



Exploring the Optimization Path of Internal Control in Financial Sharing Center of Construction Enterprises in the Context of Digital Economy: A Case Study of an Iron Construction Group

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Abstract. In the context of digital economy, it is particularly important for a railway construction group to use big data platform and information technology to improve the financial management of enterprises, optimize the internal control of the financial sharing center of the enterprise group, and enhance the business capability of the enterprise. This paper discusses the path of optimizing internal control in the financial sharing center by looking at human resource management, control activity flow, information communication, risk assessment, and internal supervision, expecting to enhance the role of the financial sharing center in the group.

Keywords: Digital Economy, Financial Sharing Center, Optimization, Internal Control.

1 Introduction

After entering the era of digital economy, big data and information technology are developing rapidly, and society is developing rapidly. The construction industry, as a pillar industry of the national economy, has been developing at a breathtaking pace. This is accompanied by fierce competition within the industry and the expansion of enterprise production and operation fields, from the former single engineering construction field to construction material procurement, project drawing design, project construction, and later project maintenance, etc. Accounting matters are trivial and complex, and financial management tasks are becoming increasingly difficult to accomplish, so enterprises are beginning to seek financial reform paths. Establishing a financial sharing center can not only enhance the group headquarters' mastery of accounting information at the grassroots level, but also help the group headquarters upgrade the type of finance and achieve the group's financial strategic goals. However, because the business processes that used to be approved directly by the grassroots were put into the financial sharing center for approval, it led to many new risk points in the group headquarters, and financial risks increased than before, and many problems with internal control. Therefore, it is very important to explore the optimization

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path of internal control in the financial sharing center. As a leading company in the construction industry for railroad projects, the company's business involves many industries, mainly involving engineering contracting, industrial manufacturing, planning, design and consulting, material logistics, etc. They have project departments in 32 provinces, autonomous regions and municipalities directly under the central government, and they are also involved in overseas markets, with their business in 130 countries and regions around the world. The author discovered the problems of internal control in the financial sharing center by participating in the internship research of the sharing center, communicating with several departments, and interviewing the accounting staff of the grassroots project department. It helps to enhance the role of financial sharing center in the group, and also provides reference and guidance for other construction enterprises to optimize the internal control of financial sharing center.

2 Problems of Internal Control in Financial Sharing Center

The Ministry of Finance released the Basic Standard for Enterprise Internal Control in May 2008. To ensure the good effect of building and implementing internal control, this paper measures five aspects, including human resource management, process design of control activities, information communication, risk assessment, and internal supervision mechanism. Its main theoretical model is shown in Figure 1 as follows:

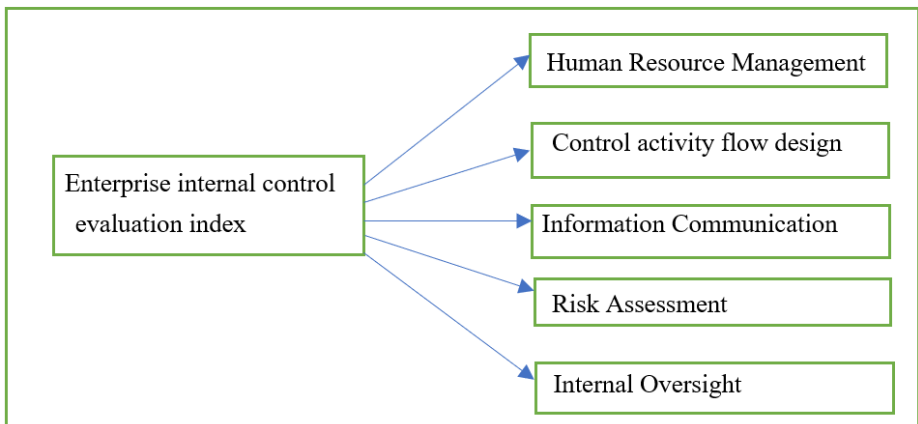


Fig. 1. Enterprise internal control evaluation index.

2.1 Inefficient Human Resource Management

The initial intention of the financial sharing center was to standardize and unify the project's fund management and accounting, improve the accounting quality of finance by using the economy of scale, reduce the number of financial personnel at the grassroots level, reduce the cost of corporate financial expenditures, reduce corporate

costs, and increase corporate profits [1]. At the early stage of the establishment of the financial sharing center, due to the need to reduce the construction period and reduce the error rate, some experienced professional financial personnel were hired externally to carry out auxiliary work, but later, after the financial sharing center was matured in operation, on the one hand, if the externally hired professional financial personnel were not fully utilized, their salary and remuneration expenses increased the burden of the enterprise; on the other hand, due to the imperfection of the basic information system on the other hand, due to the imperfect basic information system, a large number of accounting documents and vouchers still need to be handled manually by finance personnel, which occupies a lot of time of finance personnel, and the efficiency is not high, and the decision-making ability of finance personnel is not effectively played.

At the same time, the employees in the financial sharing center have a low sense of identification with the sharing center and are not very enthusiastic about their work. Because the shared center wants to standardize and specialize financial work with the effect of economy of scale, the departmental work functions are finely divided, resulting in a relatively large amount of tasks for each work position, but the work content is relatively single and repetitive, for example, in the position of auditing bills, employees are like an assembly line machine that repeatedly audits bills in large quantities every day, and the work content is not only boring and single, but there is no room for employees to develop their creative abilities and their personal abilities are not effectively improved. The employees' sense of self-worth is low, and their identification with the financial sharing center is low, and their work enthusiasm and efficiency are not high.

2.2 Control Activity Flow Design is not Reasonable

In order to reduce the operational risk of the enterprise, a railroad construction group has designed a relatively perfect approval process, but in practice, due to the special nature of railroad projects, the whole approval process does not operate smoothly enough, but is instead of dragging and redundant [2]. Take material procurement as an example, under the financial sharing mode, the financial personnel of the grassroots project department need to calculate the required material procurement amount in steps according to the construction plan, and prepare the procurement budget and submit it to the superior department, and after receiving approval, generate a budget approval order, enter relevant information in the contract management system and upload relevant bills, contracts and other materials, and then send a payment application to the financial sharing center. After approval by the center, accounting vouchers are generated and payments are made through corporate online banking to generate bank statements. If an unexpected situation arises and the budget needs to be added again, regardless of the amount, the process that has been gone through before will be gone through again, and everyone from the department head to the chief accountant will need to sign again before moving on to the next step. The excessively long approval process not only increases the workload of department leaders and the finance

staff, reducing their efficiency, but also increases the slackness of employees in the audit function.

The approval system is backward, and the existing approval process of a railway construction group also requires employees to manually review the entire process, which is a large workload and also prone to errors and low work efficiency. Lack of corresponding feedback mechanism, due to more process nodes, there is a higher possibility of accidents at the nodes out, once the accident occurs, will affect the next link, may cause work stagnation, resulting in lower efficiency [3].

2.3 Information Communication is not Smooth

A railroad group information system coverage is relatively narrow, only enter the customer, supplier contracts, bill entry, employee reimbursement and document entry, the relevance of information and business operations is not high, the use of low efficiency, the information base is only a storage warehouse, no classification and aggregation of data, no in-depth mining of the potential value of information. Take material procurement as an example, suppliers can be well classified into categories, based on historical contracts and external related information, divided into quality suppliers, potential suppliers and past suppliers, helping enterprises to do preliminary research and grasp the initiative in material procurement. When it comes to external communication, dealing with government authorities such as tax bureau and industrial and commercial administration, it mainly relies on telephone, email and online tax filing system to communicate in a relatively single way [4].

2.4 Insufficient Risk Assessment and Prediction Capability

At present, the financial sharing center finds problems in daily accounting and then gives feedback to the management, which makes group decisions based on the feedback information and then sends them to each grassroots project department. This way of risk handling belongs to dealing with risks after the fact and after the fact when they occur, and is applicable to risks with relatively simple sources. As a company grows, it faces more and more risk sources and hazards, so the risk handling method in the middle and afterwards can no longer meet the needs of the company, and the company needs to use information to make forward-looking risk prediction. However, at present, risk assessment mostly relies on the professionalism and work experience of financial personnel to identify manually, which leads to the lack of timeliness and insufficient prediction ability of enterprises for risk prediction.

2.5 Imperfect Internal Supervision Mechanism

The internal audit of the financial sharing center lacks independence and does not have a separate system module. The internal audit team carries out audit management of financial work through post-facto investigation, which is in a passive state in terms of internal control and lacks foresight, and is not conducive to pre-discovering and preventing internal management risks of the enterprise [4]. As business and finance is

separated, finance personnel are not familiar with business and cannot distinguish the truthfulness and rationality of business processes, so there will be blind spots for substantive auditing and control of business processes such as material procurement and expense reimbursement, and there is a possibility of collusion and fraud by personnel of subordinate units. With poor communication between finance and business personnel and differences in business understanding, it is difficult to ensure the authenticity and compliance of the financial information entered, and the quality of data integration, analysis and sharing is worrying. The traditional offline on-site supervision becomes online supervision, the effect of internal supervision is weakened, the center's auditors are not familiar with the business, internal supervision is not in place, and the execution of supervision is weak.

3 Suggestions for Optimization

3.1 Pay Attention to Human Resource Management

Change the traditional pyramidal management level structure of the past to a flatter management level structure and streamline the number of external staff [5]. According to the work accomplished, design scientific performance reward mechanism, improving wages and welfare benefits, realize more work, less work, and ensure fair distribution of wages and salaries. Enhance employees' sense of belonging and identity to the company, and stimulate their work enthusiasm and innovation ability. When designing performance indicators, we add employees' learning of new knowledge and innovation ability points to evaluate their work completion from multiple dimensions. Open up the upward channel for employees, implement the rotation system, and ladder rotation for technical positions and management positions to promote through dual channels. According to the different abilities of employees, as far as possible, they will be placed in positions that can maximize their value.

3.2 Business Process Redesign

In response to the complexity and length of the previous business process, the business process was streamlined. Starting from the approval process, the previous approval process required 8 layers of checking, starting from the employee checking the bills, handing them to his direct leader for approval, then to the department leader for approval, scanning the electronic version and uploading it to the sharing platform, the finance staff for review, then submitting it to the finance director for review, and the fund clearing person for final review and appropriacies of issue. After streamlining, only 3 levels of auditing are needed, starting with the employee reviewing the bills, then the department leader reviewing them, uploading them to the shared platform, the finance department head reviewing them, and the fund clearing person making the payment. The other processes can be replaced by computers, simplifying the process steps and freeing up manual labor.

A railway construction group with many projects and complex cost calculations can implement a dynamic budgeting model. According to the budget standard deter-

mined by the group and the budget data of each project department in the previous cycle, base data of the current budget is calculated and this data is uploaded to the sharing platform for later cost reimbursement references. At the same time, it automatically adds the budget audit review node and arranges for a special person to be responsible for the audit.

3.3 Strengthen the Construction of Information System and Communication Upgrade

Strengthen the construction of information system from three aspects, firstly, strengthen the security stability of hardware equipment, such as strengthening the timely update and security stability of computers, scanners and other hardware equipment; secondly, strengthen the network security awareness training of personnel and improve the information technology level and financial knowledge of information system maintenance personnel; finally, introduce OCR technology and barcode technology, OCR technology means "optical character recognition", which refers to the technology of obtaining text information from images. Using this technology to upgrade the original electronic image system of bills, the key information in the electronic image file documents can be split out and entered into the database in a unique unstructured information way, so that the filling and categorization of the information base can be carried out in full automation, freeing up the manual work, with the computer replacing the human eye for recognition, and the manual work only needs to be double-checked, reducing the workload of employees.

The sharing center can adopt unified collection, unified maintenance and unified online input certification credit for electronic invoices, so as to achieve unified management, reduce false invoicing by grassroots project departments and prevent the phenomenon of forgetting invoice certification due to company negligence. The company can understand the VAT input and output status, choose a reasonable tax rate, carry out overall group tax planning, develop taxation strategies and enjoy tax incentives to the maximum extent possible.

3.4 Change the Way of Thinking

To increase risk prediction ability, we must first change the mindset of employees. The role of the financial sharing center has shifted from an accounting role in the past to strategic finance. It requires employees to go through two transformations, namely, a change in the way of thinking about handling problems and a change in management thinking. In their daily work, employees cannot just get the job done. Secondly, they need to use digital thinking, build data awareness and platform awareness, and use system functions to discover the connectivity between data and establish effective communication. Using big data, we can find out the demand model and customer portrait of customers, realize the accurate matching of personnel and positions, find out the pain points of the industry, and provide strong support for the future bright development prospect of the enterprise.

3.5 Improve Internal Supervision Mechanism

Establish a separate internal control evaluation group. The members of this department should have a high professional level, experience in project construction and acceptance, and high ethics, and are generally composed of third-party audit experts, employees of internal control construction and group management. The staff of this department also needs to be rotated regularly to prevent slack behavior or favoritism due to the long time spent on auditing a certain part of the project. At the same time, the staff of the financial sharing center should regularly rotate to the grassroots project department to learn the project-related business and familiarize themselves with the related business processes, so as to reduce the separation of business and finance. A "cloud platform" can be set up to dig deeper and collect data and information to establish an evaluation model and then generate audit reports to promote the process of internal control construction.

4 Conclusion

In the context of the digital economy, the transformation of finance is inevitable. While the implementation of the financial sharing model has certainly brought great benefits to enterprises, saving costs and improving economic efficiency, it also faces many challenges. Through a series of measures such as staff rotation, opening up the upward channel for employees and stimulating their innovation and passion for work; improving the data analysis and integration capability of the sharing center through the use of OCR technology; releasing a large amount of manpower of employees by simplifying the internal approval process; and transforming the way employees handle problems and management thinking, the internal control of the financial sharing center is optimized to achieve a higher corporate strategy and sustainable and healthy development. By streamlining the internal approval process, releasing a large amount of manpower from employees, and transforming employees' problem-solving and management mindset, we can optimize the internal control of the financial sharing center and lay a solid foundation for achieving higher corporate strategies and sustainable healthy development.

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