

Financial Accounting Students' Behavioural Intention toward Mobile Learning in Government Science and Technical Colleges in Gombe State

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ABSTRACT

The main objective of the study focuses at determining the factors affecting behavioural intention toward m-learning among financial accounting students of government science and technical colleges (GSTCs) in Gombe State. In achieving this, four hypotheses were raised to guide the study. The study employs descriptive survey design. The study is based on the unified theory of acceptance and use of technology (UTAUT) model. A sample of 175 students was taken out of the total population of 312 financial accounting students of GSTCs using Yamane (1967) formula for determining sample size. Proportionate random sampling technique was used in drawing the sample from the three GSTCs since they are the only colleges among the GSTCs offering financial accounting. A structured questionnaire with five point Likert scale was developed, validated and its reliability ascertained using Cronbach alpha. A reliability coefficient of 0.78 was found. Data collected were analyzed using Pearson product moment correlation coefficient, multiple regression and ANOVA statistics. The finding of the study shows that all the four constructs of the UTAUT model significantly affect financial accounting students' behavioural intention toward m-learning with 52 percent of the variance. The study recommends that another study needs to be conducted to find out the behavioural intention of both financial accounting teachers and students toward the adoption of m-learning for teaching and learning of financial accounting in GSTCs in Gombe state in particular and Nigeria at large.

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INTRODUCTION

Mobile learning (m-learning) was conceptualized by various scholars in different ways but Crompton (2013) asserts that m-learning has no universally accepted definition across the globe. In the process of defining the concept, many researchers looked at the geographical location, others looked at functionality, while others defined the concept based on mobility or technology (Henry & James, 2015). In their attempt to define m-learning based on "mobility", El-Hussain and Cronje (2010) identified three concepts of m-learning as indicated in Figure 1.

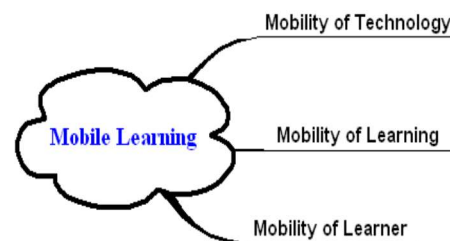


Figure 1: Three Concepts of Mobile Learning

In their contribution, Traxler and Koole (2014) defined m-learning as ubiquitous, accessible, pervasive, and transparent way of providing of education where the dominant or sole

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technology is palmtop or handheld. In other words, m-learning was also viewed as any type of learning that takes place when the students have access to the information relating to learning anywhere anytime through the use of mobile technologies with the view to carry out authentic activities (Martin & Ertzberger, cited in El-Emran et al., 2020). The overwhelming development of mobile technologies has created more emerging opportunities for learning (Al-Emran et al., 2020). Similarly, wireless network's wider coverage, proliferation and widespread usage of mobile devices offer the institutions of learning multiple alternatives in improving teaching and learning (Hoi, 2020). However, m-learning does not come to totally replace traditional teaching and learning, rather it is just another modern way of teaching and learning through the use of a new technology (Wang & Michael, 2006).

Financial accounting refers the systematic process of recording, classifying, selecting, measuring, interpreting and communicating financial data of an organization to enable users make decisions (Longe & Kazeem, 2012). Financial accounting is one of the core subjects taught in Business Departments in Government Science and Technical Colleges (GSTCs) in Gombe State. However, adopting and integrating information and communication technology (ICT) in accounting teaching and learning processes makes learning more effective and interesting and the students can broaden their knowledge and develop basic skills and competencies necessary for gainful employment in the business world (Dimitriou et al., 2013). Similarly, emerging technology such as m-learning has today changed the way and process accounting professionals conduct their businesses. As a result of this, financial accounting students need current technological skills as they move from the classroom to the business world (Staples et al., 2016), most especially through the use of m-learning since it remains a powerful medium of teaching and learning thereby facilitating students' learning experiences (Wu et al., 2020).

In Nigeria, students even in remote areas own mobile phones and wireless Internet network is readily available necessary for m-

learning program but unfortunately those mobile phones acquired by Nigerian students were mostly used for social purposes rather than as educational purpose (Titus & Okeke, 2012). In the same vein, most of the higher institutions of learning still depend on conventional teaching and learning strategies and methods, which are mainly constrained by the use of physical infrastructure which are not always suitable for teaching and learning (Chaka & Govender, 2020). Not only higher institutions of learning, almost every GSTCs in the country depend on conventional strategies of teaching and learning. This trend needs to be changed thereby utilizing mobile devices to supplement the present teaching and learning strategies most especially in this era of Covid-19 pandemic as opined by Chelvarayan et al. (2020).

However, resources are limited, if government goes ahead and implements mobile learning program without making reference to the factors affecting students' behavioural intention towards the program, it could probably lead to failure of the program and consequently waste of scarce resources that could have been invested into other important areas. Few studies conducted on the factors affecting the behavioural intention of students toward m-learning not only targeted higher institutions of learning but also fail to consider the availability and affordability of m-learning applications as well as affordability and accessibility to wireless network in determining students' intention toward m-learning. To this end, this study intends to fill the existing gaps by determining the factors affecting the behavioural intention toward m-learning among financial accounting students of GSTCs in Gombe State.

Research Objective

The main objective of the study is to determine the factors that affect Financial Accounting Students' Behavioural Intention toward Mobile Learning in Government Science and Technical Colleges in Gombe State. Specifically, the study intends to find out the following:

- i) Influence of performance expectancy on financial accounting students' behavioural intention toward m-learning adoption.

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- ii) Influence of effort expectancy on financial accounting students' behavioural intention toward m-learning adoption.
- iii) Influence of facilitating conditions on financial accounting students' behavioural intention toward m-learning adoption.
- iv) Influence of social inspiration on financial accounting students' behavioural intention toward m-learning adoption.

Research Hypotheses

The following null hypotheses were formulated and tested at 0.01 level of significance:

Ho1: Performance expectancy has no significant influence on financial accounting students' behavioural intention toward m-learning adoption.

Ho2: Effort expectancy has no significant effect on financial accounting students' behavioural intention toward m-learning adoption.

Ho3: Facilitating conditions have no significant influence on financial accounting students' behavioural intention toward m-learning adoption.

Ho4: Social inspiration has no significant influence on financial accounting students' behavioural intention toward m-learning adoption.

LITERATURE REVIEW

The study is based on the unified theory of acceptance and use of technology (UTAUT). The UTAUT model is based on eight technology acceptance theories and/or models. UTAUT model is drawn from the social cognitive theory, the theory of reasoned action (TRA), TPB, technology acceptance model (TAM), the combined TAM and TPB, the motivational model, the model of personal computer utilization, and the innovation diffusion theory (Venkatesh et al., 2003). The model is aimed at explaining the intentions of a user to use and accept an information system as well as future usage behaviour. According to the theory, there are four key constructs in determining acceptance and intention to use a technology which include; performance expectancy, effort expectancy, social inspiration, and facilitating conditions. Venkatesh et al. (2003) defined performance expectancy as the extent to which a person

perceives that using a technology or system will assist him achieved his goal in performing his job, effort expectancy is the extent of ease associated with the usage of the technology or system. Whereas social inspiration refers to the extent to which a person believes that other important people believe he should use the technology or system, and facilitating conditions refer to the perceived extent to which a persons' resources or organizational and technical infrastructure necessary to support the technologies exist (Thomas et al., 2013). Ajzen (2002) defines behavioural intention as an indication of an individual's readiness to perform a given behaviour. In the words of Ajzen (1991), "Intentions are assumed to capture the motivational factors that influence a behaviour". It is therefore presumed that behavioural intention is the immediate antecedent of the actual behaviour.

The study conducted by Welch et al. (2020) revealed that performance expectancy has significant effect on the behavioural intention to adopt m-learning at a science museum. In their study, Chelvarayan et al. (2020) examined the factors affecting universities students' perception on m-learning in Malaysia, the study found out that performance expectancy has significant effect on the universities students' perception on m-learning. Among the studies that reported a positive significant effect of performance expectancy on students' behavioural intention toward m-learning are: Hamzah et al. (2020); Hoi (2020); Shorfuzzaman and Alhoussein (2016); Al-Hujran et al. (2014); Jackman (2014); Mtebe and Raisamo (2014); Thomas et al. (2013). On the contrary, Jairak et al. (2009) reported an insignificant effect of performance expectancy on students' behavioural intention toward accepting m-learning in higher education in Thailand.

Effort expectancy or ease-of-use has significant effect on the intention to use m-learning by students of the British University, Dubai as reported by Al-Emran et al. (2020). Another study conducted by Kutluk et al. (2015) reported that the accounting students of Akdeniz University Turkey believed that using mobile devices for learning purposes will be easy. Among the studies that reported a positive significant effect of the ease-of-use/effort expectancy of m-learning among

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students include: Al-Hujran et al. (2014); Osang and Ngole (2014); Tagoe and Abakah (2014); and Wei-Han Tan et al. (2011). On the contrary, Ugur et al. (2016) and Donaldson (2011) reported that ease-of-use/effort expectancy has no significant effect on students' behavioural intention to adopt m-learning.

Jackman (2014) reported that 'facilitating conditions' significantly affects students' behavioural intention to accept m-learning in the University of the West Indies, Barbados. In their study, Ugur et al. (2016) found 'facilitating conditions' as a significant factor in determining the behavioural intention of college students to accept m-learning in Sakarya University Turkey. Also, Donaldson (2011) reported that 'facilitating conditions' has a positive significant effect on college students' behavioural intention for m-learning in United States. Among the studies that reported a significant effect of 'facilitating conditions' on students' behavioural intention toward m-learning include: Welch et al. (2020); Mtebe and Raisamo, (2014); Thomas et al. (2013). On the contrary, Al-Hujran et al. (2014) reported that 'facilitating conditions' has no significant effect on students' intention to use m-learning in higher institutions. Also, 'facilitating conditions' has no significant effect on students' behavioural intention toward accepting m-learning in higher education in Thailand in the study conducted by Jairak et al. (2009).

In an attempt to investigate the students' acceptance of m-learning in higher institutions in Thailand, Jairak et al. (2009) concluded that social inspiration strongly affect students behavioural intention to accept m-learning. In their studies, Shorfuzzaman and Alhussain (2016) reported that social inspiration strongly affects students' behavioral intention to adopt m-learning in higher education institutions. Among the studies that reported a significant effect of social inspiration on students' behavioural intention toward m-learning

include: Welch et al. (2020); Al-Hujran et al. (2014); Thomas et al. (2013). On the contrary, Hamzah et al. (2020) reported that social inspiration has no significant effect on the students' behavioural intention to use tablets as m-learning devices in Malaysia. However, all the above studies were mostly conducted in higher institutions of learning mostly outside Nigeria. Despite the differences between higher education institutions and GSTCs, the social systems of most countries differ significantly in almost all ramifications, to this end, the need to find out the factors affecting financial accounting students' behavioural intention toward m-learning among of GSTCs in Nigeria is inevitable.

METHODOLOGY

The population of the study comprises of all NTC 2 and 3 financial accounting students in GSTCs in Gombe State, the students are 312 where 175 were sampled using the formula for determining sample size developed by Yamane (1967). Proportionate random sampling technique was used in drawing the sample size of students from each of the three colleges earmarked for the study since there are only three colleges offering financial accounting. Therefore, a sample of 42, 114 and 19 students was drawn from GSTC Amada, GSTC Gombe and GSTC Tula respectively. Four research hypotheses were formulated to guide the study. A structured questionnaire with five points Likerts' scale was the instrument for data collection. The reliability of the instrument was established using Cronbach's alpha after a pilot test, the result of the reliability test shows 0.78, this means that the instrument is reliable for the study because it is within the acceptable range of reliability as reported by Cronbach (1951). Pearson product moment correlation, multiple regression and ANOVA statistics were used to analyze research hypotheses.

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RESULTS

The following findings emerged from the study:

Normal P-P Plot of Regression Standardized Residual

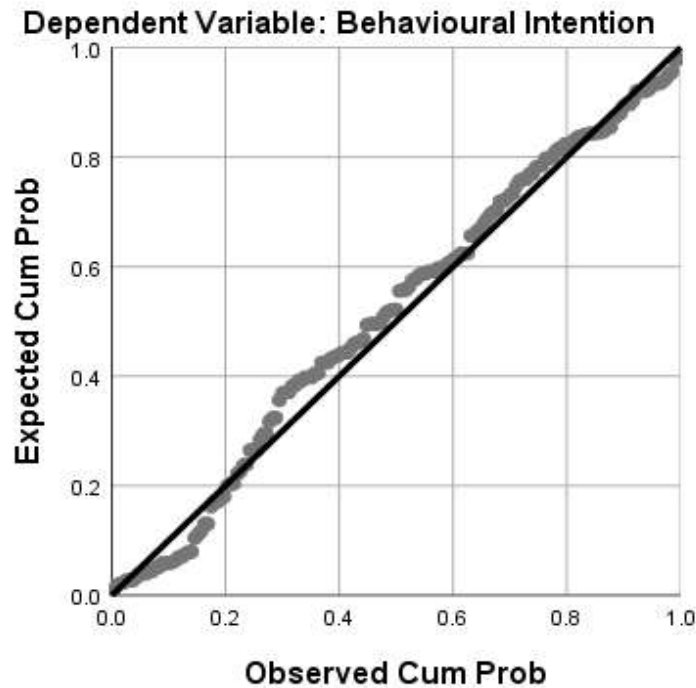


Figure 2: Normal P-P Plot of Regression Standardized Residual

Figure 2 indicates that there are no major deviations from the normality because the points lie in a reasonable straight diagonal line from the bottom left to the top right. Also, the scatter plot depicts a rectangular shape and there are no much deviations from the centre. This

indicates that the assumptions of homoscedasticity and independence of residuals are met. None of the independent variables show a tolerance value less than 0.1, this indicates that excessive multi collinearity is not a problem as opined by Tabachnick and Fidell (2013).

Table 1: Correlational Analysis of Factors influencing Behavioural Intention

Factors		Behavioural Intention	Performance Expectancy	Effort Expectancy	Facilitating Conditions	Social Inspiration
Behavioural Intention	Pearson Correlation	1	.211**	.416**	.580**	.461**
	Sig. (2-tailed)		.005	.000	.000	.000
	N	175	175	175	175	175
Performance Expectancy	Pearson Correlation	.211**	1	.390**	.522**	.418**
	Sig. (2-tailed)	.005		.000	.000	.000
	N	175	175	175	175	175

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	N	175	175	175	175	175
Effort Expectancy	Pearson Correlation	.416**	.390**	1	.934**	.994**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	175	175	175	175	175
Facilitating Conditions	Pearson Correlation	.580**	.522**	.934**	1	.956**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	175	175	175	175	175
Social Inspiration	Pearson Correlation	.461**	.418**	.994**	.956**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	175	175	175	175	175

** . Correlation is significant at the 0.01 level (2-tailed).

From Table 1, all the four independent variables (SI, PE, FC, EE) show a positive correlation with the dependent variable (BI). The FC has strong correlation coefficient, followed by SI, then EE

whereas PE has less strong correlation coefficient. Also, all the independent variables show a strong positive correlation among them.

Table 2: Summary of Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.721 ^a	.519	.508	.51476

a. Predictors: (Constant), SI, PE, FC, EE.

b. Dependent Variable: BI.

From Table 2, the dependent variable (BI) show an R Square of 0.519 (52 %), this indicates that the independent variables (SI, PE, FC, EE)

explained 52 percent of the variance in dependent variable (BI).

Table 3: Summary of ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	48.658	4	12.164	45.907	.000 ^b
	Residual	45.046	171	.265		
	Total	93.704	175			

a. Dependent Variable: BI

b. Predictors: (Constant), SI, PE, FC, EE

The analysis of variance on Table 3 indicated that the independent variables (SI, PE, FC, EE) show a significant effect on the

dependent variable (BI), (F 4, 171 = 45. 91, p<0.01).

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DISCUSSION OF FINDINGS

The finding emerged from hypothesis one shows that performance expectancy significantly affects financial accounting students' behavioural intention toward m-learning. The finding is in agreement with the finding of Welch et al. (2020) who reported that performance expectancy has significant effect on the behavioural intention to adopt m-learning at a science museum. Also supports the finding of Chelvarayan et al. (2020) who found out that performance expectancy has significant effect on the universities students' perception on m-learning. The finding is in line with the findings of the following studies that reported a positive significant effect of performance expectancy on students' behavioural intention toward m-learning which include: Hamzah et al. (2020); Hoi (2020); Shorfuzzaman and Alhussein (2016); Al-Hujran et al. (2014); Jackman (2014); Mtebe and Raisamo (2014); Thomas et al. (2013). On the contrary, the finding is not in agreement with that of Jairak et al. (2009) who reported an insignificant effect of performance expectancy on students' behavioural intention toward accepting m-learning in higher education in Thailand.

Based on the data collected to answer hypothesis two, the result indicates that effort expectancy has significant effect on the behavioural intention of financial accounting students toward m-learning adoption. This finding supports the finding of Al-Emran et al. (2020) who reported that effort expectancy or ease-of-use has significant effect on the intention to use m-learning by students of the British University, Dubai. The finding is in conformity with that of Kutluk et al. (2015) who reported that the accounting students of Akdeniz University Turkey believed that using mobile devices for learning purposes will be easy. The finding is in concordance with the findings of the following studies that reported a positive significant effect ease-of-use/effort expectancy on students' behavioural intention toward m-learning which include: Al-Hujran et al. (2014); Osang and Ngole (2014); Tagoe and Abakah (2014); and Wei-Han Tan et al. (2011). On the contrary, the finding disagrees with that of Ugur et al. (2016) and Donaldson (2011) who reported that ease-of-use/effort expectancy has no significant effect on

students' behavioural intention to adopt m-learning.

The finding from hypothesis three revealed that facilitating conditions have positive significant effect on financial accounting students' behavioural intention toward m-learning adoption. This finding is supportive to the finding of Jackman (2014) who reported that 'facilitating conditions' significantly affects students' behavioural intention to accept m-learning in the University of the West Indies, Barbados. The finding also goes hand-in-hand with that of Ugur et al. (2016) who found 'facilitating conditions' as a significant factor in determining the behavioural intention of college students to accept m-learning in Sakarya University Turkey. Also, the finding agrees with that of Donaldson (2011) who reported that 'facilitating conditions' has a positive significant effect on college students' behavioural intention for m-learning in United States. The finding also supports the findings of the following studies that reported a positive significant effect of 'facilitating conditions' on students' behavioural intention toward m-learning which include: Welch et al. (2020); Mtebe and Raisamo, (2014); Thomas et al. (2013). On the contrary, the finding is at variance with that of Al-Hujran et al. (2014) who reported that 'facilitating conditions' has no significant effect on students' intention to use m-learning in higher institutions. Also, the finding disagrees with that of Jairak et al. (2009) who revealed that 'facilitating conditions' has no significant effect on students' behavioural intention toward accepting m-learning in higher education in Thailand.

The finding that emerged from hypothesis four revealed that social inspiration has significant effect on financial accounting students' behavioural intention toward m-learning adoption. This finding is supportive of the finding of Shorfuzzaman and Alhussein (2016) who concluded that social inspiration strongly affect students' behavioural intention to adopt m-learning in higher education institutions. The finding is also in line with the findings of the following studies that reported a positive significant effect of social inspiration on students' behavioural intention toward m-learning which include: Welch et al. (2020); Al-Hujran et al.

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(2014); Thomas et al. (2013); Jairak et al. (2009). On the contrary, the finding is not in conformity with that of Hamzah et al. (2020) who reported that social inspiration has no significant effect on the students' behavioural intention to use tablets as m-learning devices in Malaysia.

CONCLUSION

The major finding of the study revealed that all the four constructs of the UTAUT model significantly affect the financial accounting students' behavioural intention to adopt m-learning in Gombe state GSTCs with 52 percent variance. Therefore, all the four constructs of the UTAUT model are relevant for investigating the behavioural intention of financial accounting students toward adoption of m-learning in GSTCs in Gombe state and beyond.

RECOMMENDATIONS

Based on the findings and conclusion of the study, it is recommended that mobile device manufacturers should incorporate more education-related and simple features in their products with the view to increase their performance and effort expectancy. Also, Curriculum planners and reviewers should ensure the incorporation of teaching and learning activities and experiences that supports the use of mobile devices into the existing curriculum for the teaching and learning of financial accounting. Another study need to be conducted on the behavioural intention of financial accounting teachers toward m-learning since they are critical in the teaching and learning process and it will pave a way for a successful m-learning adoption in GSTCs in Gombe state

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