



# Research on Internal Control of Financial Accounting Information System Under ERP Environment

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**Abstract.** This article mainly briefly introduces the relevant content of the ERP environment, and elaborates the necessity of implementing the internal control of the financial accounting information system under the ERP environment. The author analyzes the influence of the ERP environment on the internal control of the financial accounting information system to explore effective measures to strengthen the internal control of the financial accounting information system under the ERP environment. This article takes a company as an example to conduct a comprehensive study to clarify the importance of internal control of the financial accounting information system. We can give full play to the role of the ERP system, improve the level of financial accounting information management, and promote the sustainable development of the enterprise.

**Keywords:** ERP Environment · Financial Accounting · Information System · Internal Control · Effective Measures

## 1 Introduction

In recent years, with the rapid development of China's social economy, enterprises have ushered in new development opportunities and challenges. Faced with increasingly severe market competition, in order to occupy more market shares and avoid being eliminated by the market, companies must focus on themselves and strengthen internal control, especially financial and accounting information management, to enhance the overall strength of the company. Financial accounting management is an important part of the internal control of an enterprise, and it must be taken seriously and cannot be ignored. Traditional financial accounting management is no longer suitable for the development of modern enterprises. It needs to give full play to the role of computer information technology, integrate computer information technology into corporate financial accounting management, and create an ERP system. At the same time, companies can strengthen the internal control of financial accounting information systems under the ERP environment to achieve their internal control goals. Enterprises should innovate in their financial and accounting management methods to achieve good management results, so as to maximize their economic benefits.

## 2 ERP Environment Related Content

ERP refers to enterprise resource planning. It first appeared in the 1990s and is a product of the development of computer technology. Its core idea is to strengthen the overall management of the supply chain between the upstream and downstream of the enterprise, without ignoring every participant in the enterprise supply chain, and aiming to optimize the allocation of enterprise resources and enhance the enterprise's market competitiveness. Its characteristics mainly have the following aspects. Firstly, the ERP system is integrated. It can plan all business data into a database, classify and manage all information data, and conduct scientific analysis. Secondly, the ERP system can simultaneously transmit various information and data in the business activities of the enterprise. It has the function of real-time transmission of information, which can guarantee the timeliness of information and data. It can also help corporate leaders to grasp the actual operating conditions of the enterprise in time and make appropriate operating decisions. Thirdly, the ERP system is open. It can operate in an open environment. Fourthly, the ERP system can implement dynamic management work, which is conducive to improving the enterprise's ability to respond to the market [2].

## 3 The Necessity of Implementing Internal Control of Financial Accounting Information System Under ERP Environment

It is very necessary to implement internal control of financial accounting information system under ERP environment. Its advantages are mainly reflected in the following aspects. Firstly, it helps to improve the level of traditional accounting control. The traditional financial accounting information system of enterprises is mainly manual, which is a simple manual bookkeeping mode. Although computer information technology is used, it is not deep enough in automation, and can only carry out a single information transmission, which has greater limitations. The financial accounting information system under the ERP environment has a very high level of automation and is an integrated system. It can accelerate the speed of information transmission, so that all employees can obtain the required information in the shortest time, and respond to the needs of the enterprise. Moreover, it has also changed the traditional one-way communication form, so that two-way communication between the company and employees can be realized. It adopts a mesh transmission method, and corporate business information can be synchronized, which strengthens the interaction, so as to grasp the actual situation of corporate business activities [4].

Secondly, it simplifies the business process of the enterprise and realizes the sharing of enterprise information and data. The financial accounting information system under the ERP environment contains a lot of rich information data. It not only helps enterprises to quickly process business information, make up for the shortcomings in manual information processing, and gradually move toward intelligence and information, but also help rationally allocate enterprise resources and improve the utilization rate of enterprise resources. For example, we can use the inventory management in the ERP system to calculate the maximum and minimum values of inventory products based on the development of the company's internal business. Then, we can formulate

an appropriate inventory plan based on the results obtained, and set up an early warning mechanism to reduce inventory costs and avoid waste of resources. In the meantime, the financial accounting information system under the ERP environment can help business leaders fully grasp every aspect of business management, truly reflect the actual operating conditions of the business, and provide an important reference for business decision-making.

Thirdly, it improves the level of internal supervision and management. The financial accounting information system under the ERP environment has a wealth of corporate information. Based on this, we can carry out efficient, flexible and dynamic supervision and management. This can not only monitor the use of corporate funds, but also control corporate operating costs.

#### **4 The Influence of ERP Environment on the Internal Control of Financial Accounting Information System**

The ERP environment has a certain influence on the internal control of the financial accounting information system, and its influence is mainly reflected in the following aspects. Firstly, it strengthens the management system control of the enterprise. We can clearly divide the job responsibilities of financial accounting personnel, formulate unified assessment standards, establish a sound security and confidentiality system, and improve the level of system operation and management. In this way, we can effectively protect the information and data in the enterprise and maintain the financial accounting information system on a regular basis. Secondly, it strengthens system security control. This is conducive to standardizing the operation process of information systems and strengthening the management of operators. We should formulate a complete internal resource access authority and identity authentication system, establish a scientific security inspection mechanism, and carry out effective early warning. Thirdly, it improves the level of data security control. We can effectively prevent the leakage of corporate financial accounting information, ensure the integrity and accuracy of the information and data, and encrypt it to avoid man-made damage. Fourth, it implemented effective system development and control work. This is conducive to determining the construction target of the financial accounting information system, testing the functions of the information system, and ensuring its normal operation. We can discover the security vulnerabilities in them in time, and repair and deal with them. This can strengthen the maintenance of the corporate financial accounting information system [9].

#### **5 Effective Measures to Strengthen Internal Control of Financial Accounting Information System Under ERP Environment**

##### **5.1 Strengthen Corporate Supply Chain Control**

During the operation of the enterprise ERP system, we should pay attention to the management of the supply chain. We can proceed from the following two aspects. First, we need to strengthen the control of all links in the supply chain. For example, in the process of corporate procurement and payment, we must rationally divide the responsibilities of

various functional departments and select appropriate suppliers. We should formulate a scientific procurement plan based on the actual needs and budget of the company, and execute operations strictly in accordance with the procurement plan to effectively control every node of ordering, procurement, and acceptance. Meanwhile, when purchasing, we must also pay attention to the company's inventory status. We can arrange production activities according to the actual inventory situation, and strengthen the supervision and control of material budget, procurement, receipt, payment and other links. In the business sales and collection process, we must also rationally plan the responsibilities of each department and assign responsibilities to individuals. Moreover, we need to do a good job in the preliminary pricing of the products sold and strengthen the management of receipts and invoices. We need to standardize the sales process, unify management of relevant information, establish a sound adherence system, and handle customer orders well. We should record all customer information in detail to ensure the accuracy of information and data input. In the production cycle control phase of the enterprise, we must formulate work in strict accordance with relevant plans, strengthen cost accounting management, and attach importance to product quality testing. In this way, the quality management function of the ERP system can be effectively utilized. In the inventory stage, we must not only control the storage of goods, but also implement effective inventory. We should follow the requirements of relevant rules and regulations, sort out the products in the warehouse by category, so as to facilitate inquiries and storage. Besides, we should establish a minimum quantity early warning system to avoid shortages [6].

Secondly, we need to strengthen the management of SCM supply chain information utilization. ERP system has information sharing, which is conducive to the realization of enterprise resource optimization. When managing supply chain information, we must ensure that the information entered is accurate, so as to avoid errors in the information that affect the scientific nature of business decisions. Otherwise, we must improve the timeliness of information. We should enter business information at the first time to ensure the timeliness of business information. We need to quickly deliver it to those who need information, make scientific analysis and judgments on this information, and make correct decisions. In order to ensure the security of information and data, we also need to encrypt corporate financial accounting information, and set the corresponding encryption level according to the importance of the information.

## **5.2 Strengthen Accounting Information System Control**

Firstly, enterprises must effectively control the receipt and payment of business transactions. Enterprises should attach importance to accounting work, conduct scientific accounting and implement effective management of payments and income generated when their main business occurs. When a company makes purchases, it needs to pay the cost of the goods to the supplier. The two involve accounts payable and advance receipts. Enterprises need to implement effective accounting management to ensure that the funds are correct. In the transaction payment, it is necessary to strengthen the management of purchase documents, control the credit line, and standardize the payment process.

Secondly, companies must strengthen cost control work. Certain operating costs will be incurred in the course of business operations. It mainly comes from the purchase of enterprise fixed assets, the purchase of enterprise raw materials, the loss of enterprise

machinery and equipment, the daily management work of the enterprise and so on. Enterprises need to carry out effective internal control work for each cost item. Enterprises need to fill in accounting vouchers with the permission of the accounting supervisors to implement comprehensive cost monitoring. In this way, once a problem is found, the staff should promptly report to the accounting supervisor [10].

Thirdly, companies need to effectively control the general ledger business. All accounting vouchers must be verified and passed, signed and sealed by the accounting supervisor, and they can be handed over only after everything is correct, and input them into the financial accounting information system. If the accounting vouchers are transferred during business processing, the source of the transfer must be indicated and the auditors must verify them one by one.

### **5.3 Strengthen Data Backup Control**

The financial accounting information system in the ERP environment should do a good job of data backup during its operation, and the enterprise should implement effective management work on it. The application of ERP system has improved the automation level of the enterprise's internal business and achieved good application results. However, information security has become one of the urgent problems to be solved. To ensure that information and data are not leaked, companies should attach importance to the daily maintenance of ERP system software, and regularly back up data in the ERP system. If you want to upgrade the ERP system or replace hardware equipment, companies need to follow the relevant procedures to go through the approval procedures, implement effective supervision, and improve the stability of the database [1]. In general, the data and information that companies need to back up include data files, system operation trace records, etc.

## **6 Enterprise Case Study**

### **6.1 Company Profile**

The company has a registered capital of 5 million and belongs to a joint venture, with 60% of the Chinese shares and 40% of the foreign shares. Its development history is about 30 years, the company's assets are as high as 2 billion yuan, and the net profit in 2019 is about 187 million yuan. Although the company has achieved good development results, there are also certain problems. Firstly, the company has not implemented effective corporate cost management. In the early stage of operation, it adopted an extensive management model. The company regularly revises its product prices once a year [5]. In the current market competition is becoming more and more fierce, the competition pressure it faces is very high. The operating costs of its enterprises have continued to increase, and the sales prices have fallen year by year. How to alleviate this pressure in the current market environment has become one of the urgent problems to be solved. Secondly, the company belongs to a traditional industry, and the manual accounting method it uses cannot meet current development needs. The procurement of its materials is unplanned, resulting in increased inventory costs. Thirdly, there is a lack of effective

communication and communication among various departments of the enterprise, failure to realize information and data sharing, and failure to provide reliable decision-making basis for senior leaders. The division of responsibilities is not clear enough, so that it is easy to shirk responsibility. Based on this, in order to adapt to the new development environment and promote the modern development of the company, the company decided to give full play to the role of modern computer information technology to create an ERP system. Companies can use this to strengthen the internal control of corporate financial accounting information systems. According to the actual needs of the enterprise, choose the appropriate ERP system type to effectively prevent the internal control risks of the enterprise's financial accounting information system [8].

### 6.2 Internal Control of Financial Accounting Information System in Enterprise ERP Environment

The company chose the SAP system, which can effectively connect the financial sector with other business sectors, facilitating the inquiry of relevant personnel. The data flow is shown in Fig. 1.

In order to improve the internal control level of enterprise financial accounting information system, we should do the following. First of all, we must optimize the organizational structure of the enterprise and clearly divide various responsibilities and rights. A proper organizational structure of the enterprise is not in a hurry to improve the level of supervision and management of the enterprise, a reasonable division of responsibilities and powers, and it is also conducive to timely handling of various problems in the business activities of the enterprise and standardizing the powers and behaviors of all staff. It can strengthen the sense of responsibility of relevant personnel and make them perform their work in strict accordance with the requirements of the system. We must define the relationship between responsibilities and powers among key nodes, and

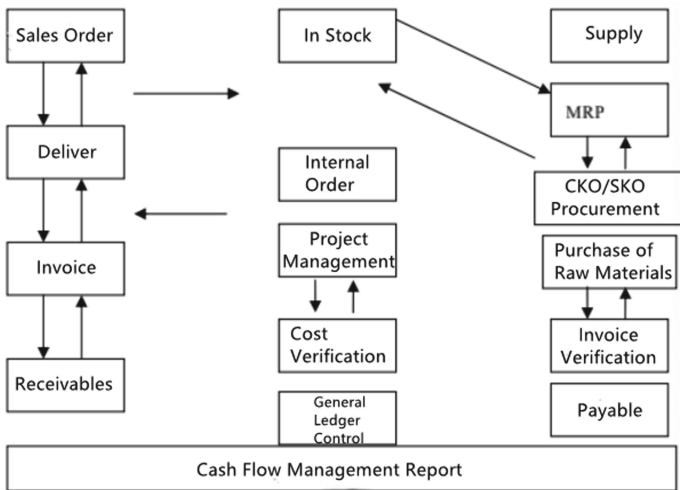


Fig. 1. Data Flow Diagram

strengthen exchanges and cooperation between various departments to ensure the smooth development of various economic activities. Secondly, we need to control the approval authorization. This means that when companies deal with daily economic activities, we must strictly follow the requirements of the documents, standardize the relevant procedures, and strengthen the internal control of the company. Approval authorization can be divided into two categories, one is general approval authorization, and the other is special authorization. The former refers to the authorization of basic processing powers, such as signing general contracts and reimbursements. The latter refers to the operation of specific businesses, such as securities trading and asset entrustment. What's more, we must strengthen the management of information records, perform operations in strict accordance with relevant operating specifications, ensure the authenticity and integrity of the company's internal information, and scientifically evaluate the internal control of the company's accounting information. The enterprise financial accounting information system developed by the enterprise should be easier to operate and easy for people to understand. Companies need to evaluate their actual application effects, find out the problems in time, and make effective adjustments. The evaluation includes but is not limited to the quality of enterprise personnel, market competition, and national policy changes [3]. Finally, we must do a good job in corporate financial budget management, implement effective budget management in strict accordance with the established internal control standards, and scientifically prepare corporate financial budget procedures. We can implement the budget implementation work in the entire business process, and conduct scientific analysis of the budget results, so as to try to control the costs incurred. Simultaneously, we must do a good job in internal audit management. We should ensure that the collected financial accounting information is authentic, complete and accurate. This can reflect the business status of the enterprise in a timely manner. When controlling internal accounting, we can start with accounts receivable management, accounts payable management, and cost center management.

### 6.3 Application Effect

After the enterprise implemented the ERP system, the internal control level of its financial accounting information system has been improved, with good results. This is mainly reflected in the following points. Firstly, through the ERP system, relevant management personnel can grasp the actual situation of the company's business activities in the first time, and understand the current status of product sales, material procurement and inventory. Afterwards, the relevant management personnel can make corresponding adjustments to the collected information to avoid a large amount of operating costs due to excessive purchases and increased inventory. Compared with before the ERP system was applied, the company after the application has reduced inventory costs by 28%. Secondly, the ERP system is open, which is conducive to the sharing of enterprise information and data. In this way, the information exchange between various departments of the enterprise can be strengthened, so that they can coordinate and cooperate with the work, and improve the production efficiency of the enterprise. Compared with the ERP system before the operation, the current enterprise production efficiency has increased by 7%. Thirdly, compared with the timeliness of traditional corporate accounting information, the timeliness of the ERP system is greatly improved. The checkout time for

enterprises was shortened to two days, and the summary report was shortened to four days. In addition, the company's risk prevention capabilities have increased. This is conducive to actively responding to various challenges in business management [7].

## 7 Conclusion

In summary, the implementation of internal control of financial accounting information under the ERP environment is conducive to ensuring the sustainable development of the enterprise and achieving good operating results. It can strengthen and improve the internal control level of financial accounting information from many aspects, so as to effectively prevent the business risk of the enterprise.

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