenges of implementing the learning management system as perceived by Business Education Students of tertiary institutions in Delta State?

Hypotheses

The following null hypotheses were tested in the study:

1. There is no significant difference between the perception of Business Education Lecturers and Students on the benefits of the learning management system in tertiary institutions in Delta State
2. There is no significant difference between the perception of Business Education Lecturers and Students on the challenges experienced in implementing the learning management system in tertiary institutions in Delta State
3. There is no significant difference between the perception of Business Education Lecturers and Students on the level of application of the learning management system in tertiary institutions in Delta State

Purpose of the Study

The purpose of this study was to examine how Business Education Lecturers and Students in Delta State Tertiary Institutions perceive the implementation of Learning Management System (LMS). Specifically, the study:

1. determined level of application of the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State;
2. found out the level of application of the learning management system as perceived by Business Education Students of tertiary institutions in Delta State;
3. examined the benefits of the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State;
4. ascertained the benefits of the learning management system as perceived by Business Education Students of tertiary institutions in Delta State;
5. found out the challenges of implementing the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State; and
6. found out the challenges of implementing the learning management system as perceived by Business Education Students of tertiary institutions in Delta State.

Significance of the Study

The findings of this study will provide valuable insights and benefits to the administrators of tertiary institutions, lecturers and other researchers involved in the field.

Administrators of tertiary institutions can benefit from a study on the implementation of Learning Management System (LMS) as perceived by Business Education Lecturers and Students in Delta State Tertiary Institutions in several ways. The study can provide administrators with important data and insights regarding the effectiveness and challenges of implementing LMS in their institutions. This information can help them make informed decisions on LMS adoption, policy formulation, resource allocation, and infrastructure development. The study can assist administrators in developing strategic plans for integrating LMS into the educational system. It can provide recommendations on how to address the perceived challenges, improve implementation strategies, and maximize the benefits of LMS for both lecturers and students.

Business education lecturers can benefit from this study in the following ways. The study can provide valuable insights into how students perceive and engage with the LMS. This information can help lecturers understand student preferences, learning styles, and expectations, allowing them to tailor their instructional strategies and content delivery within the LMS to better meet student needs. By understanding the challenges and perceptions of their colleagues regarding LMS implementation, business education lecturers can identify areas where they may need additional training or support. Other researchers can benefit from this study in several ways.

Theoretical Framework of the Study

This study is anchored on the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT).

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is a widely used theoretical framework that aims to explain and predict individuals' acceptance and adoption of technology. Developed by Fred Davis in the 1980s, TAM focuses on two primary factors: perceived usefulness (PU) and perceived ease of use (PEOU). Perceived usefulness refers to the degree to which an individual believes that using a particular technology will enhance their performance or make their tasks easier and more efficient. It assesses the perceived benefits and advantages of using the technology. Perceived ease of use, on the other hand, pertains to the individual's perception of how effortless and user-friendly the technology is. It considers factors such as ease of learning, ease of operation, and the complexity of the technology. In this model, the two factors significantly influence individuals' attitudes and behavioral intentions towards technology adoption. Attitude toward using the technology, in turn, predicts the actual usage behavior. Cavus, (2015) posits that individuals who perceive a technology as useful and easy to use are more likely to have positive attitudes and intentions to adopt and use it.

In summary, the Technology Acceptance Model (TAM) offers a valuable framework for understanding the factors influencing individuals' acceptance and adoption of technology.

Meaning of Learning Management System

Learning Management System is the prominent ICT platform over which blended learning is delivered. For higher education institutions, LMS is seen as a promising tool where the perpetual physical interaction of teacher and student is not guaranteed (Murshitha & Wickramarachchi, 2013). Turnbull, et al. (2019) defined a learning management system as an internet-based software application that supports the administration, documentation, tracking, and reporting of training programs, classroom and online events, e-learning programs, and training content. It is a blend of

software tools and Web-based technologies that enhance planning, delivery, and tracking of the training process, which supports a specific learning outcome (Sabharwal, et al., 2018).

Cavus, et al. (2021) found that many educational institutions use LMS to run online courses, while some employ it as a blended learning technology for the sustainable educational system. The LMS has features that make it an indispensable tool for the effective learning process. Some of the features include forums, wikis, glossary, threaded discussions, hyperlinks, video conferencing, chat, database, quiz/assignment, announcement, grades, feedback, emailing among others (Kant, Prasad & Anjali, 2021). All these features make LMS encompassing and accommodative for all kinds of instructional delivery. Again, the LMS gives students the opportunity to watch lecture supplemental videos, attempt assignments, quiz and carry out group projects online. It also supports synchronous and asynchronous interaction between lecturers and students, improves students' learning skills and promotes their academic performance (Correa-Baena *et al.*, 2018; Esa *et al.*, 2017; Yoloye, 2015).

Using a Learning Management System (LMS), an educator can craft online course materials and effectively oversee the course to foster critical thinking skills and encourage collaboration among university students, as highlighted by Zanjani et al. (2016). LMSs provide a range of tools, including online group chats, discussion threads, video conferencing, lecture materials, learning modules, grading, and course assessments, all of which can be tailored to meet specific instructional requirements (Fathema et al., 2015; Walker et al., 2016). Anshari et al. (2017) assert that non-traditional forms of learning supported by online instructional methods have a positive impact on both educators and learners. Learning Management Systems offer several advantages, such as well-structured course content, increased student engagement, enhanced learner autonomy, easy submission of assignments, and prompt feedback (Adzharuddin et al., 2013; Cavus, 2015; Alenezi, 2018).

There are many learning management systems such as Blackboard; Moodle; Desire2Learn; Google Classroom; Schoology; TalentLMS; Canvas LMS; eCoach; A Tutor; Skillshare; LearnUpon; Edmodo. According to Edutechnica (2016), Blackboard is the most popular LMS in the USA. Blackboard represents (33%), while Moodle (19%) is the second most popular LMS by many institutions. According to Alenezi (2018), LMSs may be divided into commercial and open sources. Open-source LMS can be improved and developed and then used free of charge. Examples of LMSs widely used open source is Moodle. On the other hand, commercial source LMSs are owned by private companies and are only used by registered users. The analysis of several LMSs conducted by Cigdem and Tirkes (2010) revealed that Moodle offers a wide range of features that improve pedagogical quality and includes a large number of required resources available for an online learning system. Moodle provides various functions and tools such as files, interactive lessons, folders, assignments, announcements, Hotpot quizzes, forums, chat, labels, URL links, and Turn it in (Lopes, 2014). These tools and functions, not only enrich managing class activities online, but also facilitate communication and collaborations between students and instructors (Scott, 2017).

Benefits of the Learning Management System

Effective use of LMS enriches the learning experience for all stakeholders involved. Through the use of technology, teaching and learning can be made interactive and in turn the instructions become more effective (Ashrafzadeh & Sayadian, 2015). Learning Management Systems (LMS) is one such technology that supports e-learning programs (Coskuncay, 2013). In higher education, LMS integration into teaching and learning has significantly increased (Ashrafzadeh & Sayadian, 2015).

LMS facilitates the learning process and the instructors involved, by developing and organizing the learning material and other relevant content.

Throughout the process of LMS, the involved personnel are able to manage the interacting activities between the learners and teachers, along with the individual needs of managing the students (tracking their performance and other relevant areas). LMS offers significant improvement measures for the enhancement of learning by students. The adoption of LMS in the learning sector are based on the objectives of enhancing the performance outcomes of the students as well as the teachers; thus, reflecting the cost-effective management of educational resources in general (Alahmari & Kyei-Blankson, 2016). Al-Adwan et. al (2013) document the effectiveness of electronic learning in terms of mitigating potential issues in educational organizations. LMS is an attractive approach to address these issues, due to its relatively inexpensive nature and the ease of adoption.

The centrality of LMS in educational delivery in the 21st Century is never in doubt. Alharbi, & Drew, (2014) indicate that LMS can centralize and simplify management to use self-service and guided services; to easily compile and deliver learning materials; to integrate training programmes on a flexible web-based platform; to promote portability, standards, personalize information and reuse expertise. In essence, LMS is used for both pedagogical and administrative purposes in institutions of higher learning. However, various users of e-learning platforms such as LMS mostly stop using it after their initial experience (Goya, 2012).

The use of LMSs creates opportunities and helps educational institutions globally (Kats, 2010). However, the adoption of LMSs requires an ongoing assessment compared to other newer technologies (Alenezi, 2018). Various studies have been conducted to investigate the effectiveness and adoption of LMSs (Lopes, 2014; Al-Sharhan, *et al.*, 2020; Uziak, *et al.*, 2018). The proper implementation of LMS, as stated by Zaharias and Pappas (2016), can provide students with self-paced learning, offers unlimited access to e-Learning materials, integrates social learning experiences, tracks learner progress, and increases cost-effectiveness. Furthermore, LMS offers a variety of functions and tools such as interactive books, assignments, announcements, quizzes, forums, chat, labels, and links to learning resources (Sayfour, 2016). These tools and functions enrich the management of class activities online and facilitate communication and collaborations between students and faculty members (Aldiab, *et al.*, 2019).

Challenges of Application the Learning Management System

Many universities that offer e-learning services encounter various difficulties in terms of adopting successful strategies including the acceptance and effectiveness of delivering courses. Danner and Pessu (2013) opined that the use of ICT applications in institutions of higher learning such as the universities is prone to lack of access to computers, internet connectivity and other related risks such as low level of competencies among students and lecturers. Other studies, Ndemo (2020) and Syed, *et al.* (2020) have also shown that certain deficiencies such as the weakness of online teaching infrastructure, the inexperience and lack of skills among teachers and learners on online Moodle usage, the level of ICT skills, the complex environment at home, among others militate against the realization of successful technology integration in the classroom. Similarly, Moore, *et al.* (2018) indicate that there continues to be a vastly unequal digital starting point for young urban citizens, who are already held by poverty and social exclusion. In particular, even students with access to devices may not have the digital skills to learn effectively online.

Asampana, *et al.* (2018) investigated the factors that affect the post-implementation of a web based LMS at the University of Professional Studies and established that the level of adoption of LMS seems very low due to poor IT infrastructure, inadequate training, and the relevance of the system to

quality lecture delivery. However, their intention to use LMS coupled with the usefulness of LMS were high.

Snoussi (2019) investigated the challenges faced by universities in the UAE in adopting a learning management system, based on interviews with 54 participants, including deans, Heads of Departments (HoDs), and program directors. The study revealed that universities encountered challenges such as students' lack of self-discipline in online systems, inconsistencies in LMS compatibility with certain academic programs, limited use of the Arabic language, and issues related to technical literacy.

Almaiah et al. (2020) examined the challenges faced by E-learning systems during the Covid-19 pandemic in Jordan and Saudi Arabia, involving students, faculty members, IT experts, and policymakers. The study identified challenges, including inadequate financial support, issues related to change management, and technical challenges associated with learning management systems. Another study by Almanthari et al. (2020) explored barriers faced by teachers in Indonesia regarding E-learning, considering school, curriculum, student, and teacher-related perspectives. The research found that teachers encountered personal challenges related to knowledge, confidence, and prior experiences with E-learning. Students faced obstacles related to knowledge and access to computers.

Role of Lecturers and Students in the Adoption of Learning Management System

While academics play a crucial role in promoting and enhancing the utilization of Learning Management Systems (LMS), students also share the responsibility for increasing LMS adoption. The adoption of LMS by teachers is influenced by factors such as their perception of ease of use, perceived usefulness, attitude towards usage, and job relevance (Alharbi & Drew, 2014). On the other hand, students' adoption of LMS is influenced by their attitude towards LMS, self-efficacy, prior experience, and their interactions with lecturers and classmates (Murshitha & Wickramarachchi, 2013).

According to Fung and Yuen (2012), teachers and students are the two primary entities in the teaching and learning process, and their close interaction is pivotal. While teachers are the primary implementers of technology integration, the success of blended learning heavily depends on the acceptance and active participation of both students and teachers. Previous literature offers various models that can explain perceptions related to the acceptance and behavioral intentions to use new technology.

Additionally, a recent study by Uziak et al. (2018) aimed to understand student and instructor perspectives on the use of the Blackboard LMS. The findings indicated that students were comfortable using Blackboard and reported significant improvements in their performance and communication with instructors. Instructors, however, highlighted time-related challenges in using the LMS. Despite these challenges, both instructors and students had a positive experience with the Blackboard Platform.

Appraisal of the Reviewed Literature

The theoretical framework of the study is based on two models: the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT). The meaning of learning management systems is described as internet-based software applications that support the administration, documentation, tracking, and reporting of training and learning programs. The researcher also discusses the benefits and challenges of implementing LMS, as well as the differences in perception between lecturers and students regarding LMS adoption. Empirical studies and a review of the literature are presented to provide further insights into LMS implementation.

From available literature, it was observed that in as much as studies have been carried on the benefits, challenges and level of implementation of Learning Management System (LMS) in tertiary

institutions, there seems to be no or insignificant studies in the Sub-Sahara Africa including Nigeria. Moreover, the researcher observed that since the introduction of LMS in tertiary institutions in Nigeria, necessitated by the advent of Covid-19, no attempt has been made to evaluate the perception of lecturers and students on their experiences including those of Business Education Lecturers and Students on the benefits, challenges and level of application of the learning Management System (LMS) in the universities. These are the gap that the current study filled.

METHODOLOGY

The study utilized a descriptive research design, which involves conducting the investigation after the observed events have taken place, without any intervention from the researcher. This design allowed the researcher to explore the perceptions of Business Education Lecturers and Students in Delta State Tertiary Institutions regarding the implementation of Learning Management System (LMS). The population of the study comprised all Business Education students and lecturers in Delta State tertiary institutions. There are four tertiary institutions in Delta State, with a total of 124 lecturers and 937 students. The sample size for the study comprised 79 lecturers and 260 students. The choice of the sample size was based on the recommendation of Gill, Johnson and Clark (2010), who in their study on sample size determination suggested that in a survey where the population size is between 100 and 149, that a sample size of 79 is adequate while in a survey where the population is between 800 and 999, that a sample size of 260 is adequate at 95% confidence level. The sampling techniques that were used for the study were proportionate stratified and convenience sampling techniques.

The data collection tool for this study was a questionnaire consisting of two parts: Part A for lecturers and Part B for students (refer to appendix II). The questionnaire comprises three different scales: the Benefits of the Learning Management System Rating Scale, which evaluated the perceived benefits of the learning management system by Business Education lecturers and students; the Challenges of Implementing the Learning Management System Rating Scale, which assessed the difficulties encountered by Business Education lecturers and students during the application of the learning Management System (LMS); and the Level of Application of the learning Management System Rating Scale, which measured the extent to which Business Education lecturers and students have implemented the Learning Management System (LMS). These rating scales are designed on a 4-point scale, with 1 representing "strongly disagree," 2 representing "disagree," 3 representing "agree," and 4 representing "strongly agree."

The questionnaire underwent face and content validation by the researcher's supervisor and other experts in the field of Business Education and Measurement and Evaluation. The experts evaluated its content and relevance to the study's objective. They provided feedback and recommended certain modifications, which were incorporated into the questionnaire. Taking into account the expert judgments, the instrument was deemed valid. To ensure the reliability of the instrument, the questionnaire was distributed to a sample of 50 lecturers and students from tertiary institutions in different states, who were not included in the study area. The data collected from this sample were then analyzed using the Cronbach alpha reliability coefficient to assess its level of internal consistency. The collected data undergo analysis using both descriptive and inferential statistics. To address the research questions, measures such as mean and standard deviation were employed at a benchmark of 2.50. Additionally, to test the hypotheses at a significance level of 0.05, an independent samples t-test was conducted. The Statistical Package for Social Sciences (SPSS) version 26 was utilized for performing the analysis.

RESULTS

Research Question 1: What is the level of application of the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State?

Table 1: Meananalysis of thelevel of application of the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State

S/N	Statement	MMean	SD	Remark
1	I use Chatroom with my students	.66	.68	High
2	I use Discussion/Forum function to communicate with my students	.61	.69	High
3	I use LMS assignment functions	.32	.65	Low
4	I use LMS frequently during my academic period	.13	.61	Low
5	I post announcements via LMS	.06	.65	Low
6	I create Quizzes via LMS	.96	.52	Low
	I upload files via LMS	.94	.54	Low
	I create Folders via LMS	.86	.42	Low
	I create digital book via LMS	.85	.46	Low
	I depend on LMS for my work	.82	.53	Low
	I use Label (information) function through LMS	.72	.58	Low
	I use Turnitin to check students' work (Plagiarism)	.70	.74	Low
	I post URL links through LMS	.58	.57	Low
Average Mean		.02	.59	Low

Criterion Mean = 2.50

Table 1 shows the mean analysis of thelevel of application of the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State. The result shows that the mean score ranged from 1.58 to 2.66. The criterion mean is 2.50. Theaverage mean score is 2.02, which is less than the criterion mean of 2.50. This means that thelevel of application of the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State is low.

Research Question 2: What is the level of application of the learning management system as perceived by Business Education students of tertiary institutions in Delta State?

Table 2: Meananalysis of thelevel of application of the learning management system as perceived by Business Education Students of tertiary institutions in Delta State

SN	Statement	Mean	D	Remark
1	My lecturers use LMS frequently for teaching and learning	.30	.93	Low
2	My lecturers use Chatroom with us	.28	.89	Low
3	My lecturers use Discussion/Forum function to communicate with us	.28	.90	Low
4	My lecturers post announcements via LMS	.27	.97	Low

5	My lecturers upload files via LMS	.24	.93	Low
6	My lecturers create digital book via LMS	.23	.93	Low
7	My lecturers use LMS assignment functions	.22	.91	Low
8	My lecturers post URL links through LMS	.22	.95	Low
9	My lecturers use Label (information) function through LMS	.20	.90	Low
1	My lecturers create Folders via LMS	.19	.88	Low
1	My lecturers create Quizzes via LMS	.19	.93	Low
1	My lecturers use Turnitin to check our work (Plagiarism)	.18	.92	Low
Average Mean		.23	.92	Low

Criterion Mean = 2.50

Table 2 shows the mean analysis of the level of application of the learning management system as perceived by Business Education Students of tertiary institutions in Delta State. The result shows that the mean score ranged from 2.18 to 2.30. The criterion mean is 2.50. The average mean score is 2.23, which is less than the criterion mean of 2.50. This means that the level of application of the learning management system as perceived by Business Education Students of tertiary institutions in Delta State is low.

Research Question 3: What are the benefits of the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State?

Table 3: Mean benefits of the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State

/N	Statement	Mean	D	Remark
1	Using LMS would enable me to significantly improve the overall quality of my teaching	3.56	.53	Agreed
2	Using LMS would encourage student engagement with course content.	3.49	.50	Agreed
3	LMS would allow for more meaningful student learning.	3.47	.55	Agreed
4	Using LMS would enable me to accomplish course management tasks (management course content, assignments, and resources) more efficiently.	3.46	.53	Agreed
5	LMS would allow me greater flexibility and control over my work.	3.46	.53	Agreed
6	Using LMS would increase interaction between students and instructor.	3.44	.50	Agreed
7	LMS would allow me to develop new technological skills	3.44	.53	Agreed
8	Using LMS would be an efficient use of my time to increase my productivity	3.42	.52	Agreed
9	Using LMS would enable me to use technology more innovatively in my teaching	3.41	.49	Agreed
0	Using LMS would make it easier to do my work.	3.41	.52	Agreed
1	Using LMS would help me improve student teaching.	3.41	.52	Agreed
2	Using LMS would increase student access to class information.	3.39	.54	Agreed
3	LMS would allow my students to develop greater technological skills.	3.37	.56	Agreed
4	LMS would allow me to reach wider audiences	3.37	.60	Agreed
5	The benefits of using the LMS outweigh the hassle factor	3.34	.48	Agreed
Average Mean		3.43	.53	Agreed

Criterion Mean = 2.50

Table 3 shows the mean analysis of the benefits of the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State. The result shows that the mean score ranged from 3.34 to 3.56. The criterion mean is 2.50. This means that lecturers perceived all items as the benefits of the learning management system in Delta State. The average mean score is 3.43, which is greater than the criterion mean of 2.50. This means that the benefits of the learning

management system as perceived by Business Education Lecturers of tertiary institutions in Delta State is high.

Research Question 4: What are the benefits of the learning management system as perceived by Business Education Students of tertiary institutions in Delta State?

Table 4: Meanbenefits of the learning management system as perceived by Business Education Students of tertiary institutions in Delta State

SN	Statement	Mean	D	Remark
1	Using LMS would be an efficient use of my time and increases my learning	3.24	0.5	Agreed
2	Using LMS would increase my access to class information.	3.24	0.7	Agreed
3	Using LMS would encourage me to engage with course content.	3.21	0.9	Agreed
4	LMS would allow me to develop new technological skills	3.20	0.5	Agreed
5	LMS would allow me to accomplish class activities more quickly	3.17	0.5	Agreed
6	Using the system would make it easier to do my studies	3.15	0.5	Agreed
7	Using LMS would enable me to use technology more innovatively in my learning	3.14	0.4	Agreed
8	Using LMS would help me plan and improve learning.	3.12	0.5	Agreed
9	Using LMS would increase interaction between students and instructor.	3.11	0.5	Agreed
10	LMS would allow me greater flexibility and control over my learning.	3.10	0.8	Agreed
11	The benefits of using the LMS outweigh the hassle factor	3.10	0.4	Agreed
12	LMS would allow for deeper or more meaningful learning.	3.09	0.7	Agreed
13	LMS would make learning more interesting for the students	3.08	0.8	Agreed
14	Using LMS would be compatible with my needs.	3.06	0.9	Agreed
Average Mean		3.14	0.3	Agreed

Criterion Mean = 2.50

Table 4 shows the mean analysis of thebenefits of the learning management system as perceived by Business Education Students of tertiary institutions in Delta State. The result shows that the mean score ranged from 3.06 to 3.24. The criterion mean is 2.50. This means that students perceived all items as thebenefits of the learning management system in Delta State. The average mean score is 3.14, which is greater than the criterion mean of 2.50. This means that thebenefits of the learning management system as perceived by Business Education Students of tertiary institutions in Delta State is high.

Research Question 5: What are the challenges of implementing the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State?

Table 5: Meananalysis of thechallenges of implementing the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State

S/N	Statement	Mean	D	Remark
1	Lack of suitable onlineenvironment at home (e.g. presence of children, other family members)	6	3	Agreed
2	Lack of time to attend online classes	1	0	Agreed
3	Poor network connectivity during the use of the LMS	8	53	Agreed
4	Longer time to prepare for an online course	8	50	Agreed
5	Lack of finance needed for internet data subscription	7	50	Agreed
6	Difficult dividing students into subgroups for group task working	47	50	Agreed
7	Lack of protection for the developed e-materials	46	50	Agreed
8	Inability to cover all the course outline	44	53	Agreed
9	Difficult receiving student feedback in the online course versus in a traditional	44	50	Agreed

	face-to-face class			
1	Inability to upload lesson note on the LMS platform	44	50	Agreed
1	Difficulty for motivating the students in the online environment than in the traditional setting	44	55	Agreed
1	Lack of incentives/ Non-repayment for Internet usage	42	50	Agreed
1	Inability to assess LMS platforms	41	52	Agreed
1	Poor power supply to power electronic gadgets needed for the LMS	27	50	Agreed
Average Mean		.45	.51	Agreed

Criterion Mean = 2.50

Table 5 shows the mean analysis of the challenges of implementing the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State. The result shows that the mean score ranged from 3.27 to 3.56. The criterion mean is 2.50. This means that lecturers perceived all items as the challenges of implementing the learning management system in Delta State. The average mean score is 3.45, which is greater than the criterion mean of 2.50. This means that the challenges of implementing the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State is high.

Research Question 6: What are the challenges of implementing the learning management system as perceived by Business Education Students of tertiary institutions in Delta State?

Table 6: Mean analysis of the challenges of implementing the learning management system as perceived by Business Education Students of tertiary institutions in Delta State

S/N	Statement	Mean	SD	Remark
1	Poor network connectivity during the use of the LMS platform	3.13	.91	Agreed
2	Inability to fully participate in online teaching and learning	3.11	.88	Agreed
3	Poor power supply to power electronic gadgets needed for the LMS platform	3.09	.95	Agreed
4	Unavailability of support Infrastructure	3.05	.89	Agreed
5	Lack of finance needed for internet data subscription	3.04	.96	Agreed
6	Inability to assess LMS platform	3.03	.92	Agreed
7	Lack of IT skills	2.94	.01	Agreed
8	Inability to download lesson notes on the university LMS platform	2.94	.97	Agreed
9	Lack of time to attend online classes	2.91	.92	Agreed
Average Mean		3.03	.93	Agred

Criterion Mean = 2.50

Table 6 shows the mean analysis of the challenges of implementing the learning management system as perceived by Business Education Students of tertiary institutions in Delta State. The result shows that the mean score ranged from 3.27 to 3.56. The criterion mean is 2.50. This means that students perceived all items as the challenges of implementing the learning management system in Delta State. The average mean score is 3.45, which is greater than the criterion mean of 2.50. This means that the

challenges of implementing the learning management system as perceived by Business Education Students of tertiary institutions in Delta State is high.

Hypothesis 1: There is no significant difference between the perception of Business Education Lecturers and Students on the benefits of the learning management system in tertiary institutions in Delta State.

Table 7: t-test analysis of the difference between the perception of Business Education Lecturers and Students on the benefits of the learning management system in tertiary institutions in Delta State.

Status	<i>n</i>	Mean	<i>SD</i>	<i>Df</i>	<i>t</i>	<i>P</i>	Remark
Lecturers	79	3.43	0.28	326	5.68	0.000	Significant
Students	260	3.14	0.62				

$\alpha = 0.05$

Table 7 shows the t-test analysis of the difference between the perception of Business Education Lecturers and Students on the benefits of the learning management system in tertiary institutions in Delta State. The result shows that lecturers ($M = 3.43$, $SD = 0.28$) students ($M = 3.14$, $SD = 0.62$); $t(326) = 5.68$, $p < 0.05$ level of significance. Hence, the null hypothesis is rejected, meaning that there is a significant difference between the perception of Business Education Lecturers and Students on the benefits of the learning management system in tertiary institutions in Delta State. Lecturers appear to possess a higher perception of the benefits of the learning management system in tertiary institutions in Delta State than students.

Hypothesis 2: There is no significant difference between the perception of Business Education Lecturers and Students on the challenges experienced in implementing the learning management system in tertiary institutions in Delta State.

Table 8: t-test analysis of the difference between the perception of Business Education Lecturers and Students on the challenges experienced in implementing the learning management system in tertiary institutions in Delta State

Status	<i>n</i>	Mean	<i>SD</i>	<i>Df</i>	<i>t</i>	<i>P</i>	Remark
Lecturers	79	3.45	0.26	326	7.34	0.000	Significant
Students	260	3.03	0.78				

$\alpha = 0.05$

Table 8 shows the t-test analysis of the difference between the perception of Business Education Lecturers and Students on the challenges experienced in implementing the learning management system in tertiary institutions in Delta State. The result shows that lecturers ($M = 3.45$, $SD = 0.26$) students ($M = 3.03$, $SD = 0.78$); $t(326) = 7.34$, $p < 0.05$ level of significance. Hence, the null hypothesis is rejected, meaning that there is a significant difference between the perception of Business Education Lecturers and Students on the challenges experienced in implementing the learning management system in tertiary institutions in Delta State. Lecturers appear to possess a higher perception of the challenges experienced in implementing the learning management system in tertiary institutions in Delta State than students.

Hypothesis 3: There is no significant difference between the perception of Business Education Lecturers and Students on the level of application of the learning management system in tertiary institutions in Delta State

Table 9: t-test analysis of the difference between the perception of Business Education Lecturers and Students on the level of application of the learning management system in tertiary institutions in Delta State

Status	<i>n</i>	Mean	<i>SD</i>	<i>Df</i>	<i>t</i>	<i>P</i>	Remark
Lecturers	79	2.02	0.30	326	3.75	0.000	Significant
Students	260	2.23	0.74				

$\alpha = 0.05$

Table 9 shows the t-test analysis of the difference between the perception of Business Education Lecturers and Students on the level of application of the learning management system in tertiary institutions in Delta State. The result shows that lecturers ($M = 2.02$, $SD = 0.30$) students ($M = 2.23$, $SD = 0.74$); $t(326) = 3.75$, $p < 0.05$ level of significance. Hence, the null hypothesis is rejected, meaning that there is a significant difference between the perception of Business Education Lecturers and Students on the level of application of the learning management system in tertiary institutions in Delta State. Students appear to possess a higher perception of the level of application of the learning management system in tertiary institutions in Delta State than lecturers.

Discussion of Findings

The purpose of this study was to examine how Business Education Lecturers and Students in Delta State Tertiary Institutions perceive the implementation of Learning Management System (LMS). Analysis of data obtained in the field revealed the following findings:

Level of Application of the learning Management System as Perceived by Business Education Lecturers of Tertiary Institutions in Delta State

The first finding revealed that the level of application of the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State is low. The finding also showed that there is a significant difference between the perception of Business Education Lecturers and Students on the level of application of the learning management system in tertiary institutions in Delta State. Lecturers appear to possess a higher perception of the application of the learning management system in tertiary institutions in Delta State than students.

Level of Application of the learning Management System as Perceived by Business Education Students of Tertiary Institutions in Delta State

The second finding showed that the level of application of the learning management system as perceived by Business Education Students of tertiary institutions in Delta State is low. This finding contradicts the outcome of Ashrafzadeh and Sayadian (2015), whose research indicates a notable rise in the integration of Learning Management Systems (LMS) into teaching and learning within higher education. This discrepancy also differs from the findings of Unwin et al. (2010), Mayoka and Kyeyune (2012), Elmahadi and Osman (2013), and Chitanana et al. (2008), whose studies suggest that multiple institutions have implemented diverse LMS in countries including Kenya, Mozambique, Uganda, Sudan, and Zimbabwe respectively.

Benefits of the Learning Management System as Perceived by Business Education Lecturers of Tertiary Institutions in Delta State

The third finding revealed that the benefits of the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State is high.

The finding also showed that there is a significant difference between the perception of Business Education Lecturers and Students on the benefits of the learning management system in tertiary institutions in Delta State. Lecturers appear to possess a higher perception of the benefits of the learning management system in tertiary institutions in Delta State than students. This finding aligns with the perspective of Ashrafzadeh and Sayadian (2015), who contended that the proficient utilization of Learning Management Systems (LMS) enhances the learning encounter for all parties involved. By leveraging technology, interactive teaching and learning can be achieved, leading to more effective instruction. The finding also supports Coskuncay's assertion (2013) that LMS is a technological tool that underpins e-learning initiatives. Additionally, it concurs with the findings of Alahmari & Kyei-Blankson (2016), who identified that the adoption of LMS within education is driven by the goal of improving student and teacher performance, reflecting efficient management of educational resources in a cost-effective manner.

Benefits of the Learning Management System as Perceived by Business Education Students of Tertiary Institutions in Delta State

The fourth finding showed that the benefits of the learning management system as perceived by Business Education Students of tertiary institutions in Delta State is high. The finding further revealed that the benefits of the learning management system as perceived by students include helping them make an efficient use of their time and increases their learning, allowing them to develop new technological skills, increasing their access to class information, encouraging them to engage with course content, enabling them to use technology more innovatively in their learning, allowing them to accomplish class activities more quickly and helping them to plan and improve learning. The finding also revealed that the learning management system make it easier to do their studies, makes learning more interesting for the students, increase interaction between students and instructor, allow for deeper or more meaningful learning and allow students greater flexibility and control over their learning.

Challenges of Application the Learning Management System as Perceived by Business Education Lecturers of Tertiary Institutions in Delta State

The fifth finding revealed that the challenges of implementing the learning management system as perceived by Business Education Lecturers of tertiary institutions in Delta State is high. The finding showed that the challenges of implementing the learning management system as perceived by lecturers include longer time to prepare for an online course, lack of time to attend online classes, Inability to cover all the course outline, lack of suitable online environment at home, difficult dividing students into subgroups for group task working, difficulty for motivating the students in the online environment than in the traditional setting and difficult receiving student feedback in the online course versus in a traditional face-to-face class. The finding also revealed other challenges to include poor network connectivity during the use of the LMS, lack of protection for the developed e-materials, lack of incentives/Non-repayment for Internet usage, inability to upload lesson note on the LMS platform, lack of finance needed for internet data subscription, inability to assess LMS platforms and poor power supply to power electronic gadgets needed for the LMS.

Challenges of Implementing the Learning Management System as Perceived by Business Education Students of Tertiary Institutions in Delta State

The sixth finding showed that the challenges of implementing the learning management system as perceived by Business Education Students of tertiary institutions in Delta State is high. The finding revealed that the challenges of implementing the learning management system as perceived by students include inability to fully participate in online teaching and learning, poor network

connectivity during the use of the LMS platform, poor power supply to power electronic gadgets needed for the LMS platform, lack of finance needed for internet data subscription and unavailability of support infrastructure. Others include inability to access LMS platform, inability to download lesson notes on the university LMS platform, lack of IT skills and lack of time to attend online classes.

Conclusion

Based on the findings of the study, it can be concluded that the benefits of the learning management system is high, there is a notable disparity in their perceptions regarding the level of implementation and the challenges associated with the system. Lecturers generally view the implementation level as low and identify high challenges, whereas students also perceive a low implementation level but associate high benefits. This disparity in perception between lecturers and students on various aspects of the learning management system highlights the need for improved communication and collaboration between these two groups to enhance the overall effectiveness of the system's implementation and usage.

Recommendations

On the basis of the findings and conclusion drawn, the following recommendations were made:

1. Tertiary institutions in Delta State should prioritize efforts to enhance the application of the learning management system. This could involve providing training and workshops for both Business Education Lecturers and Students to ensure they are well-equipped to utilize the system effectively.
2. Recognizing the significant difference in perception between Business Education Lecturers and Students regarding the level of implementation and benefits of the system, institutions should establish channels for open communication. Regular meetings, surveys, and discussions can help align these perceptions and create a shared understanding.
3. Institutions should actively address the challenges associated with implementing the learning management system. This might involve improving IT infrastructure, offering technical support, and creating user-friendly interfaces. Collaborating with IT departments and educators can help identify and mitigate these challenges.
4. Provide tailored training sessions for both Business Education Lecturers and Students to address their specific needs and concerns. Training should cover technical aspects of the system as well as strategies for effectively integrating the system into teaching and learning processes.

Business Education Lecturers should emphasize the benefits of the learning management system to their students. Highlighting how the system enhances the learning experience, offers flexibility, and provides access to valuable resources can motivate students to actively engage with the platform.

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