The Impact of UTAUT Model and ICT Theoretical Framework on University Academic Staff: Focus on Adamawa State University, Nigeria.

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ABSTRACT

This paper examined the impact of UTAUT model and ICT theoretical framework on university academicians. The UTAUT model theory was verified using multiple regressions of the four constructs on behavioral intention to accept and use ICT by the Adamawa State University (ADSU) academic staff. The ICT theoretical framework reveals the connectivity between education and the independent variables, use of ICT, ICT infrastructure, staff development and ICT available tools as it brings transformation in education. We have verified the influence of the four UTAUT constructs on the behavioral intention of the university academicians towards the acceptance and use of ICT for teaching and learning. The UTAUT constructs significantly correlated with behavioral intention to use ICT. These are the factors associated with ICT acceptance and usage in Adamawa State University. According to our results Perceived Usefulness (PU) has **R^2 = .181** and significant with p-value **.047(model 1)**, and Perceived ease of use (PEOU), has **R^2 = .270**, significant with p-vale **.000 (model 10).** This has answered objective 1, which is to examine the factors associated with ICT acceptance and usage in (ADSU). The study confirms that the most influential UTAUT constructs influencing the behavioral intention of the academic staff to accept and use ICT is Effort expectancy (EE) in (ADSU)(model 10), with **R= .519** and **R^2 = .270** (Answered Objective 2). This study confirms the validity of the UTAUT model in the field context of a developing country's educational system. Knowledge gained from the study is beneficial to both the university academic staff and the ICT policy makers in developing countries.

Keywords: UTAUT- constructs; ICT; Acceptance; Theoretical Framework; Academic staff, Behavioral intention

INTRODUCTION

The knowledge of ICT usage improves human capacity in every field of human endeavor such as business transactions, industrial operations, educational programmes and activities and in all aspects of life in general. ICT is an umbrella term that includes any communication devices or application encompassing: radio, cellular phones, hardware and software, computer and network, satellite etc. These can be use to enhance and support distance learning [1]. Therefore in education, ICT is considered to be the application of digital equipments to all aspects of teaching and learning. The use of ICT has brought about rapid transformation which involves the use of computers, internet and other information technologies [2]. However others viewed ICT as electronic or computerized devices which enabled us to process and share information [3]. E-learning is considered as the use of ICT to enhance and support teaching learning process [4]. Therefore ICT is a teaching tool, that aid education of student both on and off campus by means of teaching online offered via web-based system [5, 6]. ICT for education is more critical today than before[7]. The higher education institutions around the globe have increasingly adopted ICT as tools for teaching, cirriculm development, staff development, and student learning [8, 9].

In the information age where information and communication technology (ICT) is transforming the educational landscape around the world, HEIs in Nigeria should rise up to the challenges ahead [10-14]. Public expectation for ICT and educational systems has increase with the ubiquity of digital technologies in daily life. To date, the discourse has been predominantly instrumental, focusing on the skills and the use of ICT in the service of curriculum and instruction. Although computers have been widely available in educational setting for well over two decades, a concern remains that teachers are neither confident nor competent users of ICT.

The failure to use technology by many academics in the teaching and learning process is of particular concern. The implication for leaders in the delivery of IT service in a university environment is that to meet the reform agenda, not only must they provide administration efficiencies, but also create an environment that appropriately supports technological innovation in the university's teaching and learning. Most of the studies on innovation in higher education have centered on ICT software and hardware designs that are driven from information science (IS) or information technology (IT) perspective of behavioral intention to use the system on an individual Level

[15, 16] . The obvious problem Surry and Ensminger, encountered when discussing about technology is that there are so many different investigations and topics on the subject. Therefore, there is at various levels within any educational system, different expectation and drivers about technology's value and adoption on both personal and organizational level [17].

[18] in his study found that pre-service teachers are willing to use technology but the problem is that no lessons to facilitate them with skills that will transform them into technology competent teachers. In a study by[19] , lack of interest, limited access to ICT facilities and lack of training opportunities were some of the problems associated to ICT usage among the Nigerian University academic staff. [20] opined that inadequate ICT facilities, excess workload and funding were identified as major challenges to ICT usage among academic staff in Nigerian universities.

ICT needs for University Academicians

Nigerian universities require adequate ICT facilities to augment face-to-face teaching. Students are expected to have academic networking with their student counterpart across the globe. Excellent and current learning materials are required from academic staff to promote the quality of education and their product. Nigerian university academic staff should be able to compete globally with their colleagues. However the concern is whether university academic staff are prepared to integrate the technology that is feasible to them into effective lessons for their students. [21, 22]. [23] argue that, "the integration of ICT into our classrooms is determined by key factors, such as the contexts in which teachers interact, their beliefs, and their attitudes towards teaching and learning"(p80). The stage of enlightenment on which ICT could be use in education is still low. Many lecturers hardly comprehend the benefit of ICT in education. Most of the lecturers acknowledged the fact that internet could be browsed as a point of supply of teaching materials. [24] investigated the level and depth of use of computers by university staff. From the survey, in Nigeria, 58.5% use computers for word processing, 32.2% use it for spreadsheet and data processing and 20.5% use it for programming. 66.9% use it for e- mail/Internet while 9.4% use the computer for other purposes apart from the aforementioned. [25] stated that 90% of Nigerian educational institutions are in the emerging phase of ICT, 7% in the applying phase, and 3% in the infusing and transforming phases. ICT is therefore in its' infancy in Nigeria. Nigeria though, has a great advantage because there are many Nigerian ICT experts in the Diaspora. However, no concerted and win-win effort have been made to harness this potential to accelerate and sustain ICT development in Nigerian educational settings.

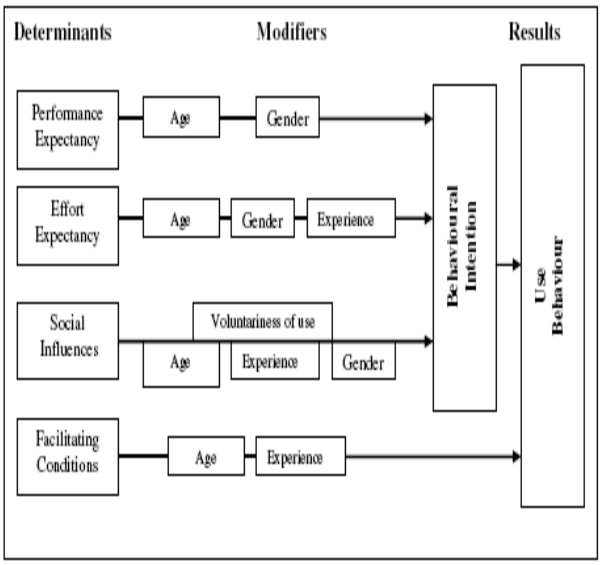
Technology Acceptance Models

With the ongoing development of ICT and the diverse fields it affects, various theoretical models have been proposed for a better understanding concerning its diffusion, adoption, acceptance, and usage [15, 26-30]. Among them, three theories have been influential: Davis and associates' Technology Acceptance Model (TAM)[26, 27, 31]. Diffusion of Innovation (DoI) theory, and Rieber and his associates' five-step hierarchical model of technology diffusion [26, 32, 33] adapted [16]. Theory of Reasoned Action (TRA) and developed the Technology Acceptance Model (TAM) to explain the behavioral intention and actual behavior of a person's computer usage. According to TRA, a person's specified behavior is determined by the person's attitude and subjective norm. Behavioral intention (BI) is a prerequisite of the likelihood of performing a specific behavior [34]. Hence, TAM postulates that a person's computer usage is mainly affected by his or her BI. The Technology Acceptance Model (TAM) is an information systems theory that models how users come to accept and use a technology. The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it. Many researchers have investigated the issue of ICT adoption and acceptance and use [35-38].

The Unified Theory of Acceptance and Use of technology (UTAUT)

Many models of technology acceptance have been developed over the years, some of which have been used to examine teachers' acceptance of technology. In 2003, Venkatesh, Morris, Davis and Davis created the Unified Theory of Acceptance and Use of Technology (UTAUT). UTAUT model identifies the key factors in acceptance of ICT as measured by behavioral intention to use the technology and actual usage. The four determinants of ICT acceptance are --- (i) performance expectancy, (ii) effort expectancy, (iii) social influence and (iv) facilitating conditions. The Unified Theory of Acceptance and Use of Technology (UTAUT) were used for this study because of its advantages. TAM is only capable of predicting technology adoption success of 30% and TAM2 (TAM extension) can predict 40%. UTAUT has condensed the 32 variables found in the existing eight models (TRA, TPB, TAM, MM, C-TPB-TAM, MPCU, IDT and SCT) into four main effect and four moderating factors. The combinations of the constructs and moderating factors have increased the predictive efficiency to 70%, a major improvement over previous TAM model rates.

- *UTAUT- Unified Theory of Acceptance and Use of Technology*
- *TRA—Theory of Reason Action*
- *TPB—Theory of Planned Behavior*
- *TAM—Technology Acceptance Model*
- *MM—Motivational Model*
- *C-TPB-TAM—Combine Theory of Planned Behavior and Technology Acceptance Model*
- *MPCU—Model of PC Utilization*
- *IDT—Innovation Diffusion Theory*
- *SCT—Social Cognitive Theory*.



The UTAUT Model (Venkatesh et al, 2003: 447)

- PE - is the extent an individual believes the system will help them do their jobs better.(PU)
- EE - relate to how ease an individual believes the system is to use.(PEOU)
- SI - relate to whether or not important others' influence an individuals' intention to use the system.

FC - whether individual have the personal knowledge and institutional resources available to use the system

Table1. Definitions and Root Constructs for the Four Constructs [29]

Construct	Definition	Root Constructs
Performance expectancy	The degree to which an individual believes that using the system will help him or her to attain gains in performance. (P.447)	'Perceived Usefulness 'from TAM and C-TAM-TPB, 'extrinsic motivation' from MM, 'Job-fit' from MPCU, 'relative advantage' from IDT, and 'Outcome expectations' from SCT.
Effort expectancy	The degree of ease associated with the use of the system (P.450)	'Perceived ease of use' from TAM, 'Complexity' from MPCU, and 'ease of use' from IDT
Social influence	The degree to which an individual perceived that important others believe he or she should use the new system(P.451)	'Subjective norm' in TRA, TAM2, TPB and C-TAM-TPB, 'social factors' in MPCU, and 'Image' in IDT.
Facilitating conditions	The degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system.	'Perceived behavioral control' from TPB, C-TAM-TPB, 'facilitating conditions' from MPCU, and 'Compatibility' from IDT.

Theoretical Framework

Our focus of the research in the area of education is to find the relationship between the ICT and the education and the relationship of other sub variables. Here the dependent variable is the education, as education depends on the independent variable (ICT) usage in education.

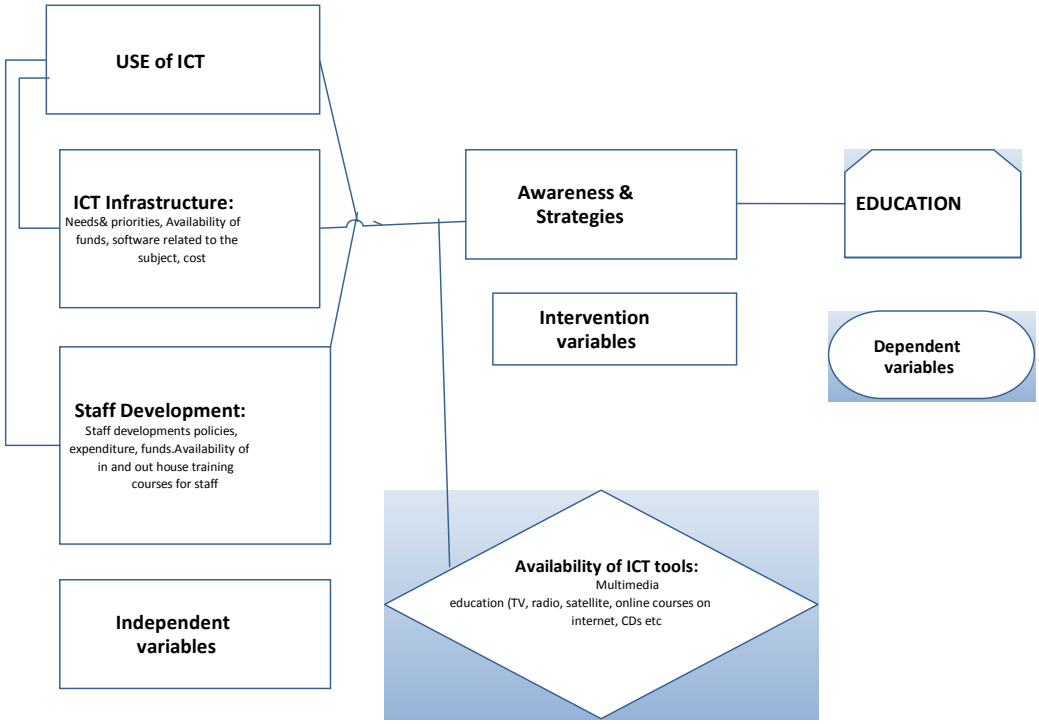


Fig 2: Conceptual Framework

DISCUSSION

In this model the dependent variable is education and its sub variables are educational level of teachers and students which is directly affected by the independent variables which are the use of ICTs, ICT Infrastructure and staff development. ICTs infrastructure and staff development also have a strong relationship with the use of ICTs which is an independent variable, because the availability of the ICTs infrastructure and staff development will enhance the use of ICTs in education. The sub factors of ICTs infrastructure are needs, to develop the ICTs infrastructure. What are the priorities of developing this infrastructure whether to diminish the role of teachers from teaching process or to make the students independent in a sense that they can study without teachers depending on the availability of useful data. Availability of sufficient funds, cost of ICTs infrastructure, availability of software related to subjects are also the sub factors that influence the development of ICTs infrastructure.

The availability of ICTs tools consists of multimedia education like TV, Radio, Internet, Satellite, Online courses etc. These tools will ensure the development of ICTs infrastructure and will also ensure the use of ICTs in education. The student computer ratio is conceived indicators of the availability of the computers, average percentage of multimedia machines and other ICT tools etc.

The second most important independent variable is the staff development and training regarding ICTs because training and development will make the staff capable to guide the students well about the use of ICTs and this will also enhances the education of students. The sub factors of staff development are the policies of organizations and institutes regarding training and development of staff, funding, expenditure on staff development, availability of in and out house training courses for staff influences directly the staff development and training for quantitative as well as qualitative studies. Finally there is an intervening variable that is awareness of ICTs which increases with the passage of time after seeing the ultimate progress in the field of education by using ICTs as a means of instruction.

Awareness campaign and sensitization of personnel is a necessary step in developing ICT infrastructure in education. Organization of seminars, conferences and workshops for top management and other critical staff within the Ministry of Education, National University Commission (NUC), and in the universities and with other stakeholders are necessary in ICT infrastructure development. These workshops, seminars and conferences aimed at raising the level of awareness of the infrastructure challenges, to discuss the users need and various infrastructure options, to promote and encourage multi-stakeholder approaches, to solicit feedback from management and staff [39].

The effective deployment of ICTs in education will therefore require that Ministries of Education collaborate with other ministries and government bodies responsible for infrastructure and ICT and associated policy development and planning. Ministries and NUC also need to establish close working relationships with the private sector and civil society involved in developing and promoting ICT policies, plans and infrastructure. Ministry of Education should hold regular meetings with other important ministries and stakeholders.

METHODOLOGY

Research Objectives are:

(i) To examine the factors associated with ICT acceptance and usage in University A.

(ii) To measure the most influential factors for the acceptance and usage of ICT by University A academic staff.

100 questionnaires were administered and collected. Using regression analysis, the study want to verify the influence of the four constructs of UTAUT (PE, EE, SI, and FC) on the behavioral intention of the university academicians, towards the acceptance and use of ICT for teaching and learning.

These findings will be used to accept or reject the two null hypotheses stated:

$H0_1$: The academic staff of Adamawa State University rejects acceptance and usage of ICT in their workplace.

$H0_2$: UTAUT do not predict successful acceptance and use of ICT by the Adamawa State University academic staff.

Reliability Analysis

Table 2: Reliability Statistics

Cronbach's Alpha	N of Items
.704	**49**

Generally reliability numbers greater than 0.6 are considered acceptable in technology acceptance literature.[40]. As summarized in the table 2b, a reliability analysis was conducted, for the 49 items using Cronbach's Alpha. The UTAUT constructs appears to have a good degree of reliability of above .7

From table 2: Influence of PE on BI

From model 1, these independent variables PE1-10 contributed only .181 of the total variation observed on behavioral intention to accept and use ICT. The correlation and R^2 are (.425 and .181) respectively. The regression equation $Y= 2.697 – 0.045PE_1 + 0.060PE_2 + 0.116PE_3 + 0.070PE_4 + 0.151PE_5 - 0.184PE_6 + 0.098PE_7 + 0.032PE_8 – 0.070PE_9 + 0.066PE_{10}$ is significant with P-value .047. The coefficient shows that PE6 is significant with p-value (.031). Here we conclude that PE6 has positive influence on behavioral intention to accept and use ICT.

From model 2, PE 1-10, contributed only .125 of the total variation observed on behavioral intention to accept and use ICT. The correlation and R^2 are (.352 and .125) respectively. The regression equation is not significant with p-value (.262). The coefficient shows that none of the independent variables are significant on individual basis. Therefore we conclude that, they have no positive influence on behavioral intention to accept and use ICT.

Table 2: Regression Analysis Summary Outcome Adamawa State University(ADSU)

Model	Independent Variables	Dependent Variables	R	R^2	Significant
1	PE 1-10	BI(1)	.425	.181	.047
2	PE 1-10	BI(2)	.352	.125	.262
3	PE 1-10	BI(3)	.304	.092	.533
4	PE 1-10	BI(4)	.343	.118	.309
5	PE 1-10	BI(5)	.373	.139	.178
6	EE 1-8	BI(1)	.346	.120	.153
7	EE 1-8	BI(2)	.326	.106	.048
8	EE 1-8	BI(3)	.388	.150	.054
9	EE 1-8	BI(4)	.460	.211	.004
10	**EE 1-8**	**BI(5)**	**.519**	**.270**	**.000**
11	SI 1-6	BI(1)	.290	.084	.214
12	SI 1-6	BI(2)	.234	.055	.500
13	SI 1-6	BI(3)	.439	.193	.002
14	SI 1-6	BI(4)	.471	.221	.001
15	SI 1-6	BI(5)	.478	.228	.000
16	FC 1-5	BI(1)	.280	.078	.168
17	FC 1-5	BI(2)	.259	.067	.251
18	FC 1-5	BI(3)	.220	.048	.448
19	FC 1-5	BI(4)	.314	.099	.078
20	FC 1-5	BI(5)	.403	.163	.005

"p<0.05"

From model 3, PE 1-10 contributed .092 of the total variation observed in the behavioral intention to accept and use ICT. The correlation and R^2 are (.304 and .092) respectively. The regression equation is not significant with p-value (.533). The coefficient shows that none of the independent variables are significant on individual basis. Therefore we conclude that PE 1-10 has no positive influence on the behavioral intention to accept and use ICT.

From model 4, PE 1-10 contributed .118 of the total variation observed on behavioral intention to accept and use ICT. The correlation and R^2 are (.343 and .118) respectively. The regression equation is not significant with p-vale (.309). The coefficient shows that none of the independent variables are significant. We conclude that the independent variables have no positive influence on the behavioral intention to accept and use ICT.

From model 5, PE 1-10 contributed .139 of the total variation observed on the behavioral intention to accept and use ICT. The correlation and R^2 are (.373 and .139) respectively. The regression equation is not significant with p-value (.178). The coefficient shows that none of the independent variables are significant. We therefore conclude that PE1-10 have no positive influence on the behavioral intention of the academicians to accept and use ICT.

From table 2: Influence of EE on BI

From model 6, EE 1-8 contributed .120 of the total variation observed on the behavioral intention to accept and use ICT. The correlation and R^2 are (.346 and .120) respectively. The regression equation $Y= 3.480 – 0.079EE_1 + 0.027EE_2 - 0.015EE_3 + 0.293EE_4 - 0.020EE_5 - 0.038EE_6 - 0.047EE_7 + 0.061EE_8$, is not significant with p-value (.153). The coefficient shows that only EE4 is significant with p-value (.007), and it has positive influence on behavioral intention to accept and use ICT.

From model 7, EE 1-8 contributed .106 of the total variation observed on behavioral intention to accept and use ICT. The correlation is (.326) and R^2 is (.106). The regression equation is not significant with p-value (.229). The coefficient shows that EE1 is significant with p-value (.048), and it has positive on the behavioral intention to accept and use ICT.

From model 8, EE1-8 contributed .150 of the total variation observed on the behavioral intention to accept and use ICT. The correlation and R^2 are (.388 and .150) respectively. The regression equation is significant with p-value (.054). The coefficient shows that EE1 is significant with p-value (.004), and it has positive influenced on behavioral intention of the academicians to accept and use ICT.

From model 9 EE 1-8 contributed .211 of the total variation observed on the behavioral intention to accept and use ICT by the academicians. The correlation and R^2 are ((.460 and .211) respectively. The regression equation is significant with p-value (.004) and the coefficient shows that only EE5 is significant with p-values (.040). Therefore it has positive influence on behavioral intention to accept and use ICT.

From model 10, EE 1-8 contributed .270 of the total variation observed on the behavioral intention to accept and use ICT by the academicians. The correlation and the R^2 are (.519 and .270) respectively. The regression equation is significant with p-value (.000). The coefficient shows that EE1 and EE4 are both significant with p-values (.027 and .047). Therefore we conclude that they have positive influence on the behavioral intention of the academicians to accept and use ICT.

From table 2: Influence of SI on BI

From model 16, SI 1-6 contributed .084 of the total variation observed on the behavioral intention to accept and use ICT. The correlation and the R^2 are (.290 and .084) respectively. The regression equation $Y= 3.255 + 0.103SI_1 + 0.231SI_2 – 0.042SI_3 - 0.029SI_4 - 0.062SI_5 + 0.035SI_6$, is not significant with p-value (.214) and the coefficient shows that none of the independent variables SI1-6 are significant. Therefore they have not influenced positive on behavioral intention to accept and use ICT.

From model 17, SI 1-6 contributed only .055 of the total variation observed on behavioral intention to accept and use ICT. The correlation (.234) and the R^2 (.055). The regression equation is not significant with p-value (.500). The coefficient shows that none of the independent variables SI1-6 are significant. Therefore they have no positive influence on the behavioral intention to accept and use ICT.

From model 18, SI 1-6 contributed .193 of the total variation observed on behavioral intention to accept and use ICT. The correlation and the R^2 are (.439 and .193) respectively. The regression equation is significant with p-value (.002) and the coefficient shows that SI6 is also significant with p-value (.000). Therefore it has positive influence on the behavioral intention of the academicians to accept and use ICT.

From model 19, SI 1-6 contributed .221 of the total variation observed on behavioral intention of the academicians to accept and use ICT. The correlation and the R^2 are (.471 and .221) respectively. The regression equation is significant with p-value (.001), and the coefficient shows that both SI2 and SI5 are significant with p-values (.002 and .016) respectively. Therefore they have positive influence on the behavioral intention of the academicians to accept and use ICT.

From model 20, SI 1-6 contributed .228 of the total variation observed on the behavioral intention to accept and use ICT. The correlation and the R^2 are (.478 and .228) respectively. The regression equation is significant with p-value (.000) and also the coefficient shows that SI1 is significant with p-value (.014). Therefore it has positive influence on the behavioral intention of the academicians to accept and use ICT.

From table 2: Influence of FC on BI

From model 21, FC 1-5 contributed .078 of the total variation observed on the behavioral intention of the academicians to accept and use ICT. The correlation and the R^2 are (.280 and .078) respectively. The regression equation $Y = 4.308 – 0.147FC_1 + 0.120FC_2 - 0.104FC_3 + 0.022FC_4 + 0.035FC_5$, is not significant with p-value (.168). The coefficient shows that all the independent variables FC 1-5 are not significant. Therefore they have no positive influence on the behavioral intention of the academicians to accept and use ICT.

From model 22, FC 1-5 contributed .067 of the total variation observed on the behavioral intention of the academicians to accept and use ICT. The correlation and R2 are (.259 and .067)

respectively. The regression equation is not significant with p-value (.251), but the coefficient shows that FC4 is significant with p-value (.020). Hence it has positive influenced on the behavioral intention of the academicians to accept and use ICT.

From model 23, FC 1-5 contributed .048 of the total variation observed on behavioral intention of the academicians to accept and use ICT. The correlation and R^2 are (.220 and .048) respectively. The regression equation is not significant with p-value (.448). The coefficient shows that all the independent variables FC 1-5 are not significant, and they have no positive influence on behavioral intention to accept and use ICT.

From model 24, FC 1-5 contributed .099 of the total variation observed on behavioral intention to accept and use ICT. The correlation and the R^2 are (.314 and .099) respectively. The regression equation is not significant with p-value (.078), but the coefficient shows that FC1 is significant with p-value (.027), and it has positive influence on the behavioral intention of the university academic staff to accept and use ICT.

From model 25, that FC 1-5 contributed .163 of the total variation observed on behavioral intention of the academicians to accept and use ICT. The correlation and the R^2 are (.403 and .163) respectively. The regression equation is significant with p-value (.005) and the coefficient shows that FC2 is also significant with p-value (.002). Therefore it has positive influence on the behavioral intention of the academicians to accept and use ICT.

Discussion on the Hypotheses

$H0_1$: The academic staff of Adamawa State University rejects acceptance and usage of ICT in their workplace

Performance expectancy is the extent an individual believes the system will help them do their jobs better (PU). Model 1, shows that (PE1-10) is significance with p-value, .047. Hence it has positive influence on the behavioral intention of the academicians to accept and use ICT in their workplace. Effort expectancy is related to how ease an individual believes the system is to use (PEOU). Models 10, shows that effort expectancy has positive influence on the behavioral intention of the academicians to accept and use ICT in their workplace and is highly significant with p-values, .000. We therefore conclude that the academic staff of University A believes that ICT is useful and ease to use. This influences their behavioral intention to accept and use ICT in their workplace. Therefore we reject the null hypothesis ($H0_1$) and accept the alternative (H_1) which states that University A academic staff do not reject ICT acceptance and usage in their workplace.

$H0_2$: UTAUT do not predict the successful acceptance and use of ICT by the Adamawa State University academic staff.

The UTAUT aims to explain user intention to use IS and subsequently usage behavior. The theory holds that four key constructs (PE, EE, SI & FC) are direct determinants of usage intention and behavior (Venkatesh et al., 2003). From model 1, performance expectancy (PE1-10) is significant with p-value (.047); from model 10, effort expectancy is highly significant with p-value (.000); from model 20, social influence is significant with p-value (.000) and in model 25, facilitating condition is significant with p-value (.005). These shows that each of the four constructs of UTAUT have positive influence on the behavioral intention of the University A academicians to accept and use ICT. Since the four constructs have significant relationship with the behavioral intention to accept and use ICT, we therefore reject the null hypothesis ($H0_2$) and accept the alternative (H_2), which states that, UTAUT do predict successful acceptance and use of ICT by the academicians in University A.

Summary of Findings

We have verified the influence of the four UTAUT constructs on the behavioral intention of the university academicians towards the acceptance and use of ICT for teaching and learning. The UTAUT model theory was verified using regression analysis to understand the behavioral intention of the university academic staff towards acceptance and use of ICT in their workplace.

The UTAUT constructs significantly correlated with behavioral intention to use ICT. These are the factors associated with ICT acceptance and usage in Adamawa State University. According to our results Perceived Usefulness (PU) has **R^2 = .181** and significant with p-value .047(model 1), and Perceived ease of use (PEOU), has **R^2 = .270**, significant with p-vale .000 (model 10). This has answered objective 1, which is to examine the factors associated with ICT acceptance and usage in Adamawa State University.

The study confirms that the most influential UTAUT constructs influencing the behavioral intention of the academic staff to accept and use ICT is Effort expectancy (EE) in University A (model 10), with **R= .519** and **R^2 = .270** (Answered Objective 2).

In summary, our findings shows that the four constructs of UTAUT have significant positive influence and impact on the behavioral intention of the Adamawa state University academic staff to accept and use ICT. This shows that university academic staff will intend to use ICT that they believe will improve their job performance, and easy to use. The facilitating conditions such as appropriate hardware, software, training and support should be in place by the management.

CONCLUSION

The study focuses on the impact of UTAUT model and ICT theoretical framework on university academic staff. Adamawa State University (ADSU) was use as a case study. The paper examines the impact of technology acceptance model on ICT usage in the ADSU.. The results shows that the intention to accept and use ICT by the academic staff is a function of various concepts including the understanding that educational IT is useful, it is not difficult to use, important others believes that he/she should use ICT for teaching and learning. Again the perception of free will to use ICT should also determine the intention to use. The findings have important implications for teaching and learning. In Adamawa State University (ADSU) EE is found to be the most influential predictors of academic staff acceptance and use of ICT among the four constructs of UTAUT. The ICT theoretical framework reveals the connectivity between education and the independent variables, use of ICT, ICT infrastructure, staff development and ICT available tools as it brings transformation to education. We found that performance and effort expectancy, social influence and facilitating conditions all positively impact acceptance and the use of ICT by the ADSU academic staff. This study confirms

the validity of the UTAUT model in the field context of a developing country's educational system. Knowledge gained from the study is beneficial to both the university academic staff and the Nigerian ICT policy makers.

ACKNOWLEDGEMENT

The authors would like to thank Prof. V. Venkatesh for allowing the use of UTAUT for this research. In addition, the authors gratefully acknowledge UTM, Research Universiti Malaysia for their support and encouragement.

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