

Research on Cost Accounting Business Process Optimization of Construction Enterprises Based on FSSC

Jinyan Liu*

School of Economics & Management, Nanjing University of Science and Technology, Nanjing, China

*Corresponding author: hljsfhxx@163.com

Abstract. Current infrastructure construction is the key of the national policy, along with the expansion of business areas, branch subsidiary is more, the traditional enterprise management system more difficult to adapt to the subsidiary, branch, distribution is more decentralized management needs of enterprise, the management of construction enterprises difficult to ascend, mainly reflected in operation of separation of goods. Financial sharing center is one of the methods to promote the integration of industry and finance and improve the efficiency of enterprise management. The cost accounting process is an important business process in the construction process. This paper optimizes the cost accounting business process of construction enterprises based on the financial sharing center, so as to improve the informatization and standardization level of construction enterprises, enhance the integration level of industry and finance, and improve the efficiency of cost management.

Keywords: Financial Sharing Center; Integration of industry and finance; Construction companies

1. Introduction

Construction enterprises take construction products as the final products, and its nature is different from that of general manufacturing. Construction enterprises generally acquire projects in the form of bidding, and the actual construction sites of each project may be scattered in the domestic and even international scope, which is difficult to manage. The construction process has a long cycle and strong technology, involving customers, labor providers, equipment providers, subcontractors, suppliers and other resources. Therefore, the large enterprises in the industry generally exist the phenomenon of separation of industry and finance. Some major business processes need to be managed more efficiently. Setting up financial sharing center is one of the ways that many enterprises solve this problem. Aiming at the problem of cost accounting business process in construction enterprises, the cost accounting business process is optimized based on financial sharing center.

2. The Construction Industry Overview

2.1 Main Business Activities of Construction Enterprises

Construction enterprises are engaged in construction engineering, installation engineering, highway engineering and other construction production enterprises, the construction materials are transformed into building products that meet the requirements of the contract through various processes. The whole life cycle of engineering project includes feasibility study stage, design stage, selection stage, construction and implementation stage, operation and maintenance stage as well as tracking and evaluation stage.

2.2 The Status of Construction Enterprise Management Information System

2.2.1 The ERP system

The construction enterprise has built an ERP system based on the organizational structure to realize the information exchange between the parent and subsidiary companies. ERP system by integrating the whole construction process of business activities, such as clients and services, machinery and equipment, and supplier resources integration, form a complete management information system, set

up a multiple operation plate, the construction enterprises division of parent and subsidiary company's finance department and business department through standardized information data flow together. The ERP system of construction enterprises needs to follow the technological update, and often carry out ERP system training.

2.2.2 Comprehensive project management platform

Most construction enterprises have established a comprehensive project management platform, and relevant information is input and reported by each construction site project department. According to the construction process of labor, equipment, contracting and other objects and processes to carry out comprehensive management. It mainly includes labor report, machinery and equipment report, material consumption and warehouse management, subcontracting, etc. According to the actual construction situation of the construction enterprise business process to establish a comprehensive management system, including contract processing, revenue management, cost management, financial revenue and expenditure, etc. The integrated project management platform plays a key role in the connection between business and finance.

2.2.3 Smart construction site

Intelligent construction site is a management system that implants sensing technology, artificial intelligence and other technologies into artificial, mechanical equipment and inventory management to form the "Internet of things" of construction site, digitize the actual situation of construction, and transfer information to the information management platform using the Internet [1]. The intelligent site system can realize the docking between the engineering management system and the engineering construction site. Through the docking of the intelligent site and the integrated project management platform, the automatic comprehensive management of "people, machines, materials and costs" can be realized.

2.3 The Necessity and Feasibility of the Implementation of FSSC in Construction Enterprises

With the extension of the Belt and Road policy, construction enterprises actively participate in the construction of large-scale international cooperation projects. At the same time contracted to build large domestic roads and Bridges. Because the bridge construction unit project all over the country provinces and cities, the difference is large. The long construction cycle and complex construction process lead to poor integration of business information and financial information. The degree of information sharing among various branches and sub-organizations of construction enterprises is poor, which increases the difficulty of financial management of enterprise groups. Therefore, construction enterprises need to establish a platform, formulate a unified system and establish a standardized financial sharing center [2]. The management system of construction enterprises has been upgraded and improved several times to meet the requirements of enterprises and technological development, and the introduction of new technology to promote the promotion of management ability. Therefore, under the condition of current technology level, construction enterprises can build financial sharing center.

3. Construction Enterprise Cost Accounting Business Process Problems

3.1 Contract Processing

Due to the project contracting in each province, city and country, the contract is difficult to distinguish. Moreover, the comprehensive project contract is complicated, and some projects need to be subcontracted, which makes it difficult to transfer the contract information in various information systems. The management system needs standardized data, but construction enterprises are still in the process of developing and introducing contract processing methods [3]. For the current information system, the standardization of contract processing does not meet the requirements, and it is difficult and inefficient to deal with complex and non-standard contracts.

3.2 Measurement and Approval Issues

At present, the statistics of labor report, machinery report and material in and out of storage of construction enterprises are manual field inventory measurement, and the foreman writes the foreman report and then inputs it into the system, which is of low efficiency and heavy manual workload. At the same time, the measurement accuracy is low, and there is a situation that the measurement of the labor machinery provider is inconsistent with the measurement of the construction unit [4]. The efficiency of publishing audit and transmission of construction enterprises is low, so there is a situation that the combination of business and finance is not very close. The main performance of the construction parties put forward the capital demand when the financial processing time is long, and even the wrong payment and other problems.

3.3 Weak Contact of Each Management System

The operation of each management system of construction enterprises has been more mature, but the connection between each system still needs to be further strengthened. The data timeliness of the integrated project management system is weak, resulting in the low efficiency of the business process of cost accounting in some projects of construction enterprises [4]. There are few interfaces between integrated project management system and EPR system, which leads to more outcome data and makes it difficult to meet the needs of management decision-making.

4. Cost Accounting Business Process Optimization Design

4.1 Standardization of Contract Cost Information

Business department standardizes supplier, labor, machinery and equipment contracts. Use standardized templates to input relevant procurement information and unit price of labor equipment [5]. On the one hand, the standardized contract information is uploaded to the business department database. On the other hand, it is transferred to the corresponding construction unit business department. Form the budget according to the winning contract, divide the budget target to each construction unit, and carry out the construction work. Standardize the subcontract, including engineering target, amount, etc., and transfer the relevant information to the business department.

4.2 Automatic Reporting of Engineering Measurement

4.2.1 Measurement and settlement of labor costs and equipment operation

The business department realizes automatic management of labor entry through face recognition technology, identity recognition technology and attendance management, and automatically collects and collates data to complete labor report volume. The actual running time of mechanical equipment is automatically counted through sensors to complete the equipment report [6]. Transfer the labor report and equipment report to the comprehensive project management platform, and conduct labor settlement according to the labor contract. The business department leaders will examine and approve the above information. If approved, the settlement and payment information will be transferred to the financial sharing center. Through this process, we can realize the automatic system management of labor receiving and discharging report and settlement. All contracts can be completed automatically by the system, except that some contracts and approval must be realized manually.

4.2.2 Material measurement and settlement

According to the construction plan, the business center puts forward the application for material removal from the warehouse. After the supervisor approves the application, the material removal will be carried out. The intelligent inventory management measures the types and quantities of different materials out of the warehouse, uploads them to the management system of the business department, and evaluates the amount tentatively according to the market price changes of materials, the FIFO method of expected consumption, and the weighted average method at the end of the month, which

is approved by the department manager. After approval, the information will be transferred to the financial sharing center. The financial sharing center will divide the whole road section projects into subgrade, bridge, tunnel and other unit foundation projects for automatic collection of material costs. It can mainly realize material inventory management and cost allocation.

4.2.3 Measurement and settlement of subcontracted works

Information, according to the subcontract business department of the contract requirements and verify the performance schedule and quality requirements and may, according to different engineering to set up a suitable index management system, set up the quantitative indicators, through the sensor to achieve digital indicators, uploaded to the database with the contract compares the corresponding standard index, and score is given. The results will be uploaded to the business department for approval by the business leader. After the approval, the contract settlement will be completed according to the contract information, quantity and cost information, and the relevant information will be transferred to the financial sharing center. It mainly realizes the management of professional subcontracting and clearing, including the automatic management of contract, report quantity and settlement.

4.3 Automatic Invoice Examination and Approval

According to the invoice format set in advance by the financial sharing center, the standards such as VAT special invoice and VAT general invoice are published for identification, and the digital information of the system is automatically generated [7].

The business department will complete the examination and approval by programming or manual labor settlement, mechanical equipment settlement, subcontract settlement, etc., and generate standardized documents for the transfer of settlement information between management information systems. The settlement information is uploaded to the financial sharing center.

After the standardized invoice information and generated documents are automatically identified, the financial sharing center generates the cost accounting vouchers, and the financial sharing center rechecks the accountant to complete the content audit of all the payable documents. After the review is completed, the leader of the financial sharing center will examine and approve, and the fund will be paid after the approval. The examination and approval failed to return the invoice application form.

The paper VAT special invoices and VAT general invoices shall be sent to the archives management department of the Financial sharing Center in time to keep the original documents. The electronic version of VAT special invoice, ordinary invoice and application form shall be sent to the archives management department of the sharing center.

4.4 Automatic Payment of Funds

The financial sharing center will pass the approved fund payment instruction to the fund settlement department of the financial sharing Center. According to the instructions of the settlement department, accounting processing and storage, automatic filling in the system accounting vouchers. At the same time, the database information is invoked to retrieve the applicant's name, bank account or bank card number and reimbursement amount according to invoices and documents [8]. Connect with the UnionPay system of the construction enterprise according to the payment method of the application form, and automatically complete the payment. When the applicant receives and confirms the payment, the automatic fund payment process is completed. The above process is shown in Fig.1.

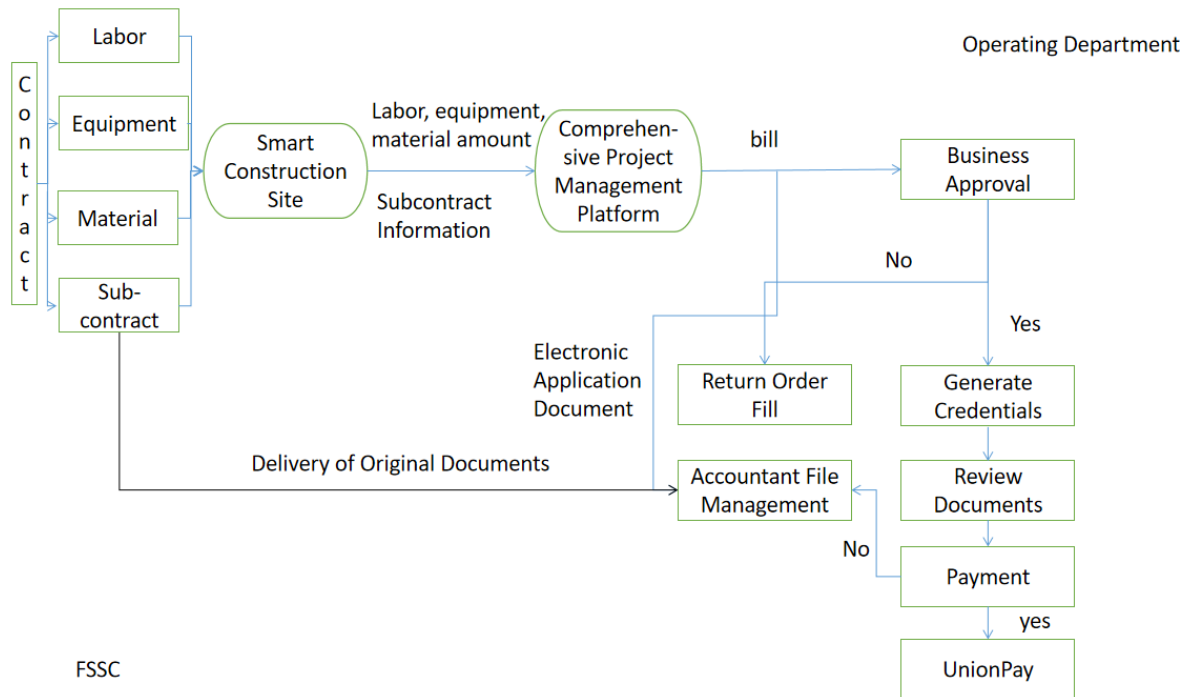


Fig 1. Schematic Diagram of Cost Accounting Business Process Optimization of Construction Enterprises Based on FSSC

5. Summary

The cost accounting business process optimization design based on financial sharing can improve the level of automation and standardization of business. With the progress of technology, management system need to constantly upgrade, more technology and management system established, can solve many practical problems, to achieve the combination of business and financial closer, enterprises need according to their own industry situation and the management present situation and the need to these new technologies and new system relative to meet the current more mature management system, To maintain the advanced nature of the management system, for enterprise management power. For construction enterprises, the problem of financial business separation is more prominent, and the management is more difficult. The financial sharing service center is an important means to improve the integration of financial business of enterprises. The business process optimization of enterprises through the financial sharing service center is helpful to improve the management efficiency of construction enterprises.

References

- [1] Gao Yuanchao, Sun Likun. Construction of digital competitiveness with "BIM+ smart site" [J]. Construction Enterprise Management,2021(03):81-83.
- [2] Xiao Jian, WANG Hao, GUAN Zhanwen, Wu Na. On the Construction of Financial Sharing Center of Expressway Enterprises and its advantages and Disadvantages: A Case study of Guangdong Expressway Co., LTD. [J]. Transportation Finance and Accounting,2021(01):31-36+41.
- [3] Yin Jincai. Contract Comprehensive Management of Construction Enterprises [J]. Building Materials and Decoration,2017(45):107-108.
- [4] Chen X M. Analysis on effective countermeasures of financial management in Construction enterprises under financial sharing mode [J]. Sme Management and Technology (Next Issue),2021(08):66-67.
- [5] Sun Haobo. Design of Automatic Contract Procurement Management System [J]. Sme Management and Technology (Next issue),2021(06):92-93.

- [6] Zhang Xu-chun, LIU Qing-ying, LI Tong, Chen Huan. Application of intelligent construction site management system based on BIM technology [J]. Information and computer (theory edition),2021,33(03):145-147.
- [7] Xue Rui. Discussion on financial sharing Mode of construction units [J]. Accounting Learning,2019(19):79-80.
- [8] Peng Qin. Analysis on the construction of financial sharing service Center of expressway enterprises [J]. Accountants,2020(19):69-70.