

Validating Instruments For Technology Acceptance Model (TAM) And Psychological Attachment Towards Computerised Accounting System (CAS) In Public Sector

Azleen Ilias
Mohd Zulkeflee Abd Razak
Syamimi Alia Mohd Halimi
Wardatuaini Amir

Department Of Accounting
College Of Business And Accounting
Sultan Haji Ahmad Shah Campus
Universiti Tenaga Nasional
Pahang, Malaysia

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ABSTRACT

Purpose - to validate the factors of Technology Acceptance Model (TAM) and Psychological Attachment towards Computerised Accounting System (CAS) for users' experience particularly public sector from Accountant General's Department (AG).

Design/Methodology/Approach - The survey was adapted the instrument from Malhotra and Galleta (1999). Based on 99 valid respondents collected from a survey questionnaire and Principal Component Analysis (PCA) was employed the validation of instruments.

Findings - The factors of Technology Acceptance Model (TAM) and Psychological Attachment is valid in measuring intention and actual usage of Computerised Accounting

System (CAS). The findings support the theory by Davis, (1989) Davis, Bagozzi, & Warshaw (1989), Matheison (1991), Moore and Benbasat (1991), Taylor & Todd (1995), Venkatesh & Davis (1996) and Kelman (1958).

Research limitations - This research is limited to employees from Accountant General's Department (AG) as Federal Government. In future, research need to generalised to Local Government and State Government in order to represent Public Sector Accounting.

Value - This research have been emphasised on perceived ease of use, perceived usefulness, behavioural intention, actual use, attitude toward using, compliance, identification as well as internalisation. This research need to be done in order to understand the important of Computerised Accounting System (CAS) in public sector accounting since Accountant General's Department (AG) is in progress preparing for accrual basis.

Keywords: Public Sector Accounting, Computerised Accounting System (CAS), Technology Acceptance Model (TAM) and Psychological Attachment.

INTRODUCTION

Public Sector

The public sector plays a role in several level of government such as federal, state as well as local or municipal to provide basic government services. None of individuals or private companies has the power to control the public sector because it is part of life in the aspect of economy and administration that

deals with delivery of goods and services by and for the government. Malaysian public sector have six related components namely are Federal Government, State Government, Federal Statutory Bodies, State Statutory Bodies, Local Government, Town, District Councils and City Halls, and lastly Islamic Council of Malaysia. The Malaysian government's management comprises of three tiers of government for which the Federal Government at the highest tier consisting of ministries, departments and public enterprises. The second tier of the government is the State Government that also consists of ministries but only for Sabah and Sarawak, departments and public enterprises. The last and third tier of the government is the Local Government that is governed by the Local Government Act 1976 which consists of city council, municipal council as well as district council. Public enterprises can be classified either as statutory or non-statutory bodies. The different between these two bodies is that, the setting up of a statutory body is governed by law and also considered as part of the Public Service but non-statutory bodies are established in accordance to the Companies Act 1965 and not subjected to government control (Fatimah et. al, 2009).

Public sector organisations vary in terms of social, economic, political and legal characteristics. The differences in powers and responsibilities to display different patterns of accountability involve different objectives and they are financed in different ways with different organisational structures. All these differences reflect how the public sector development has responded to changing pressures over time. One of the initiatives taken by the government of Malaysia was to launch

the Electronic Government to lead the country into the Information Age. The aim is to provide seamless services and information. It seeks to enhance the interactions between the government, businesses and citizens in the context of convenience, accessibility and quality. Thus, it will improve the flows of information and processes within the government. At the same time, the policy development and coordination as well as enforcement quality and speed can be improved. The use of Information Communication Technology and Multimedia can be fully utilised in transforming the process and delivery of service administration seen as the vision for e-government.

Public Sector Accounting

Public sector accounting practices in Malaysia consists of three major components. Firstly, maintenance of books and records particularly vote book that must be kept by the government agencies for recording expenditures, liabilities, and changes in budget as a financial record. The second component is that all public sectors organisations' accounts are required to be prepared, in compliance with rules and regulations set by the Federal Constitutions, Treasury Instructions and Treasury Circulars, Audit Act 1957, as well as Financial Procedure Act 1957. Finally, seeking approval from parliament for which the preparation of reports and statements must be laid (Fatimah et. al, 2009).

Both users in the private sector and the public sector will be affected from the emergence of the computerised system. As there are claims for the advantage of Information and Communication Technology (ICT) usage and application, government has taken a

step ahead by implementing Computerised Accounting System (CAS) in most of the government departments. It is proven that ICT and CAS together have ease the government in managing the increasing volume of financial data transactions that seems impossible when using outdated system or to compile them manually. By using CAS, it is believed that the performance and productivity can be enhanced hence, lead to better administration of financial and accounting management. Not only provides the accounting report, CAS also enables user to evaluate the output of the particular system as well as the system itself (Azleen, Mohd Rusdan, Mohd Zulkeflee and Rahida, 2007).

CAS used in the government organisation differs from the CAS implemented in the ordinary business and industry organisations due to the customisation and standardisation of the system's flows and processes. In the government context, the accounting information's flow will cover various levels of authority which include district level and state level, as well as the highest level of the hierarchy that is federal government level centralised in the headquarter of Accountant General Department. Malaysia is very different from those of developed economies, in particular the extent and type of government interventions on issue related to accounting and information system (Noor Azizi and Rosliza, 2009).

Traditionally cash basis of accounting has been used across the public sector organisations. The developments of governmental activities over the years in terms of size and complexity have raised concerns over whether the traditional use of cash basis accounting is sufficient for

governmental accounting and reporting. Consequently, there have been discussions on recent years for adopting accrual accounting as an alternative to better financial management and reporting of governmental activities. Although there is a continuing debate over the use of cash versus accrual accounting (Tickell, 2010), accrual accounting has been adopted in the governments of several countries including Australia, New Zealand and the United Kingdom. Similarly, the Malaysian government has also taken various accounting initiatives including accrual accounting in an attempt to improve further its financial management procedures. A key difference between these two bases of accounting can be observed as related to the timing of the recording of the transactions.

Currently, different accounting basis is used by different components of the Malaysian government. Modified cash basis is used by both at Federal and State Government. Meanwhile, Local Government and Islamic Council of Malaysia are using Modified Accrual Accounting. Only statutory bodies are currently using accrual accounting method. All of these accounting systems are intended to provide more information to users while avoiding the complexities of accrual accounting system. The modified cash basis is a hybrid method that combines features of both the cash basis and the accrual basis.

Computerised Accounting System

CAS also being referred as Computerised Accounting Information System (CAIS), in relation to business organisations, has become an important tool to improve the efficiency of the organisation and support its competitiveness through providing

management with financial and accounting information. Such information is used to make different decisions regarding planning, control, performance evaluation and other decisions (Mohammad Nayef, Jawabreh, Muneer and Sameer, 2011). In this emerging economy, the use of CAS is vital in completing task effectively and efficiently. Hence, in order to ensure that CAS can be used with its upmost benefits, the acceptance towards the system is crucial not only from the user perspective, but also from the organisational context.

Being part of the information technology, CAS requires innovation and development that will contribute to its usefulness. Initially accepted system will not determine the actual usage by the users for which their behaviours and attitudes will influence their intentions to use the system. For instance, in the study done by Elbanna (2010), has investigated a case of an e-procurement system that was initially accepted for its usefulness and ease of use. The system was later rejected and not put in any significant use when it went live. Using workplace context, data analysis reveals the complex ramification of systems configuration and business process change that could affect system use and thus, reversing its initial acceptance and positive intention to use.

In other cases, in order to develop a new system that is more integrated, the analysis on the existing system must be evaluated properly. This is because, the purpose of developing new system is to improve and update the current system. Thus, according to Putra and Budiyanto (2009), implementation and maintenance phase in the development of a new system will include both testing user acceptance and

evaluating application system performance based on its functionality to meet the needs of users. If there are fundamental changes in the system especially in terms of user needs, this will cause a total change in the application system, it will be recommended for application system development in the future.

In relation to the study done by Khalil Mesbah (2009), the acceptance from public accountant in Tripoli of Libya on the adoption of technology is important because CAS for government agencies is a system that has been designed based on standardisation. Most importantly, the two main constructs of Technology Acceptance Model (TAM) which are perceived ease of use and perceived usefulness were confirmed as variables that give the impact for which influenced the intention of public accountants to use CAS. At last, this determined the changes occurred in behavioural and performance which regards to the applications performed to business functions of public sector organisation.

According to Saleh (2011), CAS assists a company to conduct its operations and activities as well as provides information to the variety interest of users. It is seen as the combination of technology and human interaction that could be employed by small business companies to achieve an efficient and excellent operation. Accountants role are crucial in decision making process associated with CAS and it helps to ease the accountant's task of record keeping for which computerised accounting and accounts management were more customised. Thus, CAS contributed to accuracy of information and time efficiency which in turn, leads to cost efficiency. Revolution of information

technology has increase the accounting efficiencies since CAS base software made things smarter and cost effective, aligned with the government's target to have better records and ultimately improving the business management.

Recent developments in the Malaysian governmental accounting in bringing about improvements in governmental budgeting and financial management reveal a clear willingness of the government to embrace on features of new public financial management. Various re-engineering efforts have been taken by the government to develop its accounting system. For instance, Government Financial and Management Accounting System (GFMAS), has been developed to assist accrual accounting basis in capturing accounting transactions and financial preparation. This system is expected to be flexible and in compliance with accounting standards based on cash an accrual basis, or a hybrid of both. The accrual accounting system will be part of the support system for the GFMAS. This initiative is seen as an important stepping stone for migrating to accrual accounting.

Improving accounting practices and financial management of the government was seen as one of the agenda to strengthen accountability of the public sector, which can be achieved by focusing on enhancing the effectiveness in the management of the government's accounting system through the implementation of integrated financial management accounting system, improving the process of budget planning and control, strengthening the implementation of the micro accounting system and a standard computerised accounting system in statutory bodies.

There are several accounting information system that are currently being established by the public sector which include Government Financial and Management Accounting System (GFMAS), Standard Accounting System for Government Agencies (SAGA), State Government's Standard Computerised Accounting System (SPEKS), Micro Accounting System (SPM), and Electronic Budget Planning and Control System (e-SPKB).

GFMAS is the main CAS that is currently being used by AG Department and was developed in year 2005. This system will enhance operational efficiency and effectiveness to enable AG Department to deliver value-added service especially to Federal Government. This system also will be able to capture accounting transactions and prepare financial statements based on accrual basis of accounting. In order to ensure effectiveness of the project, the GFMAS Project Management team is adopting the Accelerated System Application Program (ASAP) methodology to manage the implementation activities and deliverables of the project.

GFMAS has been developed with several objectives. Firstly, it is built to improve the quality of services provided by AG Department through the usage of the latest information technology application. Secondly, it acts as a standard mechanism to monitor all accounting transactions in government context. Thirdly, GFMAS emerges to overcome the problems and setbacks arose from the legacy or existing government accounting system. Finally, in regards to the accounting and financial matters, GFMAS definitely could assist AG Department in providing value added

services to government and its agencies.

The development of SAGA has been done according to phases. Until now, there has been five phases being implemented under the SAGA Project which consists of 51 Federal Statutory Bodies. The aim of SAGA is to ensure the accounts of the statutory bodies are being updated daily and submitted in time for auditing purposes. SAGA is a web-based financial solution that will enable efficient processing of financial information at both the operational and management levels of an organisation in particular the local government agencies. It is easily accessible, flexible, efficient and reliable to meet today's demand for information.

In addition, SPEKS has been developed mainly for the State Governments in Malaysia with the purpose to ease and increase the productivity of financial management, to prepare a complete and accurate financial statement in time, to improve the State Financial Administration as well as to prepare the State Government towards the image of Electronic Government of Malaysia. Meanwhile, SPM is a process of collecting, calculating and analysing the total cost of output for each of government's programme and activity. Other than that, the system called e-SPKB has been designed and implemented to fulfill the necessity of financial control as well as to provide financial information needed for government's projects. It helps to control the budgetary planning and monitor the government spending as well as fasten the preparation of financial documents.

PROBLEM STATEMENT

When there is an existence of a system, it must be capable of fulfilling its potential benefits and usage. CAS in AG has gone through a successful development but the performance and effectiveness of the system will not determine the acceptance towards the usage of CAS by the users based on their experiences. Perceived ease of use and perceived usefulness are the two main factors that will impact the behaviour. Thus, the intention of using the system will also be affected. All of these will depend on the individual perceptions and varies among people that are using the system (Davis, Bagozzi and Warshaw, 1989).

Certain changes have been done in the AG regarding the CAS itself since January 2015, all reporting entities in the public sector are expected to produce financial statements prepared using the accrual basis in Malaysia. Based on research done by Wynne (2004), they found the adequate of IT system is one of risk when moving from cash basis to accrual basis. Thus, employees will have no choice but to use the system implemented by the government and follow the process flow of the accounting information, there are potential reluctant to change exists when new system is enforced. This is because; there are different level of hierarchy and positions held by the users. The pressure of completing task using the new system will be higher in the lower level employees as compared to the top management. In this situation, it is believed that management support and usage experience of prior system can help the users to accept the new system. The behavioural intention and usage will complement the acceptance of the system during the actual usage in the

workplace (Muhammad Sharif, Fida, Abdul Fatah and Farwa, 2011).

As Technology Acceptance Model (TAM) has been employed in many previous studies, it is proven that TAM for information technology is not enough from individual aspect but also need to take into account from the organisational aspect, for instance by looking from the actual work condition point of view. TAM has mainly focus on individual acceptance and being criticised for its treatment of individual acceptance as distinct at the organisational level in terms of implementation success (Venkatesh, Morris, Davis and Davis, 2003).

According to Lu, Yu, Liu and Yao (2003), many studies have modified TAM to fit their researches and in order to get accurate result; these studies also have implemented an extension to the TAM initially based on the purpose and samples of the studies. This is to ensure that the findings can be later use for further research and realistic to the field of study. For example, as outlined by Kelman (1958) and further investigated by Malhotra and Galletta (1999), the three processes in social influence have a big impact to TAM which is specifically related to individual behaviour that includes compliance, identification and internalisation. Firstly, compliance happens when an individual adopts the induced behaviour for which to expect gaining rewards or avoiding punishments but not because she believes in its content. Secondly, identification related to when an individual accepts influence because she wants to maintain or establish a satisfying self-defining relationship to another person or group. In addition, internalisation occurs when an individual accepts influence because it is in relation

with her value system. These processes are believed leading to the commitment or in other words, psychological attachment to the continuous usage of the information system as whether the system is actually accepted or not.

RESEARCH OBJECTIVE

The objective is to validate the factors of Technology Acceptance Model (TAM) and Psychological Attachment towards Computerised Accounting System (CAS) for users' experience particularly public sector from Accountant General's Department (AG).

SIGNIFICANCE OF THE STUDY

There are prior researches related to TAM and CAS but particularly focusing in private sector as well as academic institutions and therefore, lack of studies being done in public sector or governmental context. Thus, this study aims to contribute to the existing body of knowledge in the area of accounting for public sector regarding the use of CAS and the intention to use it.

Within three years time, the government will fully implement the accrual accounting system, thus the accounting standards and processes will also experience changes. One of the reasons to make accrual accounting a success, all accounting systems need to be computerised. In Wynne (2004) stated that an understanding of the computerised accounting systems that are needed including the general ledger system. In order to improve the CAS in Accountant General's Department, this study is

significant in assisting the government to further understand the behaviour towards the use of existing CAS. The call for this study to be done is that the existing CAS will be integrated with the accrual accounting system that will be further enforced in public sector specifically.

According to Tickell (2010), financial institutions around the world have realised how important the governments' financial reporting improvement. This includes the World Bank, the United Nations Development Program, the International Monetary Fund as well as the Asian Development Bank that strongly encouraged the migration to accrual accounting by developing countries and it is proven that financial aid coming from these institutions are mainly to improve the CAS and in purpose to adopt for accrual accounting. CAS requirements in relation to its role and function as well as training and communication strategies will be further determined by the accounting policies and standards mandated for accrual accounting purpose. Any incorrect software purchased will burden the implementation of CAS and making it too complex to be used. For instance, this issue has been faced personally by the government of Fiji in their two previous attempts in accrual accounting project that failed. As a result, Fiji's Ministry of Finance took the decision to further utilise the previous software that has been purchased to make it capable in handling new range of transactions aligned with accrual accounting. It is further concluded that in accrual accounting adoption, many developing nations had linked their aid funds to modernise their CAS because it will contribute to the success of the whole project.

In relation with the research done by Grande, Estebanez and Colomina (2011), CAS can improve the productivity of an organisation by the innovation incentive that being put in place for this technology development. It also can help to reduce the obstacles coming from the financial and organisational aspect. Accounting systems have gone through a better use by the companies to improve their relationships with suppliers and customers from this new computer tools. CAS has fastened tax management as well as improving the accounting and finance administrative management. Moreover, this sophisticated statistical software has the capability of predicting future earnings and help companies to gauge some operations' risk. Investment in CAS also helps expanding the scope of action which in turn provides time saving for certain tasks and reducing firms' cost. In other words, when these technology innovations are being used properly, the firms' productivity will also increase. Similarly, Saleh (2011) has found that the capabilities owned by CAS paired by the adoption of technology will improve the firms' performance in both financially and non-financially.

Government Accounting Standards Advisory Board of India has outlined that the use of CAS at transaction level will enhance the compilation and smooth flow of information. The system in the Treasury and District Treasury offices need to be computerised initially in order to investigate the extent of networks throughout the process. This is because the extent of computerisation will depend on user capabilities as well as availability of computers.

Since CAS plays an important role in the accounting and financial management of

AG, it is crucial to investigate the behavioural intention towards the CAS implemented using TAM. This study will indirectly help the public sector towards the achievement of the excellent and better performance. Theoretically, this study measures and validates the elements of Malhotra and Galletta (1999)'s extension of TAM. In addition, these elements are very useful in practice, not only for public sector but also for private sector.

This paper continues with a literature review in discussing and elaborating of Technology Acceptance Model (TAM) and Psychological Attachment. Next, the research design includes a sample; instrumentation and data collection are presented. This is followed by quantitative analysis and the findings are discussed using descriptive analysis, Principal Component Analysis (PCA) and reliability analysis. The final part concludes the study and provides suggestions for further research.

LITERATURE REVIEW

Technology Acceptance Model (TAM)

TAM is an information system (IS) theory that shows how users can accept and use a technology. In 1989, TAM has been introduced by Davis where it explains the computer-usage behaviour. Davis has noted that SN is an important consideration where it represents the social influence. It also emphasizes the role of social influence represent an important area for better understanding.

From the previous study by Malhotra et al. (1999), it has proven that, towards understanding the information system (IS)

in usage and acceptance behaviours, they need to represent an important theoretical contribution in using the Technology Acceptance Model (TAM). However, there are several researchers found that TAM is not complete in one important aspect where it does not take account for social influence in the adoption and utilisation of new IS. Moreover, the basic theory of Theory of Reasoned Action (TRA) by Ajzen and Fishbein (1980) is very difficult to distinguish if the behaviour is due to the influence of someone who shows the desire of a person or of their attitude. Next, SN concept is based on the theory of TRA. It also has theoretical and psychometric problems.

TAM has its own goals and it have been achieved in which the TAM is a model that can influence the research. It can be explained by a computerised acceptance, user behaviour that can be traversed by a variety of End User Computing (EUC) technology and user populations (Malhotra et al., 1999).

Based on study of Khalil Mesbah (2009), TAM plays an important role in the computerised management of IS. In this study, there were two objectives that can be explained, which it should give an idea that can be opened up to researchers to study the use of new technologies and examine the factors that influence the recruitment of technology adoption among public accountants for each government agency. Most previous researchers have examined that the end-user technology is quite easy to use. It focused on the adoption of technologies to illustrate the influence of different individuals. To analyse the intention of CAS usage is a scientific activity to determine the level of technology adoption and to

make a combination of uses and facilities to represent the TAM theory in which they can improve the performance of public use in the technology sector organisation.

Furthermore, TAM also has played a role in the use of internet. According to McKechnie, Winklhofer and Ennew (2006), researchers found that TAM model serves as a theoretical basis for identifying key factors that affect the use of the Internet. Perspective based on the process of innovation, the Internet can provide a clearer image of the Financial Services (FS). In this study, the results shown that the TAM model can help to provide a good understanding of the factors that influence the level of use.

Moreover, an adoption of Innovation Management Applications (IMAs) can improve the TAM. From the study done by Plewa, Troshani, Francis & Rampersad (2012), this study contributes to the literature by separating the influence of the use of IMAS and the relationship between the performances of the innovation process that can be verified through perceived usefulness and compatibility IMAS through the user's work style. In addition, the study also contributes by suggesting a model of adoption and it should be verify. It can connect to the adoption of the IMA to the innovation process, thus it is distinguished in technology adoption research.

Other aspect from a research by Elbanna (2010), TAM may reflect one of the most influential theories in information systems (IS). However, its simplicity can prevent researchers to explore beyond TAM and investigate further with more complex issues. Purpose of this paper was to consider a direct relationship between the

intentions of the adoption and use of IS with its actual use. Any factors that can reduce the actual initial intention in the use of IS were also investigated.

However, studies done by Saleh (2011) mentioned that individual's attitude using the CAS can motivate the actual usage of it. It is a function of an individual belief when using the technology and the value he or she was looking for. CAS has been valued by accountants not only for face to face conversation but also for making interest based decision as they seek any chance to maintain business group booking on the internet. Moreover, when there is a lot of integration rather than the past systems, the process will be more efficient and accurate. Analysing the Perceived Ease Of Use (PEOU), Perceived Usefulness (PU) affects on the intention towards using CAS as dependent variable, required the basis of TAM in exploring the actual usage of CAS.

Perceived Usefulness (PU)

In the establishment of PU in study done by Davis (1989), it defines as users who use a specific application system to improve their work performance in their respective organisations. Based on Venkatesh (2000), PU and attitudes have a poor relationship whereas PU and intentions have a strong link. PU was influenced by PEOU as the use of a simple and useful technology can be successful. Moreover, in the TAM, extrinsic motivation and associated intermediate can be captured through PU constructs.

Based on Ahlam Abdullah (2011), a system having high PU response reflects that a user believe that the system will give positive impact on his or her performance and this is why PU is defined as the extent of fulfilling

a purpose by using CAS. According to Khalil Mesbah (2009), PU will be the first variable that refer to people who is tend to use or not to use an application to extent of their beliefs when they need to perform their job. If someone intended to change the argument, it should has contain a well-supported facts to influence someone beliefs in the PU systems.

Regarding to Venkatesh and Davis (2000), demonstrability have a direct influence on PU. Individuals who can be expected to form a more positive perception on the use of the system, meaning the results can easily be seen. Besides, in terms of job characteristics model, it is associated with any working knowledge of a person as a motivation underlying the work of a psychological state. In addition, findings from Wang (2002) indicated that in which the importance of the effect of PU, PEOU, and Perceived Credibility (PC) were seen on behavioural intentions that definitely can be observed. For PEOU, it has a strong influence from either PU or PC.

Perceived Ease Of Use (PEOU)

PEOU has been used by many past researchers but it was first established by Davis (1989). PEOU is important to influence user acceptance and usage behaviour of Information Technologies (IT). In the study done by Malhotra et al. (1999), PEOU refers to users who expect the level of the target system to be free from effort. Internalisation of new system may influence attitude towards the use of new IS than PEOU.

However, in the study done by Saleh (2011), beliefs in PEOU are hypothesised to be a predictor of PU. Both factors can be influenced by external variables, for example

computer self-efficacy. From the study done by Venkatesh (2000), it was found that some past researchers have investigated about the understanding on how the perception forms and changes over time. Usually those who have much experience could improve the perception of the ease of use. Meanwhile, it is still based on common beliefs about computers and their uses in which they can adapt themselves to the objectives of the usability, the new system of environmental controls and systems that are easy to see. Moreover, the remains of attitude will help better to understand the influence of PEOU and PU on the key dependent variable of interest intention.

According to the studies by Khalil Mesbah (2009), CAS is based on the usefulness and ease of use for measuring the technology acceptance. From this perspective, it may happen when the behavioural and performance changes through applications to the business functions of public sector towards the acceptance of technology. However, it can be confirmed by the relationship between PU and PEOU in which they can contribute positively to the use of CAS acceptance among public sector organisations. Besides, it can provide estimates for the model of research and make recommendations to the component that include this particular construct in order to achieve successful adoption of CAS.

Regarding the study that has done by Lin and Chang (2011), past research has overlooked the role of consumers' Technology Readiness (TR) plays in adoption of Self-Service Technologies (SSTs). The study was aim to fill the research gap by developing and testing a model that integrates the role of TR into the TAM. The

results have indicated that customer TR enhances PU, PEOU, attitude towards use, and intention to use. It also shows that TR attenuates the positive relationship between perceived ease of use and attitude toward using SSTs.

Apart from that, Long (2010) has found that the relation between PU and PEOU, from a causal perspective, ease of use acted as an antecedent to usage. Other than that, PEOU is major to determine the attitude toward use in the TAM (Lu et al., 2003). PU and PEOU are different in nature but they are related in one specific construct. It is because PEOU have a positive impact on the PU in the near future. Then, PEOU is easier to use in technology. It is because they can spend time to do something rather than figure out on how to use the systems.

Attitude Toward Using CAS (ATU)

Attitude is basically referred to a perception where it is generally depending on positive or negative views of a person, place, thing, or event. From the study done by Malhotra et al. (1999), the belief structure instability which includes PEOU and PU may be further understood by the role of social influence processes associated with technology acceptance and usage behaviour in the utility of certain technology context. Such cases are important because attitude with the absence of external influences will cause the usage behaviour to be more stable.

From the study done by Robinson (2006), overall usage of technology is defined as attitude. The attitude model has been constructed, in relation to attitude toward behaviour (Theory Reasoned Action (TRA), theory of planned behaviour (TPB) by Fishben and Ajzen (1975), and combined

TAM and TPB (C-TAM-TPB)) by Taylor and Todd (1995), intrinsic motivation (motivational model (MM)) by Davis, Bagozzi, and Warshaw (1992), and affect toward use (model of PC utilisation (MPCU)) by Thompson, Higgins, and Howell (1991). These entire constructs have related to the individual's general feeling or affect associated with the behaviour of using technology. A positive attitude towards using Information Technology (IT) would leads to positive behavioural intention. Moreover, highly using PU and PEOU would lead to positive attitude towards usage where it leads to the behavioural action of using actual system. Then, cultural perspective of power distance in the TAM model will get an additional insight into attitude and usage (Kellermanns and Islam, 2004).

From the study done by Khalil Mesbah (2009), it is found that an attitude towards behaviour is a stage to perform the behaviour whether it is positive or negative value. Over the past 30 years, the attitude-behaviour is the most popular topic for research. This is because the relationship can give better understanding to influence an action as well as learn how the brain works. From the perspective of theory, the researcher has posited to support a theory on how individual make a difference on new acceptance IT through influence on beliefs. TAM is said to be a parsimonious and prominent concept of usefulness and ease of use beliefs. Besides that, from study done by Saleh (2011), TAM proposes the use of technology is motivated by an individual's attitude toward using CAS. It is a function of the beliefs in using the technology and an evaluation of the value when using it.

Behavioural Intention (BI)

Behaviour has a range of actions where it comes from the attitude of a particular person. Human behaviour can be common, unusual, acceptable, or unacceptable. It can be evaluated through the acceptability of behaviour using social norms and regulate behaviour by means of social control.

BI has also been developed by Davis (1989) where the most important that an individual need to focus on the determinants of new TAM when using the BI or behaviour itself. Based on Khalil Mesbah (2009), BI in CAS was defined as function on attitudes towards behaviour and SN. This can determine how to predict actual behaviour for individual. While the intention is the cognitive representative available for a person to perform a given behaviour and it is considered as a matter immediately preceded the behaviour.

According to Saleh (2011), BI is a major determinant of user behaviour while other factors influence user behaviour indirectly against BI. If an individual want to deliver some information in the report, it must be in a good condition, so it can be translated into intention to usefulness of CAS. Regarding to the study done by Muhammad Sharif, Fida, Abdul Fatah, Farwa (2011), it has been proven that behaviour can caused from positive or negative feelings that depends on the individual's observations or performance. The PU and PEOU have given the significant influence against of attitudinal beliefs on behavioural intention. The results in this study have found that if attitudinal beliefs are positive towards acceptance of the system, it may have a positive effect on behaviour intention for their use.

According to Malhotra & Galletta (1999),

both PU and PEOU can be predicted by the attitude of using the system to benefit users. Attitude (A) and PU influences the individual's behavioural intention (BI) to use the system. Actual use of the system is predicted by BI. Apart from that, the main relationship between two key beliefs constructs and users' attitudes are intentions and adoption behaviour. It represents that attitude towards using a new IS can be determined by users' perceptions of usefulness and ease of use of the system. Furthermore, attitude towards using the system, in turn, is the main determinant of BI to use, and hence the use of the system (McKechnie, Winklhofer, & Ennew, 2006).

Moreover, the study done by Aderonke and Charles (2010), presented that PEOU and PU will not fulfil the intention of the consumer. Thus, the need to examine additional factors exists to predict consumer acceptance. Besides that, according to Wang (2002), the benefit of using TAM is to understand system usage behaviour that provides a framework to investigate the effects of external variables on system usage. Thus, to be more consistent on this research, individual differences can refer to features such as personality and demographic variables, as well as situational variables that give a difference to certain circumstances such as experience and training.

Actual Use (AU)

AU is actually has been adopted from prior studies where it has already been established in term of its reliability and validity. However, AU is predicted by the BI. It is measured in terms of frequency of system use and the volume of system use by the user. Moreover, TAM can be observed on how to be a reliable predictor

for future actual use of technology. Besides that, expectations of future use are based on internalisation and identification. It would be more highly embedded with actual system use.

In contrast, an expectation of future use is based on compliance. It will be less correlated with actual system use. Thus, to propose conceptualisation, a better understanding should be developed which relates to expected use and future use. So the analyses can lend credence to the hypothesised influence of attitude and intention of expected use (Malhotra & Galletta, 1999).

Psychological Attachment

Psychological attachment is an important construct because it operates in a variety of social influence processes that affect a person's commitment to the use of IS. There are three different processes to explain social influence that affect individual behaviour: (1) compliance, (2) identification, and (3) internalisation (Malhotra & Galletta, 1999).

In regards to the study by Kelman (1958), the definition of compliance, identification and internalisation were clearly stated. Compliance is caused by social effect of accepting influence and identification is caused from the act conforming as such. For internalisation, it is caused due to the content of the new behaviour. Each of these corresponds to a characteristic pattern of internal responses in which the individual will engaged to adopt the induced behaviour.

In another study done by Kelman (2005), there were three process models of social influence and to trace its evolution into a

broader area against social psychological model. The core issues of social entities must be placed as negotiating their social environment. From the view of this related research, public conformity to social influence and private acceptance of the opinions or positions advocated by the other represent qualitatively distinct processes, each with its own distinct set of determinants. Moreover, a social influence analysis can address two issues which are; first, the adoption of specific elements of the national identity and second is the development of an orientation to the nation itself.

Based on the research done by Cheung and Lee (2010), the usage of an online social network by individual need to conceptualise as intentional social action and the relative impact of the three modes of social influence processes are based on compliance, internalisation, and identification. Social influence has been used widely in group and collective behaviour. The past researches have explored where the roles of compliance (SN), internalisation (group norm), and identification (social identity) play in explaining intentional social actions.

RESEARCH METHODOLOGY

Population And Sample

The population for this study consists of executives and non-executives from AG at its main headquarter located in Putrajaya, Malaysia. The lists of positions of each executive in each department are obtained from the AG directory. The questionnaires were randomly distributed to the executives and non-executives, which expected to receive feedback from 200 respondents. As a result, 111 instruments were collected but

only 99 were valid.

Instrumentation

There are two parts of the questionnaire. Part A is the demographic which includes information such as gender, education level, department, position, year of service, additional computerised accounting course as well as current use of government accounting system. Part B (as in Table 2) is the factor for TAM and Psychological Attachment includes perceived ease of use,

Table 2: Instrument

TAM and Psychological Attachment
<p>Perceived Ease of Use (PEOU)</p> <ol style="list-style-type: none"> 1. Learning to operate CAS is easy for me. 2. I find CAS to be flexible to interact with. 3. I find it easy to get CAS to do what I want to do. 4. It is easy for me to become skilful at using CAS. 5. I find CAS easy to use. 6. My interaction with CAS is clear and understandable. <p>1= Very Unlikely – 5= Very Likely</p> <p>Perceived Usefulness (PU)</p> <ol style="list-style-type: none"> 7. Using CAS would improve my job performance. 8. Using CAS in my job would enable me to accomplish tasks more quickly. 9. I would find CAS useful in my job. 10. Using CAS in my job would increase my productivity. 11. Using CAS would enhance my effectiveness on the job. 12. Using CAs would make it easier to do my job. <p>1= Very Unlikely – 5= Very Likely</p> <p>Behavioral Intention (BI)</p> <ol style="list-style-type: none"> 13. I intend to use CAS for communicating financial information. 14. I intend to use CAS frequently in my job. 15. I intend to use CAS in doing my job. <p>1= Strongly Disagree – 5 = Strongly Agree</p>

Actual Use (ACTUSE)

16. How many times do you believe you use CAS during a week?

1= Not at all, 2= About once a week, 3= 2 or several times a week, 4 = About once a day, 5= Several times a day

17. How many hours do you believe you use CAS every week?

1= Less than 1 hour, 2= Between 1-5 hours, 3= Between 5-10 hours, 4= Between 10-15 hours, 5 = Between 15-20 hours, 6 = Between 20-25 hours, 7 = More than 25 hours

Attitude Toward Using (ATT)

18. All things considered, my using of CAS in my job is a(n)_ Extremely Negative to Extremely Positive idea

1= Extremely Negative 2= Quite Negative, 3= Slightly Negative, 4= Neither Negative Nor Positive, 5= Slightly Positive, 6= Quite Positive, 7=Extremely Positive

19. All things considered, my using of CAS in my job is a (n)_ Extremely Harmful to Extremely Beneficial_ idea.

1= Extremely Harmful 2 = Quite Harmful, 3= Slightly Harmful, 4= Neither Harmful Nor Beneficial, 5= Slightly Beneficial, 6= Quite Beneficial, 7= Extremely Beneficial

Internalisation

20. What the use of CAS stands for it is important for me.

21. The reason I prefer use of CAS is because of the underlying organisational values.

22. I like using CAS primarily based on the similarity of my values and the organisational values underlying its use.

1= Strongly Disagree – 5 = Strongly Agree

Identification

23. I feel a sense of personal ownership about the use of CAS.

24. I talk up the use of CAS to my colleagues as a great use.

25. I am proud about using CAS

1= Strongly Disagree – 5 = Strongly Agree

Compliance

26. My private views about use of CAS are different than those I express publicly.
 27. Unless I'm rewarded for using CAS in some way, I see no reason to spend extra effort in using it.
 28. In order for me to get rewarded in my job, it is necessary to use CAS.
 29. How hard I work on using CAS is directly linked to how much I am rewarded.
- 1= *Strongly Disagree* – 5 = *Strongly Agree*

Adopted from Malhotra and Galleta, (1999)

perceived usefulness, behavioural intention, actual use, attitude toward using, compliance, identification as well as internalisation with likert scale with measurement using a seven-point scale ranging from 1 (strongly disagree) to 5 (strongly agree) and 1 (very unlikely) to 5 (very likely). Previous study done by (Malhotra and Galleta, 1999) was used as a guideline for constructing operational and measurement of the variable. This is because researchers were also tested three different variables in their research; internalisation, identification and compliance. However, the scales were already established according to Davis, (1989) Davis et. al (1989), Matheison (1991), Moore and Benbasat (1991), Taylor & Todd (1995), Venkatesh & Davis (1996) and Kelman (1958).

From Table 3, a total of 67.7 percent are female respondents that represent more than half of the total sample. Most of them have Diploma as their education level with 37.4 percent followed by SPM/STPM holders at 28.3 percent. 27.3 percent of the respondents came from Centres Operation and Agencies Services Division (BPOPA) and 25.3 percent of them are currently serving Information

Technology Management Division (BPTM). Respondents that are using the CAS hold the position of Assistant Accountant at 28.3 percent while 16.2 percent of them work as Accountant Clerk.

From the survey, it is found that 61.6 percent of the respondents agreed that the accounting system used in AG is a combination of manual and computer processes while 38.4 percent of them agreed that their accounting system is fully computerised. The respondents have also obtained additional computerised accounting course with 31.3 percent of them represent solely UBS and 16.1 percent of the respondents have enhanced their knowledge in the combination of two software and above. The results obtained from the survey also shown that GFMAS stands as the top CAS being experienced with 59.6 percent followed by e-SPKB at 17.3 percent. A total of 15.1 percent of the respondents experienced combination of two or more CAS in performing their jobs. In line with the result about experienced use of CAS, GFMAS are the most preferred CAS among users from AG with 59.6 percent of them agreed.

Table 3: Respondents' Profiles

	Frequency	Percent
Gender		
Male	32	32.3
Female	67	67.7
Level of Education		
SPM/STPM	28	28.3
College Certificate	11	11.1
Diploma	37	37.4
Degree	19	19.2

Masters	3	3.0
Professional Certificate	1	1.0
Current Department		
Accounting and Management Development Division (BPPP)	13	13.1
Information and Technology Management Division (BPTM)	25	25.3
Centres Operation and Agencies Services Division (BPOPA)	27	27.3
Trust and Securities Managemnet Division (BPAS)	9	9.1
JANM Wilayah Persekutuan Putrajaya	20	20.2
Others	5	5.1
Current Position		
Chief of Assistant Director	3	3.0
Senior Assistant Director	4	4.0
Assistant Director	7	7.1
Accountant	8	8.1
Chief of Administrative Assistant	2	2.0
Finance Assistant	2	2.0
Senior Accountant Assistant	2	2.0
Information Sytem Officer	1	1.0
Information Technology Assistant Officer	2	2.0
Data Processing Assitant Officer	5	5.1
Administrative Officer	2	2.0
Senior Administrative Officer	2	2.0
Administrative Assistant	11	11.1
Assistant Accountant	28	28.3
Accountant Clerk	16	16.2
Others	4	4.0
Accounting System Use In Department		
A combination of manual	61	61.6

Fully computerised	38	38.4
Experience In Using Accounting Software		
MYOB	9	9.1
UBS	31	31.3
LOTUS 123	5	5.1
MrAccounting	4	4.0
QuickBook	1	1.0
Others	33	33.3
UBS plus QuickBook	1	1.0
MYOB plus LOTUS 123	1	1.0
MYOB plus UBS	3	3.0
MrAccounting plus Quick-Book	3	3.0
MYOB plus UBS plus MrAccounting	1	1.0
UBS plus MrAccounting	5	5.1
Quickbook plus Others	1	1.0
UBS plus Others	1	1.0
Experience In Using Government Accounting System		
Government Financial and Management Accounting System (GFMAS)	59	59.6
Standard Accounting System for Government Agencies (SAGA)	3	3.0
State Government's Standard Computerised Accounting System (SPEKS)	1	1.0
Micro Accounting System (SPM)	1	1.0
Electronic Budget Planning and Control System (e-SPKB)	17	17.2
Others	3	3.0
GFMAS plus e-SPKB	11	11.1
GFMAS plus SAGA plus SPEKS	3	3.0
GFMAS plus SAGA	1	1.0

Table 4: Descriptive Analysis

	Mean	Std. Deviation
Perceived Ease of Use (PEOU)	3.7912	.63368
Perceived Usefulness (PU)	3.8451	.50240
Behavior Intention (BI)	3.6869	.60388
Internalisation and Identification (IDIN)	3.6684	.50423
Actual Use (ACTUSE)	3.6515	1.31214
Compliance (COMP)	3.2753	.77467
Attitude Towards Using (ATT)	5.5505	.97021

The mean obtained for all these constructs shown that they are above average with the highest mean is obtained for perceived usefulness (PU) at 3.8451 followed by Perceived Ease Of Use (PEOU) at 3.7912. Standard deviations for both constructs are 0.5024 and 0.6337 respectively. Apart from that, Attitude Towards Using (ATT) and Actual Use (ACTUSE) were analysed based on 7-point interval scale. The mean obtained for attitude is 5.551 which exhibit value above average with the standard deviation of 0.9702. Meanwhile, for the variable of Actual Use (ACTUSE), the mean shown a result of 3.6515 with standard deviation value of 1.3121 that is highest compared to all the other variables. The reason for choosing the 5-point and 7-point likert scales are based on the results found by Hinkin (1995), that the most adequate measures to be used in a study are scales that made up of five to six items that utilise 5 or 7-point likert scales. This is because a proper length of scale can be the most effective way to provide adequate internal consistency in reliability and minimise the biases of response.

Factor Analysis For Technology Acceptance Model (TAM)

Based on Table 5, there are five factors that contribute to the Technology Acceptance Model (TAM) and Theory Of Reasoned Action (TRA). The factors' measurement was taken from Davis (1989), Davis, Bagozzi and Warshaw (1989), Matheison (1991), Moore and Benbasat (1991), Taylor & Todd (1995) and Venkatesh and Davis (1996). In this study, researcher has implemented the Principal Component Analysis (PCA) with varimax rotation for the proposed construct in order to ensure the empirical summary of the data set. The Kaiser-Meyer-Olkin's (KMO) measure of sampling adequacy is 0.867. According to Tabachnick and Fidell (2007), The KMO index ranges from 0 to 1, with 0.6 suggested as the minimum value for a good factor analysis. The rule of thumb for the Bartlett's Test of Sphericity should be significant ($p < .05$). In this study, the Bartlett's Test shows $p = .000$. From this result, factor analysis is appropriate to be implemented.

In the case of the Technology Acceptance Model (TAM) and Theory Of Reasoned Action (TRA), the factor analysis yielded five factors with an eigenvalue greater than one. The emerging five factors are those that were expected conceptually and can be clearly identified as relating to the Technology Acceptance Model (TAM) and Theory Of Reasoned Action (TRA): perceived ease of use, perceived usefulness, actual use, behavioral intentions, and attitude toward using. Furthermore, using Kaiser's criterion, the rule of thumb is the study only interested factors that have an eigenvalue of 1 or more. From this study, there are five eigenvalue with values provided more than 1. These five factors explain a total of 77.203 percent of the variance.

Factor Analysis Of The Studied Constructs

Table 5: Factor Loading for Technology Acceptance Model (TAM)

	Rotated Component Matrix				
	1 PEOU	2 PU	3 ATT	4 BI	5 ACTUSE
Learning to operate CAS is easy for me	.718				
I find CAS to be flexible to interact with	.811				
I find it easy to get CAS to do what I want to do	.790				
It is easy for me to become skillful at using CAS	.774				
I find CAS easy to use	.856				
My interaction with CAS is clear and understandable	.835				
Using CAS would improve my job performance		.790			
Using CAS in my job would enable me to accomplish tasks more quickly		.788			
I would find CAS useful in my job		.642			
Using CAS in my job would increase my productivity		.761			
Using CAS would enhance my effectiveness on the job		.795			
Using CAS would make it easier to do my job		.774			
I intend to use CAS for communicating financial information				.841	
I intend to use CAS frequently in my job				.658	
I intend to use CAS in doing my job				.629	
How many times do you believe you use CAS during a week?					.740
How many hours do you believe you use CAS every week?					.817
All things considered, my using of CAS in my job is a(n)_ Extremely Negative to Extremely Positive idea			.863		
All things considered, my using of CAS in my job is a(n)_ Extremely Harmful to Extremely Beneficial_ idea			.924		
Communalities	.722- .857	.564- .821	.863- .884	.760- .799	.653- .689

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

Kaiser-Meyer-Olkin Measure of Sampling Adequacy : .867

Bartlett's Test of Sphericity : Sig. = .000

Eigenvalue : above 1 (8.843, 2.123, 1.350, 1.212, 1.140)

Total Variance Explained : 77.203

Firstly, the first factor is Perceived Ease Of Use (PEOU). About six items were grouped with highest loading is for item "I find CAS easy to use" = 0.856, followed by "My interaction with CAS is clear and understandable", "I find CAS to be flexible to interact with", "I find it easy to get CAS to do what I want to do", "It is easy for me to become skillful at using CAS" and "Learning to operate CAS is easy for me". The factor loading for each item is between 0.718 to 0.856 with communalities between 0.722 to 0.857. According to Hair et. al (2010), the factor loading value greater than 0.5 are generally considered necessary for practical significance and should generally have communalities of greater than 0.50 in order to meet acceptable levels of explanation. Thus, this first factor can be considered necessary for practicality and have sufficient explanation.

Secondly, the results show that the factor loading for each item is between 0.642 to 0.790 for Perceived Usefulness (PU). The communalities show between .564-.821. The second factor has met the criteria of Hair et. al (2010) and can be considered practical significance and have sufficient explanation.

Thirdly, Attitude (ATT) contains two items that show factor loading for "All things considered, my using of CAS in my job is a(n)_ Extremely Negative to Extremely Positive idea" = 0.863 and "All things considered, my using of CAS in my job is a(n)_ Extremely Harmful to Extremely Beneficial_ idea" = 0.924. The communalities also show ranges between 0.863 to 0.884. This factor can be considered practical significance for this research with having sufficient explanation.

Fourth, three items represent for Behavior Intention (BI) which loading between 0.629 to 0.841. These three items ("I intend to use CAS for communicating financial information", "I intend to use CAS frequently in my job" and "I intend to use CAS in doing my job") can be considered sufficient explanation with the communalities more than 0.5 (between 0.760-0.799).

Last factor that produce is Actual Use (ACTUSE) which consist of "How many times do you believe you use CAS during a week?" = 0.740 and "How many hours do you believe you use CAS every week?" = 0.817. The communalities for these two items are ranged between 0.653 to 0.689.

Factor Analysis For Social Influence

The psychological attachment is measured in terms of compliance, identification and internalisation in the organisational commitment context. The Principal Component Analysis (PCA) with varimax rotation for the proposed construct of psychological attachment which produced two factors instead of three factors proposed by Kelman (1958). In Kelman (1958), the three items scale to measure identification, three items for internationalisation and four items scale in measuring compliance. After PCA has been implemented, all four items for compliance loaded, however, all items of identification and internalisation loaded together on another factor. In research done by Malhotra and Galetta (1999), O'Reilly, Chatman and Caldwell (1991) and Sutton and Harrison (1993), they also found only two factors in organisational commitment.

The Kaiser-Meyer-Olkin's (KMO) measure of sampling adequacy is 0.807 (Table 6). According to Tabachnick and Fidell (2007),

The KMO index ranges from 0 to 1, with 0.6 suggested as the minimum value for a good factor analysis. The rule of thumb for the Bartlett's Test of Sphericity should be significant ($p < .05$). In this study, the Bartlett's Test shows $p = .000$. From this result, factor analysis is appropriate to be implemented.

In the case of the Social Influence, the factor analysis yielded two factors with an eigenvalue greater than one. The emerging two factors are those that were expected conceptually and can be clearly identified as relating to the psychological attachment: compliance, identification and internalisation. Furthermore, using Kaiser's criterion, the rule of thumb is the study only interested factors that have an eigenvalue of 1 or more. From this study, there are two eigenvalue with values provided more than 1. These two factors explain a total of 68.813 percent of the variance.

Factor Analysis Of The Studied Constructs

Firstly, the first factor produced is the combination of internalisation and identification (IDIN). About six items were group together which the lowest loading is 0.508 for the item "I feel a sense of personal ownership about the use of CAS" and the highest is 0.857 for the item "I am proud about using CAS". This factor is consider practical significance due to the factor loading value greater than 0.5. This result is aligned with Malhotra and Galetta (1999) which the loading is between 0.669 to 0.839.

Second factor that produced is compliance (COMP) with loading between 0.793 and 0.895. Malhotra and Galetta (1999), the loading for this factor is between 0.562 and 0.791. According to Hair et. al (2010),

Table 6: Factor Loading For Social Influence

	Rotated Component Matrix	
	Component	
	1 (IDIN)	2 (COMP)
What the use of CAS stands for it is important for me	.634	
The reason I prefer use of CAS is because of the underlying organisational values	.848	
I like using CAS primarily based on the similarity of my values and the organisational values underlying its use	.851	
I feel a sense of personal ownership about the use of CAS	.508	
I talk up the use of CAS to my colleagues as a great use	.751	
I am proud about using CAS	.857	
My private views about use of CAS are different than those I express publicly		.855
Unless I'm rewarded for using CAS in some way, I see no reason to spend extra effort in using it.		.895
In order for me to get rewarded in my job, it is necessary to use CAS		.793
How hard I work on using CAS is directly linked to how much I am rewarded		.816

*Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalization
Kaiser-Meyer-Olkin Measure of Sampling Adequacy: .807
Bartlett's Test of Sphericity: Sig. = .000
Eigenvalue: above 1 (4.861, 2.021)
Total Variance Explained: 68.813*

the factor loading value greater than 0.5 are generally considered necessary for practical significance. Thus, this factor can be considered practical significance and acceptable.

Technology Acceptance Model (TAM) with several variables were tested with strong instruments. This can be supported by Cronbach Alpha Value. Most of research adopted Davis, (1989) Davis et. al (1989), Matheison (1991), Moore and Benbasat (1991), Taylor & Todd (1995), Venkatesh &

Table 7 shows previous research done on

Table 7: Previous Research for Technology Acceptance Model (TAM)

Research Purposes	Factors and Cronbach Alpha Value	Authors
Develop and validate PU and PEOU	1. Perceived usefulness = 0.98 2. Perceived ease of use = 0.94 3. Self reported system usage	Davis (1989)
Predict people's computer acceptance from a measure of their intention and explain intention	1. Perceived usefulness = 0.97 2. Perceived ease of use = 0.91 3. Subjective norms = single item 4. Intention to use = 0.90 5. Attitude = 0.82	Davis et al. (1989)
System characteristics, user perception and behavioural impacts	1. Perceived usefulness = 0.97 2. Perceived ease of use = 0.91 3. Attitude toward using = 0.96 4. Actual system use = 0.70 5. System design features	Davis (1993)
Validate factors on TAM and propose construct on Physiological Attachment	1. Perceived usefulness = .960 2. Perceived ease of use = .961 3. Internalization + Identification = .8690 4. Compliance = .7043 5. Attitude = .899 6. Behavioural intention = .832 7. Actual use	Malhotra and Galletta (1999)
Determining the extent to which an innovation is adopted	1. Perceived ease of use = 0.73 2. Perceived usefulness = 0.84 3. Attitude (insecurity emotions) = 0.76 4. Attitude (positive emotions) = 0.75 5. Extent to use	McKechnie, Winklhofer, & Ennew (2006).
Examine students' perceptions and their acceptance towards implementing a laptop program.	1. Perceived ease of use = 0.981 2. Perceived usefulness = 0.971 3. Perceived requirements = new factor 4. Perceived change = new factor 5. Acceptance	Elwood, Changchit, & Cutshall, (2006)
Analyse the acceptance of business management software by focusing on high-tech firms dedicated to information technologies and belonging to the service sector (IT high-tech firms).	1. Ease of use = 0.766 2. Usefulness = 0.787 3. Basic technologies = 0.904 4. Intensity of use = 0.779 5. Complex technologies = 0.867 6. Web procurement = single 7. Intention to use = single item	Hernandez, Jimenez & Martin. (2010)

Extend technology acceptance model (TAM) to suit in a developing country context	<ol style="list-style-type: none"> 1. Subjective norms = 0.6724 2. Perceived ease of use = 0.7712 3. Perceived usefulness = 0.7752 4. Government support = 0.7507 5. Institute support = 0.7492 6. Behavioural intention = 0.7296 7. Behavioural usage = 0.7051 	Muhammad Sharif, Fida, Abdul Fatah, Farwa. (2011)
Investigate the adoption of innovation management applications (IMAs)	<ol style="list-style-type: none"> 1. System compatibility = 0.90 2. Perceived ease of use = 0.87 3. Perceived usefulness = 0.94 4. Need for interaction = 0.77 5. Attitude = 0.96 6. Innovation process performance = 0.95 7. Intention to use = single item 	Plewa, Troshani, Francis & Rampersad. (2012)
Develop and Revising technology acceptance model (TAM)- Conceptual Framework	<ol style="list-style-type: none"> 1. Long-term usefulness 2. Near-term usefulness 3. Perceived ease of use 4. Attitude 5. Behavioural intention 6. Technology Complexity 7. Individual Differences 8. Facilitating Conditions 9. Social Influences 10. Wireless Trust Environment 	Lu, Yu, Liu, & Yao. (2003)
Proposed a model to explain how new customers of a web-based company develop initial trust in the company after their first visit. The model is empirically tested using a questionnaire-based field study.	<ol style="list-style-type: none"> 1. Perceived willingness to customise = 0.787 2. Perceived reputation = 0.823 3. Perceived usefulness = 0.929 4. Perceived ease of use = 0.896 5. Perceived security control = 0.823 6. Trust Propensity = 0.833 7. Initial Trust = 0.865 	Koufaris, & Hampton-Sosa (2004)
Examines antecedents to consumer adoption of a popular form of online entertainment – fantasy sports leagues	<ol style="list-style-type: none"> 1. Perceived ease of use = 0.86 2. Perceived knowledge = 0.97 3. Subjective norms = 0.98 4. Attitude towards Television Sport 5. Intention = 0.98 6. Attitude towards Technology System = 0.96 	Kwak, & McDaniel (2011)
Examine the determinants of online community user participation from a social influence perspective.	<ol style="list-style-type: none"> 1. Subjective norm = 0.78 2. Group norm = 0.85 3. Cognitive social identity = 0.78 4. Evaluative social identity = 0.78 5. Affective social identity = 0.75 6. Participation intention = 0.88 7. Participation behavior = 0.91 	Tao Zhou (2011)

Determining the level of users' acceptance of the electronic banking services and investigating the factors that determine users' behavioral intentions to use electronic banking systems in Nigeria	<ol style="list-style-type: none"> 1. Computer Self efficacy = 0.752 2. Perceived Credibility = 0.726 3. Perceived ease of use = 0.877 4. Perceived usefulness = 0.910 5. Customer attitude = 0.744 6. Behaviour intention = 0.752 	Aderonke & Charles (2010)
The decision to use an online social network is conceptualized as intentional social action and the relative impact of the three modes of social influence processes (compliance, internalization, and identification) on intentional social action to use (collective intention) is examined.	<ol style="list-style-type: none"> 1. Intention = 0.97 2. Compliance (subjective norm) = 0.88 3. Internalization (group norm) = 0.78 4. Cognitive social identity = 0.90 5. Evaluative social identity = 0.90 6. Affective social identity = 0.90 	Cheung & Lee (2010)

Davis (1996) and Kelman (1958).

Reliability Analysis For Technology Acceptance Model (TAM)

Table 8: Reliability Analysis for Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM)	Cronbach Alpha Value
Perceived Ease Of Use (PEOU)	.936
Perceived Usefulness (PU)	.918
Attitude (ATT)	.856
Behavior Intention (BI)	.781
Actual Use (ACTUSE)	.533

Table 8 shows the Cronbach's Alpha for Technology Acceptance Model (TAM) to test the quality of the measurement. Most of the Cronbach Alpha shows more than .70 which indicates that this instrument items and scales produce reliable and robust results due to the rule of thumb developed by Hair *et al.*(2010) and Sekaran (2000). They stated if Cronbach Alpha of more than 0.7 can be considered acceptable.

The closer the Cronbach Alpha coefficient gets to 1.0, the better the results of reliability will be. Reliabilities that are less than 0.6 are considered to be poor, those in the 0.7 ranges, acceptable, and those 0.8 are good (Sekaran, 2000). In current study, the study can be considered as good for PEOU, PU, and ATT because each Cronbach Alpha shows more than 0.8. Next, the Cronbach Alpha for BI is indicated acceptable because more than 0.7. However, Cronbach Alpha shows 0.533 for ACTUSE which indicated poor due to more than 0.5.

Reliability Analysis For Social Influence

Table 9: Reliability Analysis for Social Influence

Social Influence	Cronbach Alpha Value
Internalisation and Identification (IDIN)	.861
Compliance (COMP)	.883

Table 9 shows the Cronbach's Alpha for Social Influence. This result can be

considered good and sufficient instruments to be use in research. Furthermore, the results can be compared with Malhotra and Galletta (1999) and Cheung & Lee (2010). However, the first factor, an alpha of 0.91 (IDIN) and 0.54 for second factor (COMP) in Sutton and Harrison (1993).

Discussion And Conclusion

This paper revises and validates instruments (i.e. Perceived Ease Of Use (PEOU), Perceived Usefulness (PU), Attitude (ATT), Behavior Intention (BI) and Actual Use (ACTUSE) for measuring Technology Acceptance Model (TAM) of Computerised Accounting System (CAS) in Computerised Accounting System (CAS) particularly in Accountant General's Department (AG).

Descriptive analysis and factor analysis were employed in this study to measure and validate the Technology Acceptance Model (TAM) factors contributing to actual usage. After examination the data by means of factor analysis, five factors (i.e. Perceived Ease Of Use (PEOU), Perceived Usefulness (PU), Attitude (ATT), Behavior Intention (BI) and Actual Use (ACTUSE)) towards computerised accounting system were extracted with the loadings exceed 0.50 and eigenvalues of more than 1.0.

Firstly, the first factor is Perceived Ease Of Use (PEOU). About six items were grouped with highest loading is for item "I find CAS easy to use" = 0.856, followed by "My interaction with CAS is clear and understandable", "I find CAS to be flexible to interact with", "I find it easy to get CAS to do what I want to do", "It is easy for me to become skilful at using CAS" and "Learning to operate CAS is easy for me". Secondly, the results show that the factor loading

for each item is between 0.642 to 0.790 for Perceived Usefulness (PU). Thirdly, Attitude (ATT) contains two items that show factor loading for "All things considered, my using of CAS in my job is a(n)_ Extremely Negative to Extremely Positive_ idea" = 0.863 and "All things considered, my using of CAS in my job is a(n)_ Extremely Harmful to Extremely Beneficial_ idea" = 0.924. Fourth, three items represent for Behavior Intention (BI) which loading between 0.629 to 0.841. These three items ("I intend to use CAS for communicating financial information", "I intend to use CAS frequently in my job" and "I intend to use CAS in doing my job") can be considered sufficient explanation with the communalities more than 0.5 (between 0.760-0.799). Last factor that produce is Actual Use (ACTUSE) which consist of "How many times do you believe you use CAS during a week?" = 0.740 and "How many hours do you believe you use CAS every week?" = 0.817. In determining the level of reliabilities, the study can be considered as good for PEOU, PU, and ATT because each Cronbach Alpha shows more than 0.8. Next, the Cronbach Alpha for BI is indicated acceptable because more than 0.7. However, Cronbach Alpha shows 0.533 for ACTUSE which indicated poor due to more than 0.5.

Furthermore, the study also measure and validate the Social Influence called as Psychological Attachment factors contributing to actual usage. After examination the data by means of factor analysis, two factors (i.e. Internalisation and Identification (IDIN) and Compliance (COMP)) towards computerised accounting system were extracted with the loadings exceed 0.50 and eigenvalues of more than 1.0. Firstly, the first factor produced

is the combination of internalisation and identification (IDIN). About six items were group together which the lowest loading is 0.508 for the item "I feel a sense of personal ownership about the use of CAS" and the highest is 0.857 for the item "I am proud about using CAS". Second factor that produced is compliance (COMP) with loading between 0.793 and 0.895.

Overall, the finding of this study verifies that a revised instrument with some changes to the TAM and Psychological Attachment instruments is still valid in measuring intention and actual usage. The factors of Technology Acceptance Model (TAM) and Psychological Attachment is valid in measuring intention and actual usage of Computerised Accounting System (CAS). The findings support the theory by Davis, (1989) Davis et. al (1989), Matheison (1991), Moore and Benbasat (1991), Taylor & Todd (1995), Venkatesh & Davis (1996) and Kelman (1958).

This research is limited to employees from Accountant General's Department (AG) as Federal Government. In future, research need to generalised to Local Government and State Government in order to represent Public Sector Accounting. This research have been emphasised on perceived ease of use, perceived usefulness, behavioural intention, actual use, attitude toward using, compliance, identification as well as internalisation. This research need to be done in order to understand the important of Computerised Accounting System (CAS) in public sector accounting since Accountant General's Department (AG) is in progress preparing for accrual basis.

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