DETERMINANTS OF CLOUD COMPUTING ADOPTION IN ACCOUNTING: A STUDY OF BIG FOUR COMPANY- DELOITTE KUALA LUMPUR OFFICE

TEOH LI MIN

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APPROVAL

I/We hereby declare that I/We have read and go through this dissertation/report/thesis and certify that, this dissertation/report/thesis is satisfactoryin the sense of scope and quality as a partial fulfilment of the requirement for the award of the Bachelor's Degree of Technology Management (Technology Innovation) With Honours

SUPERVISOR'S SIGNATURE   :

DR. NOR AZAH BINTI ABDUL AZIZ
PENSYARAH KANAN
JABATAN TEKNOUSAHAWANAN
FAKULTI PENGURUSAN TEKNOLOGI & TEKNOUSAHAWANAN
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

SUPERVISOR'S NAME   :   DR. NOR AZAH BINTI ABDUL AZIZ

DATE   :
22/01/2023

PANEL'S SIGNATURE   :

PANEL'S NAME   :   PROF. MADYA DR. JUHAINI BINTI JABAR

DATE   :
22/01/2023

DECLARATION

I hereby declare that the work in this study is the result of my own research except ascited in the references. The thesis has not been accepted for any degree and is not concurrently submitted in the candidature of any other degree

SIGNATURE : _____

NAME   : TEOH LI MIN

DATE   : 22/01/2023

DEDICATION

This thesis is dedicated to my beloved parents.

A special feeling of gratitude to my loving parents for being the sources of my

inspiration and motivation.

This thesis is also dedicated to my

supervisor Dr. Nor Azah Binti Abdul Aziz,

who had been a tremendous and wonderful guide and motivator all the way.

Last but not least, this thesis is

dedicated to those who believe in the

power of knowledge.

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ABSTRACT

Nowadays, fast-paced of information technology arising, a variety of high-tech technology have been fused to help enhance in human daily lifestyle. Adoption technology in accounting like Cloud Computing can make accounting firm stay on top of client expectations and stand out among competitors. The purpose of this quantitative study was to use the Technology Acceptance Model (TAM) as a proposed framework to examine the factors to motivate accounting firm to use Cloud Computing and the willingness of the accounting firm apply on Cloud Computing. There are 4 factors such as perceived usefulness, perceived ease of use, perceived security, and perceived convenience is associated with the willingness of the accounting firm to use Cloud Computing. A quantitative research design was chosen to investigate the research problem and associated questions. The population for this study was 413 as the research location was chosen at Deloitte Kuala Lumpur Office. The target sample for this study was 196 respondents. While all the data collection and analysis, the researcher will be using Statistical Package for Social Sciences (SPSS) to analyses.

Keywords: Accounting, Technology, Cloud Computing, TAM.

ABSTRAK

Pada masa kini, perkembangan teknologi maklumat yang pantas, pelbagai teknologi berteknologi tinggi telah digabungkan untuk membantu meningkatkan gaya hidup harian manusia. Teknologi pakai dalam perakaunan seperti Pengkomputeran Awan boleh menjadikan firma perakaunan kekal di atas jangkaan pelanggan dan menonjol di kalangan pesaing. Tujuan kajian kuantitatif ini adalah untuk menggunakan Technology Acceptance Model (TAM) sebagai rangka kerja yang dicadangkan untuk mengkaji faktor-faktor yang mendorong firma perakaunan untuk menggunakan Pengkomputeran Awan dan hasrat firma perakaunan memohon pada Pengkomputeran Awan. Terdapat 4 faktor seperti persepsi kebergunaan, persepsi kemudahan penggunaan, persepsi keselamatan, dan persepsi kemudahan dikaitkan dengan niat firma perakaunan untuk menggunakan Pengkomputeran Awan. Reka bentuk kajian kuantitatif telah dipilih untuk menyiasat masalah kajian dan persoalan yang berkaitan. Populasi bagi kajian ini adalah seramai 413 orang kerana lokasi kajian dipilih di Pejabat Deloitte Kuala Lumpur. Sampel sasaran bagi kajian ini ialah seramai 196 orang responden. Sementara semua pengumpulan dan analisis data, pengkaji akan menggunakan Statistical Package for Social Sciences (SPSS) untuk menganalisis.

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LIST OF ABBREVIATIONS

UTeM	Universiti Teknikal Malaysia Melaka
SPSS	Statistical Package for Social Science
TAM	Technology Acceptance Model
PU	Perceived Usefulness
PEU	Perceived Ease of Use
PR	Perceived Risk
W	Willingness to Adopt

CHAPTER ONE

INTRODUCTION

1.1   Introduction

This chapter will discuss the background of the research regarding to the Determinants of Cloud Computing Adoption in Accounting: A study of Bog Four Company - Deloitte. The background of study, problem statement, research questions, research objectives, scope and limitation of the study, significant of study and summary will be discussed in this chapter.

1.2   Background of Study

The status of the world as we know it is always changing. Globalization and technological improvement have heightened the need for economic innovation to accomplish performance and success. In 2012, ACCA and IMA performed research that identified a set of change drivers that will affect the firm and, as a result, the accounting environment over the following ten years.

Traditionally, the accounting department has provided the necessary data for managers to make educated decisions in order to fulfil organizational objectives. As a result, the accountant uses IT to find, measure, gather, analyze, assemble, interpret, and present data to executives (Kemski & Nyberg, 2014).

Recently with the fast paced of information technology arising, a variety of high-tech technology have been fused to help enhance in human daily lifestyle. Adoption technology in accounting like Cloud Computing can make accounting firm stay on top of client expectations and stand out among competitors (Tom, 2020). Cloud computing is a new technology that has the potential to transform the way people use computers (Igor Ruiz-Agundez et al., 2012). It has the potential to assist consumers, corporations, and the government while also posing new risks and concerns (Elzbieta & Dorota, 2015).

1.3   Problem Statement

Cloud solutions also allow for a faster rate of change, which has pervaded the accounting domain and area. Cloud service providers, as expected, have developed cloud-based accounting software that offers numerous advantages. Accounting in the cloud is a modern corporate sector driven by technology in today's world (Asatiani et al., 2019). Cloud computing is a type of accounting software that is installed on users' computers and runs on servers that provide online services, which users can access through web browsers. As a result, accountants or business owners can access their financial records via the Internet from any location.

It is critical for accountants to understand the factors at work in reforming the future of the organizations they support. Accountants must also objectively assess the effects of the modifications in light of their relationship to accounting system features such as staff, processes, and standards (Deegan, 2017). The impact of future transformation spans all parts of accounting, from the job of accounting personnel to

the substance of financial reporting requirements and the future accountant's reformation.

According to Khanom (2017), Cloud computing will provide access to all accounting data. Traditional accounting confined access to the business's precise financial information to when the accounting professional was available, or when one could travel to the office to check the paper-based records or even the information-holding desktop computer. In this aspect, cloud computing outperforms traditional methods. Accounting records are as close as a mobile device as long as one has internet connectivity.

Cloud computing allows accounting and finance personnel to work concurrently, as well as experts from other company departments to view a report concurrently, or by simultaneously supporting a report with diverse data. In addition to all of its advantages, data security is one of the most significant challenges that have hampered or jeopardized the adoption of cloud computing by enterprises. In cloud computing, as opposed to conventional software, servers are held by third parties, and the limited intervention options available to cloud computing customers to secure their data increases security concerns (Özdoğan, 2017).

Cloud computing saves operational expenses by reducing the necessary technology infrastructure for enterprises. The storing of accounting data on the cloud eliminates hazards that might lead to data loss, such as accidents, theft, or damage to the business's physical location. SaaS and cloud computing business models have warped conventional software pricing tactics, making accounting and finance applications far more accessible. This circumstance encouraged the use of accounting data as a crucial management tool for organizations and boosted accounting staff efficiency (Özdoğan, 2017).

Therefore, this paper intends to study the motivating factors that drive Deloitte Kuala Lumpur Office to become an adopter of Cloud Computing and the level of the willingness of Deloitte Kuala Lumpur Office to adopt it.

1.4 Research Questions

The research question is an important part of the process since it gives the study direction and focus. The research question is fundamentally the most important component since it may lead and create a succinct and more understandable study guideline. The following are the research question:

RQ1: What are the factors motivate the accounting firm use Cloud Computing?

RQ2: What is the most significant factor to motivate accounting firm use Cloud Computing?

RQ3: What is the level of willingness of accounting firm to apply Cloud Computing?

1.5 Research Objectives

To ensure that the research objectives are met, the research questions will be reviewed several times throughout the research period in order to obtain accurate and meaningful results. These are the objectives:

RO1: To investigate factors motivate accounting firm use Cloud Computing.

RO2: To determine most significant factor to motivate accounting firm use Cloud Computing.

RO3: To examine the level of willingness of accounting firm to apply Cloud Computing.

1.6   Scope and Limitation of the Study

This research paper is focusing on the determinants of Cloud Computing adoption in accounting. This research will be focus ed on people who are working in Deloitte in Kuala Lumpur. The reason is because Kuala Lumpur is a hub of digital centric and it ready to adoption technology in accounting. According to Nor Shaipah (2021), the growth of the accounting industry will rely heavily on persons who are financially and technologically knowledgeable.

In this study, there are some constraints when doing this research. Firstly, the process of finding resources like data and information are challenging as Cloud Computing technology using in accounting firm seem to have a difficult breakthrough as it is still considered as a emerging technologies. Hence, there are not many articles and journals being published. Besides, data collection could be time consuming as I have to gather all the target respondents from a large sample size in order to generate an accurate and reliable outcome.
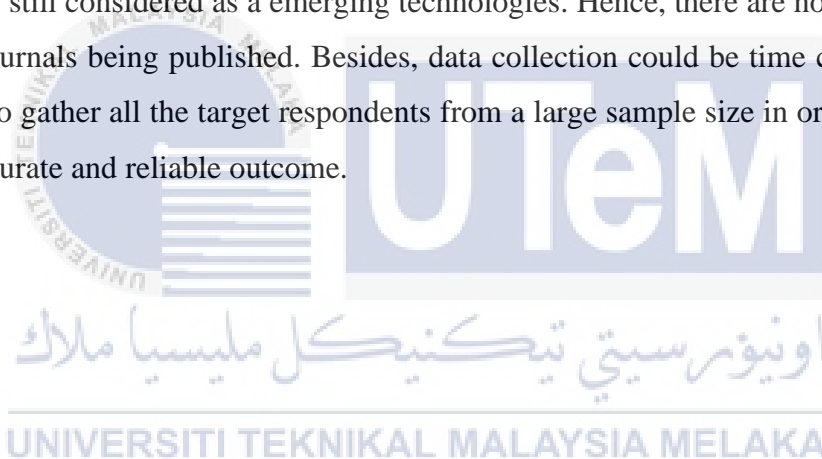
1.7   Significant of Study

The findings of the study factor motivate Deloitte Kuala Lumpur Office which uses Cloud Computing. They will understand the most significant factor of using Cloud Computing in the Deloitte Kuala Lumpur Office. Besides, we can understand the willingness of the Deloitte Kuala Lumpur Office for using Cloud Computing through this research. In addition, the study provides empirical literature sources to future researchers which carry out a similar topic by adding an existing body of knowledge on the using Cloud Computing.

1.8   Research Structure

In the study of Chapter 1, the researcher will be explained an overview of the topic covered in this study, namely Determinants of Cloud Computing Adoption in Accounting: A Study of Big Four Company- Deloitte Kuala Lumpur Office, a research background explaining the development and progress of the topic, a problem statement on why this study was conducted, research questions that will serve as a guide to achieve the objectives of the study, and finally, the scope of the study that will help narrow the scope.

In Chapter 2 will be discussed the literature review that is related to the research questions. There is not much academic research completed in the field of interest as it is a fairly new adoption. The literature review has broken down into sections that first describe the Cloud Computing, accounting, and technology acceptance model which has been used in the past study on the adoption of this technology. A new proposed framework has been constructed with different variables and the hypothesis of this study is proposed. The components of constructs are perceived usefulness, perceived ease of use, perceived risk, and perceived convenience.

In Chapter 3 will be covered more detail on to which research method to be used in meeting the objectives. The researcher is then using quantitative research by collecting data numerically and applying statistical criteria to the measures. Surveys and questionnaires will be conducting as for data collection. Explanatory research for research design will be used in conducting the study as it outlines the procedures and shows the relationship of independent variables to dependent variables. Data collections will be collected through primary and secondary data. The research location will be set in Deloitte Kuala Lumpur Office as it is the main hub city in Malaysia where every new advanced technology will be first adopted. Simple random sampling will also be used based on the criteria of employees who work at the Deloitte Kuala Lumpur Office. A Cronbach Alpha in the reliability is applied to measure the alpha coefficient in this research.

In Chapter 4, the researcher will be conducting data analysis with respect to the willingness of an accounting firm to apply cloud computing in Kuala Lumpur. All of the data were collected to make further analyses and will be using the statistical

package for social sciences (SPSS) for analyses purpose. There are a few data analyses to be conducted such as pilot test analysis result, analysis of respondent's demographic information, descriptive analysis and Pearson's correlation coefficient, multiple regression analysis, and hypothesis testing.

Lastly, Chapter 5 will be summarized all the findings in order to meet the research objectives. Implications of the research will be discussed in detail to provide an insight into the research. Besides, limitations will also be explained by the researcher in regard to what influenced the research findings. Recommendations for the future research and conclusion will be suggested and a sum of conclusions will be drawn from the research.

1.9   Summary
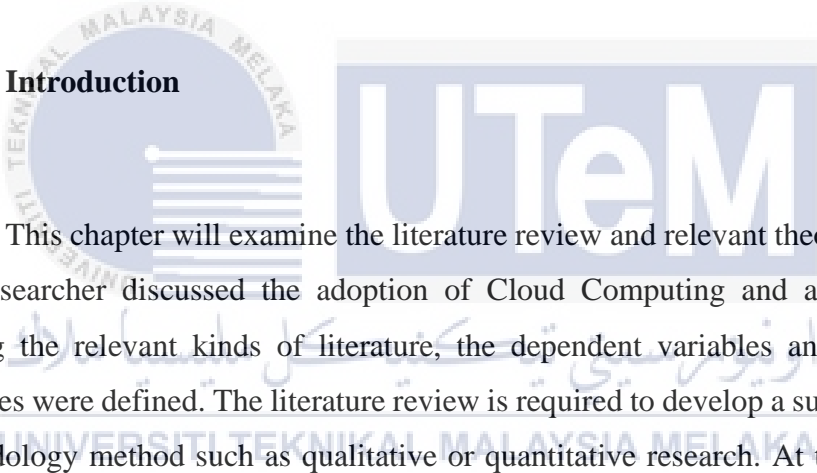
In conclusion, this chapter is discussed about the overview of the study. It discussed the background of the study, problem statement, research questions, research objectives, scope and limitation of the study, and significance of the study. In the coming chapter, the researcher will carry out the literature review of the study. The information will be broader and more understandable.

CHAPTER TWO

LITERATURE REVIEW

2.1   Introduction

This chapter will examine the literature review and relevant theoretical model. The researcher discussed the adoption of Cloud Computing and accounting. By reading the relevant kinds of literature, the dependent variables and independent variables were defined. The literature review is required to develop a suitable research methodology method such as qualitative or quantitative research. At the end of this chapter, the proposed research framework can describe the theory and develop the hypothesis.

2.2   Cloud Computing

In 1961, John McCarthy coined the phrase "cloud computing" (Keshavarzi et al., 2020). The Cloud is a flexible execution platform of resources that includes various stakeholders and provides a calculated service at multiple granularities for a specified

level of information quality (Schubert & Jeffery, 2012). Cloud computing is defined as follows by the US National Institute of Standards and Technology (NIST). "A model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction" (Mell & Grance, 2011).

Similarly, Buttell (2010) defines "moving your computer applications and programs to the Internet rather than your desktop". According to Low et al. (2011), it is a type of service used in desktop apps such as office applications, e-mail, and company resource planning that makes use of resources shared by staff or partners. As a result, an Internet user might communicate with and exchange data with several servers at the same time. Cloud computing is also defined by research and consulting businesses. As an example, "Cloud computing is a style of computing in which scalable and elastic IT-enabled capabilities are delivered as a service to external customers using Internet technologies" (Plummer et al., 2008). From a commercial standpoint, cloud computing is characterized as covering all of the major benefits for businesses as well as delivering technological capabilities, that is IT services "are delivered on-demand to customers over a network in a self-service fashion, independent of device and location users pay for the service as an operating expense without incurring any significant initial capital expenditure" (Marston et al., 2011).

2.2.1 SERVICE MODELS OF CLOUD COMPUTING

Infrastructure as a service (IaaS), platform as a service (PaaS), and software as a service (SaaS) are all terms used to describe different layers of the cloud computing architecture (Hassan et al., 2017).

i.   **IaaS (Infrastructure-as-a-Service)**