

# *Optimization of Financial Shared Service Center from the Perspective of Low Carbon Economy*

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**Abstract:** There has been increasing attention to the development of a low-carbon economic model with low energy consumption, low pollution and low emissions against the background of sustainable development. It is essential to optimize the company's Financial Shared Service Center in the context of low carbon economy, as the company's original production and operation mode may be affected and impacted, and the company's financial activities and financial risks may also show new characteristics different from those of the traditional economic background. Therefore, this article discusses the business process of the Financial Shared Service Center of Company X as an example and combines relevant theories. Based on the construction background and operational status of Company X's Financial Shared Service Center, this paper analyzes its existing problems, and finally considers how to optimize it using financial intelligence methods. Then, this paper finds through the study on the application effect of the optimized Financial Shared Service Center of Company X in the aspects of management cost control, organizational and personnel reform and fund management: the Financial Shared Service Center is an important platform conducive to promoting the all-round transformation of finance, and it needs to learn how to combine with intelligent information technology to output more value. The application of intelligent technology will continuously inject new vitality into the Financial Shared Service Center.

## 1. Introduction

### 1.1. Research Background and Significance

Green and low-carbon development is a major consensus in the world today. In order to reduce global greenhouse gas emissions and protect the global ecological environment and maintain the stability of the global ecosystem, we need to significantly reduce the carbon emissions generated by global economic activities. This is the common responsibility and obligation of all countries around the world. From an observational perspective, in-depth exploration of the specific path of green finance in the development of low-carbon economy is currently the most urgent issue in economic

transformation. Under the traditional model of extensive economy development, traditional financial management has the problems of focusing on accounting for costs and historical performance, being driven by spreadsheets, low specialization of staff, and the time spent on basic accounting work far exceeding the time spent on decision-making support, which make it difficult for this financial model to meet the current financial management needs [1-2]. Long-term overuse of resources creates serious constraints on the future sustainability of the enterprise. The change of enterprise financial management style in the context of low carbon economy is an inevitable option that many enterprises must take as the core of their strategy and realize sustainable development [3-4]. The financial sharing model belongs to a modern management technology and an important transformation method, which can effectively help enterprises optimize organizational structure, improve process efficiency, and reduce operational costs. This article aims to explore the optimization of Financial Shared Service Center from the perspective of low-carbon economy through relevant research, providing an important theoretical basis for balancing low-carbon economy and financial risks [5-6].

## **1.2. Research Content**

This research mainly aims to analyze the practical effectiveness of Company X's implementation of the Financial Shared Service Center through specific case studies, explore some measures that Company X can refer to in the construction process, and summarize some areas that need improvement in practical operations, in order to provide a relatively complete identification of the necessity of implementation and suggestions for implementation plans for traditional enterprises that urgently need transformation. Thus, it can better achieve financial digital transformation and promote the development of low-carbon economy. This article focuses on solving two problems: firstly, in response to some problems that have arisen in the construction of Financial Shared Service Center, some optimized solutions are provided; secondly, after optimizing the Financial Shared Service Center of Company X, the application effect was analyzed and the experience gained during its application process was summarized.

## **2. Literature Review and Theoretical Basis**

### **2.1. Overview of National Research**

#### **2.1.1. Research on Financial Shared Service Center**

Due to significant differences in economic foundation, natural resources, social development level, industrial structure, market and system of financial development among different provinces in China, there is a significant imbalance in the development of green finance in the eastern and western regions, as well as significant differences in the low-carbon economic transformation process among different regions. Green finance is based on a low-carbon economy, and green finance is an indispensable and important part of it. To this end, the nonlinear impact mechanism of green finance on the development of low-carbon economy will be studied based on the economic, financial, and policy backgrounds of different regions. At the same time, the latest developed semi parametric spatial panel data is used to study the nonlinear relationship between the two. On this basis, a new and sustainable green finance development strategy was proposed, and a set of green finance systems suitable for national conditions was proposed.

Nowadays, many industries have applied Financial Shared Service Center to the daily business activities of enterprises, and more and more scholars have conducted in-depth research on Financial Shared Service Center. Scholar Xiwen L, based on research data from the Financial Shared Service

Center (referred to as H Center) of H Co., Ltd., analyzes the current status of its internal control, identifies risk points from five aspects: control environment, risk assessment, control activities, information communication, and internal supervision, and explores the key links of its internal control [7]. Tang Y analyzed the current situation of accounts receivable management in retail companies and optimized the accounts receivable process management of the Financial Shared Service Center from three aspects: invoice management automation, reconciliation management automation, and accounting period management automation. This provides practical and theoretical reference for group companies that are about to build or have already built a Financial Shared Service Center [8]. Liu L believes that expense reimbursement is an important component in the Financial Shared Service Center, and a scientific and smooth process is the key to determining employee work efficiency. Therefore, continuously optimizing the expense reimbursement process of the Financial Shared Service Center has become one of the important tasks of the finance department [9].

### **2.1.2. Literature Review**

From the literature review at home and abroad, people can find that most of the current research on Financial Shared Service Center by scholars and practitioners at home and abroad is limited to analyzing the current business processes. These problems have been solved accordingly as modern new information technology continues to develop, but the above studies have stayed at the most basic level and lacked optimization for the real conditions of the enterprise. Therefore, this article follows the pace of the development of the times and selects Company X as a case to study and analyze the optimization of the Financial Shared Service Center.

## **2.2. Concept of Financial Shared Service Center**

Financial Shared Service Center refers to the centralized accounting and reporting of various regions in a shared center. This approach not only ensures the consistency of accounting statements, but also avoids setting up basic financial positions in each branch of the group, thereby reducing the number of financial personnel within the enterprise. By utilizing a Financial Shared Service Center, enterprises can not only achieve uniformity in financial management and ensure that their financial accounting becomes more standardized during implementation, but also have full control over their own capital operations, ensuring transparency in financial work, and giving enterprises a clear understanding of the use and mobilization of various funds [10-11].

## **2.3. Basic Theory of Financial Shared Service Center**

### **(1) Resource Allocation Theory**

The principle of resource allocation is to optimize allocation by reducing losses under limited resource conditions, in order to obtain maximum income. On this basis, scientific incentive mechanisms, information mechanisms, and decision-making mechanisms were proposed [12-13]. A great number of fields are involved during the construction of the Financial Shared Service Center, including organizational restructuring, personnel arrangement adjustment, technology implementation and application, which require a large amount of resources to support the promotion and operation of the entire project. Therefore, the reasonable application of resource allocation theory can better help build a Financial Shared Service Center [14-15].

### **(2) Theory of economies of scale**

The so-called economies of scale refer to the fact that within a certain period of time. The larger the output of a company, the lower its unit cost. In other words, the larger the operating scale of a

company, the lower its unit cost, and therefore, the higher its profitability. Based on the theory of economies of scale, people will construct an enterprise Financial Shared Service Center that integrates large-scale business data and management activities using information systems and sharing technologies to achieve the sharing of financial resources. This will make the complex financial work of the group and various subsidiary companies more efficient, professional, and centralized, and play a positive role in economies of scale, ultimately achieving cost reduction and efficiency increase the operational management effectiveness of enterprise competitiveness [16-17].

(3) Flat management theory

The flat management theory refers to reducing organizational levels and integrating different functional departments to make the hierarchical management relationship of an enterprise more refined, thus achieving effective control and guidance of business processes by senior leaders using information platforms. Nowadays, flat management has become a management concept highly respected by large companies, and the idea of establishing a Financial Shared Service Center is to use this theory to break through traditional financial management models [18].

**2.4. Optimization Plan for Financial Shared Service Center**

In the operation of the Financial Shared Service Center, this article focuses on optimizing aspects such as system upgrade, institutional improvement, and personnel training [19-20].

There is a need to integrate information systems to create distinctive information management models. Based on the uniqueness of the enterprise, people build a personalized information platform that is suitable for the enterprise, better integrate data resources, analyze the overall situation of the enterprise, provide strong decision support for business, and achieve a higher degree of financial integration. In addition, efforts should also be made to control data security. Financial sharing is an inevitable requirement for financial digital transformation, and it is necessary to improve the ability to prevent financial information risks and improve the management level of financial information.

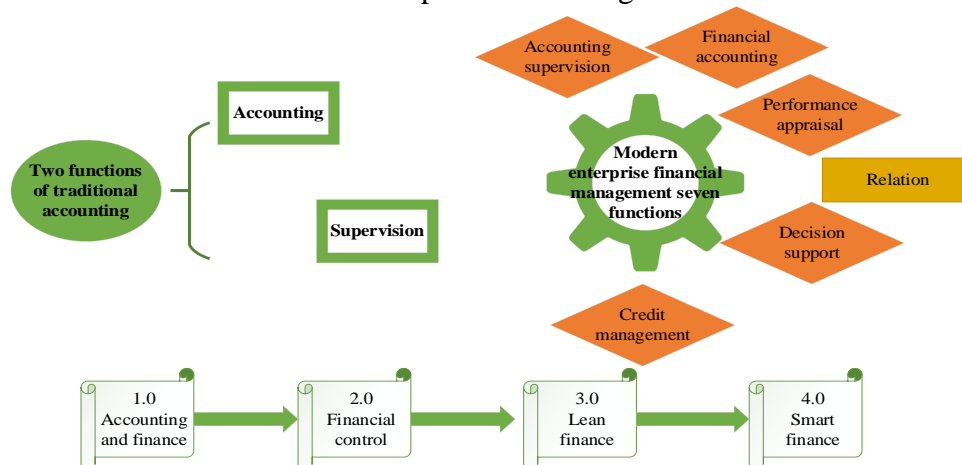


Figure 1: Schematic diagram of the evolution of accounting functions

There is a need to establish a professional team to effectively integrate business and financial process systems. When constructing a Financial Shared Service Center, the phenomenon of separation between business and finance often occurs. Therefore, it is necessary to build a collaborative mechanism between business and financial process systems, organically combining business activities with financial management, and forming a process system with a budget in advance, monitoring during the process, and evaluation after the event. On this basis, by establishing effective connections between sound financial management and enterprise operations, information sharing and achievement utilization can be achieved. By leveraging the advantages of

information technology development, people have evolved from the 1.0 version of financial management centered on accounting - Accounting Finance to the 4.0 version - Smart Finance. Figure 1 shows the evolution of accounting functions:

In terms of talent training, it is necessary to promote the digital transformation of financial personnel and improve and implement employee training mechanisms. The brain drain in enterprises is quite severe, partly due to the lack of a good training mechanism, and partly due to the inadequate incentive mechanism of the company. The current incentive mechanism cannot stimulate employees' work enthusiasm, nor can it retain employees, thereby reducing their turnover rate. Specific incentive mechanism improvement measures can be based on the organizational personnel structure, and a corresponding promotion management system can be constructed to incentivize outstanding personnel in their work for job promotion. They can also be included in talent reserves, and can be appointed at any time when there is a vacancy. In addition, it is also necessary to regularly organize training for employees. Through learning about different departments' business and shared knowledge, employees can achieve self-growth, enhance their sense of gain, and more easily stimulate their work enthusiasm, improve their enthusiasm, and better create value for the Financial Shared Service Center.

### 3. Case Study - Taking X Mobile Company as an Example

#### 3.1. Background Introduction

The main business of X Group is high-end smartphones, internet TV, internet platforms, smart hardware, and the industrial chain of smart homes. After several years of continuous growth, by 2019, it had become the third largest network technology company in the world. Profitability is the ability that a company pays the most attention to and values. This paper takes Company X as the research object and analyzes the operating status of Company X based on several commonly used profit analysis indicators. Through comparison and analysis, people can understand some of the current problems of Company X, which are of great help in improving the company's financial structure, increasing its operational efficiency, and promoting its long-term development. Figure 2 shows the profitability of Company X.

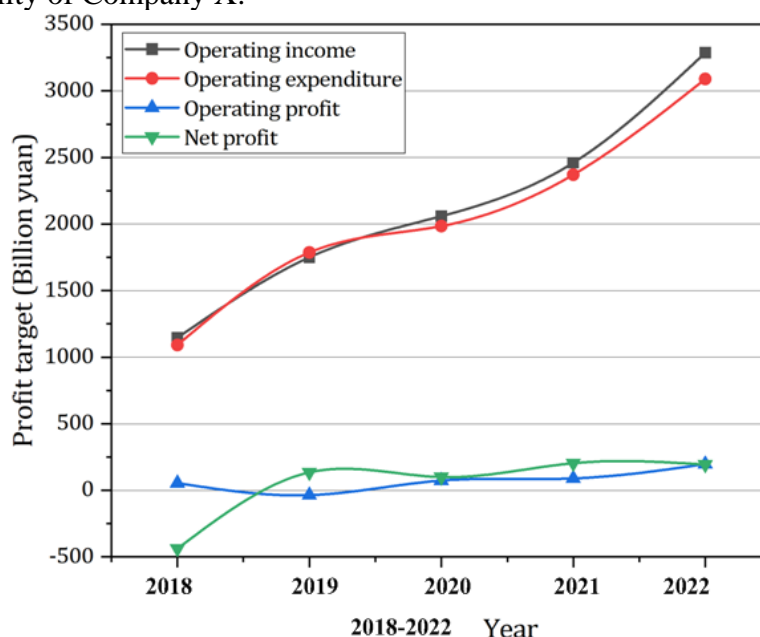


Figure 2: Warnings indicators of Company X from 2018 to 2022

As can be seen from Figure 2 below, the net profit showed an increasing trend from 2018 to 2022. With the continuous development of company X, it is imperative to upgrade and transform the traditional finance. The leaders of company X incorporated the construction of the Financial Shared Service Center into the company's strategy in 2018. After 2019, the company's operation and financial integration were completed, and the company's net profit has been greatly improved. However, although Company X has established a Financial Shared Service Center and achieved certain results, it still needs to be further improved.

### 3.2. Company X Financial Shared Service Center Optimization Implementation Effect

#### 3.2.1. Financial Processing Efficiency and Quality Improvement

The Financial Shared Service Center of Company X has carried out a detailed and professional division of financial accounting, and solved the problem of manual accounting processing through financial accounting informatization, which has reduced the incidence of errors and greatly improved the work efficiency of financial accounting and the quality of accounting. Taking document approval as an example, Figure 3 shows the statistical chart of payment approval time and effectiveness of company X in 2022.

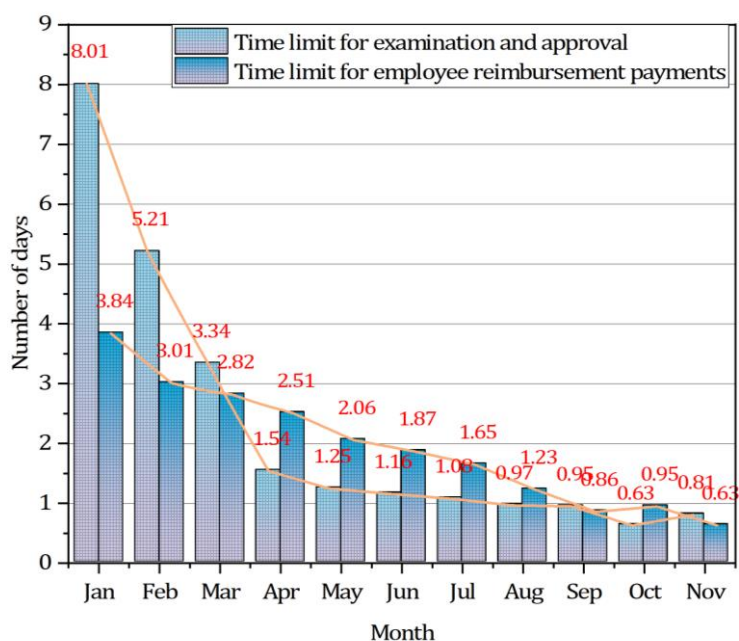


Figure 3: Statistical chart of the time limit for approving payments of Company X in 2022

From the document to the shared pool for approval, after the financial accounts payable bill of lading and approval, the enterprise resource plan is to be imported to the final cash balance system for payment. Approval time limit plus payment time limit. According to the statistical data in Figure 3, the completion time of the whole document approval process is shortened from 11.9 days to 1.4 days. The electronic voucher management and file management not only improve the efficiency of payment and reimbursement, but also ensure the high quality of file management.

#### 3.2.2. Reduced Operating Costs

The Financial Shared Service Center of Company X will integrate the decentralized financial basic transaction type activities and resources, conduct centralized transaction financial processing,

realize the scale effect and reduce the unit processing cost. When business expansion continues to build new companies, it is no longer necessary to consider building new financial support departments. The number of basic financial personnel is reduced and the total labor cost is reduced. The statistical results are shown in Table 1.

Table 1: Changes in the personal structure of Company X from 2020-2022

	2020	2021	2022
Financial personnel	381	208	135
Administrative staff	1701	1425	296
Total annual labor cost (Ten thousand yuan)	3954	2875	2321

It can be seen from Table 1 that before the optimization of the Financial Shared Service Center in 2020, company X had 381 financial personnel and 1701 administrative personnel, with a total annual labor cost of 39.54 million. After the optimization of the Financial Shared Service Center in 2022, the number of financial personnel was less than half of the previous number, and the number of administrative personnel was significantly reduced. The total annual labor cost was saved by about 16.33 million compared with that before the optimization, and the trend continued to decrease.

### 3.2.3. Strengthened Management and Control Ability of Company X

In the process of establishing the Financial Shared Service Center, company X also reorganized the business process of capital management, and centralized the data and information related to capital. With timely and sufficient information, the management can better play the role of capital, so as to make better use of capital, obtain greater profits, and improve the flexibility of capital use. In this section, this paper will focus on the changes of financial leverage and asset liability ratio of company.

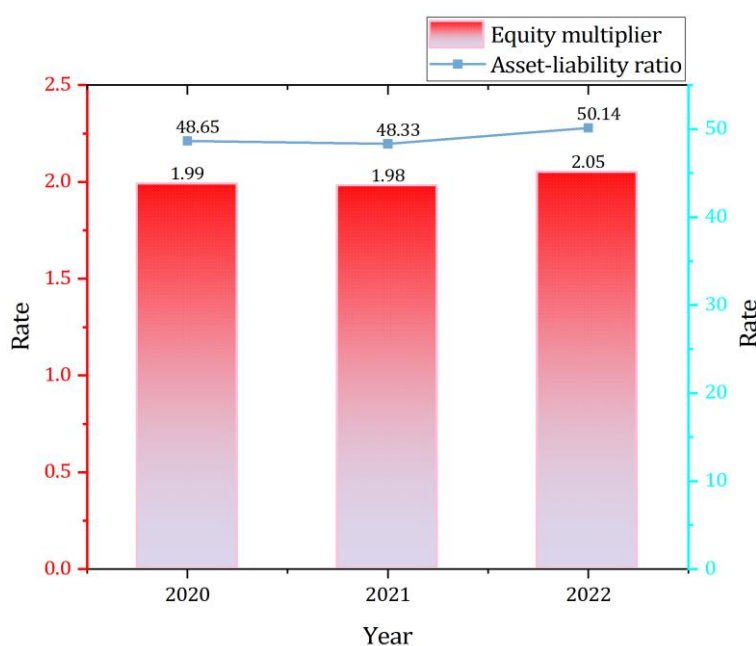


Figure 4: Changes in Company X's financial leverage and capital structure

From the data in Figure 4, the equity multiplier index of company X in recent years has always remained around 2, and the overall investment leverage level has remained within a reasonable range. In the process of establishing the Financial Shared Service Center, the leverage risk has always remained at a very low level. Therefore, the overall financial leverage level of company X is within the normal and reasonable range, and its risk can be controlled. For company X, reasonably increasing the leverage level can bring more profits to the company. Therefore, the Financial Shared Service Center can also promote the management of capital structure.

## **4. Company X's Experience in Optimizing the Financial Shared Service Center**

### **4.1. Improve Financial Sharing Efficiency with Intelligent Technology**

The Financial Shared Service Center is a financial management department that uses the scale effect to promote the cost reduction and efficiency increase of enterprises. Using intelligent technology, people can improve the inefficient problems in the current process. In the case enterprise, it mainly solves the problems such as the complicated and easily lost circulation process of paper documents, the impact of a large number of audit work on the process efficiency of expense reimbursement, the low communication efficiency and the blocked service feedback channel, which is of great help to improve the operation efficiency of the enterprise Financial Shared Service Center.

### **4.2. Strengthening Data Integration and Optimizing Enterprise Management and Control**

The application of intelligent technology provides more efficient data processing and analysis means for financial sharing services, improves the capital risk problems in existing business processes, and can strengthen the management and control of enterprises' financial work. There are many capital risks in the enterprise Financial Shared Service Center. Therefore, the optimization in the Financial Shared Service Center can use intelligent technology to improve the risk of repeated payment or wrong payment, and the risk of wrong payment or misappropriation of funds, so as to help enterprises avoid potential financial risks as much as possible.

### **4.3. Strengthening the Introduction and Training of High-quality Financial Sharing Talents**

Talent is always the decisive factor of the core competitiveness of enterprises. Enterprises should introduce a number of high-end and pragmatic excellent financial and management professional teams in combination with the characteristics of financial sharing management and service, which is more conducive to the transformation and upgrading of enterprises to "digital intelligence" Financial Shared Service Center.

## **5. Conclusions**

Under the background of low-carbon economy, this paper uses the theory of social sustainable development, the basic theory of Financial Sharing and the theory of industry finance integration to optimize the Financial Shared Service Center of enterprises, which provides the optimization practice experience for other domestic enterprises, and provides a useful reference for the theoretical and practical research of carbon finance. This paper adopts a combination of literature analysis and case study. After optimizing and analyzing the Financial Shared Service Center of Company X, the following conclusions are drawn: 1) the demand for digital transformation and the scale of enterprise operation are important criteria for judging whether it is necessary to establish a



Financial Shared Service Center. 2) In the comprehensive optimization of the Financial Shared Service Center, optimizing the system process is a crucial core link. 3) In order to ensure the successful implementation of the Financial Shared Service Center, the company needs to take specific measures in terms of organizational mechanism, resource guarantee and capacity building, so as to make full use of advantageous resources in the process of strategy implementation, form an efficient and agile operation mechanism, enhance core competence, stimulate the mobility of employees, and create favorable conditions for financial transformation.

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