# ABSTRACT

We are living in knowledge world nowadays. So people need to seek knowledge from born until death and many enterprises consider knowledge as their invisible asset. Knowledge Management becomes a hot topic for researchers. Enterprise Resource Planning is a type of knowledge which published by research and analysis firm Gartner Group in 1990. Successful implementation of ERP is not easy like somebody's thinking because ERP is not a simple system to implement and it consists of many parts such as tangible assets, financial resources, materials, and human resources. In fact, failure of ERP implementation is higher. The ERP implementation research is in a relatively new area although many enterprises started implement ERP system. In recent years, some research institutes and ERP system companies are looking for suitable implementation method which can effectively increase successful rate of ERP implementation. This thesis focuses on Knowledge Management and ERP implementation and tries to use Knowledge Management do a better ERP implementation.

# ABSTRAK

Dikala ini kita tinggal di dalam dunia berpengetahuan. Manusia perlu mencari pengetahuan dari ianya lahir hinggalah mati, dan banyak syarikat menganggap bahawa pengetahuan sebagai aset yang tidak dapat dilihat oleh mereka. Pengurusan pengetahuan telah menjadi topik hangat bagi para penyelidik. *Enterprise Resource Planning* (ERP) adalah suatu jenis pengetahuan yang diterbitkan oleh syarikat penyelidikan dan analisis Gartner Group pada tahun 1990. Kejayaan ERP tidak semudah seperti yang difikirkan oleh semua orang kerana ERP bukan sistem yang mudah untuk dilaksanakan, dan ianya terdiri daripada banyak bahagian seperti aset nyata, sumber kewangan, bahan dan sumber manusia. Malah, kegagalan pelaksanaan ERP adalah tinggi. Penyelidikan terhadap pelaksanaan ERP secara relatifnya masih baru walaupun banyak syarikat telah mula melaksanakan sistem ERP. Dalam beberapa tahun kebelakangan ini, terdapat institusi penyelidikan dan syarikat pembangun sistem ERP mencari kaedah pelaksanaan yang sesuai bagi meningkatkan secara berkesan tahap kejayaan pelaksanaan ERP. Tesis ini memberi penumpuan kepada pengurusan pengetahuan dan pelaksanaan ERP, dan cuba untuk menggunakan pengurusan pengetahuan dalam melaksanakan ERP dengan lebih baik.

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# CHAPTER 1

# INTRODUCTION

## 1.1 Background

The complexity in human life tends to fashion innovative initiatives that easy every chore which produces knowledge. Hence, this centric old cycle molded our society and became a powerful and knowledgeable community. In general, knowledge is a practice of experience which consists of artificial environment; the artificial intelligence that shapes all experience; shapes wisdom in total sum; that finally produces information or knowledge. In another way, knowledge is the product of human society practices in creation. It is all ideology, the system info, tool system's sum total.

Knowledge management is relatively a new practice to most business organizations and, more and more companies are moving towards pursuing it. However, only a few companies appeared to recognize the effectiveness in performance improvements that can be achieve through KM (Sveiby, 1997).

Enterprise resource planning (ERP) is an integrated packaged software, which addresses to most fundamental business processing functionalities across different serviceable areas of business units, that works in a single software system, with single database and accessible through a unified interface on multiple channel of communication. Every complexity chore that initiates new version allows ERP to produce easiness to business processes.

The 21th century promises on many innovative inventions which concentrates in socio-economic, social development and the enterprise grow where, knowledge turn out to be a crucial resource. A good command of knowledge and use of knowledge become core informationization in enterprise and in organization.

## 1.2 Problem Background

Dongfeng Motor Corporation, built in 1969, is one of the China's biggest automobile industries. With handful experience more than 30 years in automobile construction, Dongfeng Motor Corporation has many factories in many cities in China. Dongfeng Motor Corporation cooperates with Peugeot Citroen, financing with Nissan, also has expanded their cooperation with Honda and KIA.

Back in the 1990s, ERP implementation haunted the industries in China, and Toyota written the success story as an enterprise with ERP operation. It was so successful till reflects in other industries to try on ERP. Relatively, ERP is not a simple system, it includes a collection of management software, As a result, and it

isn’t an easy implementation process. Huge amount of enterprises invested big amount of money in the implementation project but failed to get the expected result and reflects a high percentage of failure.

Apparently, Dongfeng Motor Corporation faced the similar problem because it is very different to implement ERP in every corner in the corporation. The staffs need to shift from traditional simple system to complex ERP. The typical habit of staffs needs to be adjusted far most to adapt to new model of ERP management system. Initially ERP system is designed to stop wastage, but the ERP implementation showered big laundry of money since ERP is an integrate business system, it contain several areas management. How to change and implement are becoming a problem that arise many issues and stress in various sector of the big corporation.

## 1.3 Statement of Problem

Gradually, an announcement made by AMR Research, saying that globally the ERP market has increased to 37% recently. In 1998, the global gross income of ERP reached $14.8billion U.S., and in 2002, it rise to $52billion U.S. (Chang Xiangyun, Chen Zhigao, 2004). The promising result assures that ERP become crucial to the business world. Unfortunately, success story to share on ERP implementation is actually less than 20%, resulted from many enterprise failure, including Dell and Boeing (Chang Xiangyun, Chen Zhigao, 2004). Therefore, how to implement ERP becomes a question.

Consequently, the business people are arguing how to implement ERP successfully. But there is one point is same – affect of ERP implementation in the large is management, technology is just local impact. So how to reinforce management is becoming more important in ERP implementation.

The ERP is also known as neural network of enterprise. But ERP is usually not integrated into the enterprise. ERP is more likely an advanced management system; it is not just a tool for big enterprises. To achieve this goal, most enterprises normally choose to create training programs that ERP can be played into role. Nevertheless this traditional way is needed in lots of time with limited trained employees learned from the training programs .These problems re-emphasize the importance to reinforce in management.

## 1.4 Research Question

There are abundant literatures on ERP implementation and Knowledge Management. And this study will attempt to investigate the Knowledge Management in ERP implementation, and will answer three research questions:

i. What kind of knowledge does ERP implementation need?
ii. How does Knowledge Management work in ERP implementation?
iii. How does Dongfeng Motor Corporation implement ERP?

## 1.5 Project Aims

This project aims to study the implementation of ERP in big corporation such as Dongfeng Motor Corporation and KM in successful plantation that generates new knowledge creation.

## 1.6 Project Scope

This research is conducted to study the impact of gigantic enterprise to implement ERP system, and which are divided into three sections, with each part of the main content as follows:

i. The study focus on Knowledge Management and ERP
ii. Analyze the framework of KM in ERP implementation
iii. The implementation of ERP at Dongfeng Motor Corporation

## 1.7 Project Objective

In order to achieve the aims, objectives of this research that relate to the current problem have been formulated. The objectives of this research are:

i. To study and analyze Knowledge Management in ERP implementation
ii. To propose a framework of KM in ERP implementation

iii. To develop a implementation framework for ERP at Dongfeng Motor Corporation

## 1.8 Significance of Research

Apparently, an ERP system merges firm's data, information flows and business processes into a single package. (C.A. Lengnick-Hall, M.L. Lengnick-Hall, and S. Abdinnour-Helm, 2004). It provides a tightly integrated solution to information system needs of the organization these solutions are in high demand by both manufacturing and service organizations. (E.M. Shehab, M.W. Sharp, L. Supramaniam, and T.A. Spedding, 2004). However, most implementations upshot failures in terms of time cost, and scope. (N. Basoglu, T. Daim, and O., Kerimoglu, 2007)

Gradually, modern organizations have realized the need of properly managing the two types of assets, namely, physical assets and knowledge assets. In order to manage knowledge assets the integration of KM and ERP systems becomes a strategic initiative (L. Xu, C. Wang, X. Luo, and Z. Shi, 2006). The principles and practices of implementing ERP and other information system projects have certain major differences. These can be mainly attributed to the cross functional nature and the broader human interaction in the ERP implementations. In fact, the ERP implementation may lead to redefinition of jobs and demolition of organizational boundaries (T. Suraweera, U. Remus, and S. Wakerley, 2007). ERP systems facilitate KM related activities in a number of ways. Accordingly, KM is increasingly critical for the success of ERP implementations (H. Zhang and Y. Liang, 2006).

Moreover, knowledge is considered as enterprise's invisible assets. In our time knowledge already becomes the key resource of economic growth and the social development and the enterprise growth. There is the most important thing for enterprise which is maximum grasping and using knowledge. Unprecedented attach importance to knowledge, causes the Enterprise Resource Planning (ERP) which is using chain of work as stress, faces a stern challenge. Therefore, my research will be discussing on how to use knowledge management to help and support the ERP implementation.

## 1.9 Chapter Summary

This chapter is the introduction and foundation of the whole research, it firstly introduces Knowledge Management, ERP system, and the case study – Dongfeng Motor Corporation. Then researcher describes the problem background of ERP implementation, identify the scope of the research, set gold of the research, and finally researcher simply explain the importance of the research.