

# INTI INTERNATIONAL UNIVERSITY

## MASTER OF BUSINESS ADMINISTRATION

### USER ACCEPTANCE OF COMPUTER AIDED AUDIT TECHNIQUES AND TOOLS BY EXTERNAL AUDIT PROFESSIONALS IN MONGOLIA

FOR REFERENCE ONLY

Author: Ariunaa Jargalsaikhan  
Student No: I13002806  
Supervisor: Dr. Jaspal Singh Joginders  
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## ABSTRACT

By virtue of the rapidly developing information technology solutions in accounting system, audit examination is urged to cope with such development to provide an opinion as to whether the accounting information expresses an accurate and impartial picture of the organization's financial stand. Therefore, popularity of Computer Aided Audit Techniques and Tools (CAATTs) has been increased all over the world. The objective of this research is to examine user acceptance of CAATTs among Mongolian external audit professionals. Technology Acceptance Model 2 was utilized as theoretical foundation of the research. Organizational, social and individual factors were developed to test user acceptance via perceived usefulness, perceived ease of use and behavioral intention to use CAATTs. A total of 101 external auditors participated in as sample for the research. The data was collected via self-completion hand delivery questionnaire and analyzed through descriptive analysis, measurement and structural model assessment. The result of the research suggests that the auditors' perception toward usefulness of CAATTs is positively affected by social and individual factors while rationalization toward easiness is positively influenced by organizational and social factors. Further, perception toward usefulness and easiness positively impact on external auditors' intention to use CAATTs, however only perceived ease of use has significant relationship with actual usage of CAATTs.

*Keywords: User acceptance of external auditors, CAATTs, TAM2*

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## DECLARATION

I hereby declare that this research project is of my own effort except for the information that has been used from authors that have been cited accordingly and ethically.

Ariunaa Jargalsaikhan

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## LIST OF ABBRIVATIONS

ACCA	Association of Chartered Certified Accountant
AVE	Average variance extracted
BI	Behavioral intention)
CAATTs	Computer Aided Audit Techniques and Tools
CPA	Certified Public Accountant
CTA	Certified Tax Accountant
DV	Dependent variable
GAS	Generalized Audit Software
I	Image
IF	Individual factor
IS	Information system
IT	Information technology
IV	Independent variable
JR	Job relevance
MIIA	Mongolian Institute of Internal Auditors
MONICPA	Mongolian Institute of Certified Public Accountants
MS Access	Microsoft Access
MS Excel	Microsoft Excel
MV	Mediator variable
OF	Organizational factor
OQ	Output quality
PEOU	Perceived ease of use
PLS	Partial Least Square
PLS-SEM	Partial Least Square-Structural Equation Model
PU	Perceived usefulness
RD	Result demonstrability
SF	Social factor
SMS	Small and medium sized

SN	Subjective norm
SPSS	Statistical Packages for the Social Sciences
TAM	Technology Acceptance Model
TAM2	Technology Acceptance Model 2
UTAUT	Unified Theory of Acceptance and Use of Technology
V	Voluntariness
VAF	Variance accounted for
VIF	Variance inflation factor

## CHAPTER 1: INTRODUCTION

### 1.1. Chapter overview

This chapter provides introduction of the research project which examines user acceptance of Computer Aided Audit Techniques and Tools (CAATTs) by external audit professionals. The chapter comprises background of the research, statement of problems that trigger the research, objectives of the study, importance of investigating such problems, limitations confronted to the research and framework of the study.

### 1.2. Background of study

By virtue of the rapidly changing information technology, widely available and user friendly accounting system, and organizations' aspiration to obtain and enforce state-of-art computer aided systems and software; nowadays, traditional accounting procedures are mostly replaced by sophisticated accounting systems that based on computerized technology (Abu-Musa, 2004). As long as almost every single accounting transaction or task is conducted by computer based system, audit examination of accounting data is also anticipated to be executed on computer aided solutions in order to provide an opinion as to whether the accounting information expresses an accurate and impartial picture of the organization's financial stand (Ahmi and Kent, 2013). Therefore, popularity of CAATTs has been increased all over the world and various kinds of sophisticated software packages that can be used on a variety of computer platforms to effectively and efficiently assist auditors in completing routine audits tasks are available in the market (Doucet and Doucet, 2003).



### 1.3. Problem statement

Although it has been long time since embracement of Generalized Audit Software (GAS) in global audit practice; pertinence of such sophisticated software in audit engagement is still very limited in Mongolian context particularly among small and medium sized (SMS) independent auditing companies. Accordance with MONICPA (2013), by the end of February 2013, in total there are 97 officially licensed independent audit firms in Mongolia including foreign invested or franchised firms such as Big-4 audit firms and domestically owned SMS firms as well. Furthermore, according to the information provided by Audit Committee of Mongolian Institute of Certified Public Accountants (MONICPA), rest of such SMS independent audit firms exercise only Microsoft Excel and other common utility programs in their audit engagement while very few firms implement home-grown or other sophisticated audit software. Hence, such limited practical implication of various types of CAATTs alerts needed research in the field.

Besides the gap between Mongolian audit practice and international practice of penetration of CAATTs, academic researches that strive to investigate potential reasons behind are less conducted in Mongolia. Moreover, issues regarding to usage and user acceptance of CAATTs by external audit professionals is studied in very limited extend.

From theoretical perspective, Davis et al (1989) had originated Technology Acceptance Model (TAM) that interprets reasons behind individuals' computer technology acceptance or rejection. The researchers explained people's acceptance of computer technology based on their intention toward accepting particular technology which in turn influenced by people's attitudes toward such technology, perception of expedience, perception of easiness when using the technology, and other exogenous variables.

By investigating factors that influence audit professionals' acceptance toward CAATTs, this research provides fundamental literature that would be useful to

internal and external stakeholders of Mongolian audit firms. Furthermore, based on the result of the research interested parties would be able to make decision regarding to effective and efficient utilization of CAATTs in Mongolian audit firms.

#### **1.4. Research objectives**

Main objective of the research is defining usage level of CAATTs and identifying key determinants that influence user acceptance of CAATTs among Mongolian external audit professionals.

- RO-1: To identify usage level of CAATTs by external audit professionals in Mongolia.
- RO-2: To examine the impact of external factors on perceived usefulness and perceived ease of use toward CAATTs by external audit professionals in Mongolia.
- RO-3: To examine the direct impact of perceived usefulness and easiness toward CAATTs on its usage by external audit professionals in Mongolia.
- RO-4: To examine the indirect impact of perceived usefulness and easiness toward CAATTs on its usage by external audit professionals in Mongolia.

#### **1.5. Significance of the study**

By identifying usage level of CAATTs among Mongolian external audit professionals and determining potential factors that influence the system usage, this research contributes following issues from different perspectives:

- The importance of the study to academia is that it provides fundamental academic research in Mongolian context regarding to external audit professionals' usage level of CAATTs and user acceptance issues. Moreover, the research extends Technology Acceptance Model 2 (TAM2) in respect to organizational variables such as training, technical support and management support. Also the research can be used as literature review for the further researches.



- The result of the research contributes various government projects and programs that strive to enhance sustainability and credibility of audit industry through reliable, effective and efficient CAATTs practices. Beside the government, the research also assists professional accountants' regulating bodies in Mongolia such as MONICPA and Mongolian Institute of Internal Auditors (MIIA) to develop and implement new audit engagement software and upgrade usage of existing CAATTs in independent audit firms.
- From the industry perspective, the research will provide crucial background information to management of independent audit firms about their employees' perception toward usage of CAATTs and potential solutions for further literacy of such systems. On the other hand, information system (IS) service providers and software developers would be greatly benefited as the understanding their clients is crucial for their business.

#### **1.6. Limitations of the study**

The potential restraints of the study would be defined as follow. First disadvantage of the research may caused by the methodology utilized to assess TAM. In the research, system usage is measured by self-reported measurement. Consequences of that subjective measurement, actual usage of the system would not be measured correctly. Secondly, as the research strives to find out sensitive and potentially confidential information of audit firms such as usage level and types of CAATTs in the firm and factors that influence external audit professionals' perception toward organizational, social and individual factors; some professionals may refuse to participate in the survey. Also, although they participate there is high possibility to not providing their real point of view.

#### **1.7. Scope of the study**

This research intentionally focuses on the issue of identifying the usage level and user acceptance of CAATTs among external audit professionals in Mongolia. According to MONICPA (2013), there are 97 independent audit firms in Mongolia