GENDER DIFFERENCES IN THE ADOPTION OF SELF-SERVICE TECHNOLOGIES AMONG STUDENTS

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ABSTRACT: *This study aims to empirically examine the factors that affect the gender differences in the adoption of Self-Service Technology (SST) among students in Nigeria. The four factors examined in this study are performance expectancy (PE), facilitating condition (FC), social influence (SI) and service quality (SQ), using gender as the moderating variable. Unified Theory of Acceptance and Use of Technology (UTAUT) was utilized in this study. Stratified sampling method was used with a total valid 355 respondents, which were randomly drawn from Students of Abubakar Tafawa Balewa University, Bauchi state, Nigeria. Results of the regression analysis revealed that Performance Expectance (PE), Service Quality (SQ) and Facilitating Condition (FC) have significant and positive relationship with the behavioural intention to adopt SST. Similarly, the independent t-test results revealed that PE significantly influences the Intention of men to adopt SST higher than women. While SQ, significantly influences the Intention of women to adopt SST higher than men.*

KEYWORDS: Adoption, Differences, Gender, Nigeria, Self-Service Technology, Unified Theory of Acceptance and Use of Technology (UTAUT)

INTRODUCTION

In this our modern days society, there is much discussion about the necessity for tertiary institutions to accomplish more with less. Numerous higher educational institutions use self-service technology (SST) in order to accomplish more with less as students, make use of machines, to perform tasks that were before conducted by the administrative staff and changing the students' job from basically passive to dynamic. The focal point of this study is on the utilization of self-service technology by gender in the advanced educational settings.

Financial advantages are a central point; however tertiary institutions have likewise seen that there is a need to apply standards of adequately dealing with their services and expanding consumer loyalty (Browne, Kaldenberg, Browne & Brown, 1998). Tertiary establishments' fundamental objective is to improve services, to students and the school and to likewise remain monetarily viable by paying staff and specialist who provide services. The tertiary establishments' major point is principally on the administrative procedures for example the admission system, school fees payment and other services to the students. The most important need of any student when searching for a school to select is the scholarly scopes it offers and their reputation, however students additionally consider other services that are offered, and how easy and helpful the system is will be the point at which they choose to learn at that specific institution (Browne *et al*., 1998).

The University portal which represents the SST system at Abubakar Tafawa Balewa University (ATBU), Bauchi has experienced various improvements throughout the years by specialists from the Directorate of Information and Communication Technology (DICT). It is extremely essential to get to a point where a study is conducted to assess the adoption of the SST by gender orientation of the students. What benefit does an effective SST in each area of need have towards students? There are such a significant number of chances of progress which the University through the DICT can work at accomplishing. Students on campus make use of services such as registration at the beginning of the year, book for hostel through the system that automatically allocates available rooms for them at the two main campuses (Yelwa and Gubi); download course registration forms, exams card, check their results, they need a proficient working system for this situation, applying for courses and course alterations, checking for any vital information and paying for their educational fees.

Self-service technology (SST) has turned out to be universal in present day life. The adoption of such innovation has been very much studied in business settings as a basic component in controlling expenses and improving client experience. Nonetheless, researchers caution that there are many components to consider in guaranteeing the successful implementation of these advances. Past research has demonstrated that the adoption of self-service technology has been considered from numerous viewpoints in a wide range of settings. For instance, on-going exploration has been directed in the context of banking (Radomir & Nistor 2012; 2014), television (Jang & Noh 2011), air travel (Choi & Park 2013) and hospitality (Oh, Jeong & Baloglu 2013). We note that every one of these studies have concentrated on SST adoption in buyer market, however little research exists in higher education contexts where knowledge students interact with technology to perform academic work-related services. This study attempts to address this gap.

Hence, there is need for research on SST to be focused particularly from the perspective of developing nation like Nigeria, in understanding the variables affecting the adoption of the system by gender. The purpose of this study is to fill existing research gap by empirically establishing a model to explain the factors influencing the adoption of SST by gender in Nigeria.

LITERATURE REVIEW

Conceptualization of Self-service Technology

Self-service technology is characterized as "technological interfaces that enable customers to produce a service independent of direct service employee involvement" (Meuter, Ostrom, Roundtree & Bitner, 2000). We define SST as innovations, provided by a higher institution, specifically to empower students to participate in self-service practices. By and large this will involve student performing assignments that were until that time carried out by the administrative staff of the Abubakar Tafawa Balewa University, Bauchi (ATBU).

SSTs can be separated into two alternatives: on-location and off-site choices. Instances of the 'on location' choice incorporate computerized aircraft ticketing, intuitive stands in retail chains, mechanized lodging checkout, and self-scanning checkouts at supermarkets. Phone and web-based banking and Internet shopping have a place with the 'off-site' alternative (Dabholkar & Bagozzi, 2002; Meuter & Bitner, 1998).

Self-service technology empowers clients the autonomy of extension of services without the direct participation of the institution's workers (Meuter *et al.,* 2000). Self-service technology is spreading in academic settings. Today, there is no restriction as to where one can get access to the Internet; another piece of self-service technology has developed in the Web. This online self-service with Internet support empowers clients get to wherever and at whatever point without direct representation (Gerber & Martin, 2012). Custom online self-service assumes an imperative job in advancement, service/product today. In comparison with the traditional normal services, helpful electronic self-service and Offline Services make the innovativeness simpler, quickens the collaboration effort, diminish advancement expenses and dangers (Yang, Wu, Huang, & Sung, 2015).

Theoretical Bases

A few models have been created to survey the elements influencing the use of Computer innovation. Venkatesh, Morris, Davis and Davis (2003) combined eight user acceptance and inspiration models to propose the Unified Theory of Acceptance and Use of Technology (UTAUT). The eight theories are the Theory of Reasoned Action (TRA), the Technology Acceptance Model (TAM), the Motivational Model (MM), the Theory of Planned Behavior (TPB), a combined theory of Planned Behavior/Technology Acceptance Model (C-TPB-TAM), the Model of PC Utilization (MPCU), Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT). Accordingly, the researchers thought the model (UTAUT) is more suitable to be used for the purpose of this study.

Gotten from the abovementioned, UTAUT recommends that four factors are immediate determinants of technology acceptance (behavioural intention) and use (intention); Performance Expectancy; Effort Expectancy; Social Influence; and Facilitating Conditions. In order to improve the expectation of adoption of SST by gender in Nigeria, this study utilizes the UTAUT, however, in order to improve the prediction of adoption of SST by gender in Nigeria, this study uses the UTAUT but the Effort Expectancy construct was replaced with Service Quality in the model in order to suit the context and for simplicity purpose (Luarn & Lin, 2005). Gender was incorporated into the model to serve as a moderating variable. The new UTAUT in this study is shown in Figure 1.
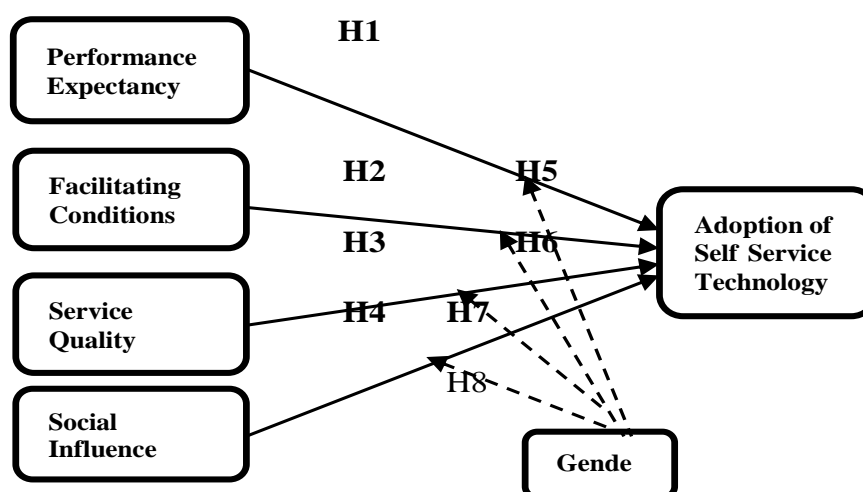

Figure 1. Conceptual Model

Hypotheses Development

A. Performance Expectancy (PE)

The variable is defined "as the degree to which an individual believes that using the system will help him/her to attain gains in job performance" (Venkatesh *et al.* 2003 p.47). In the context of this study, performance expectancy refers to the belief that users (Students) will gain benefits such as increased efficiency, and time saving as a result of using SST. Because of the expected benefits perceived from the use of SST, it is believed that performance expectancy will influence behavioural change towards greater adoption of the SST. Self-service tools offer many advantages for users and IT personnel. The reason more clients are using these technologies, is the perceived benefits of the transaction independently (Lee & Lu, 2016). One of the most important of these benefits is that clients could achieve to better efficiency in a transaction through self-service technologies. According to recent authoritative reports, these tools can reduce IT-based demands up to 31% that will have a significant impact on efficiency (Humphries, 2015). Moreover, the less need for IT personnel intervention in the transaction and technology-based activities is also another reason why clients prefer to use self-service technologies. Additionally, a good network of web-based self-service and offline services can stimulate the creativity of the user in advance of completion of the development (Gerber & Martin, 2012). Therefore, the researchers hypothesized the following hypothesis: ***H1: Performance expectancy will significantly influence the intention of students to adopt SST.***

B. Facilitating Conditions (FC)

Facilitating condition is defined as the degree to which an individual believes that an organizational and technical infrastructure exists to support the system use (Venkatesh *et al.*, 2003). In the context of this study, the system referred in the adoption is SST. The facilitating condition of the SST that should be present includes excellent user interface, and this includes ease of access, navigation and searching (Yang, 2010) to encourage the use of SST and with better result if there are proper guidance provided. Besides that, other resources associated with such use, and the prior knowledge that users must have before using the SST system are also part of the facilitating conditions. Chang (2013) conducted a study in Taiwan using 363 respondents and concluded that Facilitating condition is one of the determinants of the adoption of Technology. Accordingly, the researchers assumed that: ***H2: Facilitating Condition will significantly influence the intention of students to adopt SST.***

C. Service Quality (SQ)

Service quality has really gotten the special consideration of researchers everywhere in the world. Service quality portrays two rather different aspects of the construct: a technical aspect (the centre service offered) and a functional aspect (how the service is delivered) (Grönroos, 1984). The use of self-service technology has seen advances to react both to shoppers' inclinations and retailers' needs (Zhu, Ghoufi, Szymczyk, Balannec, & Morineau, 2013; Renko & Druzijanic, 2014), such as touch screen displays, smart mirrors, mobile applications, automatic payment modalities, or radio frequency identification (Kallweit, Spreer & Toporowski, 2014; Pontano & Viassone, 2014). The dimension of service quality has been assessed in various scales over the previous decade. This study examines it under the qualities of; speed and ease of use.

Speed of operation is characterized as the time it takes to effectively finish a transaction through an SST (Dabholkar, 1996). SST can be considered as an elective channel for clients who need to lessen transaction conveyance time (Lee *et al*., 2013). Langeard, Bateson, Lovelock and Eiglier (1981) found also that time was a noteworthy factor for people in utilizing another service or innovation. SST can be utilized to conquer the apparent time and location limitations of a full service offering and can be the integral factor in deciding on which service channel to utilize (Collier & Sherrell, 2010). SST studies notice speed of transaction as a standout amongst the most powerful factors influencing consumer loyalty (e.g., Meuter *et al*., 2000; Howard & Worboys, 2006; Collier & Kimes, 2013).

Ease-of-use has been characterized as how much an individual trust that utilizing a specific technology would be free of effort (Davis, 1989). Clients may connect ease of use with less effort spent, from one viewpoint, and diminished social risk, on the other (Dabholkar, 1996). Consequently, the effort a client needs to make so as to adequately utilize the new service process and make the most of its normal preference is the ease of use (Timmor & Rymon, 2008). Ease of use reflects to the degree to which clients expect SST to be anything but difficult to learn and utilize, and is emphatically connected to clients' eagerness to reuse SST (Davis & Wiedenbeck, 2001). Findings from many fields through web-based shopping, web-based banking and health services have demonstrated positive connections between ease of use, adoption and fulfilment with another service (De jong, Geiselmann, Batt, Hernandez & Page, 2003; Lim & Dubinsky, 2004; Curran & Meuter, 2005). In view of that, the researchers assumed that*:   H3: Service Quality will significantly influence the intention of students to adopt SST.*

D. Social Influence (SI)

Social Influence is described as "the degree to which an individual believes that people who are important to him think he should or should not perform the behavior in question" (Ajzen & Fishbein, 1980). Affirmation from surveyed research moreover exhibited that social influence, impacts the utilization of technology emphatically (Puschel, Mazzon, & Hernandez, 2010). Venkatesh and Davis, (2000) provide a connection between social influence and behavioural intention as they trust that people may choose to play out a conduct paying little heed to the way that they do not feel good about it, provided some basic referent individuals have the trust that they should play out the conduct (i.e., conforming to a required policy). Martins, Oliveira and Popovic, (2013) surveyed 249 portugese and found that social influence emphatically impacts the adoption of Technology. Hamza and Shah (2014) likewise led an analysis and found that social influence is one of the factors affecting the utilization of technology among clients. This variable assumes an incredibly basic part in affecting the intention of clients to use another technology. SST is certainly being utilized in some tertiary establishments in Nigeria. Therefore, in light of the social feeling of the students in Nigeria, the researchers proposed the following hypothesis: **H4: Social Influence will significantly** *influence the intention of students to adopt SST.*

E. Gender

Gender as a construct yields diverse habits of technology use. A few investigations have demonstrated the gender related differences about the adoption of new technology (Hasan, 2010; Toray, Salminen & Mursu, 2013). Liaw (2002) found that the positive impression of male students towards the utilization of web innovations and PCs are more than that of their

female partners. Comparable finding likewise uncovered that the ability of men, to embrace a recently presented technology is by a wide margin more than that of their ladies' partners (Wood & Li, 2005). Shashaani and Khalili (2001) additionally discovered that in terms of confidence, male clients had high confidence to work with PCs than female clients, despite the fact that ladies firmly have confidence in equivalent gender ability and skill in working with PCs. Studies of (Ong & Lai, 2006; Wood & Li, 2005) found that men are more impacted by perceived ease of use (PEOU) perceived usefulness (PU) than ladies. Social norm (SN) was additionally found to have huge effect on gender (Nysveen, Pedersen & Thorbjørnsen, 2005). Ladies were observed to be affected by social norm more than men (Wood & Li, 2005). Nevertheless, there is need to examine the moderating effect of gender on Self-Service Technology (SST) adoption from the perspective of a developing country like Nigeria. Hence, the researchers hypothesized the following hypotheses:

> **H5:** *The influence of PE on Intention to adopt SST will significantly be higher among men than women.*

> **H6:** *The influence of FC on Intention to adopt SST will significantly be higher among men than women.*

> **H7:** *The influence of SQ on Intention to adopt SST will significantly be higher among women than men.*

> **H8:** *The influence of SI on Intention to adopt SST will significantly be higher among women than men.*

METHODOLOGY

This section describes the methodology used in conducting the study; a survey research method was adopted.

Participants and Data Collection

The respondents in this research were Students of the Abubakar Tafawa Balewa University, Bauchi State, Nigeria. A personally-administered questionnaire was utilized in the study. Questionnaires were disseminated to the students who represent the number of the population in the study. Stratified random sampling method was utilized in picking the sample, where an aggregate of 400 questionnaires were distributed to the respondents. Three hundred and fifty-five (355) questionnaires were returned, demonstrating an 88.8 per cent rate of return.

Instrument Development

The initial segment of the questionnaire includes nominal scale values comprising of gender and age of the students. The second part contains the conceptual factors which were measured utilizing five-point Likert scales, going from (1) "strongly disagree" to (5) "strongly agree". The items in the questionnaire were adapted from existing literatures. The questions were modified to fit the context of SST. PE was measured with 4 items adapted from (Venkatesh *et al.,* 2003). SI with 4 items adapted from (Venkatesh *et al.*, 2003), SQ with 4 items adapted from (Renko and Druzijanic, 2014), FC with 4 items adapted from

(Venkatesh *et al*., 2003). Lastly, Students' intention to adopt SST with 4 items adapted from (Venkatesh *et al*., 2003).

STUDY FINDINGS

Profile of the Respondents

The demographic profile of the surveyed respondents is displayed in Table 1, which incorporates gender and age group. The gender distribution of the respondents is 63.1 per cent males and 36.9 per cent females. The outcomes additionally demonstrated that the sample has age mostly somewhere in the range of 26 and 30 years, which is 39.2 per cent.

Table 1: Demographic Variables

Variable		Frequency	Percentage
Gender	Male	224	63.1
	Female	131	36.9
Age	21-25 years	63	17.7
	26-30 years	139	39.2
	31-35 years	113	32.8
	36-40 years	28	7.9
	Above 40	12	3.4

Source: Field Survey 2019

Scale Reliability and Factor Analysis

To be sure of the measures, Cronbach's alpha co-efficient was computed for all factors and it affirmed the unwavering quality of the instrument that had been utilized in the study since all factors indicated values above 0.7 as recommended by (Nunnally, 1978). Validity was attained utilizing Content Validity Index in which Kaiser-Meyer-Olkins (KMO) and Bartlet's test of sphericity ranges from 0.718 to 0.835 over the acceptable limit of 0.7 and .000 respectively. Similarly, other indicators as anti-image, communalities were all satisfactory and greater than the cut off value of .5 as shown in table 2 and 3.

Table 2: Assessing Factorability

Constructs	KMO-MSA	BTS Sig.	Cronbach' Alpha	Minimum anti-image correlations/items
PE	0.813	0.000	0.812	0.754 item 1
FC	0.794	0.000	0.741	0.717 item 2
SQ	0.763	0.000	0.853	0.698 item 1
SI	0.835	0.000	0.731	0.808 item 5
Adoption	0.718	0.000	0.729	0.685 item 2

Source: Field Survey (2019)

Table 3: Eigen Values, Range of Factor Loadings % of Variance Explained

Variables	1st factor eigen values	2nd factor eigen values	Ratio	Range of Factor loading	% of Variance Explained
PE	2.827	0.561	3.188	0.563-0.746	51%
FC	2.916	0.642	3.627	0.542-0.704	58%
SQ	2.025	0.586	3.303	0.583-0.721	47%
SI	4.136	0.398	3.964	0.762-0.896	45%
Adoption	2.307	0.442	3.468	0.708–0.760	53%

Source: Field Survey (2019)

Multiple Regression Analysis

As appeared in table 4, the four independent factors (Performance Expectancy, Service Quality, Social Influence and Facilitating Conditions) in the UTAUT in the Model explain 59.3% of the dependent variable (Adoption). Implying that, the research model UTAUT explains 59.3% (R^2 .593) of the variance in the Intention of students to adopt SST.

Table 4: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson R Square Change	Sig. F Change
1	.764[a]	.593	.571	.63569	.693	.000

a. Predictors: (Constant), PE, SQ, FC, SI
b. Dependent Variable: Adoption

The table of Anova in Table 5, likewise proved that with an F-value 493.263. Implying that, the predicting factors significantly influence the behavioural intention to adopt SST among the students of Abubakar Tafawa Balewa University, Bauchi.

Table 5: Anova[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	59.500	5	11.855	493.263	.000[b]
	Residual	72.816	241	.313		
	Total	122.532	247			

a. Dependent Variable: Adoption
b. Predictors: (Constant), PE, SQ, FC, SI

Independent Variables' Evaluation

Regardless of the fact that there is significant correlation between the model's independent factors and the dependent variable (Adoption), still the Beta coefficient in Table 6, enables

the researcher to determine whether all the independent variables significantly explain the variance in adopting the SST. Moreover, it likewise shows the relative significance of each variable.

In this segment regression analysis was used in obtaining the significant predictors and the findings were also used to test the hypotheses. As shown in table 6, the three factors: Performance Expectancy (PE), Service Quality (SQ) and Facilitating Conditions (FC) are significant with good contribution towards the prediction of the dependent variable Adoption. Social Influence (SI) is not significant, with very little contribution towards predicting the adoption of SST. Likewise, the column for standardized coefficients of Beta for each of the four independent variables shows how each contributes to the prediction of the dependent variable. The standardized coefficient Beta value for Performance Expectancy is ($\beta = 0.391$), meaning that it makes the highest contribution of 39.1% to the Adoption of SST. Followed by Service Quality (SQ) with Beta value of ($\beta = 0.341$), meaning that it makes the second highest contribution of 34.1% to the Adoption of SST. Then, Facilitating Condition with Beta value of ($\beta = 0.313$), meaning that it makes the third highest contribution of 31.3% to the Adoption of SST. While the remaining variable Social Influence has ($\beta = 0.094$), implying that SI makes the least contribution of 9.4% to the Adoption.

Table 6: Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	B	t	Sig.	Tolerance	VIF
(Constant)	1.045.	0.174		-3.833	0.000		
PE	0.381	0.062	0.391	4.166	0.000	0.598	1.627
FC	0.291	0.063	0.313	2.650	0.014	0.604	1.682
SQ	0.235	0.037	0.341	2.975	0.002	0.321	1.888
SI	0.089	0.059	0.094	1.506	0.213	0.345	1.564

a. Dependent Variable: Adoption

Table 7, depicts the independent t-test results for the predictors of self-service technology by gender. The outcome demonstrates that a significant difference was found in PE (t (213) =3.15, p < .05) and SQ (t (213) = 2.94, p < .05). The descriptive outcomes demonstrate that performance expectancy (PE) influences male higher than their female partners with (m =4.25 and 3.94; SD =.458 and .710) separately. Also, service quality (SQ) influences female respondents in using self-service technology more than their male partners with (m =3.98 and 3.63; SD =.428 and .306) respectively, indicating that service quality tends to affect the degree to which female adopt self-service technology better than their male counterparts. However, no significant difference was found in FC by gender with (t (213) =.954, p > .05).

Table 7: Independent T-Test for Influence of Predictors of Self-Service Technology by Gender

Variables	Gender	Mean	Std. Dev	DF	*t*	*P*
PE	Male	4.25	.458	213	3.152	.002
	Female	3.94	.710			
FC	Male	4.14	.320	213	.954	.324
	Female	4.09	.316			
SQ	Male	3.63	.306	213	2.945	.006
	Female	3.98	.428			

N =355, *p* =0.05

Hypotheses Testing

H1: *Performance expectancy will significantly influence the intention of students to adopt SST.*

The individual model variables presented in table 6, shows a significant relationship between Performance expectancy and Intention of Students to adopt SST, in which Performance expectancy is (p < .05). The result of the model demonstrates that Performance expectancy has significant relationship with Adoption in such a way that the variable makes the highest contribution with standardized coefficient Beta value of (β = 0. 391) 39.1% to Adoption. Therefore, the hypothesis that states: *Performance expectancy will significantly influence the intention of students to adopt SST* is accepted.

H2: *Facilitating Conditions will significantly influence the intention of students to adopt SST.*

The individual model variables presented in table 6, indicate a significant relationship between FC and Adoption, in which FC (p <.05). The result of the model demonstrates that FC has a significant relationship with Adoption in such a way that the standardized coefficient Beta value is (β = 0. 313) meaning that FC makes the third highest contribution of 31.3% to the Behavioural Intention of Adopt SST. Accordingly, the hypothesis that states: *Facilitating Conditions will significantly influence the intention of students to adopt SST* is accepted.

H3: *Service Quality will significantly influence the intention of students to adopt SST.*

As shown in table 6, the individual model shows a significant relationship between SQ and Adoption, in which SQ is (p< .05). The result of the model demonstrates that SQ has a significant relationship with Adoption in such a way that the standardized coefficient Beta value is (β = 0.341) meaning that SQ makes the second highest contribution of 34.1% to the Adoption. Hence, the hypothesis that states: *Service Quality will significantly influence the intention of students to adopt SST* is accepted.

H4: *Social Influence will significantly influence the intention of students to adopt SST.*

As shown in table 6, the individual model shows an insignificant relationship between SI and Adoption, in which SI is (p> .05). The result of the model demonstrates that SI has an

insignificant relationship with Adoption in such a way that the standardized coefficient Beta value is (β = 0.094) meaning that SI makes a negligible contribution of 9.4% to the Adoption. Consequently, the hypothesis that states: *Social Influence will significantly influence the intention of students to adopt SST* is rejected.

H5: *The influence of PE on Intention to adopt SST will significantly be higher among men than women.*

As shown in table 7, the independent t-test result for the predictors of self-service technology by gender shows that a significant difference was found in which performance expectancy (PE) influences male higher than their female counterparts with (m =4.25 and 3.94, $p < .05$). Therefore, the hypothesis that states: *The influence of PE on Intention to adopt SST will significantly be higher among men than women* is accepted.

H6: *The influence of FC on Intention to adopt SST will significantly be higher among men than women.*

As shown in table 7, the result shows an insignificant difference was found in which facilitating condition (FC) does not influence any of the male or female student higher than the other, with approximately the same mean values (m =4.14 and 4.09 $p > .05$). As a result, the hypothesis that states: *The influence of FC on Intention to adopt SST will significantly be higher among men than women* are rejected.

H7: *The influence of SQ on Intention to adopt SST will significantly be higher among women than men.*

As shown in table 7, the independent t-test result for the predictors of self-service technology by gender shows that a significant difference was found in which service quality (SQ) influences female higher than their male counterparts with (m =3.98 and 3.63, $p < .05$). Therefore, the hypothesis that states: *The influence of SQ on Intention to adopt SST will significantly be higher among women than men* is accepted. Figure 2 shows these findings visually with R^2 = 59.3.
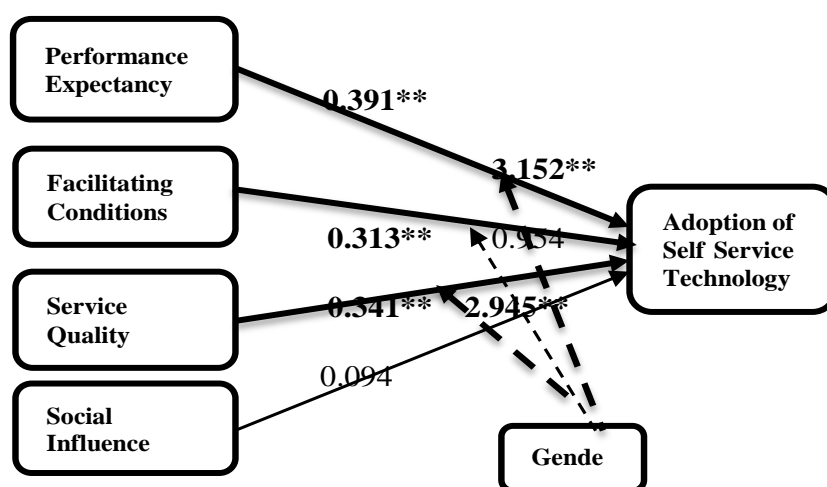

Figure 2. Predictors of Self-Service Technology Adoption

DISCUSSION OF FINDINGS

The outcome for Performance Expectancy uncovers that there is a significant relationship between it and Behavioural Intention of client to adopt SST. This finding rejects that of Addo (2014) which expresses that there is no significant relationship between the performance expectancy and user intention to utilize technology in learning. This implies that, students are more likely to have the behavioural intention to adopt self-service technology so long as they have the perception that it is usefulness to them.

The outcome for Social Influence uncovers that there is no significant relationship between it and user intention to adopt SST. This is on the grounds that students in Nigeria have negative recognition about the utilization of Self-service technology. In our institutions, some students either assigned their classmates or café attendants to assist them instead of using the University portal (SST) themselves. Therefore, it is not surprising, because in most of the tertiary institutions, social influence might not be able to convince them otherwise. In a related development, this result is in line with the findings of (Chitungo & Munongo, 2013; Addo, 2014) who support the outcome that social influence lacks significant relationship with user intention to use technology in learning. However, Hamza and Shah (2014) contradicted that social influence has positive significant relations with user intention to use technology.

The outcome for Facilitating Conditions shows that there is a significant relationship between it and Behavioural intention of user to adopt SST. This is because most students of the tertiary institutions believe that infrastructure and other related conducive conditions will influence their intention to adopt the SST system. Similarly, this finding is in line with that of (Choi & Park (2013) who concluded that Facilitating condition is one of the determinants of the adoption of Technology.

The result for Service Quality reveals that there is a significant relationship between it and user intention to adopt SST. This result is in line with the findings of (Chitungo, & Munongo, 2013; Addo, 2014) who support that service quality has significant relationship with user intention to use technology in learning.

The independent t-test results for PE and SQ reveal that the influence of PE on Intention to adopt SST is significantly higher among men than women. This finding is corroborated by other studies (e.g. Ong & Lai, 2006; Wood & Li, 2005) who found that men are more influenced by performance expectancy of a system than ladies. On the other hand, the influence of SQ on Intention to adopt SST is significantly higher among women than men. While no significance difference was found in the influence of FC on the Intention to adopt SST by gender of the respondents.

IMPLICATION TO RESEARCH AND PRACTICE

This study provided both theoretical and managerial implications. From the perspective of theory, the strength of the model (UTAUT) in predicting the adoption of technology has also been established by the findings of this study. The findings also contribute significantly to the existing literature in the field of SST, where PE, SQ and FC were found to significantly influence the adoption of SST, while SI was found not to be significant in influencing the adoption of the SST system. The gender differences of the influence of the predicting

variables have also been established. This is a significant contribution as very little literature exists on SST adoption by gender among students especially from the perspective of developing countries.

From the managerial perspective, discoveries from this study recommend that the administrative experts in the education sector should focus on strategizing towards PE, SQ and FC. The Tertiary establishments ought to likewise strengthen their awareness campaign programme through the organization of workshops for students on how to use the Self-Service Technology. This will go far in promoting the idea and reveal the importance of the SST system in education sector.

CONCLUSION AND FUTURE RESEARCH

The main aim of this study is to empirically examine the gender differences in the adoption of Self-Service Technology (SST) among students in Nigeria using UTAUT model. This study has some limitations. The sample was constrained to students of Abubakar Tafawa Balewa University, Bauchi, Nigeria. Therefore, the results might not hold true for students from other developing nations with different culture and different mode of study. Therefore, future research should utilize different sample structures and conduct a comparative study between two countries in order to improve our understanding of the determinants of SST adoption by gender within different demographic groups. Other than the research model (UTAUT) used in this study, future research should likewise examine the predictive influence of other technology acceptance theories such as, expectation confirmation theory (ECT) and Technology Acceptance Model (TAM). In conclusion, the main aim of this study has been achieved.

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