CHAPTER I
INTRODUCTION

1.1 Introduction

Enterprise Resource Planning (ERP) system had been the norm and the 'the talk of the town' industries wide in the recent years. Its features promised the potential owners and managers with various benefits and practically real time information right at few mouse clicks away. These benefits had attracted companies to plunged in and invest millions of baths and dollars into developing and acquiring the system. In contrast according to recent surveys by the OASIG Study (1995) 7 out of 10 IT projects "fail" in some respect and Robbions-Gioia Survery (2001) 51%of 232 survey respondents in various industries viewed their ERP implementation as unsuccessful. Difficulties, hurdles and failure stories related with the implementation of the ERP system had also been widely studied and documented.

This research was done with the main objective of implementing an ERP system within a paint manufacturing company. It involved the study of the current business processes (BPs) which included the current information system (IS) work flow and infrastructure and the related problems. It also included the modification and reengineering of the BPs, and ultimately the implementation of ERP system within the company on a control item "N" over a specified period of time. The research included method of acquiring the real cost of the system and indicators which help measures the benefit of the system. These are done in order to avoid the mistakes and blunders that have proved disastrous in many attempts of ERP system implementation in the past.

The company involved in this research was ABC Paint Co., Ltd founded in 1979. The company is a manufacturer and distributor of masonry, decorative paints (interior and exterior) and industrial paints (e.g. alkyd enamel). The company is currently producing averaging 5 millions gallons of paint per year. The company employs 200 plus employees. The company supply chain is shown in the next diagram.

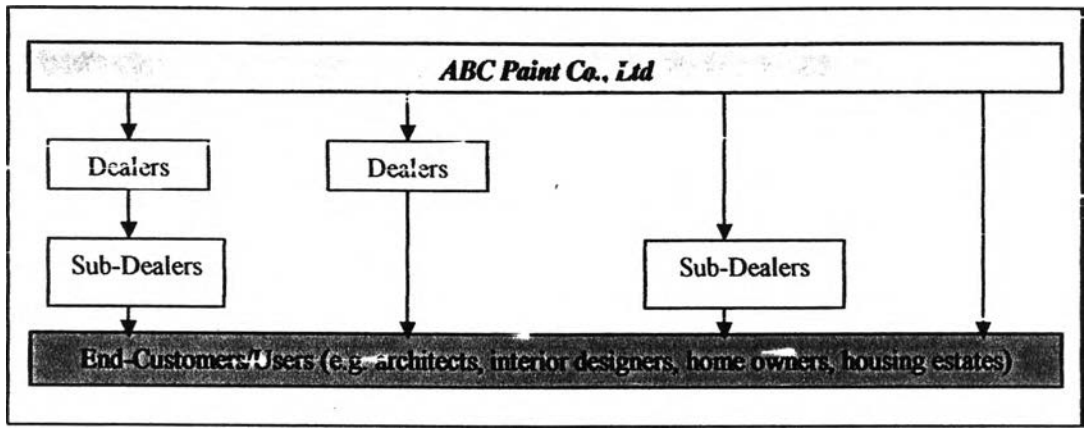

Figure 1-1: Current Company's supply chain (1)

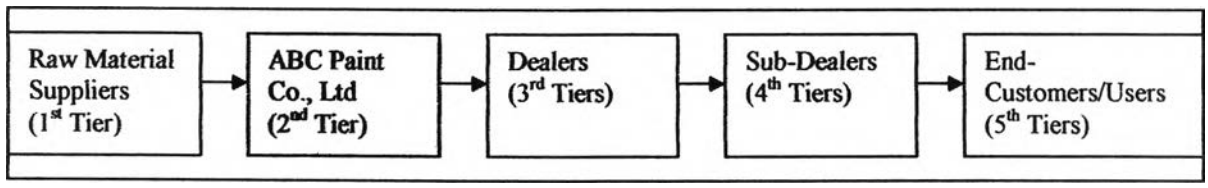

Figure 1-2: Current Company's supply chain (2)

The company has its sales office located 55 kilometers away from the production facilities. The next figure elaborates the communication network before implementation between the two facilities.

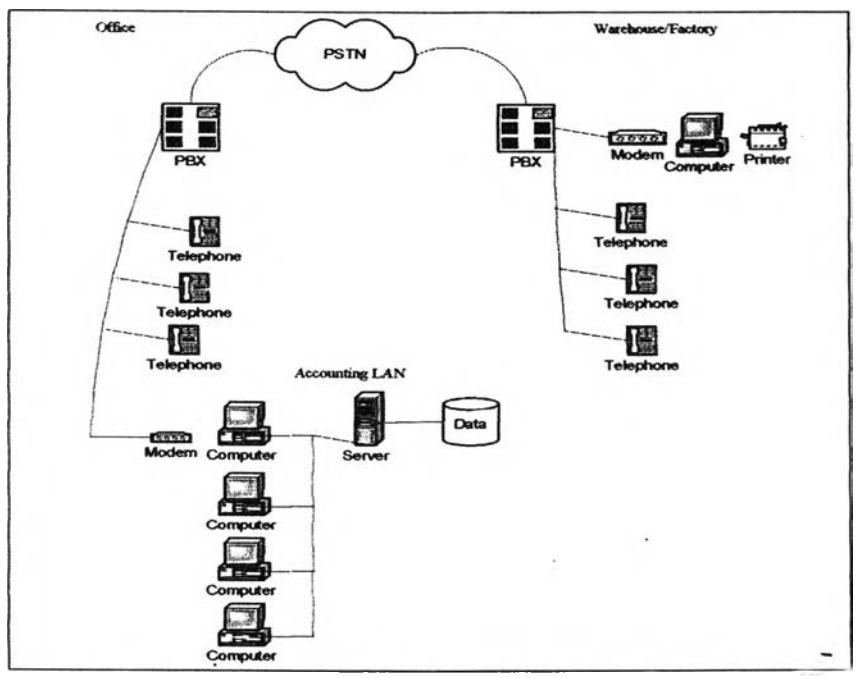

Figure 1-3: Current communication network

1.2 Statement of Problem

The scope of work in this research is generally evolved around nearly all area of the company functions. These involved sales, inventory management and delivery management (logistic). In general the problems that the company was facing were of the following

- The production department fails to stock or produce the needed product/shade of color required for sale.
- The logistic department fails to plan for the required transportation to deliver the product.
- As a result of inaccurate inventory database, the sales department keeps changing orders due to the lack of information of the available inventory
- Customers were unhappy at late delivery and followed by the cancellation of the sale orders.

Before the launch of the ERP system implementation, the company only had it accounting system computerized. The partial paper/computerized system was inaccurate partly due to multiple entry of the information and delays of data and information flow i.e. the information was only updated when the documents were authorized and passed forward.

The old system only allowed mono-direction of flow of data and information (please refers to figure 1:3), which led to confusion and even a havoc during peak hours of sale period. This included the delays caused by inter-department miscommunication. This leads to improper planning of the capacity required in order to meet the demand.

The root of the mentioned problem was the out dated information system and communication procedures and inefficient business processes within the company.

1.3 Objectives of the Study

To implement Enterprisc Resource Planning System or ERP system within the paint business in order to improve the inter-department communication.

1.4 Scope of the Study

The research is limited to the implementation of the Distribution Modules of the ERP system, which involved Order Management (sales order, order picking, shipping), Procurement/Purchasing, and Inventory Management.

- The implementation will focus only on a group of control items, acrylic emulsion paint "N".

1.5 Methodology

The following steps are taken in this study:

1. Analyze the company using SWOT analysis;
2. Analyze the company's situation using PEST analysis;
3. Study of related theories and literatures review;
4. Collection of the relevant data of the control item;
5. Define the project, informing all the involves parties, setting up implementation team;
6. Project costing analysis (Total Cost of Ownership analysis following suggestion from "Chart of Account" proposed by Gartner, 2003);
7. Project initiation project feasibility study i.e. financial feasibility considering Return On Investment ROI,
8. System design and system requirement analysis;
9. Risk/Change management;
10. System implementation;
11. Post implementation evaluation

1.6 Expected Results

The Enterprise Resources Planning System (ERP system) was implemented on the control item "N". The subsets included the methodology and steps required prior to ERP system implementation by the studies of the strengths and weaknesses of the organization, the company's organization structure and culture, information system structure, business processes, reengineering of the business processes, and the system cost and benefits.

1.7 Expected Benefits

The benefit of this research can be divided into two main categories, direct/main benefit and indirect/by-benefits. **The main benefit would be a more reliable and accurate inventory database.**

The indirect as a result from this ERP system implementation, are;

- shorter order to deliver cycle;
- to give the implementation team a sense of what to expect (the required changes and problems which might occur during implementation) and serve as guidelines for the rest of the company to implement other modules of ERP system into the company;
- to improve inter-department communication, and prevent lost of opportunity of sales i.e. satisfying more sales orders;
- standardize and speed up business processes;
- integration of customer order information;
- reduce non-selling or slow moving inventory and accelerating both finish good and raw material turnover.