



## Examining the Adoption of Computerized Accounting System in Bauchi State Public Secondary School: A proposed Model

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### Abstract

*The objective of the study is geared toward an understanding on the perception of schools' administrators towards the intention to adopt Computerized Accounting System (CAS) in public secondary schools. The study also aims to examine the effect of perceived usefulness, perceived ease of use, management commitment and social influence on intention to adopt accounting information system in public secondary school. This study proposes a conceptual framework based on four variables (perceived usefulness, perceived ease of use, management commitment and social influence) in order to examine the influence of these factors on the intention of secondary school teachers to adopt the use of computerised accounting system in their daily activities. This research modified the Technology Acceptance Model (TAM), by integrating management commitment and social influence. In conclusion, it is expected that upcoming empirical studies using this framework can give an insight to school administrators' intention to adopt Computerized Accounting System in public secondary schools within Bauchi State.*

**Keywords:** Computerized accounting system, perceived usefulness, perceived ease of use, management commitment, social influence, TAM.

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### 1.0 Introduction

Accounting information system is a computer built-in system where financial information are processed, and such information helps in taking decisions about the general control and coordination of company's activities (Nicolaou, 2000). For instance, American Institute of Certified Public Accountants (AICPA) stated that: "Accounting actually is information system and to be more precise, accounting is the practice of general theories of information in the field of effective economic activities and consists of a major part of the information which is presented in the quantitative form."

Recently, computerized accounting receives growing attention among various scholars across the globe. Example, advancement in technology positively affects the education system in developing countries like Nigeria and Ethiopia (Tilahun, 2018). The mechanism of information technology and its pervasive adoption by many business organizations makes professional accountants concerned about whether educational institutions like secondary schools would adopt the usage of computerized accounting system in their daily activities (Asiabaka, 2010).

According to Tilahun (2018), the accounting information system has been recognized as a major contributor towards economic management, creating job opportunities, growth and social



progress in developing economy. In addition, accounting information system provides information on actual budgets of the organization which helps the company's management to plan and control business operations (Sajady, Dastgir & Nejad, 2008).

It is argued that, the use of Information Technology in administration of schools has to be strengthened so as to manage and plan activities more effectively (Nicolaou 2000). Information that is stored in hardcopy format cannot be easily accessed. Data in respect of teachers, salaries, students' bio data, grades, the number of students per class, and statistical information generally are dispersed and don't seem to be easily available (Zhou, 2007). Therefore, equipping schools with knowledge and competencies especially on Computerized Accounting System and evaluating the impact of such system on the effectiveness and performance of schools is a worthy research exercise that could make pertinent contribution to the literature. In consequence school administrators may have deep understanding of educational and social dimension of ICT integration (Ubogu & Evarista 2012).

In view of the constant development in information technology, prior studies in information technology have unfolded determinant that influences individual intention to accept and use new technology (Lee, Song, Bendle, Kim, & Han 2012). For instance, Perceived usefulness and perceived ease of use were found to have positive influence on user intention to use new technology (Suki & Suki 2011; Kigongo 2011; Tella & Olasina, 2014; Diatmika, Irianto & Baridwan, 2016; Kabir, Siti & Ahmi 2017; Kashada & Koshadah 2018; Pratomo & Fika 2019; Jun & Chin 2020). Likewise, Management commitment and Social influence are also found to be important factors that influence user intention to use new technology (James, Chee-Sing & Raman, 1996; Rahayu 2012; Al-Hiyari, Hamood, Nik, & Mohammed 2013; Ibrahim & Al-Rawashdeh 2014; Abrahao, Moriguchi & Andrade 2016 Rosnidah, Arinal, Ayatulloh, & Nelia, 2018; Kashada & Koshadah 2018; Tilahun 2019; Zahedul Alam, Hoque, Hu, and Baruae 2020).

The purpose of this paper is to put forward a conceptual framework for teachers of public senior secondary school using Technology Acceptance Model (TAM) to examine the extent of influence of each determinant on user intention to use the computerized accounting system in secondary schools in Bauchi State.

The study will help the school administrators to prevail over the problems that affect educational system such as student registration, payments of Parent Teachers Association, (PTA) West African Examination Council, (WAEC) and National Examination Council (NECO) by adopting computerized accounting system. The findings will assist state governments in making policies. The study also provides vital information to parent and government on the financial and academic records of students. Finally, this will serve as a reference material to those who may wish to further their research on similar area.

## **2.Literature Review**

### **2.1Theoretical Framework**

#### **Technology Acceptance Model (TAM)**

Information system models were primarily established to investigate the factors that lead to the acceptance and use of new technology for either organizations or individuals (Kabir et al 2017). The accomplishment of an information system depends on the continuous use and intention to use the new system (Tella & Olasina 2014). Technology Acceptance Model (TAM) was one of such models being used for that purpose. TAM which is founded by Davis in 1989 was derived from the Theory of Reasoned Action (TRA) and Theory of Planned Behaviour (TPB) which

were used to test the users' acceptance of information system. Generally, TAM was set to explain the computer acceptance elements by its users. TAM is a model that identifies reason for accepting or rejecting a particular system (Atiquil Islam, 2010).

TAM theorizes that two particular beliefs, namely, perceived usefulness and perceived ease of use are of paramount importance in technology acceptance. For example, Perceived usefulness (PU) is defined as the prospective user's subjective probability that using a specific application or system will increase his or her job performance within an organizational context. Perceived ease of use (PEOU) refers to the degree to which the prospective user expects the target system to be free of effort strenuous and otherwise (Davis 1989). There are many studies such as (Suki & Suki 2011; Kigongo 2011; Kabir, et al 2017; Kashada & Koshadah 2018; Pratomo & Fika 2019; Jun & Chin 2020) that tested the TAM in the information systems area and further research in the area of information management. Therefore, TAM model should be basic and theoretical grounding for the current study.

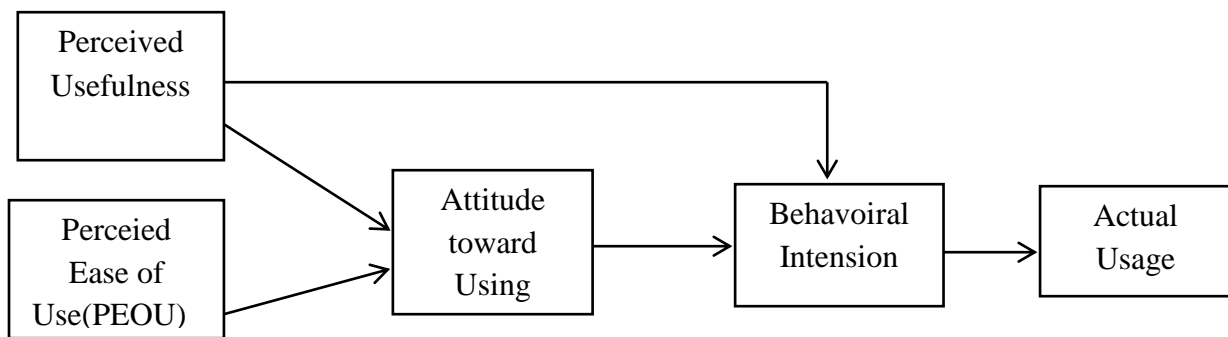


Figure 2.1: Technology Acceptance Model

Source: Davis (1989)

TAM has been used widely by several researchers and in different field of studies across the sphere. According to Abbasi, Shah, Doudpota, Channa, and Kandhro, (2013) TAM can be reformed by adding or reducing some variables to satisfy the context of the study (Venkatesh, 2000; Kabir et al 2017; Vincent, Veera & Nadim 2019; Oladejo, Yinus & Aina 2020 and Grandon, Diaz-Pinzon, Magal & Rojas-Contreras 2021). Therefore, the model was developed from a conceptualization of “perceived usefulness”, “perceived ease of use”, “management commitment” and “social influence” impact towards “behavioural intention” to adopt computerized accounting system in public secondary schools in Bauchi State.

### 2.2 Conceptual Framework and Propositions

To determine the relationship among the variables under review, conceptual framework was developed. In the conceptual framework perceived usefulness, perceived ease of use, management commitment and social influence are the independent variables while computerised accounting system is the dependent variable. The four mentioned variables have influenced on the individual intention to use new technology as cited in the literature. Consequently, this study will employ these variables to propose research model in order to examine whether these variables could influence the intention to use computerised accounting system in public secondary schools in Bauchi State.

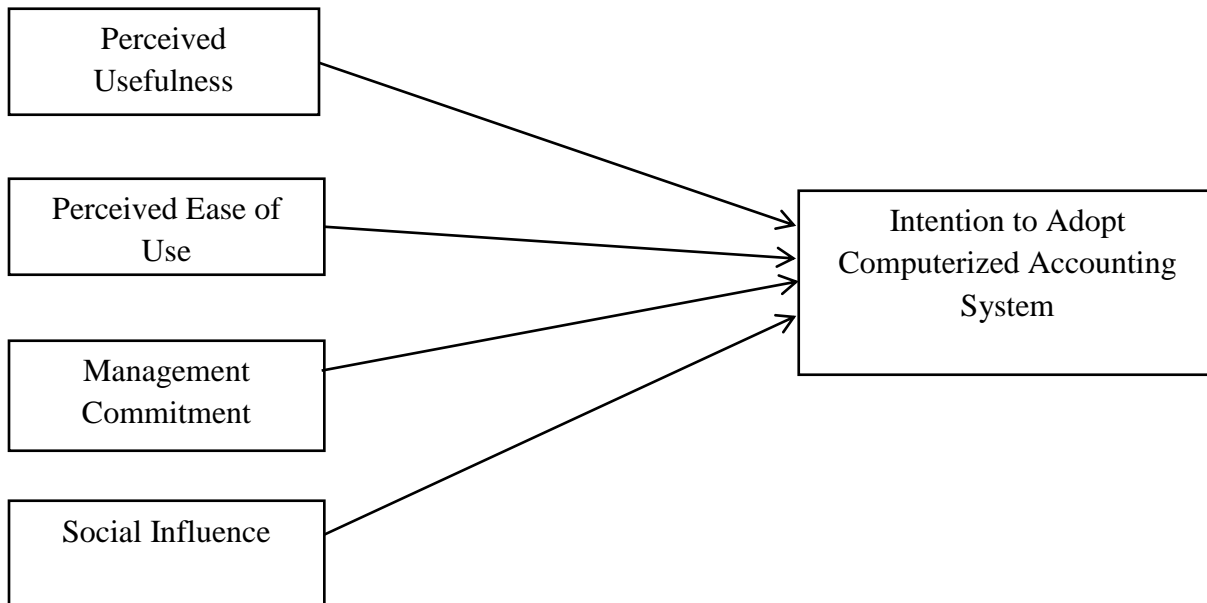


Figure 2.2: Proposed conceptual framework

### Perceived usefulness

Perceived usefulness is the degree to which a user of technology or information system believes that it will enhance his or her performance on the job (Davis, 1989). According to Atiquil (2010) perceived usefulness shows the amount to which the use of technology will increase individual performance. For instance, the study of Alshurafat, Al Shbail, Masadeh, Dahmash, Al-Msiedeen, (2021) found that, Perceived usefulness, has positive effect on intention to use online learning systems by accounting students in Jordanian public universities. Likewise, in the study of (Abrahao, et al 2016; Diatmika et al. 2016; Kashada & Koshadah 2018; Pratomo & Fika 2019) reveals that, perceived usefulness has positive influence on intention to adopt computerised accounting system. The following proposition is formulated based on the above findings

**H<sub>1</sub>:** *Perceived usefulness positively influences the behavioural intention to adopt computerized accounting system in public secondary schools.*

### Perceived Ease of Use

According to Venkatesh, (2000), “Perceived ease of use is a construct tied to an individual’s assessment of the effort involved in the process of using the system”. Similarly, Saade and Bahli (2005), define perceived ease of use as a degree to which a person believes that using a particular system is free from effort. In the study of (Suki and Suki 2011; Kigongo 2011; Kabir, et al 2017; Anugraheni, Baridwan, and Mardiaty, 2018; Pratomo & Fika 2019) stated that, perceived ease of use (PEOU) significantly influences behavioural intention to adopt new system. PEOU is an important predictor that affects user’s intention to use new technology. Also, Jun and Chin (2020) result revealed that intention to use is positively affected by ease of use. Therefore, the following proposition is formulated:

**H<sub>2</sub>:** *Perceived ease of use positively influences the behavioural intention to adopt computerized accounting system in public secondary schools.*

### Management Commitment



Management commitment is “engaging in and maintaining behaviors that others achieve the goals” (Cooper, 2006:1). Equally, Adeh, (2012) define management commitment as the involvement of management in applying information system and developing strategies for information system to be employed. Rahayu (2012), found that, management commitment has positive effects on the accounting information system. In the study of Al-Hiyari et al (2013), found that management commitment has significant relationship with accounting information system implementation. The study of Tilahun (2019), found that organizations with top management commitment may possibly adopt computerised accounting system than organizations with little management support. The above discussions lead to the formulation of the following proposition:

*H<sub>3</sub>: Management commitment positively influences the behavioural intention to adopt computerized accounting system in public secondary schools.*

#### **Social Influence**

Social influence is defined as the degree to which an individual perceives that how important others believe he or she should use the new system (Venkatesh, Michael, Davis and Davis 2003). In the study of (Ibrahim and AL-Rawashdeh 2014: Rosnidah, et al 2018 & Henny et al 2020) found that, there is a significant relationship between social influence and behavioural intention to use accounting information system. Also, Zahedul Alam et al (2020) reveals that, social influence is related to the effects of peer thoughts and activities on the behavior of a person. The following proposition is formulated.

*H<sub>4</sub>: Social influence positively influences the behavioural intention to adopt computerized*

*accounting system in public secondary schools*

#### **3. Proposed Method**

The study will employ quantitative approach. Quantitative approach refers to the process of measuring the data by applying statistical techniques. Survey research design can be used for future empirical studies on the proposed framework. In preference, the unit of analysis should be individuals because TAM was conceptualized to test individual behaviour among technology users. Additionally, the appropriate instrument for data collection for the target sample should be questionnaire which consist teachers of public senior secondary school. There are 5,348 teachers in 214 public senior secondary schools in Bauchi state. Simple random sampling techniques should be used to select sample size from the population.

#### **4. Conclusion**

The objective of this paper is to provide a propose conceptual framework in order to examine the influence of the independent variables (perceived usefulness, perceived ease of use, management commitment and social influence) which serve as determinants of adopting computerized accounting system in public secondary schools. By modifying the TAM model, this study adds knowledge to the existing literature towards understanding the determinants that lead to the intention to adopt new technology in public school in Bauchi State. The study will focus on testing this framework in secondary school level where there are fewer studies in relation to computerized accounting system. This conceptual model should serve as a guide to researchers who wishes to conduct additional empirical studies on the relationship presented in the model. If the empirical research is successfully





conducted, it will serve as significant guide to management of secondary schools to understand the advantage and how to overcome the challenges that affect the education system such as student registration, payments of PTAs, WAEC, and NECO. Also, it will assist government to identify the benefit of adopting computerized accounting system and assist government in making policies. The study also provides vital information to parent and government on the financial and academic records of students.

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