

**University of Science and Technology**  
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A Thesis submitted in Partial Fulfillment of the Requirements for  
the Degree of Master of Computer Sciences

**ARELIABLE CLOUD STORAGE MODEL FOR**  
**STORAGE AS SERVICES**

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October - 2014

## Abstract

Cloud computing is the best solution for most the problem that faced by client to store their information that consuming large spaces. And it also provides access from anywhere and anytime in any location. Storage as services is seen as a good alternative for a small or mid-size business that lacks the capital budget and/or technical personnel to implement and maintain their own storage infrastructure. The problem of this research is tradition storage devices suffer from many problem such as expensive bying storage devices, maintaining, and management, Safety, Security and Protection of the stored data. This research aim is to develop and implement storage framework to provide storage as services to solve the problem of tradition storage. The proposed model was evaluated by conducted empirical study by developing cloud storage as services using visual basic to manage and store and organized the data of clients. The obtained of result showed that cloud base can reduce the cost for business company and provide the cloud advantages to the services process.

## المستخلص

الحوسبة السحابية هي الحل الأفضل لمعظم المشكلة التي يواجهها العميل لتخزين المعلومات الخاصة بهم التي تستهلك مساحات واسعة. ويوفر أيضا إمكانية الوصول من أي مكان وفي أي وقت في أي مكان. ويعتبر التخزين والخدمات كبديل جيد للأعمال التجارية الصغيرة أو متوسطة الحجم التي تفتقر الموازنة الرأسمالية و / أو الكوادر الفنية لتنفيذ وصيانة البنية التحتية للتخزين الخاصة بهم. مشكلة هذا البحث هي أجهزة التخزين تقليد تعاني من مشكلة العديد من مثل تكلفة أجهزة التخزين وصيانة وإدارة والسلامة والأمن وحماية البيانات المخزنة. يهدف هذا البحث إلى تطوير وتنفيذ إطار التخزين لتوفير تخزين والخدمات لإيجاد حل لمشكلة تخزين التقليد. تم تقييم النموذج المقترح من قبل دراسة تجريبية أجريت خلال تطوير سحابة التخزين والخدمات باستخدام البصرية الأساسية لإدارة وتخزين وتنظيم البيانات من العملاء. والتي تم الحصول عليها من نتيجة أظهر أن قاعدة السحابة يمكن أن تقلل من تكاليف شركة الأعمال التجارية وتوفير مزايا السحابة لعملية الخدمات.



## 1.1 . Introduction

This chapter introduces research work. And the problem background, and problem statement and the research objective and the research contribution and scope, and the structure of the project.

## 1.2. Problem background

Abu mazen engineering company store files of accounts and employees file, companies file and file of the public accounts and the prices of equipment refrigeration and air-conditioning file and maintenance and customer file in its own server and works to protect those files are used a means simple protection ,it consume a large amount of storage areas in keeping those files and always need to increase storage space to buy either another server Or hard disks, every time it need to network devices and cables to connect with the old network and usually get problems connected , the need to increase the electricity consumption So Increase the company's expenses.

Finally, the company needs to use cloud computing as an alternative to its own data center which increased every day and increases expenses of the company, It is known that cloud computing increases the storage areas and decreases according to needs.

The company decided to use storage as a service that store personnel files, accounts and companies and refrigeration equipment, air conditioning and reduce the costs of which are used to buy new servers and new network devices

## 1.3. Problem Statement

Storage data is considered as important issue for each computing.

Traditional storage devices suffer from many problem such as:

- i. The cost of buying storage devices
- ii. Maintaining and management of the store data.

- iii. Safety issues.
- iv. Security concerns.
- v. Protection of the storage data.

#### **1.4. Research Objective**

To develop a cloud model to provide storage as services to solve the problem of tradition storage model.

#### **1.5. Research contribution**

Building a cloud storage model server that tackles the traditional storage server problems.

#### **1.6. Scope**

- i. Storage as service cloud model.
- ii. Developing an implementation of the conceptual model.
- ii. Using a programming language.
- iv. Evaluating the model using Empirical study.

#### **1.7. Thesis structure**

This thesis contains six chapters:

Chapter two contains a literature Review. and chapter three contains a Research methodology. and chapter four contains explain a proposed model. and chapter five contains a research Results and discussions. and chapter six contains conclude the study.