## UNIVERSITI TEKNOLOGI MARA

# THE TRUST ISSUE IN CLOUD STORAGE SECURITY

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#### **ABSTRACT**

Nowadays, cloud storage has been widely used around the world. It is convenient and user-friendly that attract many users to utilize the service in various devices. However, concerns on its security issues still persist. The issue is mainly associated with security issues experienced by the cloud providers itself or by the cloud users. Problem with cloud storage security really affect the level of users' trust from adopting the technology. Hence, a survey is conducted by spread a set of questionnaire to evaluate whether the proposed factors from the research model can help to measure the level of users' trust in adopting cloud storage. Three objectives were aligned in this research. The first objective is to identify dominant factors that can help users to gain trust in adopting cloud storage technology. The second objective is to identify the common security issue faced by the cloud storage users and how it affects the level of users' trust, and the last objective is to identify the solution to the cloud storage security issues. As for the result, the perceived ease-of-use became the most dominant factor. The findings obtained from the evaluation shows that the level of user trust towards cloud storage is still acceptable. Respondents agreed that the CSP provide sufficient security for cloud storage service and users will continue to use cloud storage in the future

Keyword: Cloud storage, security, privacy, data, virtual storage

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## CHAPTER 1 INTRODUCTION

#### 1.1 Introduction

This chapter discusses the importance and benefits of using cloud storage, current issues experienced by the cloud storage users, specifically on the topic of cloud storage security. Research background, problem statement, research questions, aim, objectives and significance of the research are also included in this chapter.

#### 1.2 Research Background

Internet has changed the way of human's daily life, starting from its wide emergence in the early 1990's. Many efforts and researches had been done to improve the internet speed, its infrastructure, and connection stability. Until now, internet has become one of the greatest achievement in human history. With the global average of 4G internet speed of 5.6 megabyte per second (Fastmetrics.com, 2017), and millions of online applications available on the network, everything is possible. Many websites are available for people to surf for entertainment, social networking, online shopping, and more. Furthermore, with high speed connectivity makes it easier for users to browse for website and download any files in a shorter time range. Users are able to download various type of files including movies, songs, software or any documents they want without limitation.

As time goes by, the files downloaded will accumulate and occupy available disk space in users' personal computer. Sooner or later, users need to find another alternatives to store their files. Users usually opt to buy extra disk space to transfer and backup their files from the local storage. They need to move the files from their local hard disk drive to another file storage medium such as external hard disk, USB thumb drive, or CD / DVD. The storage alternatives mentioned are examples of hardware storage devices.