# The Reengineering of Enterprise Financial Management Process in ERP System

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**Abstract.** With the accession to the world trade organization, China's economy will be more closely integrated into the world economy and the game rules of the economic activities are geared further to international standards. If an enterprise wants to remain invincible in the competition in the future, it must think about the development strategies for enterprises to keep pace with the times.

## Introduction

In recent years, the internationalization, alliance and the trend of competition and cooperation of enterprises are still continuing. The trend of internationalization requires that Chinese enterprises should not only strengthen their own construction and development but also should attach great importance to the enterprise management and governance, so as to improve the core competitiveness. At this new historical stage, it is necessary and urgent to highlight the role and status of financial management and establish and perfect scientific, reasonable and effective enterprise financial management procedure. Based on summarizing relevant theories of financial management and related research results, the paper uses the method of combining theory and practice, chooses Shandong Tobacco Industry Company that is famous for carrying on ERP system of SAP company as the case for research to study the connotation, characteristics and advantages of ERP centralized financial management system, how the system is implemented, the existing and potential problems in the process and the solutions to those problems, which is of great practical significance.

In this paper, by combining the theory illustration with practice induction and with a method combining empirical research with normative research, including literature review, depth investigation and other research methods, the application problems of the ERP centralized financial management system in Shandong Tobacco Industry Company are to be researched, striving to provide practical reference and guiding significance for the successful implementation and effective operation of the system for the company and also hoping to give some inspiration and reference to other companies and enterprises that intend to carry out the ERP centralized financial management system. The main conclusions of the paper are:

(1) On the basis of literature review and theoretical analysis, the paper points out that the enterprise group is a senior product of the development of market economy, whose abundant strength and good adaptability enable it to be developed rapidly. Besides, with the gradual collectivization of the enterprise group, no matter what pattern its financial management adopts, the trend of informatization is unavoidable. The ERP system has important effects on the financial management of the enterprise group. That is, ERP plays a positive role in the integration and optimization of the group's financial centralized management process, comprehensive financial budget, capital and cost management, financial analysis, financial forecast and financial real-time monitoring. Supported by the ERP system, a number of centralized and sophisticated sharing mechanisms are established so that the enterprise financial management can play a better role in enterprise informatization.

- (2) Through normative research and empirical analysis, this paper analyzes and demonstrates the construction background of implementing EPR centralized financial management system in Shandong Tobacco Industry Company. It mainly discusses many new problems that the company faced in the financial management before using the ERP financial management system, which mainly shows as follows: lack of decentralized management system, hysteretic financial management and financial budget management difficulties. Finally, Shandong Tobacco Industry Company has an urgent desire for informatization management and has its own strategic objectives. In order to conform to the objective laws of the change and development and to cope with the above problems and challenges better, Shandong Tobacco Industry Company must carry on the bold reform and innovation about the financial management pattern. From the current situation, it is quite necessary and important for Shandong Tobacco Industry Company to implement EPR centralized financial management system.
- (3) The paper points out that the implementation of ERP centralized financial management system for Shandong Tobacco Industry Company is meant to achieve the following goals: to achieve the centralized management of assets and credit and debts; to achieve the integration of finance and business; to build a unified informatization platform of financial accounting and comprehensive budget and to build a unified platform for financial management merging and reporting. This paper also analyzes the organizational structure, the master plan and the implementation status of the implementation of ERP centralized financial management system in Shandong Tobacco Industry Company. It demonstrates the undone work at each stage of the implementation of the system.
- (4) Through the investigation and profound study of the fourth part, in the paper, the existing problems and potential problems in the process of the implementation of ERP centralized financial management system for Shandong Tobacco Industry Company are analyzed in detail. It is found in the research that the problems are: the current financial management system is not conducive to the development of ERP centralized financial management system; the existing corporate culture restricts the implementation of ERP centralized financial management system; the current financial staff is not conducive to the implementation of ERP centralized financial management system makes financial personnel face new challenges, that the overall business quality of the group's financial staff is not high and unable to adapt to the challenges and facing the new challenge, the financial staff showes "adverse selection", and that in the staff training there are problems with the lack of the leader's attention, limited training objects and too narrow training content, etc.
- (5) To solve the above problems of Shandong Tobacco Industry Company in implementing ERP centralized financial management system, the paper puts forward the corresponding countermeasures. As for the problem that the current financial management system is not conducive to carry out ERP centralized financial management system, the paper points out that Shandong Tobacco Industry Company should further improve the group's financial management system, including further changing the concept, establishing the center position of financial management, expanding the content of financial management and updating financial management methods.

# Reengineering of enterprise financial management

The ERP system is the best embodiment of the essence of foreign business management technology. According to the statistics of American Production and Control Association (APICS), the use of an ERP system averagely can bring economic benefits to the enterprise are as follows:

- 1. Stocks falls 30%-50%.
- 2. Delayed delivery decreases by 80%.
- 3. Purchase in advance shortens by 50%.
- 4. Downtime for waiting for materials is reduced by 60%.
- 5. Cost is reduced by 12%.
- 6. Management personnel is reduced by 10% and the production capacity rises by 10%-15%.

In conclusion, the ERP system is the product of the highly integration of information technology and management level, which improves the management level further for us and provides the advanced management concept and technology platform.

ERP (Enterprise Resource, Planning, ERP) was first proposed by America famous computer technology consulting and assessment group Gartner Group in 1990. Our understanding of ERP is that ERP is a management platform which is based on information technology and use the systematized management thinking to provide decision-making and operation means for the decision-makers and employees. The ERP system integrates information technology and advanced management ideas, becoming the modern enterprise mode. It reflects the demand of the era that enterprises should allocate resources reasonably to maximize the creation of social wealth, which has become the cornerstone of business survival and development of enterprises in the information era.

By definition, ERP is an application software system, which expands its scope of management, based on the MRPII software system. The basic idea is to treat the business procedure as a closely connected supply chain and to divide the inside of the enterprise into several supporting subsystems of mutually cooperative operation, such as finance, market marketing, manufacturing, maintenance, engineering and technical services, which can manage all links of the internal supply chain such as orders, procurement, inventory, planning, manufacturing, quality control, transportation, distribution, service and maintenance, finance, cost control, risk management and investment, decision support and human resources effectively. From the scope and depth of the management it provides rich functions and tools for the enterprise. A powerful ERP system can make the financial management control and real business connected closely, so that the plan, budget, monitoring and analysis can be extended to the end of the various functional departments of the enterprise, providing decision support for the operation of the enterprise.

The core management thought of ERP is to realize the effective management of the entire supply chain and enterprise internal business procedure, mainly reflected in the following three aspects:

It reflects the thought of managing the whole supply chain resources. In the era of knowledge economy, only relying on their own resources of the enterprises can not effectively participate in the market competition, but they should also integrate relevant parts in the process of management, such as suppliers, factories, distribution network, customers, into a tight supply chain, so as to effectively arrange production, supply and marketing to meet the needs of enterprises using all market resources in the whole society fast and efficiently for production and management to further improve the efficiency and gain competitive advantage in the market. In other words, the competition of modern enterprises is the one not between single enterprises but between a supply chain and another one. ERP system implements the management for the enterprise supply chain, adapting to the demand of the enterprise in the market competition in the era of knowledge economy.

It reflects the idea of lean production, simultaneous engineering and agile manufacturing. The ERP system supports the mixed mode of production management, whose management performance is shown in two aspects: one is the "LP (Lean Production)" idea, which is an enterprise

management strategy system proposed by USA MIT, namely, when the enterprise organizes production according to mass production, the customer, sales agents, suppliers are partners are integrated into the relationship between production enterprise with its sales agents, customers and suppliers, which is no longer simple business transaction but partnership sharing the profit. This partnership composes an enterprise's supply chain, which is the core idea of lean production. The second is the "AM (Agile Manufacturing)". When the market changes and the enterprise needs a specific market and production and its basic partners cannot meet the requirements of the development and production of the new product, the enterprise will organize a short-term or one-time chain composed of a specific supplier and sales channels, forming a "virtual factory", regarding supply unit and cooperation unit as a component of the enterprises. Use "SE (Simultaneous Engineering)" to organize production, put the new products into the market in a shortest time and maintain the high quality of products, diversification and spirituality, which is the core idea of "agile manufacturing".

It reflects the thought of beforehand planning and in-process control. The planning system in ERP system mainly includes: the main production planning, material requirements planning, capacity planning, procurement plan, sales plan, profit plan, financial budget and human resources plan, etc. And the planning functions and value control function have been fully integrated into the supply chain system. On the other hand, by defining relevant accounting subjects and methods of transaction, ERP system can automatically generate accounting entries as the transaction takes place to implement the consistency of the synchronous record and data of capital flow and logistics, so as to trace the ins and outs of capital according to realize the status of financial funds and further to trace the related transaction changes, thus varying the situation where the financial information lags behind materials information and facilitating the realization of in-process control and real-time decision-making.

The financial work in the past mainly focuses on the FI part, namely, external financial accounting, and the main purpose is external reporting. The work procedure mainly includes: the original document collection, accounting, subjects summary, monthly (annual) accounting, accounting statements, etc. SAP financial management includes two parts: FI and CO. CO is on the internal cost accounting and the main purpose is for the internal management, analysis and decision-making. The advantages of SAP financial management are being highly-integrated with transaction, expense collection according to the cost center, profit analysis according to the profit center, and timely and accurate profit analysis and the improvement of the financial supervision.

- ① The old system implements the expense collection mainly by setting the accounting subjects while the newly-used ERP system can realize any combination of the expense and cost centers, can implement the summary query and analysis of many departments through the cost center, for example, marketing center and can enquiry the schedule of cost taking place in time to realize the budget control of the whole process.
- ② The old system doesn't conduct accounting treatment of the workshop resources occupied by the tests in technology center while the new ERP system establishes a certain sharing rules to add the workshop resources occupied in the tests, such as water and electricity and gas fees, depreciation fees, repair fees, labor cost and other related expenses, to the research expense, reflecting the input-output ratios of the cost.
- 3 The old system conducts inventory management for insurance, stationery and easy consumables of low value, adding them as the expense entries. The new ERP system requires the

various departments to submit material demand plan and puts them into account directly by establishing purchase order and invoice verification. It doesn't conduct inventory management for the goods above, which can save the warehouse resources (utilities, custodial fees, labor costs) so as to reduce funds of inventory occupation.

- ④ The old system collects technology development costs by adding three level accounting subjects, to a certain extent, confusing the category of the technology development fee and management fee. The new ERP system increases the functional range of "technology development fee" and collects completely and accurately all fees happening in the technology developing projects, including: salary expenses, office expenses, the asset purchase expenses and others, helping enterprises to use the policy to plan tax.
- The old system simply includes the research and development expenses, advertising promotional fees, repair fees in the department cost, without according with the "project" cost accounting. The new ERP system uses the "internal order" management tools to implement project management for the above cost. With the research and development expenses based on projects, advertising promotional fees in accordance with the brand and specifications and repair fee in accordance with the appropriate machine and production line, the corresponding management and control reflects "slicing management" concept of the cost.

The contents of financial management, in addition to the traditional fund management and financial management, should also be extended to the financial risk, capital management, tax and human resources management and other aspects. The method of financial management should be combined with the actual situation of the enterprises and applies more quantization financial management methods timely, such as the establishment of the comprehensive budget management as the control mode of the financial management system, financial budget, rolling budget, investment decision and risk decision-making etc. For example, in terms of investment decisions, it should try to reduce the risk of investment and should establish "investment responsibility center" for the purpose of the enterprise long-term benefits and overall benefits to implement the investment management work specifically. The determination of the investment decisions should focus on the confirmation of the business investment scheme. "Business investment" and "welfare investment" should be controlled relatively. To obtain economic benefits in business investment, we should improve the management of investment and carry out standardized investment procedures and sophisticated investment management system. Combine the control and supervision of the investment process, analyze and assess the benefit of the investment benefit, and sum up experience to avoid weaknesses, thus enabling enterprises to maximize the benefit of the limited funds.

### **Conclusions**

(1) On the basis of literature review and theoretical analysis, the paper points out that the enterprise group is a senior product of the development of market economy, whose strong strength and good adaptability enable it to be developed rapidly and increasingly. Besides, with the gradual collectivization of the enterprise group, no matter what pattern its financial management adopts, the trend of informatization is unavoidable. The ERP system has important effects on the financial management of the enterprise group. That is, ERP plays a positive role in the integration and optimization of the group's financial centralized management process, comprehensive financial budget, capital and cost management, financial analysis, financial forecast and financial real-time monitoring. Supported by the ERP system, a number of centralized and sophisticated sharing

mechanisms are established so that the enterprise financial management can play a better role in enterprise informatization.

ERP centralized financial management is produced in such a background and condition. ERP centralized financial management is a management system based on Internet technology, which manages and controls the enterprise finance whenever and wherever. The ERP financial centralized management system realizes the integration of finance and transaction and the centralized management of the group's finance and strengthen the supervision over the subsidiaries, thus providing comprehensive, timely, accurate and effective data for leadership decision analysis. It implements the integrated and highly efficient financial management so as to effectively control the management and production cost of the whole group and improve the quality of products to ensure customer service level. It implements information sharing among the subsidiaries and inner departments, minimizing manual participation and realizing centralized management and collaborative commerce. ERP centralized financial management system can improve enterprise accounting and the transaction procedure of financial management effectively and provide financial management information and globalization management more comprehensively, which achieves the centralized management and the decentralized management of subordinate enterprises, thus realizing better tools for the group enterprise to conduct decentralized management under the guidance of the headquarters.

(2) Through normative research and empirical analysis, this paper analyzes and demonstrates the construction background of implementing EPR centralized financial management system in Shandong Tobacco Industry Company. It mainly discusses many new problems that the company faced in the financial management before using the ERP financial management system, which mainly shows as follows: lack of decentralized management system, hysteretic financial management and financial budget management difficulties. Finally, Shandong Tobacco Industry Company has an urgent desire for informatization management and has its own strategic objectives. In order to conform to the objective laws of the change and development and to cope with the above problems and challenges better, Shandong tobacco industry company must carry on the bold reform and innovation about the financial management pattern. From the current situation, it is quite necessary and important for Shandong tobacco industry company to implement EPR centralized financial management system.

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