

Design of Project Cost Module in Financial Shared Service Center from the Perspective of Intelligence

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Keywords: Intelligent Perspective, Project Cost Module, Financial Shared Service Center, Enterprise Informatization

Abstract: In the era of knowledge economy, China's engineering cost consulting enterprises, as a typical knowledge intensive enterprise, are faced with many challenges and obstacles on the road of sustainable development in recent years. In order to successfully break through these challenges and obstacles and stand firm in the cruel competitive market, we must establish a set of intelligent system. This paper mainly introduces the design and research of project cost module in Financial Shared Service Center from the perspective of intelligence. This paper studies the design of the project cost module in the Financial Shared Service Center from the perspective of intelligence. The project cost industry mainly relies on the professional knowledge and experience level of employees to provide consulting services for clients. It can be seen that the human factor is very important. The importance of financial sharing engineering cost enterprises must strengthen their own financial sharing in order to achieve sustainable development in the fierce market in the era of knowledge economy. The experimental results show that the research on the design of project cost module in the Financial Shared Service Center from the perspective of intelligence increases the project completion rate by 19%. The limitations of the research on the design of project cost module in the Financial Shared Service Center are analyzed, discussed and summarized, so as to enrich the academic research results.

1. Introduction

With the rapid development of the construction industry and infrastructure construction in China, engineering cost consulting enterprises begin to gradually highlight their important role in the construction process, and their position in the construction process of the project is growing [1-2]. The main function of engineering cost consulting enterprise is to provide clients with professional technical services such as project investment, accounting and project cost control. It is a typical knowledge intensive enterprise. It can be seen that the business content and foothold of engineering cost consulting enterprises are the foundation [3-4]. To a large extent, it comes from the understanding and application of knowledge. In order to improve their core competitiveness and seek sustainable development in the fierce competition, engineering cost consulting enterprises need to make full use of financial sharing and integrate financial sharing with enterprise strategy [5-6].

However, at present, China's engineering cost consulting enterprises lack the ability to integrate knowledge, pay less attention to financial sharing, especially lack of a complete financial sharing system, which seriously restricts the development of enterprises [7-8].

With the progress of science and technology and the rapid development of the internet, the design of intelligent application is enhanced and the foreign research on financial sharing of engineering cost consulting enterprises is reviewed. The research on financial sharing of engineering cost consulting enterprises by foreign scholars mainly focuses on strategy and technology. In terms of strategy, Wang J conducted a survey on engineering cost consulting enterprises in the United States, and found that financial sharing is already one of the business processes of these enterprises and financial sharing can play an effective role only when it is closely combined with the core process [9]. Xiang P studied the financial sharing of engineering cost consulting enterprises after cross-border acquisition. It is pointed out that technological and cultural differences in the process of financial sharing have a great impact on enterprises [10]. However, there are errors in their experimental process, resulting in inaccurate results.

The innovation of this paper is to put forward the research on the design of project cost module in the Financial Shared Service Center from the perspective of intelligence. This paper focuses on the design and research of project cost module in Financial Shared Service Center from the perspective of intelligence and analyzes that the management department of project cost industry is mainly China Project Cost Association derived from government departments. This management association has not formed the management function consciousness of project cost industry and the law enforcement is not strict in the process of industry management and not fully play its due business functions. The purpose of this study is to find a new way for the development of indoor path planning system in complex environment [11-12].

2. Project Cost Module from the Perspective of Intelligence

2.1 Enterprise Analysis of Project Cost

Most engineering cost enterprises adopt the matrix project structure or flat organizational structure to promote the knowledge flow quickly in the internal structure. In addition, the service content of engineering cost enterprises requires high professional skills and literacy of employees. But there are some problems such as low education background, poor quality, low level of professional service, high mobility and so on. The service content of engineering cost enterprises involves many specialties, flexibility and large content. The service work is dominated by tacit knowledge such as the professional level and experience of cost consultants. The main purpose is to help clients improve project quality, shorten construction period and reduce cost.

At present, there are many problems in China's engineering cost industry, such as low industry status and more requirements for professional knowledge. As a result, in the fierce market competition of engineering cost enterprises, the mobility of employees is large and the tacit knowledge such as professional knowledge and experience of employees will be lost. In this severe situation, the use of financial sharing can extract the knowledge and experience stored in the minds of employees for other personnel to learn and exchange so as to effectively reduce and control the loss of enterprise knowledge and promote the sustainable development of engineering cost enterprises[13]. Just like the analysis of knowledge classification, knowledge can be divided into different structural types according to different classification methods. According to the level of knowledge, knowledge is divided into strategic knowledge, business knowledge and comprehensive knowledge. Among them, strategic knowledge mainly serves the strategic objectives of the enterprise and supports the decision-making system of the enterprise. Business knowledge mainly serves the business management of the enterprise and supports the core operation system of the

enterprise. Comprehensive knowledge mainly serves the daily management and supports the normal operation of the enterprise. Appropriate application of this function can design an effective algorithm for the design of project cost module in Financial Shared Service Center from the perspective of intelligence, which has the following forms.

$$K = \exp(-(u - v) / 2 \times pl^2) \quad (1)$$

The formula is as follows;

$$\hat{a} = \begin{bmatrix} a \\ b \end{bmatrix} = (B^T B)^{-1} B^T Y_N \quad (2)$$

The following formula shall be used for the test:

$$3I_{02} = I_{A2} + I_{B2} + I_{C2} = 3U_{0j} \varpi C_{02} \quad (3)$$

2.2 Cost Consultation

The relevant enterprises in the engineering cost consulting industry participate in the project management in an independent capacity. These enterprises are neither affiliated to other construction enterprises nor attached to government departments. They can ensure independent analysis and research in the process of work[14]. The engineering cost consulting industry needs interdisciplinary and multi professional division of labor and cooperation which depends on team cooperation and personal knowledge sharing. Based on knowledge and experience, the workflow and links of engineering cost consulting industry are knowledge-based and the products they serve are the results of knowledge application and innovation within the enterprise. The service process of engineering cost consulting products has subjective initiative and the results of consulting products have objectivity[15].

Research method the paper adopted is questionnaire to study the current situation of financial sharing of engineering cost consulting enterprises. It mainly carries out paper survey, network survey and interview for 100 staff of engineering cost consulting enterprises in China. According to the scale and maturity of the enterprise, we can understand the current situation of financial sharing of engineering cost consulting enterprises according to the specific data. The meaning of engineering cost consulting industry engineering cost consulting industry is a social consulting industry with the development and rise of China's market economy and infrastructure construction in recent years. Project cost consultation refers to the cost accounting and control of the entrusted project and the analysis of cost information service according to the requirements of the client, the contract and relevant laws, the theory of project cost, project management and economics, the knowledge of engineering technology, and the own experience and professional knowledge.

3. Enterprise Information Analysis of Financial Sharing

3.1 Enterprise Informatization

Financial sharing of engineering cost enterprises can promote the improvement of enterprise informatization. In the service process of engineering cost enterprises, the internal and external environment is full of policy specifications, project summary, quota and many other information. The process of obtaining, integrating and using these information helps to enhance the informatization of enterprises and make their own informatization more diversified. Information makes their own degree of information more diverse. Financial sharing of engineering cost

enterprises can promote the quality of employees and reduce the flow of personnel. The orderly use of knowledge in engineering cost enterprises enables employees to obtain the required knowledge conveniently and quickly which can mobilize their work enthusiasm and improve their quality to a great extent.

Not only so, enterprise financial sharing also creates a good atmosphere of knowledge exchange, learning, sharing and innovation for employees, enhances the attraction of engineering cost enterprises to talents, and reduces the flow of employees. Financial sharing of engineering cost enterprises can promote the expansion of enterprise scale. The enhancement of enterprise financial sharing ability not only ensures the quality of consulting service products, but also promotes the improvement of enterprise management level and technical level, which is very effective for the improvement of enterprise image and reputation, and also provides strong support for the expansion of enterprise business scope and scale. Financial sharing of engineering cost enterprises can enhance the status of technology or management departments. The improvement of financial sharing ability can promote the transformation of technology or management departments from auxiliary departments to departments with important control over knowledge.

3.2 Enterprise Financial Sharing

Engineering cost enterprises attach great importance to the consistency of financial sharing and enterprise strategy, set up special functional departments to supervise the operation of knowledge, ensure that knowledge does not deviate from the strategic goal in the process of internal circulation, and always take improving engineering cost service as the strategic goal. In addition, engineering cost enterprises have changed the way in which employees find knowledge by themselves. Instead, they actively push relevant knowledge (such as industry news, company announcements, government reports, knowledge update information, etc.) to employees' desktops by departments and posts through information technology so that employees can obtain the necessary, important and accurate knowledge in time. In terms of the organization system of financial sharing, based on the original organizational structure of the project department, the project cost enterprise has established a special and perfect financial sharing group.

Table 1: Comparison of several wireless data transmission methods

| | Great Influence | | Big Influence | | Influential | | Small Influence | | No Effect | |
|----------------------|-----------------|-------|---------------|-------|-------------|-------|-----------------|-------|-----------|------|
| | N | % | N | % | N | % | N | % | N | % |
| Learning Philosophy | 37 | 41.11 | 28 | 31.11 | 18 | 20.00 | 7 | 7.78 | 0 | 0.00 |
| Learning Attitude | 42 | 46.67 | 23 | 25.60 | 18 | 20.00 | 7 | 7.78 | 0 | 0.00 |
| Learning Environment | 41 | 45.56 | 19 | 21.11 | 17 | 18.90 | 13 | 14.40 | 0 | 0.00 |
| Learning Ability | 26 | 28.90 | 25 | 27.80 | 26 | 28.90 | 13 | 14.40 | 0 | 0.00 |
| Learning Path | 26 | 28.90 | 24 | 26.70 | 20 | 22.22 | 10 | 11.11 | 0 | 0.00 |

The team is led by the deputy manager of the project cost enterprise, with four experienced and highly skilled employees as the full-time team leader, and has set up the positions of group knowledge officer, regional knowledge officer and financial sharing specialist. Its main task is to conduct professional and comprehensive supervision, planning and management on the construction of enterprise financial sharing. At the same time, on the basis of maintaining the original corporate culture, the project cost enterprises strive to create a corporate culture that allows employees to

actively cooperate and trust each other, and create a good atmosphere for financial sharing. The cooperation and trust of engineering cost enterprise staff is an important factor to promote knowledge sharing and innovation, and is also the premise of the formation of open enterprise culture. In addition, in order to breed a good corporate culture, engineering cost enterprises have established a reward and punishment mechanism for financial sharing. If the knowledge points account is set up, the employees who get the points can exchange the corresponding leave, bonus, voucher, living goods and other rewards with the points. At the same time, the enterprise will regularly rank the knowledge points and incorporate the ranking results into the performance evaluation of the employees. The specific results are shown in Table 1.

4. Financial Shared Service Center from the Perspective of Intelligence

4.1 information System analysis of Financial Sharing

This paper proposes a process of sublimation of financial sharing, which can find the operation of knowledge among departments, and optimize the process of knowledge release, use, update and deletion. Meanwhile, for employees with less knowledge points or negative knowledge, the engineering cost enterprises will take punishment measures such as ideological report, public criticism and bonus deduction to encourage employees to actively share, exchange and innovate knowledge and promote the good circulation of enterprise knowledge. In the aspect of financial sharing information system, the engineering cost enterprise has built a comprehensive internal portal information system, integrating human resource management, customer information management, cost management, progress management and other management systems into a unified portal page, and realized the single sign in of these information. The specific results are shown in Figure 1.

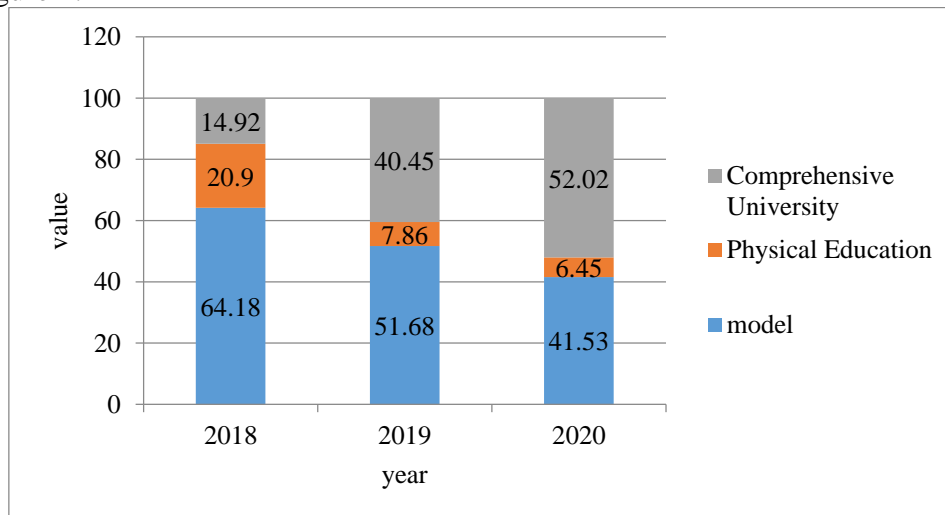


Figure 1: The proportion of financial sharing

4.2 Financial Sharing System Model

The practical application of financial sharing system optimization measures. At present, few project cost enterprises establish financial sharing system. It has proved that the improvement measures are feasible and effective from the current point of view, which can not be denied. However, with the change of the surrounding environment in the future, whether each enterprise can achieve the effect of the case by adopting the optimization measures remains to be studied.

Combined with the current situation, the financial sharing of engineering cost enterprises is still in the stage of rapid development. Many enterprises have begun to consciously carry out financial sharing, and there are successful enterprise cases on trial. Looking forward to the future, financial sharing is the new trend of engineering cost enterprises and even the whole industry. If enterprises want to improve their core competitiveness and ensure sustainable development, it is imperative to establish a harmonious and perfect financial sharing system. The specific results are shown in Table 2.

Table 2: Statistical table of sample library

| | Normal | Ageing | Malfunction |
|------------------------|--------|--------|-------------|
| Number of Transformers | 51 | 8 | 9 |
| Total Sample | 45 | 160 | 10 |
| Training Samples | 26 | 106 | 26 |
| Validation Sample | 2 | 54 | 9 |

With the rapid development of economy, the cost of artificial materials and machinery is also rising year by year, and the difficulty of construction cost control is further improved, which puts forward higher requirements for the project cost management of the construction unit. For a long time, the project cost management of the construction unit is an inefficient and extensive management mode. It has been unable to meet the increasingly mature information technology, refinement, intelligent industry development requirements. The collaborative management organization mode facilitates the follow-up coordination work of the project participants for the design change. According to the new model after the change, the project participants can quickly get the follow-up work task changes, so as to improve the speed and accuracy of information transmission, and improve the efficiency of project cost management. The specific results are shown in Figure 2. When the number of attributes is same, with the growth of the number of sample data, the efficiency of financial sharing management has been significantly improved.

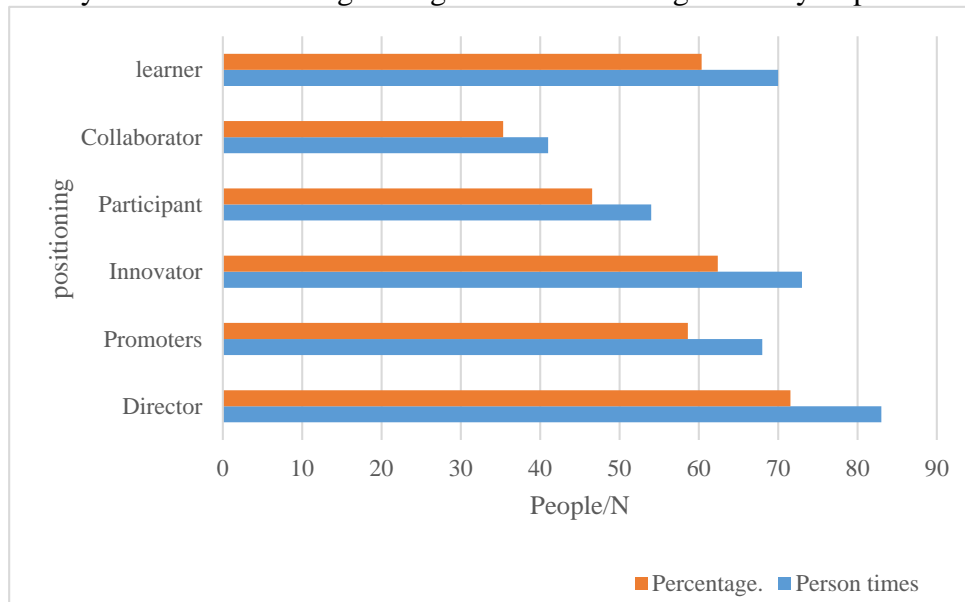


Figure 2: Perspective of intelligence

5. Conclusions

In this paper, although in the perspective of intelligent project cost module in the Financial

Shared Service Center design research, there are still great deficiencies. In recent years, with the rapid development of information technology, financial sharing mode has been gradually recognized by Chinese enterprises. As a new financial management mode in financial transformation, Financial Shared Service Center centralizes financial intelligence. Its business process optimization is aimed at the process problems existing in the operation of Financial Shared Service Center so as to enhance the standardization of business process and strengthen the management control of capital, risk and operation. It is beneficial for the enterprise group to control the overall development direction of business, control and reduce the overall risk of the enterprise group. From the perspective of intelligence, there are still many in-depth contents in the design and research of the project cost module in the Financial Shared Service Center. There are still many steps in the analysis of the project cost module in the Financial Shared Service Center, which are not involved due to the length and personal ability. In addition, the practical application effect of intelligent related experiments can only be compared with the traditional model from the theoretical and simulation level.

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