Student Acceptance of Blended Learning In Nigeria

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ABSTRACT

This study explains the factors that influence the acceptance of blended learning and the level of acceptance of the features of blended learning by undergraduate students in Landmark University. Questionnaires were used as the data collection instrument and the acceptance of blended learning was tested using UTAUT model. Data was analyzed using SPSS .Frequencies; Principal Component Analysis and Regression Analysis were used in analysis. The study found that Performance expectance and Facilitating conditions significantly influenced the acceptance of blended learning. In understanding the acceptance of blended learning features, the student's shows more interest in course-related readings and course materials available on the learning management system and less interest on discussion with lecturers and discussion with classmates. Performance expectancy was a major determinant on the acceptance of blended learning by students. It was also discovered that there is no relationship between the learning style of students and intention to adopt blended learning. This study has implications for university administrators on the importance of academic improvement and supporting features in the introduction of blended learning in educational institutions.

Keywords: Blended learning, UTAUT, technology acceptance

1. INTRODUCTION

Information technology has affected the student learning process making learners more willing to participate and encouraging the individualized learning process. Technology invariably has the power to close the learning gap making education a ubiquitous service. Information technology has further brought about active participation and learning in classrooms making use of collaborative technologies. 21st Century learning skills are different from what has always occurred, making it necessary for a change in approach by which knowledge is delivered. Knowledge transfer must stimulate critical thinking and problem solving skills also awakening creativity in the minds of learners.

Blended Learning is a learner-centered approach where the learner interacts with the instructor and with other learners and content through a thoughtful integration of face-face and online environments. It is a mix of online and face-face learning subject to a range of permutations in technologies, pedagogies and context (Graham, 2006, Garrison& Vaughan, 2008).In consideration of blended learning in a given institution, consideration must be made to users of the technology. Harris et al. (2009) highlight the importance of the perspectives of such stakeholders as organizations, instructors, and students. Among the perspectives, that of the students is the most vital. Hence, the Objective of this study is to find out factors that facilitate user acceptance of blended learning by undergraduate students in Landmark University

2. LITERATURE REVIEW

Blended Learning has been noted for its variation across institutional contexts (Graham, 2013). However, Finn and Bucceri (2004) describes blended learning as an effective integration of multiple learning techniques, technologies, and delivery modes to meet specific communication, knowledge sharing, and informational needs of learners. Blended learning has change the approach of learning .Singh (2003) stressed that blended learning offers more benefits and it is more effective than the traditional e-learning approach.

Bonk and Graham (2012) stressed the accelerated growth of blended learning and cautions of the need to create strategic plans and directions due to its accelerated growth. Sharpe et al. (2006) states that blended learning can be adopted in institutions in 3 ways and these include making learning materials available through the learning management system, digital technologies and new pedagogies introduced and the use of digital technologies by learners.

Students are the major stakeholders in the educational process and research on student attitude towards blended learning is important (Park, 2000) Lopez-Perez et al. (2011) points that tertiary students prefer learning when traditional modes of teaching are complemented by Information technology. Learning occurs in different ways which makes it imperative to combine different approaches to learning through the use of educational tools. Howard (2009) reported that more than half of the online students surveyed missed face to face interaction with other students. In a study by Kehrwald, Rawlins and Simpson (2011) students were noted to have different experiences with blended learning and different values due to its impact on their program. Jackson, Jones& Rodriquez (2010) also noted that students become more independent in the blended learning environment while Lecturers become facilitator which is stated as a major challenge.

Blended learning in Nigeria is still in its infancy and has not fully taken shape in Nigeria (Ololube, 2011). Certain challenges are still pertinent with the educational sector in Nigeria such as lack of infrastructures to support learning, nevertheless Nsofor et al (2014) states that adopting blended learning in Nigeria's Higher education system requires the exploitation of success stories so as to identify challenges specific to them. Blended learning removes barriers in providing answers irrespective of environmental, social or cultural circumstances. (Ifinedo & Ololube, 2007) identified barriers to ICT use in Nigerian universities as including inadequate funding, limited computer/internet access, poor infrastructure, power supply shortages, lack of trained faculty/personnel, and poverty. Private universities however are not faced with these limitations and it makes blended learning implementable in private universities in Nigeria (Ololube, 2011).

2.1 Theoretical Background and Hypothesis
Several models have been identified for the adoption of technologies and to predict its actual use but for the purpose of this study Unified Theory of Acceptance and Use of Technology (UTAUT) has been adopted because it is widely used and well validated among researchers. Venkatesh et. al. (2003) formulated the Unified Theory of Acceptance and Use of Technology (UTAUT) UTUAT is based upon the conceptual and empirical similarities across different technology acceptance models.

The model consists of 4 constructs and states that these constructs explain user acceptance and use of technologies. They are Performance expectancy, effort expectancy, social influence and facilitating conditions

Hypothesis 1: Performance expectancy has a positive effect on blended learning adoption

Performance expectancy is the degree to which using a system will improve the performance of the student .This construct has been the strongest in predicting behavioural intention (Venkatesh et al.2003).

Hypothesis 2: Effort expectancy has a positive effect on blended Learning adoption

Effort expectancy is defined as the degree to which student believes adoption of blended learning will be easy

Hypothesis 3: Social Influence   has a positive effect on blended Learning adoption

Social Influence is described as the degree a student thinks people he considers important should use the system.it has been shown that there is a positive effect between social influence and intention to use a technology

Hypothesis 4: Facilitating Conditions has a positive effect on Blended Learning adoption

Facilitating Condition is the degree a student believes the organizational policies and structures and technical infrastructure support blended learning

Moderating Variables
The moderating variable considered in this study is gender based on the UTAUT model Venkatesh et al. (2003) reported, that gender plays a significant role in the adoption of technologies.
According to research on performance expectancy, gender is usually stronger in men (Venkatesh & Morris, 2000) , while Effort expectancy and Social influence are more significant in women (Cheng, Yu, Huang, Yu, & Yu, 2011; Venkatesh & Morris, 2000).
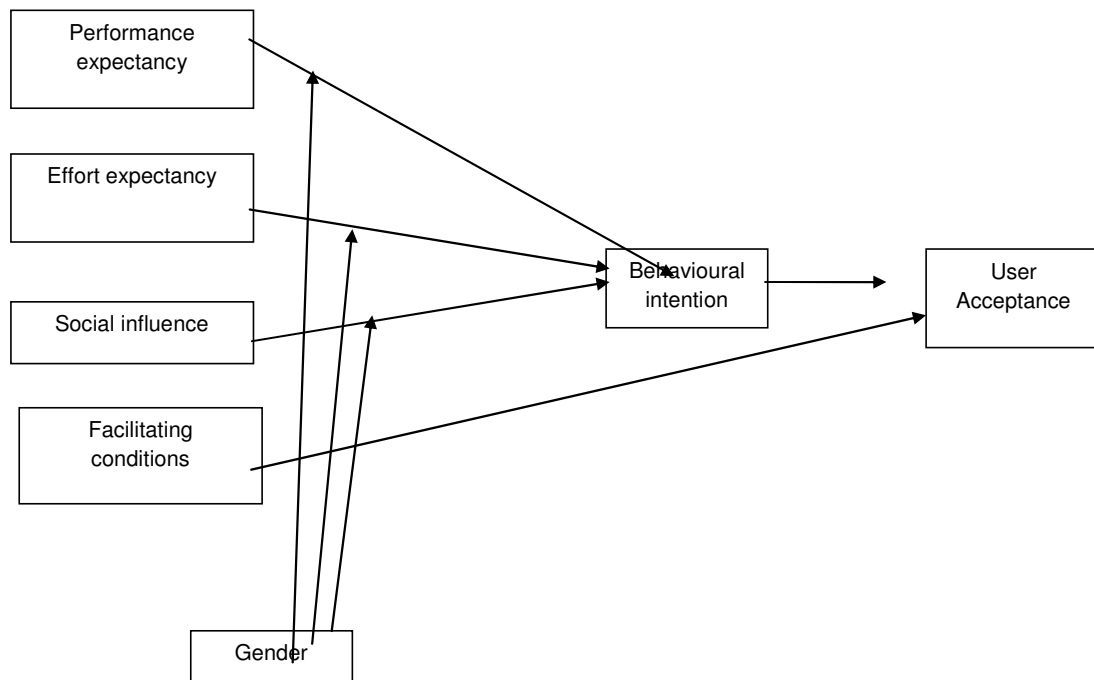H5: Gender influences intention to adopt blended learning

Figure 1: Model of Unified Theory of Acceptance and Use of Technology (UTAUT)

3. RESEARCH METHODOLOGY

The study was made up of Landmark University undergraduate student. Landmark University is currently running a blended learning approach; this adoption is still in the early phase with uploading of lecture materials and course compact as the major aspects been implemented, few lecturers are engaged in discussions, quizzes and exercises. This study used a questionnaire-based survey which was adopted based on UTAUT model. The questionnaire consisted of close end questions. 300 Questionnaires were distributed, of which 205 were returned by students. Descriptive analysis, and regression analysis were used for analysis and principal component analysis and reliability analysis were used to test the reliability of the data.

4. RESULT

4.1 Demographic Characteristics

Table 1 below shows that 56.8% of the sampled population is male while 43.2%   are female. All levels in the university were fully represented in this study with 400 level accounting for the majority with 38.3%. Also College of Science and Engineering accounted for the majority of respondents from the colleges.
Table 1: Demographic characteristics of respondents

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Gender	Frequency	Percentage
Male	117	56.8
Female	89	43.2
Level of Study		
100 Level	29	14.1
200 Level	34	16.5
300 Level	40	19.4
400 Level	79	38.3
500 Level	24	11.7
College of Study		
CAS	11	5.3
CBS	73	35.4
CSE	112	59.2

4.2 Learning Styles
Table 1 reveals majority of respondents stated that the learn best with the aid of pictures while only 28% stated that the learn with the aid of sound. This implies that blended learning features should include more images and educational games and simulations rather than just words or text

Table 2: Learning styles of students

Learning Styles	Percentage
Pictures	54.9
Sound	28.2
Words	34.0
Practice hands-on	35.9
Reasoning	29.6
Learn best in groups	35.9
Learn best working alone	41.3

4.3 Willingness to use blended learning
In Table 3, 66.5% of students were in support of course-related readings included on the Learning management systems to support teaching, while only 47.6% found discussion with classmates improving their learning. Majority of students were in support of course related readings, assignments, exercises and discussion with lecturers

Table 3: Willingness to use blended learning features

Blended Learning Features	Percentage willingness to use
Course Materials	61%
Exercises	59.2%
Course related readings	66.5%
Assignment	59.2%
Discussion with Lecturers	56.8%
Discussion with Classmates	47.6%

4.4 Perceived Benefits of Blended learning Features
47.6% of the student population stated that the benefits of course materials available online is high, while 48.1% rated course-related readings with medium benefits and 36.4% rated discussion with lectures as low as shown in Table 4.

Table 4. Perceived benefits of Blended Learning Features

Blended Learning Features	Low	Medium	High
Exercises	21.4%	41.3%	31.6%
Course Materials	7.8%	40.3%	47.6%
Course-related readings	15.0%	48.1%	32.5%
Discussion with classmates	31.1%	37.4%	27.2%
Discussion with Lecturers	36.4%	28.6%	30.6%

4.5 Validity and Reliability
Principal component analysis was done to access the reliability of constructs .The results in Table 5 showed that item loadings were greater than 0.5, except for one item that was dropped from performance expectancy. A reliability analysis was conducted for the constructs of which all coefficients were satisfactory as having a reliability greater than 0.7 as stated by Nunnally(1978)

Table 5: Crobach Alpha Reliability Test

Constructs	Crobach Alpha (Reliability Test)
Performance Expectancy	0.787
Effort Expectancy	0.829
Social Influence	0.794
Facilitating Condition	0.715
Intention to adopt Blended Learning	0.819

4.6 Hypothesis Testing

Regression analysis was carried out to test the research hypothesis, In Table 6, performance expectancy and facilitating conditions were significant with coefficients less than 0.05, while effort expectancy and social influence were not significant. This implies that only performance expectancy and facilitating conditions explain the intention to adopt blended learning in Landmark University

Table 6:Regression Analysis of Constructs

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	1.137	.655		1.736	.084
PerformanceExpectancy	.655	.098	.437	6.708	.000
EffortExpectancy	.012	.066	.013	.188	.851
SocialInfluence	.023	.062	.027	.378	.706
FacilitatingConditions	.202	.063	.218	3.229	.001

a. Dependent Variable: BehaviouralIntention

There was a significant relationship between performance expectancy and behavioural intention, we therefore accept the hypothesis. Performance expectancy had a significance of 0.000.It is therefore the strongest predator of intention to adopt blended learning, the findings are consistent with previous research that states performance expectancy as the strongest motivating factor for the use of technology which corrobotes the findings on venkatesh (2003). Effort expectancy construct did not predict intention to use blended learning. We therefore reject the hypothesis. This can be explained based on technological proficiency of the younger generation. Hence they consider themselves proficient.

Social Influence Construct did not significantly predict behavioural intention. This implies that the opinion of others is not important in determining adoption of blended learning in Landmark University. Facilitating Conditions construct is proven to predict intention to use blended learning (sig=0.001;p<0.005).Lecturers support for blended learning, university policies, internet bandwidth size and speed as well as knowledge are important in predicting adoption of blended learning by undergraduate students.

4.7Gender Moderating Behavioural Intention

The results of the moderating effects of gender differed from the hypothesis as shown in Table 7. We therefore reject the hypothesis. The findings differ from previous findings in which gender showed some moderating effects

Table 7: Gender Moderating User Acceptance

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	5.764	.583		9.894	.000
Sex of respondents	.590	.385	.107	1.533	.127

a. Dependent Variable: BehaviouralIntention

4.8 Relationship between Learning styles and Behavioural Intention

The result showed that there is no significant relationship between learning styles and intention to adopt blended learning (p=0.208) .We therefore reject the hypothesi

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.250	.341		18.308	.000
	LearningStyles	.133	.105	.089	1.264	.208

a. Dependent Variable: BehaviouralIntention

5. CONCLUSION

The acceptance of blended learning by undergraduate students was the objective of the study, since blended learning is still in its infancy in Landmark University, the study set out to find those factors that influence the adoption of the technology. The study found out that majority of students are more interested in course-related reading and course materials features of blended learning .Also, students perceive course materials to provide high benefits on performance. Interesting students are not interested in collaborating with colleges and discussing with lecturers on blended learning platforms. The study further showed that performance expectancy and facilitating conditions influenced adoption of blended learning in Landmark University, while perceived ease of use and social influence did not have any influence on adoption.

Gender did not play any moderating effect on ad on adoption of blended learning, as male and female undergraduate students' intention to adopt blended learning had no variation. This study also found out that there is no relationship between learning styles and blended learning adoption. This study has implications in providing insights on the acceptance of blended learning in universities. Undergraduate students consider blended learning useful in their academic pursuits and with supporting features being available will invariably lead to the acceptance of the technology.

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