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Predictors and Moderators of ICT Use by Registry Staff of University of Ibadan, Nigeria

Claudius Akinkunmi Isamakinde
University of Ibadan, Nigeria, ca.isamakinde@gmail.com

Wole Olatokun
University of Ibadan, Nigeria, woleabbeyolatokun@yahoo.co.uk

PREDICTORS AND MODERATORS OF ICT USE BY REGISTRY STAFF OF UNIVERSITY OF IBADAN, NIGERIA

By

Claudius Akinkunmi Isamakinde
Department of Data and Information Science
University of Ibadan
Email: ca.isamakinde@gmail.com

and

Wole Olatokun
Department of Data and Information Science
University of Ibadan
Email:woleabbeyolatokun@yahoo.co.uk

Abstract
The study was designed to investigate the relationship between social influence and facilitating conditions and the behavioural intention to use, and actual use of ICT tools among registry staff of University of Ibadan, Oyo State. Five hypotheses were formulated and tested at 0.05 level of significance. Survey design was adopted. Two hundred and sixty registry staff participated in the study. Data were obtained with a validated structured questionnaire. Collected data were analysed using frequency distribution, Pearson's correlation, multiple regression and moderated multiple regression. Findings showed that there is a significant relationship between social influence, facilitating conditions and the intention to use ICT among the registry staff. Significant moderating effects of gender, age, experience and voluntariness on the relationships were not all confirmed. The relationship between social influence and behavioural intention to use ICT is not moderated by gender and age, but by experience and voluntariness of use. Also, the relationship between facilitating conditions and use behaviour is not moderated by age, but by experience. The University of Ibadan Management should create an enabling environment that will facilitate and support constant use of ICT tools for official work by the registry staff and also fund staff training and retraining in relevant ICT skills.

Keywords: Social Influence, Facilitating Conditions, Predictors of ICT Use, Registry Staff, University of Ibadan

Introduction

The increasing complexities in higher education administration has necessitated the application of Information and Communication Technology (ICT) for quality assurance and goal attainment (Kwame, Fosu and Roderick, 2013). ICT refers to a diverse set of technological tools and resources used to communicate, create, store and manage information. It has significantly impacted on administrative processes in education (Teräs et al., 2020, as cited in Oreku, 2021). Generally speaking, ICT has within the last two decades brought tremendous transformation to higher education administration. Typical universities have embraced ICT-enabled administration, which is the use of electronic technologies and

techniques to manage data, information and knowledge for decision-making purposes (Ibrahim, Adu-Gyamfi, and Kassim, 2018). ICT specifically supports administrative tasks relating to finance, student admission and records, personnel records, e-communication, paperless meetings and library systems (Mbatia, 2014).

Ahmad (2014) found it well established in ICT adoption literature, that adoption of ICT by organisations will not be effective in meeting their information needs unless it is used. He revealed further that since the seventies of the twentieth century, researchers have been searching for predictors that contribute to integration of ICT with operations within organisations. Predictors of ICT use are underlying factors that explain ICT acceptance and use. Afshari, Bakar, Luan, Samah and Fooi (2009) stated that there are manipulative and non-manipulative factors that affect utilisation of ICT. According to them, non-manipulative factors are those that cannot be influenced by the institution, which include such factors as age, ICT experience, policies and availability of external support for the institution. Manipulative factors refer to those that the institution can influence, which include users' attitudes towards ICT, ICT skills and knowledge, and institutional commitment towards implementation of ICT support, among others.

This study examined predictors and moderators of ICT use by registry staff of the University of Ibadan (UI), using the Unified Theory of Acceptance and Use of Technology (UTAUT) developed by Venkatesh, Moris, Davis and Davis (2003). Ahmad (2014) explained that the theory was established on four theoretical constructs representing determinants of Behavioural Intention (BI) or Use Behaviour (UB). These constructs are: Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Facilitating Conditions (FC). PE refers to the degree to which an individual believes that using the system will help him or her to attain gains in job performance. EE is the degree of ease associated with the use of the system. SI is the degree to which an individual perceives that important others believe he or she should use the new systems. FC refers to consumers' perceptions of the resources and support available to perform a behaviour. BI is a measure of the strength of one's intention to perform a specific behaviour. UB, the main dependent variable, is the degree to which a person accepts and uses a new technology (Davis, Bagozzi and Warshaw, 1989). In addition to these variables, the theory considers moderating factors which moderate the relations between various constructs and Behavioural Intention or Use Behaviour. The moderators are gender, age, experience, and voluntariness of use. Ahmad (2014) found out that since the introduction of the theory, numerous studies have either empirically validated or theoretically contributed to the theory. Some of them empirically validated the theory either in western countries or across different cultures.

The location of the study is the University of Ibadan, Ibadan, Oyo State, Nigeria. The University, Nigeria's premier University, was established in 1948 as the University College, Ibadan (UCI) with three faculties: Arts, Science and Medicine. It opened its gates as a centre of learning and research, to the 104 foundation students who began their courses at the University on 18 January, 1948. The Faculties of Arts, Medicine and Science became the three foundation faculties between 1948 and 1949 (Edo, Olaniyi, Ndukwe and Muritala, 2015). With the vision to be a world-class institution for academic excellence geared towards meeting societal needs, UI, as it is fondly called, has evolved over the years from being a simple organisation established to provide needed manpower for the nation, to a predominantly research and postgraduate university. Today, there are sixteen (16) faculties, two (2) colleges, several institutes and academic centres. The workforce of the University, which is a federal institution, is made up of 5422 members of staff comprising 1484 academic

staff and 3938 non-teaching staff (2711 senior staff and 1227 junior staff). The students' population of the University is 46031 comprising 14833 full-time undergraduate students, 15280 full-time postgraduate students, 1963 part-time postgraduate students, 7861 Distance Learning students and 6094 Affiliated Institutions students (University of Ibadan Annual Report, 2018 and University of Ibadan Pocket Statistics, 2018).

Research on the adoption of ICT by university administrative staff is generally limited, as there are few previous studies on the phenomenon. Yet, majority of the administrative tasks performed by this category of users require ICT tools towards enhanced effectiveness and efficiency (Ibrahim, Adu-Gyamfi and Kassim, 2018). Furthermore, there is dearth of empirical examination of factors underlying adoption of ICT by administrative staff within the Nigerian context. Previous research studies about ICT adoption among administrative staff of higher education institutions in Nigeria, Oye, Iahad and Ab (2012), Ogunwemimo (2012), Akintunde (2014), Yusuf and Oso (2014), Egoeze, Misra, Maskeliūnas and Damaševičius (2018), Ogunode, Babayo, Jegede, and Abubakar (2021) and Ogunode, Babayo, Jegede, and Abubakar (2021), mainly focused on the impact, availability, accessibility and challenges of ICT use as well as ICT competency level of staff.

The researchers are unaware of any similar study that has examined underlying factors that influence ICT use by registry staff in Nigeria, despite the fact that the role of registry staff has evolved into one that is strategically important in providing essential support for academic advancement. After all, what influences ICT use among teachers, students and other users may not invariably be the case with other categories of users of ICT. Part of what is yet to be added to previous endeavours in this context, therefore, is: what factors influence ICT use among registry staff?

The broad objective of this study therefore is to examine the influence of social influence and facilitating conditions on ICT use among Registry staff of the University of Ibadan. In line with this objective, the following hypotheses are formulated to be tested at 0.05 level of significance.

$H_0 1$: There is no significant relationship between social influence and the behavioural intention to use ICT among Registry staff of the University of Ibadan.

$H_0 2$: There is no significant relationship between facilitating conditions and use behaviour among Registry staff of the University of Ibadan.

$H_0 3$: There is no significant relationship between the behavioural intention to use ICT and use behaviour among Registry staff of the University of Ibadan.

$H_0 4$: The predictive relationship between social influence and behavioural intention to use ICT among Registry staff of the University of Ibadan is not moderated by gender, age, experience and voluntariness of use.

$H_0 5$: The predictive relationship between facilitating conditions and use behaviour among Registry staff of the University of Ibadan is not moderated by age and experience.

The remainder of this paper is structured as follows: the next section presents the review of related literature and the theoretical underpinning that drives the study; this is closely

followed by the details of the methodology, results and discussions of the findings. The conclusion, recommendations and suggestions for further studies finalised the paper.

Literature Review
In this section, a review of related literature is presented.

ICT Use in Higher Education Management and Administration
ICT has played a major role in supporting higher education administration and enhanced its overall efficiency in the area of information management and other administrative services (Pohekar, 2018). ICT has been deployed for storing, accessing, processing and sharing information in textual, audio, visual and audio-visual formats, and for administrative services to students, staff and other stakeholders of higher education institutions (Beaudry and Pinsonneault, 2010).

ICT tools relevant to educational management include computer hardware, software and other web-based applications. Krishnaveni and Meenakumari (2010), as cited in Ibrahim, Adu-Gyamfi and Kassim (2018), observed that as against the ability to read and write in the preceding centuries, the 21st century literacy centres on the ability to use ICT to carry out information-related tasks. In the study about the level of ICT use in higher education, Oye, Iahad and Ab (2012) found out that the ICT competency of administrative staff is in basic packages such as word processors, database management systems and email services.

While Zainly (2008) submitted that ICT has transformed higher education administration by enabling any form of information to be shared, stored, retrieved and processed easily by all who work, study or interact with higher education institutions, Hassan (2012) argued that administrative work processes in such institutions still face a number of challenges, indicating ineffective integration of ICT (as cited in Qureshi and Abro, 2016). Zuhaib and Muhammad (2016) also reported that ICT usage in administration was not found to be effective enough, and that the limited availability of appropriate resources and training explained the situation (as cited in Oreku G.S., 2021).
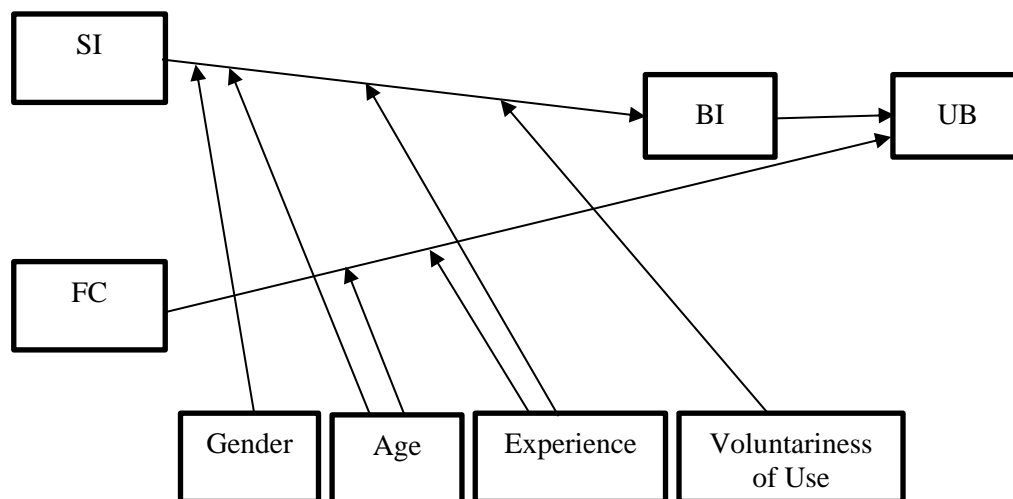
Unified Theory of Acceptance and Use of Technology and Higher Education Administration
The Unified Theory of Acceptance and Use of Technology was proposed by Venkatesh, Morris, Davis, and Davis, (2003), with four core determinants of intention and usage of a technology. The theory consists of four constructs; performance expectancy, effort expectancy, social influence and facilitating conditions. The purpose for using UTAUT is to determine user acceptance and usage behaviour on technology as depicted in Figure 1. From a theoretical perspective, UTAUT provides a refined view of how the determinants of intention and behaviour evolve over time, and it is important to emphasize that most of the key relationships in the model are moderated (Luhamya, Bakkabulindi, and Muyinda, 2017).

According to Ahmad (2014), the UTAUT was introduced as an accumulation of various research efforts represented in different models and theories of Technology Acceptance. The theory is considered as a trial to unify terminology of variables of different models and theories of Technology Acceptance. Driven by a motivation to unify these research efforts in Technology Acceptance literature, the UTAUT was introduced and developed based on eight Technology Acceptance competing models. These models and theories are the Theory

of Reasoned Action (TRA), the Technology Acceptance Model (TAM), the Motivational Model (MM), the Theory of Planned Behaviour (TPB), a model combining the Technology Acceptance Model and the Theory of Planned Behaviour (C-TAM-TPB), the model of PC utilization, the Innovation Diffusion Theory (IDT), and the Social Cognitive Theory (SCT).

This study, which was based on the UTAUT, set out to determine the strength of Social Influence (SI) and Facilitating Conditions (FC) on registry staff's ICT acceptance and usage behaviour. The model has four exogenous variables (Performance Expectancy, Effort Expentancy, Social Influence and Facilitation Conditions), two endogenous variables (Behaviioural Intentions and Use Behaviour) and four moderating variables (Gender, Age, Experience and Voluntariness of Use). But for the purpose of this study, two constructs (that is, Performance Expectancy and Effort Expentancy) were excluded, as depicted in Figure 1.

Figure 1: *Unified Theory of Acceptance and Use of Technology (UTAUT) Adapted for this study*

Social Influence
The notion of subjective norm (Ajzen, 1991) as a predictor of attitude is popular in adoption and acceptance literature. Social influence (SI) is like the operationalisation of the concept of the subjective norm in the Theory of Planned Behaviour (TPB) model. Ajzen (1991) avers that the more favourable the subjective norms of a specific behaviour, the stronger would be the users' intention to perform the behaviour. SI indicates approval or support from essential individuals for the activation of behaviour. Hence it has been validated as a strong predictor of adoption behaviour (Sumak and Sorgo, 2016; Tosuntas, Karadag and Orhan, 2014). Users are expected to accept and use a system based on the influence of the salient stakeholders (peers, teachers and family) encouraging and persuading them to achieve some outcomes.

In the study of factors affecting the adoption of ICT by administrators of the University for Development Studies, Tamale, Ghana, Ibrahim, Adu-Gyamfi and Kassim (2018) found out that Social Influence exerts the second strongest influence on Behavioural Intention. In the study to determine the relationships among conceptualised constructs of UTAUT, Aliyu, Arasanmi and Ekundayo (2019) reported that social influence has a significant influence on behavioural intention and that behavioural intention has a significant influence on system usage.

Facilitating Conditions

Facilitating Conditions (FC) indicate the perception of an individual concerning the availability of organisational and technical infrastructure to support the use of a system. FC refers to the factors and resources that facilitate and support an individual's activities. This concept is analogous to perceived behavioural control of the TPB model which accounts for the role of a user's knowledge, ability and resources (Venkatesh et al., 2003). Several studies have shown the significant impact of Facilitating Conditions (FC) on end-users behavioural intention and the system's usage (Chandio, 2021; Sumak and Sorgo, 2016; and Tosuntas, Karadag and Orhan, 2014). Ibrahim, Adu-Gyamfi and Kassim (2018) also revealed Facilitating Conditions (with age and experience as moderating factors) as the most powerful factor influencing administrators' intention to adopt and use ICT in the course of their job.

Behavioural Intention

Behavioural Intention (BI) is a measure of the strength of one's intention to perform a specific behaviour (Davis et al., 1989). It is a person's subjective probability that he will perform some behaviours. The intention to use a technology seems to associate with the belief that routinised use of a system will lead to an essential and attractive or valued outcome (Vroom, 1964). From a motivational perspective, behavioural intention connotes the desire to continue the use of a system and the preparedness to depend on the technology for actual or routine task performance. BI is a precursor of the actual usage of an information system (IS). BI has been validated in several psychologically-based models, such as TPB, TAM and UTAUT in different contexts (Chauhan and Jaiswal, 2016; Sumak and Sorgo, 2016; Tosuntas, Karadag and Orhan, 2014).

Moderating Variables

A moderator affects the direction of the relationship between an independent and a dependent variable. In the original UTAUT model, age, gender, experience and voluntariness are regarded as critical moderating variables (Venkatesh et al., 2003). Yu (2012), as cited in Aliyu, Arasanmi and Ekundayo (2019), argues that while UTAUT primarily highlights the core constructs that predict behavioural intention to use and actual use, it helps researchers to study the chances of moderators boosting or constraining the effects of the core constructs.

While some studies have seen a significant difference in the moderating effect of gender in relation to ICT use, others have found no significant difference. For instance, in their study, Wang and Shih (2009) found out that gender significantly moderated the effect of performance expectancy, more in men than women in regard to the intention to use an information kiosk (as cited in Aliyu, Arasanmi and Ekundayo, 2019). The perception of the usefulness of the information kiosk tends to be stronger in men thus influencing their intention to use. Regarding social influence, women were more likely to be influenced by their significant others in using the information kiosk than men. On the contrary, Gupta, Dasgupta and Gupta (2008) did not find any significant moderating influence of gender on the adoption of ICT in a government organisation in India. Maldonado, Khan, Moon and Rho (2011) did not find gender influence to be significant in a study on the adoption of e-learning in Peru, either.

Wang and Shih (2009) found out that age was significant regarding effort expectancy in determining intention to use an information kiosk (as cited in Aliyu, Arasanmi and Ekundayo, 2019). Older citizens are more inclined to the user-friendliness of the system than their younger counterparts. In a study that attempted to predict multigenerational tablet adoption practices, Magsamen-Conrad, Upadhyaya, Joa and Dowd (2015) found out that age

is a significant predictor of behavioural intention to adopt the tablet. The assertion means that the older a person gets, the intention to adopt or use a tablet decreases. Kijsanayotin, Pannarunothai and Speedie (2009) in a study of the adoption of health information technology amongst health workers in Thailand showed that experience has a moderating effect in behavioural intention to use the technology. They found out that previous IT experience had a stronger effect than facilitating conditions. Giannakos and Vlamos (2013) found out that previous experience with online webcast significantly affects the use of the technology in their study of online webcast learners in Greece.

Performance Expectancy, Effort Expectancy, Social Influence and Facilitating Conditions and Use Behaviour
In their meta-analytic review of 43 empirical studies on the UTAUT framework which they got from the Web of Science database, Dwivedi, Rana, Chen and Williams (2011) reported that PE had shown the strongest correlation with BI followed by SI, EE and FC throughout the studies reviewed (as cited in Luhamya, Bakkabulindi and Muyinda, 2017). In his study, which examined empirical works on the core constructs of UTAUT, Chang (2012) also found that all of the four constructs of UTAUT contributed to Behavioural Intention with Performance Expectancy being the most significant contributor among the four.

Method
This study adopted a descriptive survey design due to its flexibility. The study location was University of Ibadan, Ibadan, Oyo State, situated in the south-western part of Nigeria. The population covered all 520 members of staff (comprising Administrative Officers: 74, Executive Officers: 294, Secretaries: 78, and Computer Operators: 74) across the various Sections of the Registry. Using stratified random sampling, a sample of 260 respondents (representing 50% of the population) from the 4 cadres comprised 37 Administrative Officers, 147 Executive Officers, 39 Secretaries and 37 Computer Operators was selected. Data was collected with a validated structured questionnaire between the months of March 2020 and July 2021.

The questionnaire was subdivided into 5 sections. Section A collected demographic data, while section B measured Social Influence, Facilitating Conditions, Behavioural Intention, Voluntariness of Use and Use of ICT. A 4-point Likert: Strongly Disagree, Moderately Disagree, Moderately Agree and Strongly Agree, adapted from Mtebe and Raisamo (2014), Ramayah (2010), and Zuiderwijk, Janssen and Dwivedi (2015) was used. Out of the 260 copies of the questionnaire distributed to the respondents, only 218 copies that were properly completed were retrieved and found useful for analysis, giving a 83.8% response rate. Collected data were analysed using frequency distribution, Pearson Product Moment correlation, multiple regression and moderated multiple regression. In all, two hundred and eighteen respondents were involved in the study, out of which 103 (47.2%) of the respondents were males, while 113 (51.9%) were female. Also, 8 (3.7%) of them were between the ages of 20 – 30 years, 51 (23.4%) were between 31 – 40 years, 90 (41.3%) were between 41 – 50 years, 55 (25.2%) were between 51 – 60 years, while 4 (1.8%) were above 60 years.

Results
In this section, the results of the test of hypotheses are presented followed by a discussion of the findings. All the hypotheses were tested at 0.05 level of significance.

H₀1: There is no significant relationship between social influence and the behavioural intention to use ICT among Registry staff of the University of Ibadan.

Table 1 presents the results.

Table 1: Relationship between Social Influence and the Behavioural Intention to Use ICT

Variables	Behavioural Intention to Use ICT	
Social Influence	Pearson Correlation	**.625**
	Sig. (2-tailed)	.000
	N	218

From Table 1, the sig. (2-tailed) value arrived at when social influence was correlated with behavioural intentions to use ICT is .000. This indicates that there is a strong positive significant relationship between social influence and behavioural intentions to use ICT tools by registry staff (r=.625).The null hypothesis is therefore rejected. This indicates that increase in social influence will lead to an increase in the behavioural intention to use ICT for official work.

H₀2: There is no significant predictive relationship between facilitating conditions and ICT use among Registry staff of the University of Ibadan.

Table 2 presents the results.

Table 2: Relationship between Facilitating Conditions and Use of ICT for Official Work

Variables	Use of ICT	
Facilitating Conditions	Pearson Correlation	**.496**
	Sig. (2-tailed)	**.000**
	N	**218**

From Table 2, the sig. (2-tailed) value arrived at when facilitating conditions was correlated with the use of ICT for official work is .000. This indicates that there is a moderate positive significant relationship between facilitating conditions and the use of ICT tools by the registry staff (r=.496). Therefore, the null hypothesis is rejected. This implies that increase in facilitating conditions will lead to an increase in the use of ICT for official work.

H₀3: There is no significant relationship between the behavioural intention to use ICT and use behaviour among Registry staff of the University of Ibadan.

Table 3 presents the results.

Table 3: Relationship between Behavioural Intention to Use ICT and Use Behaviour among Registry Staff of the University of Ibadan (Pearson Bivariate Correlation)

Variables	Use of ICT	
Behavioural Intention to Use ICT	Pearson Correlation	**.557**
	Sig. (2-tailed)	**.000**
	N	**218**

From Table 3, the sig. (2-tailed) value arrived at when behavioural intention to use ICT was correlated with use behaviour is .000. This indicates that there is a moderate positive significant relationship between behavioural intention to use ICT and the actual use of ICT tools for official work by the registry staff (r=.557). Therefore, the null hypothesis is rejected, implying that increase in the behavioural intention of registry staff to use ICT tools will lead to an increase in the use of ICT tools for official work.

H$_0$4: The relationship between social influence and behavioural intention to use ICT among Registry staff of the University of Ibadan is not moderated by gender, age, experience and voluntariness of use.

To test the effects of the moderators on the relationships between social influence (SI) and the behavioural intention to use ICT, moderated multiple regression analysis was conducted. Table 4 presents the results.

Table 4: Interaction Effects of Gender on the Relationship between Social Influence and Behavioural Intention to Use ICT among Registry Staff

Model Summary				
Model	**R**	**R Squared**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.625[a]	.390	.387	2.86567
2	.635[b]	.403	.395	2.84782

ANOVA					
Model	**Sum of Square**	**Df**	**Mean Squar**	**F**	**Sig**
1 Regression	1134.717		1134.717		
Residual	1773.801	216	8.212	138.177	.000[b]
Total	2908.518	217			
2 Regression	1172.956		390.985		
Residual	1735.562	214	8.110	48.210	.000[c]
Total	2908.518	217			

Coefficients					
Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig**
	B	**Std. Error**	**Beta**		
1 Constant)	5.440	.688		7.909	.000
Social Influence(SI)	.655	.056	.625	11.755	.000
2 (Constant)	4.160	1.032		4.031	.000
Social Influence(SI)	.782	.085	.746	9.181	.000
Gender (Dummy Variable)	2.158	1.380	.295	1.563	.119
Interaction Term (SI*Gender_dummy)	-.216	.112	-.387	-1.923	.056

Table 4 shows the test results of the relationship between social influence and behavioural intention to use ICT as moderated by gender. The first model shows the predictive relationship between social influence and behavioural intention to use ICT before the

introduction of the moderator (gender) [F = 138.177; R =.63; R^2 = 0.39], while the second model shows the relationship after the moderator is introduced [F = 48.210; R =.64; R^2 = 0.40]. A seen in model 2, the interaction term of social influence (independent variable) and gender (as a moderator) in the relationship between social influence and behavioural intention to use ICT by the registry staff (β=-.387). Hence, since the p value of the interaction term is > 0.05, this is not significant. Therefore, the predictive relationship between social influence and behavioural intention to use ICT by the registry staff is not moderated by gender.

Table 5: Interaction Effects of Age on the Relationship between Social Influence and Behavioural Intention to Use ICT among Registry Staff

Model Summary					
Model	**R**	**R Squared**	**Adjusted R Square**	**Std. Error of the Estimate**	
1	.624[a]	.389	.387	2.91489	
2	.625[b]	.390	.381	2.92789	
ANOVA					
Model	**Sum of Square**	**Df**	**Mean Squar**	**F**	**Sig**
1 Regression	1116.619		1116.619		
Residual	1750.299	206	8.497	131.420	.000[b]
Total	2866.918	207			
2 Regression	1118.118		372.706		
Residual	1748.800	204	8.573	43.477	.000[c]
Total	2866.918	207			
Coefficients					
Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig**
	B	**Std. Error**	**Beta**		
1 (Constant)	13.180	.202		65.209	.000
Social Influence(SI)	2.315	.202	.624	11.464	.000
2 (Constant)	13.180	.203		64.919	.000
Social Influence(SI)	2.313	.203	.623	11.392	.000
Age	-.067	.204	-.018	-.327	.744
Interaction Term (SI*Age)	-.055	.210	-.014	-.265	.792

Table 5 shows the test results of the relationship between social influence and behavioural intention to use ICT as moderated by age. The first model shows the predictive relationship between social influence and behavioural intention to use ICT [F = 131.420; R =.62; R^2 = 0.39], while the second model show the relationship between the variables after the introduction of the moderating variable (Age) [F = 43.477; R =.63; R^2 = 0.39]. The interaction term of social influence (independent variable) and age (as a moderator) in the relationship between social influence and behavioural intention to use ICT by the registry staff is (β=-.014). Since the p value of the interaction term is > 0.05, this is not significant.

Therefore, the predictive relationship between social influence and behavioural intention to use ICT by the registry staff is not moderated by age.

Table 6: Interaction Effects of Experience on the Relationship between Social Influence and Behavioural Intention to Use ICT among Registry Staff

Model Summary					
Model	**R**	**R Squared**	**Adjusted R Square**	**Std. Error of the Estimate**	
1	.625[a]	.390	.387	2.86567	
2	.661[b]	.436	.423	2.78098	

ANOVA						
Model	**Sum of Square**	**Df**	**Mean Square**	**F**	**Sig**	
1 Regression	1134.717		1134.717			
Residual	1773.801	216	8.212	138.177	.000[b]	
Total	2908.518	217				
2 Regression	1268.942		253.788			
Residual	1639.577	212	7.734	32.815	.000[c]	
Total	2908.518	217				

Coefficients					
Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig**
	B	**Std. Error**	**Beta**		
1 (Constant)	5.440	.688		7.909	.000
Social Influence(SI)	.655	.056	.625	11.755	.000
2 (Constant)	2.984	1.200		2.487	.014
Social Influence(SI)	.820	.101	.781	8.093	.000
Experience1 (Intermediate) Dummy Variable	2.332	1.495	.299	1.560	.120
Experience2 (Expert) Dummy Variable	8.959	2.207	.868	4.060	.000
Interaction Term (SI* Experience1)	-.152	.124	-.258	-1.225	.222
Interaction Term (SI* Experience2)	-.639	.177	-.791	-3.600	.000

Table 6 shows the test results of the relationship between social influence and behavioural intention to use ICT as moderated by experience. The first model shows the predictive relationship between social influence and behavioural intention to use ICT before the introduction of the moderator (experience) [F = 138.177; R =.63; R^2 = 0.39, while the second model shows the relationship after the introduction of the moderator [F = 32.815; R =.66; R^2 = 0.44]. As shown in model 2, the interaction terms of social influence (independent variable) and experience (as a moderator) in the relationship between social influence and behavioural intention to use ICT by the registry staff are: interaction term 1 (β=-.258) and interaction term 2 (β=-.791). Since the p value of one of the two interaction terms, interaction term 2 which is the interact effect of social influence and experience (expert dummy) is < 0.05, this is significant. Therefore, the predictive relationship between social influence and behavioural intention to use ICT by the registry staff is moderated by experience.

Table 7: Interaction Effects of Voluntariness of Use on the Relationship between Social Influence and Behavioural Intention to Use ICT among Registry Staff

Model Summary					
Model	**R**	**R Squared**	**Adjusted R Square**	**Std. Error of the Estimate**	
1	.625[a]	.390	.387	2.86567	
2	.652[b]	.425	.416	2.79668	

ANOVA					
Model	**Sum of Square**	**Df**	**Mean Square**	**F**	**Sig**
1 Regression	1134.717		1134.717		
Residual	1773.801	216	8.212	138.177	.000[b]
Total	2908.518	217			
2 Regression	1234.740		411.580		
Residual	1673.779	214	7.821	52.622	.000[c]
Total	2908.518	217			

Coefficients					
Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig**
	B	**Std. Error**	**Beta**		
1 (Constant)	13.197	.194		67.996	.000
Social Influence(SI)	2.287	.195	.625	11.755	.000
2 (Constant)	13.323	.193		69.097	.000
Social Influence(SI)	2.013	.207	.550	9.733	.000
Voluntariness (VU)	.209	.196	.057	1.065	.288
Interaction Term (SI*VU)	-.541	.155	-.192	-3.493	.001

Table 7 shows the test results of the relationship between social influence and behavioural intention to use ICT as moderated by voluntariness of use. The first model shows the predictive relationship between social influence and behavioural intention to use ICT [F = 138.177; R =.63; R^2 = 0.39], while the second model shows the relationship between the variables after the introduction of the moderating variable (voluntariness of use) [F = 52.622; R =.65; R^2 = 0.43]. The interaction term of social influence (independent variable) and voluntariness of use (as a moderator) in the relationship between social influence and behavioural intention to use ICT by the staff is (β=-.192). Since the p value of the interaction term is < 0.05, this is significant. Therefore, the predictive relationship between social influence and behavioural intention to use ICT by the registry staff is moderated by voluntariness of use.

H₀5: The relationship between facilitating conditions and use behaviour among Registry staff of the University of Ibadan is not moderated by age and experience.

To test the moderation effects of the moderators on the relationships between facilitating conditions (FC) and use behaviour, moderated multiple regression analysis was conducted to test the interaction effect of each of the moderators on the relationship between the construct and the outcome variable as illustrated in the UTAUT model.

Table 8: Interaction Effects of Age on the Relationship between Facilitating Conditions and Use Behaviour among Registry Staff

Model Summary					
Model	R	R Squared	Adjusted R Square	Std. Error of the Estimate	
1	.502[a]	.252	.248	3.63079	
2	.512[b]	.262	.252	3.62238	

ANOVA					
Model	Sum of Square	Df	Mean Square	F	Sig
1 Regression	913.339		913.339	69.284	.000[b]
Residual	2715.618	206	13.183		
Total	3628.957	207			
2 Regression	952.138		317.379	24.187	.000[c]
Residual	2676.819	204	13.122		
Total	3628.957	207			

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
1 (Constant)	11.908	.252		47.289	.000
Facilitating Conditions (FC)	2.091	.251	.502	8.324	.000
2 (Constant)	11.924	.251		47.425	.000
Facilitating Conditions (FC)	2.118	.252	.508	8.418	.000
Age	-.162	.252	-.039	-.643	.521
Interaction Term (FC*Age)	.436	.271	.097	1.609	.109

Table 8 shows the test results of the relationship between facilitating conditions and use behaviour as moderated by age. The first model shows the predictive relationship between facilitating conditions and use behaviour [F = 69.284; R =.50; R^2 = 0.25], while the second model show the relationship between the variables after the introduction of the moderating variable (Age) [F = 24.187; R =.51; R^2 = 0.26]. The interaction term of facilitating conditions (independent variable) and age (as a moderator) in the relationship between facilitating conditions and use behaviour of registry staff is (β=.097). Since the p value of the interaction term is > 0.05, this is not significant. Therefore, the predictive relationship between facilitating conditions and use behaviour of the registry staff is not moderated by age.

Table 9: Interaction Effects of Experience on the Relationship between Facilitating Conditions and Use Behaviour among Registry Staff

Model Summary					
Model	**R**	**R Squared**	**Adjusted R Square**	**Std. Error of the Estimate**	
1	.496[a]	.246	.243	3.62959	
2	.549[b]	.301	.285	3.52723	

ANOVA					
Model	**Sum of Square**	**Df**	**Mean Square**	**F**	**Sig**
1 Regression	930.109		930.109		
Residual	2845.565	216	13.174	70.602	.000[b]
Total	3775.674	217			
2 Regression	1138.103		227.621		
Residual	2637.572	212	12.441	18.295	.000[c]
Total	3775.674	217			

Coefficients					
Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig**
	B	**Std. Error**	**Beta**		
1 (Constant)	5.367	.818		6.562	.000
Facilitating Conditions (FC)	.628	.075	.496	8.403	.000
2 (Constant)	1.710	1.501		1.139	.256
Facilitating Conditions (FC)	.848	.136	.670	6.235	.000
Experience (Intermediate) Dummy Variable	4.026	1.837	.453	2.192	.029
Experience2 (Expert) Dummy Variable	8.833	2.547	.751	3.468	.001
Interaction Term (FC * Experience1)	-.244	.167	-.320	-1.458	.146
Interaction Term (FC * Experience2)	-.593	.227	-.573	-2.607	.010

Table 9 shows the test results of the relationship between facilitating conditions and use behaviour as moderated by experience. The first model shows the predictive relationship between facilitating conditions and use behaviour before the introduction of the moderator (experience) [F = 70.602; R = .50; R^2 = 0.25], while the second model shows the relationship after the introduction of the moderator [F = 18.295; R = .55; R^2 = 0.30]. As seen in model 2, the interaction terms of facilitating conditions (independent variable) and experience (as a moderator) in the relationship between facilitating conditions and use behaviour of the registry staff are: interaction term 1 (β=-.320) and interaction term 2 (β=-.573). Since the p value of one of the two interaction terms, interaction term 2 which is the interact effect of facilitating conditions and experience (expert dummy) is < 0.05, this is significant. Therefore, the predictive relationship between facilitating conditions and use behaviour of the registry staff is moderated by experience.

Based on the test results from these moderation analyses, it is evident that many of the results from these tests are not significant, only with few exceptions. The results revealed that the relationship between social influence and behavioural intention to use ICT is not moderated by gender and age, but by experience and voluntariness of use, the relationship between facilitating conditions and use behaviour is not moderated by age, but by experience.

Discussion of Findings

The study investigated the influence of social influence and facilitating conditions on the behavioural intention and use behaviour respectively among the registry staff of the University of Ibadan. Findings revealed that there is a strong positive significant relationship between social influence and behavioural intentions to use ICT tools among the registry staff, implying that increase in social influence will lead to an increase in the behavioural intention to use ICT for official work. This finding is consistent with those of Ibrahim, Adu-Gyamfi and Kassim (2018), Chang (2012); Tosuntas, Karadag and Orhan (2014); Sumak and Sorgo (2016); and Aliyu, Arasanmi and Ekundayo (2019) who reported that social influence affected their respondents' behavioural intention to use the understudied technologies.

The findings from this study also showed that there is a moderate positive significant relationship between facilitating conditions and use behaviour among the registry staff, which implies that increase in facilitating conditions will lead to an increase in the use of ICT for official work. This finding is also consistent with those of Chandio (2021); Tosuntas, Karadag and Orhan (2014); Mtebe and Raisamo (2014); and Sumak and Sorgo (2016) that social influence is a strong predictor of adoption behaviour, that is, users will accept and use a system based on the influence of important others encouraging and persuading them to achieve some outcomes. The study further established that there is a moderate positive significant relationship between behavioural intention to use ICT and the actual use of ICT tools for official work among the registry staff, which is in harmony with the submission of Venkatesh, et al. (2003).

Looking at how the moderating variables affect the relationship between the independent and dependent variables in the UTAUT model, this study revealed that the relationship between social influence and behavioural intention to use ICT among the registry staff is not moderated by gender and age, but by experience and voluntariness of use. While the results of the effect of two of these moderating variables negate the submission in regard to the relationship in the UTAUT model, the effects of the other two are consistent therewith. Experience and voluntariness of use are seen to have a moderating effect on the relationship between social influence and behavioural intention to use ICT. The reason for this may not be far-fetched as many people with low (beginner) or intermediate experience on ICT use will possibly be influenced by colleagues or friends who are experts in the use of the technology in order to help them, too, to use it effectively.

Finally, the study revealed that the relationship between facilitating conditions and use behaviour of the registry staff is not moderated by age, but by experience. Given that facilitating conditions deal with the perception of an individual concerning the availability of organisational and technical infrastructure to support the use of a system, the reality of experience having a moderating effect on the relationship that exists between facilitating conditions and use behaviour among the registry staff is understood. Experience can influence how, when and where to seek help. This takes shape as users climb up through the experience ladder, thereby influencing the use of a technology. While the result of the moderating effect of age on the relationship between facilitating conditions and use behaviour negates the submission of Venkatesh et al. (2003) as illustrated in UTAUT model, the study supported their finding on experience as a moderating factor that influences the relationship between facilitating conditions and use behaviour.

Conclusion, Recommendations and Suggestions for Further Studies

This study has been able to contribute to the body of knowledge by providing evidence-based information about the influence of social influence, facilitating conditions and demographic factors on the use of ICT tools, thereby complementing the existing works in the area of ICT adoption and use research. It has also contributed to knowledge by providing the understanding of how to foster integration of ICT tools in administrative work processes in higher institutions of learning. This study concludes that the predictors of ICT use among the registry staff of the University of Ibadan include social influence, facilitating conditions, experience and voluntariness of use. Based on the findings, the following recommendations are made:

1. The University Management should create an enabling environment as part of the facilitating conditions for constant use of ICT for official work by registry staff. This can be done by resolving various challenges inhibiting ICT use among the staff and ensuring availability of relevant ICT consumables.

2. The University Management should also fund registry staff training and retraining in relevant ICT skills and in the use of advanced ICT tools for official purposes, since the experience level was established as a moderating factor between facilitating conditions and ICT use.

Further studies can examine the influence of all the constructs of the UTAUT in regard to ICT use for official work by the registry staff of other universities in the country. A comparative analysis on underlying factors that predict the acceptance and use of ICT tools among the registry staff of a public university and private university can be carried out. This study can also be replicated using a purely qualitative approach.

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