

**INSTRUCTIONAL DELIVERY DIGITALIZATION AND JOB PERFORMANCE A
MODERATING ROLE OF TECHNOLOGICAL FACILITIES OF BUSINESS EDUCATION
LECTURERS IN UNIVERSITIES IN SOUTH-SOUTH NIGERIA**

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ABSTRACT

This study is titled Instructional Delivery Digitalization Dimensions and Job Performance: A Moderating role of Technological Facilities of Business Education Lecturers in Universities in South-South Nigeria". The study adopted correlational research design. The population of this work consisted of 141 business education lecturers in universities in south-south Nigeria. This population was a manageable size; therefore, the researcher adopted a census study. Two questionnaires were used to gather data from the target sampled population. Cronbach alpha was used to measure the internal consistency of the instruments at a coefficient index of 0.89. Descriptive statistics and Pearson Product Moment Correlation Coefficient was adopted for data analysis using SPSS version 22.0. Findings of the study revealed that there is relationship between Instructional Delivery Digitalization Dimensions and Measures of Job Performance of Lecturers in universities in South-South, Nigeria. This study thus concluded that Network Facilities has a strong antecedent and irrefutable dynamic for enhancing Job Performance of Lecturers in universities in South-South, Nigeria. The study recommended among others that Universities in South-South should provide adequate training to enhance lecturers' competence in the use of instructional delivery digitalization in order to enhance lecturers' job performance in business education.

Keywords: Instructional Delivery Digitalization, Job Performance, Business Education Lecturers, Technological Facilities

INTRODUCTION

Digitization faces many problems apart from the technical point of view. Required staff expertise and additional resources are often the greatest costs in digitization. Not only are large budget allocations needed to fund research and intellectual selection, but also time must be spent for feasibility assessments, training, and methodical prioritization of items or collections to be digitized. These requirements pull staff away from their regular workloads.

Digitization has no doubt changed our education system, but we cannot say that it has diminished the value of our old time classroom learning. Neither do we want something so priceless to turn into dust. The best part about the digitization of education in the 21st century is that it is combined with the aspects of both; classroom learning and online learning methods. Walking hand in hand both act as a support system to each other, which gives a stronghold to our modern students. Digitization in education has also proved to be the right method for saving resources. Online examination platforms have restricted the frivolous usage of paper, directly confining the cutting down of trees. This way the digitization of education industry in the 21st century proves to be a boon to our society.

Internet penetration rates are higher for men than for women worldwide. According to the World Wide Web Foundation, the global digital gender gap grew from 11% in 2013 to 12% in 2016. Africa accounts for the largest gap at 23%, while the Americas constitute the smallest gap, at 2%. As the world embraces the Fourth Industrial Revolution (4IR) – which is

characterized by new technologies merging the physical, digital and biological worlds – women risk being left behind. (South Africa Institute of International Affairs, 2021). However, a [2015 report](#) by the Web Foundation's Women's Rights Online shows that in poor urban areas in the global South, women are 50% less likely to be online than men. Once online, women are also less likely to use the web to access important information related to their rights. This is a result of the lack of education [data](#) shows women who have completed secondary school are six times more likely to be online than women with primary school or no school. Another reason is age: older women in developing and Liquid Cristal Display (LDC)s are less likely to be online than men, and even those with minimal digital skills are unlikely to use the internet to learn about becoming economically stable. (Global Report, 2015).

Conceptual framework

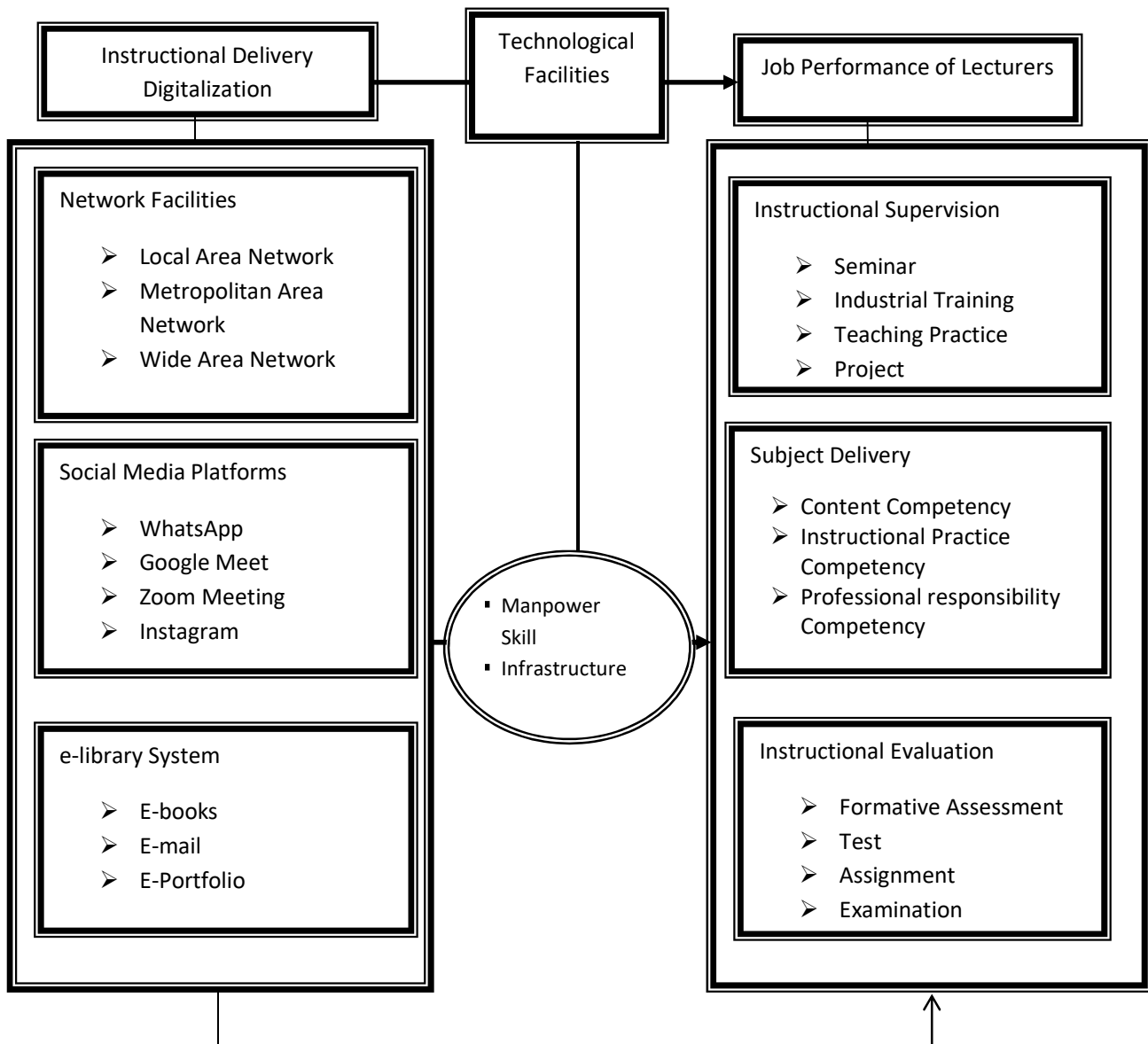


Fig. 1.1: Conceptual Framework showing instructional delivery digitalization and job performance of lecturers in universities in south-south geopolitical zone Nigeria.

Source: (Mitchel, 2020; Victor, 2021; Hayta, 2013; Williams, 2020; Nwokika et al., 2021).

Hypothesis

H₀₁ Technological level of universities do not significantly moderate the relationship between instructional delivery digitalization and Job performance of business Education lecturers in Universities in South-South, Nigeria.

Instructional Delivery Digitalization in Nigeria

Digitalization for instructional delivery in Universities in Nigeria is still a mirage despite the fact that digitalization has become increasingly important in universities with its immensely usage in this era of technological advancement. Digitalization is a hot concept in universities which has been growing since the inception of the first web-based courses in the mid to late 1990s (Bichsel, 2013). In recent decades, the use of information and communication technologies (ICT) for educational purposes has increased, and the spread of network technologies has caused e-learning practices to evolve significantly (Kahiigi et al., 2008). Digitalization is a new approach to teaching and learning, representing all or part of the educational model applied, that is based on the use of electronic media and devices as tools for improving access to training, communication and interaction that facilitates the adoption of new ways of understanding and developing learning. Digitalization involves the use of a computer or electronic device (e.g. a mobile phone) in some way to provide training, educational or learning material. (Stockley, 2006). It is the delivery of a learning, training or education program by electronic means. Digitalization could also be considered a natural evolution of distance learning, which has always taken advantage of the latest tools to emerge in the context of technologies for structuring education (Albert et al., 2012).

The huge growth of computers, the internet and other electronic devices such as smart phones and tablets provide global opportunities for education, especially for learning outside the premises of the school (Ngwoke, 2011). They are powerful tools for the development of quality teaching. They are also catalysts for radical change in existing school practices and veritable vehicle for service delivery in universities. They have facilitated quick delivery of learning and dissemination of knowledge and information in a way that were not previously possible. The recognition of these facts, has led to the Federal government of Nigeria to instruct the National Policy on Education (2004) to set standards, regulate framework for the deployment of ICT infrastructure at all levels of education in Nigeria. The federal government urged the state government to adopt the National Policy on Computer Education of 1998 which has its objectives as to encourage teachers to develop a sense of rapport with computer and appreciate its potentials for solving teaching and learning challenges and to entrench computer culture that permeates all activities in institutions of learning (Adeosun, 2010).

Concepts of Job Performance

Performance is what the organization hires one to do, and do well" (Campbell et al., 1993). Thus, performance is not defined by the action itself but by judgmental and evaluative processes (Ilgen & Schneider, 1991; Motowidlo et al., 1999). Moreover, only actions which can be scaled, i.e., measured, are considered to constitute performance (Campbell et al., 1993). The outcome aspect refers to the consequence or result of the individual's behavior. The above described behaviors may result in outcomes such as numbers of engines assembled, pupils' reading proficiency, sales figure, or number of successful heart operations. In many situations, the behavioral and outcome aspects are related empirically, but they do not overlap completely. Outcome aspects of performance depend also on factors other than the individual's behavior. For example, imagine a teacher who delivers a perfect reading lesson (behavioral aspect of performance), but one or two of his pupils nevertheless do not improve their reading skills

because of their intellectual deficits (outcome aspect of performance). Or imagine a sales employee in the telecommunication business who shows only mediocre performance in the direct interaction with potential clients (behavioral aspect of performance), but nevertheless achieves high sales figure for mobile phones (outcome aspect of performance) because of a general high demand for mobile phone equipment. In practice, it might be difficult to describe the action aspect of performance without any reference to the outcome aspect.

Because not any action but only actions relevant for organizational goals constitute performance, one needs criteria for evaluating the degree to which an individual's performance meets the organizational goals. It is difficult to imagine how to conceptualize such criteria without simultaneously considering the outcome aspect of performance at the same time. Thus, the emphasis on performance being an action does not really solve all the problems. Moreover, despite the general agreement that the behavioral and the outcome aspect of performance have to be differentiated, authors do not completely agree about which of these two aspects should be labeled 'performance'.

Performance is a multi-dimensional concept. On the most basic level, Motowidlo and Borman (1993) distinguish between task and contextual performance. Task performance refers to an individual's proficiency with which he or she performs activities which contribute to the organization's 'technical core'. This contribution can be both direct (e.g., in the case of production workers), or indirect (e.g., in the case of managers or staff personnel).

Contextual performance refers to activities which do not contribute to the technical core but which support the organizational, social, and psychological environment in which organizational goals are pursued. Contextual performance includes not only behaviors such as helping coworkers or being a reliable member of the organization, but also making suggestions about how to improve work procedures. Three basic assumptions are associated with the differentiation between task and contextual performance (Motowidlo & Borman 1997; Motowidlo & Schmit, 1999).

- (1) Activities relevant for task performance vary between jobs whereas contextual performance activities are relatively similar across jobs;
- (2) task performance is related to ability, whereas contextual performance is related to personality and motivation;
- (3) task performance is more prescribed and constitutes in-role behavior, whereas contextual performance is more discretionary and extra-ordinary.

Technological Level of Institution

schooling should be genuine and authentic for students and that using technology in the classroom will help lecturers and students to engage in real-world experience artificial intelligence technologies like Presentation Translator that creates subtitles in real-time for what the teacher is saying can help make classrooms available to all – including those who speak different languages or who might have visual or hearing impairments or other learning disabilities. The reality is, chalkboards are also becoming a thing of the past in the classroom. Instead, smart technologies such as interactive whiteboards, IT suites and tablet-based learning, are becoming more commonplace in schools.

Evidently, the evolution of technology in education and the learning experience of students is a step in the right direction. Hence, the need for a technology-driven educational system in Nigeria cannot be overemphasized. We need technology in every classroom and in every

student and teacher's hand because it is the pen and paper of our time and the lens through which we experience much of our world. Public schools (both primary and secondary) in Nigeria are no longer what they used to be. In previous years, parents from all walks of life would have been happy to enroll their children in federal and state government schools. However, due to the quality of education in most of these institutions, most parents now opt to enroll their children in private schools, despite the higher costs.

Despite the infrastructure challenges, some of Nigeria's most expensive private schools are still merely catching up with the rest of the world with regards to Internet access, Artificial Intelligence, and other smart technologies to enhance schooling and the learning experience. However, the fees charged by some of these high-cost private schools results in the ability to hire top-notch educators. One still wonders though, if students are getting commensurate quality for the fees being paid but this is a topic for another day. The differences between these categories of private schools alongside the public schools. Unfortunately, the same cannot be said about the low-cost private schools and some public schools are in their financial capability and pace in embracing technological innovation in their education system. (Fela, 2021).

Ragan (2012) asserts that technology education is really a good means to the realization of vision 2020, but in the Nigerian society, it has so many hindrances that are retarding its encompassing benefits. Below are a few of them;

1. Societal Misconception: In Nigeria, technology education has a very low awareness compared to other fields of study. This is primarily as a result of the misconception and the poor image generated around it. People have this misconception that it is for the less intelligent and the inferiors in the society (Ezeji & Okorie, 1988). Therefore, no field of study that has that level of inferiority against it can prosper easily and realize vision 2020 in a competitive society like Nigeria.

2. Inadequate Training Facilities: Technology education has been going through epileptic growth in Nigeria. One of the resounding aspects is the area of inadequate training facilities that it has been encountering. No field of study can do well without corresponding facilities for training. According to Kalat (2007), the training facilities are the working instrument that assists the acquisition of skill. Since technology education is the aspects of learning that equip the individual with practical skills, it therefore implies that without the necessary facilities, it will not be useful in realizing vision 2020.

3. Inadequate Funding: Technology education require high level of funding since it require several equipment, machines, tools etc. for its program. Anything less than the required funding will make it non effective, which should be avoided. But in Nigeria funding of technology education is a big challenge. Most of the institutions are suffering from inadequate funding. This had added more injury than healing to its existence. Therefore, technology education funding is really a big challenge in realizing vision 2020.

4. Poor Policy Implementation: Education policy implementers take little or no account of implementing policies that relates to technology education (Aina & Beecoft, 1992). They went further to state that, some educational policies are due to most of the planners not having adequate knowledge of technology education. Most of them they lamented are historians, economists etc. On this ground, they suggested that technology education should be separated from general education and manned by the experts, so as to attract adequate allocation and help the realization of vision 2020.

Instructional Delivery Digitalization and Job Performance

Popova et al., (2021) opined that Digitalization of the global economic processes has had a great impact on the digitalization of higher education. The idea of developing this area of educational activity is supported by many researchers who speak about the possibilities of expanding 24/7 learning technologies for the digital generation, thereby increasing the competitiveness of the university. The purpose of this article is to analyze the pros and cons of organizing the higher education process using digital technologies. The methodological basis of the research were the theories of management, consumer behavior and sociology. Based on structural and logical analysis and deduction, the positive and problematic aspects of implementing distance learning in universities were identified. The article presents a critical review of the literature that reveals the essence and directions of digital technologies management and the basics of consumer behavior of digital users. Based on desk research, the analysis of university students ' feedback on the use of distance learning technologies was carried out. The attitude of students to the online educational process was determined. The positive sides and the problems of using digital technologies in the university were identified. Recommendations were made on improving distance education. Problem origin description: the digitalization process has long been a prerequisite in training bachelors and masters. However, due to an objective global problem -the COVID-19 corona virus pandemic, the need to transfer training to an online format has become mandatory for everyone. On March 16, 2020, after the order of the Ministry of Education and Science of the Russian Federation, all Russian universities switched to distance learning. The authors of the article formulated the hypothesis that in general, universities are ready for practicing distance learning. There are both positive aspects and problems in this process which are an incentive for improving the educational process in the context of digitalization. The purpose of the study: to analyze the readiness of Russian universities to use digital technologies in distance education.

Technology Acceptance Model

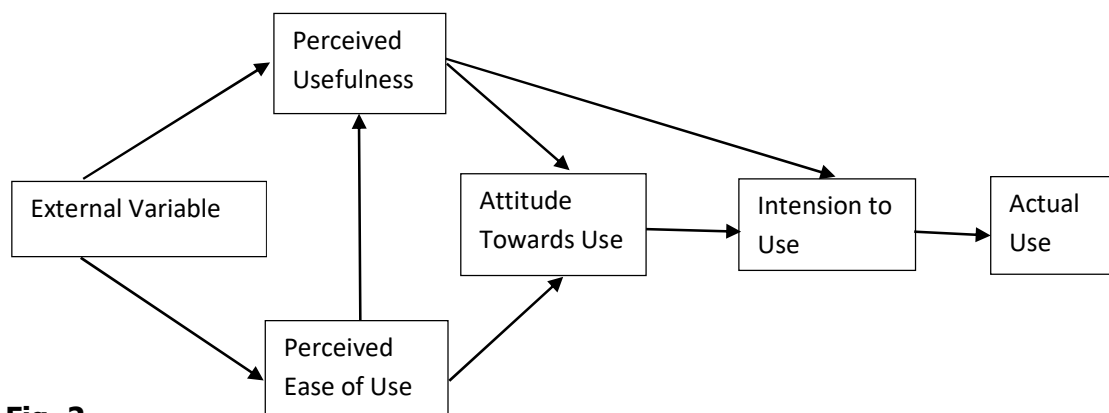


Fig. 2

Source: Davice 1989

The technology acceptance model (TAM) is an information systems theory that models how users come to accept and use a technology. Technology Acceptance Model (TAM); Davis, (1989) has been one of the most influential models of technology acceptance, with two primary factors influencing an individual's intention to use new technology: perceived ease of use and perceived usefulness. An older adult who perceives digital games as too difficult to play or a waste of time will be unlikely to want to adopt this technology, while an older adult who perceives digital games as providing needed mental stimulation and as easy to learn will be more likely to want to learn how to use digital games. While TAM has been criticized on a

number of grounds, it serves as a useful general framework and is consistent with a number of investigations into the factors that influence older adults' intention to use new technology. With this assumption, lecturers in the universities should be willing and ever ready to accept the switch over from traditional way of teaching activities to the modern and digital means of teaching.

METHODOLOGY

This study adopted correlational research design. The population of the study comprised of Business Education Lecturers in ten public and state universities in the south-South zone of Nigeria. The researcher used the entire number of the population of Business Education Lecturers in the South-South Universities in Nigeria. This was because, the population was of a manageable size of 141 lecturers, and therefore, the study was a Census Study. They were structured questionnaires. Data collected through the use of questionnaires, were coded and entered into the computer by using the Statistical Package for Social science (SPSS version 22.0). The computation was made using the mean score statistics and standard deviation to analyze the research questions while the hypotheses were analyzed using the descriptive statistics and Pearson Product Moment Correlation at a 0.05 Coefficient. These established the extent to which the independent variable (Instructional Delivery Digitalization) related to the dependent variable (Job Performance of Business Education Lecturers in Universities in South-South Nigeria). Other analysis, such as the biometric data, were computed using the percentage and pie chart statistics.

Multivariate Analysis

H₀₁ Technological level of universities do not significantly moderate the relationship between instructional delivery digitalization and Job performance of lecturers in universities in South-South Region of Nigeria.

The result of the test of hypothesis ten which involved the moderating variable to the relationship under study is presented under this section.

Partial Correlation Matrix

Correlations					
Control Variables				IDD	JPL
	instructional	delivery	Correlation	1.000	.800
	digitalization		Significance (2-tailed)	.	.008
Technological			Df	0	140
level of	Job performance	of	Correlation	.800	1.000
universities	lecturers		Significance (2-tailed)	.008	.
			Df	14	0

Source: Researcher's SPSS (v.22) output 2021.

IDD: Instructional Delivery Digitalization

JPL: Job Performance of Lecturers

From the output of the correlation matrix, Technological level of universities bears a significant influence on the relationship between instructional delivery digitalization and Job performance of lecturers in South-South Region of Nigeria. It means that technological level of universities influences the interplay of instructional delivery digitalization and Job performance as depicted by the probability level of 0.008 which is lesser than the chosen alpha level of 0.05, thus leading to the rejection of the null hypothesis and accepting the alternative hypothesis.

Technological level of institutions moderate instructional delivery digitalization and job performance of lecturers

Technological level of universities bears a significant influence on the relationship between instructional delivery digitalization and Job performance of lecturers in South-South Region of Nigeria. It means that technological level of universities influences the interplay of instructional delivery digitalization and Job performance as depicted by the probability level of 0.008. This findings is supported by wakkala et al., (2019) who agreed that lecturers' competence on network facilities influence instructional subject delivery, this implies that network facilities influence subject delivery however, lecturers need to be competent in order to adopt this approach thus influence job performance, this techniques implies that Technological level of institutions moderate instructional delivery digitalization and job performance of lecturers.

Eze et al., (2018) indicated that if there are sufficient e-learning facilities for use in the universities and facilities are user friendly then it will facilitate and improve learning. It was indicated that the attitudes of users, inadequate Internet facility and inadequate training are major inhibitors. The implication is that the University under study should regularly conduct training especially when new faculty is employed to ensure that they adapt and use them. Furthermore, there should be some kind of weekly monitoring to ensure that lecturers use them in classes at all times.

Availability and adequacy of e-learning facilities is one of the basic requirements for successful adoption of e-learning facilities in private Universities, and for such institution to adopt e-learning successfully, it must provide adequate and reliable technical infrastructures. Although there are quite a number of e-learning facilities available in most universities. The usage of e-learning facilities in universities is still on the average. This is as a result of lack of technical know-how and the attitudes of the staff which reveal the low level of usage of ICT equipment and facilities in schools today. Majority of the lecturers are comfortable with the use of e-learning to deliver lectures to students because most of the facilities are user friendly which has significantly improved lecture delivery.

The study also recognises some of the inhibiting factors affecting e-learning adoption. Attitude of the users is one of the inhibiting factors that affect the successful adoption of e-learning facilities by lecturers. Some lecturers are not used to it and they do not want to accept changes because they are afraid of adopting the new technology as old professors do not see reasons to change from the analogue age to the digital age. The implication is that the level of e-learning usage in Universities is still on the average. In addition, while other e-learning facilities are available in University poor internet facilities is a major challenge. The implication is that lecturer's access to the internet and the megabyte needed to access the internet is limited. Also, limited utilisation of the e-learning facilities is due to limited training as a result of poor knowledge of ICT facilities and lack of requisite skills. The level of e-learning facilities would be improved if quality internet facilities are provided and accessible. Therefore, school management and government authorities should brace up to these challenges through acquisition and installation of modern e-learning infrastructures and active involvement of e-learning in all school curricula. Also, ICT centres should be established and necessary facilities like computers, web-connectivity and constant electricity supply in the institutions to enhance students' access to e-learning facilities are to be provided and upgraded from time to time. This would improve lecturers' performance and increase the usage of e-learning facilities. In addition, periodical trainings should be organized for lecturers. This would enable them acquire the relevant skills and knowledge on the usage of e-learning facilities.

Adoption of e-learning facilities have moved from a simpler adoption participation process to involving various stakeholders in the institution with the university system including the student that constantly interact and influence the process of adoption. Eze et al. (2014) noted that various stakeholders can influence and be influenced by technology adoption and these stakeholders especially the innovative ones are the ones that are the forefront of initiating and influencing the adoption process. Lecturers are not in full utilisation of the available e-learning facilities because most of them are not involved in the decisions making process of its adoption. The university management do not make any effort to listen and to understand their needs and requirements. When such facilities are procured some lecturers particularly the experienced ones will abandon it. The implication of this is that adoption of e-learning facilities is a complex process requiring significant attention and interactions among various internal and external stakeholders who impact on the adoption process. Eze et al., (2014) identifies the importance of individual factors influencing the adoption of e-learning, and the underlying message has emerged that the level of e-learning adoption will improve if tertiary universities recognise the social dimensions of e-learning adoption such as interest and needs, academic and professional goals, pattern of work source of support and social network.

CONCLUSION

This study has primarily investigated instructional delivery digitalization and Job performance of lecturers in universities in South-South Region of Nigeria and found that there is a strong relationship between the two variables. It also significantly investigated the relationship between instructional delivery digitalization dimensions and measures of Job performance of lecturers in South-South Region of Nigeria. The findings show an irrefutable relationship between and among them. This study thus concluded that instructional delivery digitalization is a strong antecedent and irrefutable dynamic tool for enhancing Job performance of lecturers in universities in South-South Region of Nigeria.

RECOMMENDATIONS

The following recommendations were drawn from the study:

1. Universities in south-south, Nigeria should provide adequate network facilities in order to enhance instructional delivery digitalization in business education.
2. Universities in south-south, Nigeria should provide adequate social media platform such as facebook, whatsapp, instragram and website or block page in order to enhance instructional supervision, subject delivery and it should be evaluated from time to time to ensure that these platforms serve the purpose or rational in which they were created for.

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