

# Research on the Efficiency Evaluation of Company A's Financial Shared Service Center

Caiyu Song\*

School of Business, Guilin University of Electronic Science and Technology, Guilin, 541004, China

\*Corresponding author: Caiyu Song, 1163766652@qq.com

**Copyright:** 2025 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY-NC 4.0), permitting distribution and reproduction in any medium, provided the original author and source are credited, and explicitly prohibiting its use for commercial purposes.

**Abstract:** Against the backdrop of the widespread global application of financial shared services and domestic policies driving enterprises' digital transformation, Company A, an enterprise in the energy industry, established a Financial Shared Service Center (FSSC) in 2016 to address issues such as inconsistent accounting, cumbersome processes, and weak risk control in the traditional decentralized financial model. Adhering to the principles of comprehensiveness, systematicness, goal-orientation, and feasibility, this paper combines the Analytic Hierarchy Process (AHP) to establish an evaluation framework consisting of 4 first-level indicators ("Strategic Planning", "Information System", "Organizational Personnel", and "Process Management") and 16 second-level indicators. After scoring by over 10 experts from Company A, constructing a judgment matrix, and conducting a consistency test (all CR values < 0.1), it is determined that "Process Management" and "Information System" have relatively high weights, while indicators such as "Process Effectiveness" are core second-level indicators. The study finds that only the "Strategic Planning" dimension of Company A's FSSC meets the standards, while there are shortcomings in the three dimensions of "Information System" (e.g., subpar system efficiency), "Organizational Personnel" (e.g., insufficient personnel management quality), and "Process Management" (e.g., imbalanced process effectiveness). Based on this, optimization proposals are put forward from three aspects: information system integration, improvement of organizational personnel assessment and incentives, and process reconstruction with risk control. These proposals provide references for the improvement of Company A's FSSC and similar practices in the energy industry.

**Keywords:** FSS; AHP; Evaluation Indicator System; Effectiveness Evaluation; Energy Industry

**Published:** Sept 15, 2025

**DOI:** <https://doi.org/10.62177/apemr.v2i5.592>

## 1.Introduction

Amid the wave of global economic integration and digital transformation, the scale expansion and diversified development of enterprise groups have driven continuous innovation in their financial management models. As an innovative financial management model, the Financial Shared Service Center (FSSC) consolidates repetitive and standardized financial operations scattered across various business units, enabling resource integration, cost reduction, and efficiency improvement. Since the 1980s, when General Electric Company of the United States established the first FSSC, this model has been widely adopted worldwide. According to the 2024 Global Shared Services Survey Report released by Deloitte, 78% of enterprises globally have implemented financial shared services.<sup>[1]</sup> Among them, 70% of enterprises reported achieving cost reduction through shared services, and 65% believed that the efficiency of financial processes had been improved.

In China, with the advancement of economic restructuring and high-quality development, policies have continuously promoted enterprises' digital transformation and innovation in financial management. In 2024, the Ministry of Finance revised and issued the Accounting Informatization Work Standards (Finance and Accounting [2024] No. 11) and the Basic Functions and Service Standards for Accounting Software (Finance and Accounting [2024] No. 12), which took effect on January 1, 2025. These standards explicitly require enterprises to strengthen the development of accounting informatization and enhance the digital and intelligent level of financial management, providing policy guidance and standardized guarantees for the development of FSSCs.

As a key enterprise in the energy industry, Company A's business covers power generation, transmission, distribution, and related services, with a large-scale organizational structure and complex business system. Faced with the deepening of energy system reform, the rapid expansion of new energy businesses under the "dual carbon" goal, and the requirements for refined and intelligent financial management in the construction of a new energy system, the traditional decentralized financial model has exposed numerous drawbacks. For instance, inconsistent financial accounting standards among subsidiaries make it difficult to integrate group financial data, and the accuracy and timeliness of data cannot be guaranteed; financial processes are cumbersome with excessive approval links, leading to long processing cycles for businesses such as expense reimbursement and fund settlement, which affects operational efficiency; risk control is decentralized, and the ability to identify, early warn, and respond to financial risks is insufficient, failing to meet the operational needs of strong supervision and high risks in the energy industry. To break through these bottlenecks, Company A fully launched informatization initiatives in 2016, gradually building and putting into operation an FSSC that covers core financial businesses including expense reimbursement, accounts payable, fund settlement, and tax accounting. The goal is to improve the efficiency of financial operations and strengthen group control capabilities through centralized and standardized management.

As a key enterprise in the energy industry, Company A's business covers power generation, transmission, distribution, and related services, with a large-scale organizational structure and complex business system. Faced with the deepening of energy system reform, the rapid expansion of new energy businesses under the "dual carbon" goal, and the requirements for refined and intelligent financial management in the construction of a new energy system, the traditional decentralized financial model has exposed numerous drawbacks. For instance, inconsistent financial accounting standards among subsidiaries make it difficult to integrate group financial data, and the accuracy and timeliness of data cannot be guaranteed; financial processes are cumbersome with excessive approval links, leading to long processing cycles for businesses such as expense reimbursement and fund settlement, which affects operational efficiency; risk control is decentralized, and the ability to identify, early warn, and respond to financial risks is insufficient, failing to meet the operational needs of strong supervision and high risks in the energy industry. To break through these bottlenecks, Company A fully launched informatization initiatives in 2016, gradually building and putting into operation an FSSC that covers core financial businesses including expense reimbursement, accounts payable, fund settlement, and tax accounting. The goal is to improve the efficiency of financial operations and strengthen group control capabilities through centralized and standardized management.

From an academic research perspective, evaluating the operational effectiveness of FSSCs is a key link to ensure their continuous optimization and value creation. Traditional evaluation methods mostly focus on the analysis of financial indicators (e.g., cost reduction rate, process efficiency improvement), which cannot fully reflect the multi-dimensional operational status of FSSCs in terms of process optimization, technical support, personnel capabilities, service quality, and risk control. In recent years, the Analytic Hierarchy Process (AHP)—an effective multi-criteria decision-making and comprehensive evaluation method—has been gradually applied in the field of enterprise management. Proposed by American operations researcher Thomas L. Saaty in the 1970s, AHP decomposes complex problems into a target layer, criterion layer, and alternative layer, constructs a judgment matrix, and calculates the relative importance weights of elements at each layer. This realizes the combination of qualitative and quantitative analysis, providing a scientific basis for multi-factor decision-making.

At present, research on applying AHP to the evaluation of FSSC operational effectiveness is still in the exploratory stage. Particularly in the energy industry, due to the uniqueness of its business (e.g., asset intensiveness, strong production

continuity, and significant policy impact), existing research results cannot fully meet the needs of industry-specific characteristics. Therefore, this study takes Company A's FSSC as the research object and innovatively constructs a comprehensive evaluation model based on AHP. By systematically sorting out the key influencing factors of FSSC operations and using AHP to determine the weights of each factor, this study aims to accurately identify the advantages and shortcomings of Company A's FSSC operations, provide targeted strategies for its continuous optimization, and at the same time offer theoretical and practical references for FSSC practices in the energy industry and other similar industries. This enriches and improves the theoretical and methodological system for evaluating FSSC operational effectiveness.

## **2. Construction of the Operational Effectiveness Evaluation System for Company A's FSSC**

### **2.1 Construction Principles**

**Comprehensiveness Principle:** An FSSC encompasses multiple capabilities. In constructing the indicator system, all key dimensions of the FSSC should be covered to ensure that the evaluation system can objectively and comprehensively reflect the operational status of the FSSC.<sup>[2]</sup>

**Systematic Principle:** In establishing the evaluation indicator system, systematic thinking should be followed to ensure logical relevance among various evaluation dimensions and form a complete evaluation system.

**Goal-orientation Principle:** The construction of the FSSC-AHP model must be guided by the enterprise's strategic goals. The selected indicators should clarify the development stage of the FSSC, ensuring that the evaluation results can be used to analyze current development deficiencies and provide valuable references for enterprise management decisions.

**Feasibility Principle:** The selection of indicators should consider the feasibility of practical operation. In the actual evaluation process, indicator design should emphasize quantifiability, prioritizing indicators that can be measured through objective data. Additionally, the accessibility of data should be considered, and indicators that are important but difficult to obtain data for should be avoided. This ensures that the model can be smoothly implemented under the enterprise's existing resource conditions.

### **2.2 AHP Hierarchical Analysis Evaluation Model**

AHP is a structured decision-analysis tool. It first decomposes complex decision-making problems into multiple layers, including the target layer and criterion layer. Then, by constructing a judgment matrix, it determines the relative importance among factors at each layer. Next, it calculates the weights of each factor and conducts a consistency test to ensure the rationality of weight distribution. This method helps decision-makers understand problems more clearly and make decisions based on more comprehensive information.

### **2.3 Framework of the Evaluation Indicator System**

By synthesizing research by domestic and foreign scholars on the key factors of FSSCs, this paper identifies the core construction elements of FSSCs: high alignment with strategic planning, high-standard business processes, a reasonable organizational structure, and a diverse and cutting-edge information system.<sup>[3][4]</sup> Based on this, the paper sets "Strategic Planning", "Information System", "Organizational Personnel", and "Process Management" as first-level indicators, which are further subdivided into four aspects: efficiency, quality, cost, and risk. By assigning different weights to each dimension and summing the scores of each dimension according to the weights, the final operational effectiveness evaluation result can be obtained. Based on questionnaires and in-depth interviews, the operational effectiveness of Company A's FSSC can be evaluated using 4 first-level key process area dimensions and 16 second-level subordinate indicators. These include: Strategic Planning (A) with Cost Adaptability (A1), Service Quality (A2), Operational Efficiency (A3), and Risk Resilience (A4); Information System (B) with Cost Rationality (B1), System Quality (B2), System Efficiency (B3), and System Security (B4); Organizational Personnel (C) with Human Resource Cost Adaptability (C1), Personnel Management Quality (C2), Personnel Effectiveness (C3), and Personnel Risk (C4); and Process Management (D) with Process Cost Adaptability (D1), Process Quality (D2), Process Effectiveness (D3), and Process Risk (D4). For details, see Table 1.

Table1: Evaluation Index System for Operational Effectiveness of Company A's Financial Shared Service Center

First-level Indicators	Code	Second-level Indicators	Code
Strategic Planning	A	Cost Adaptability	A1
		Service Quality	A2
		Operational Efficiency	A3
		Risk Resilience	A4
Information System	B	Cost Rationality	B1
		System Quality	B2
		System Efficiency	B3
		System Security	B4
Organizational Personnel	C	Human Resource Cost Adaptability	C1
		Personnel Management Quality	C2
		Personnel Effectiveness	C3
		Personnel Risk	C4
Process Management	D	Process Cost Adaptability	D1
		Process Quality	D2
		Process Effectiveness	D3
		Process Risk	D4

### 3.Weight Allocation of Evaluation Indicators and Effectiveness Analysis of Company A's FSSC-AHP Model

#### 3.1 Weight Allocation of Evaluation Indicators for Company A's FSSC-AHP Model

To clarify the weight of each indicator, more than 10 enterprise experts from Company A were invited to score the importance of each indicator during the research process. The scoring results were then validated and summarized within the company, and a judgment matrix  $S = (u_{ij})_{p \times p}$  was constructed. The final judgment matrices for indicators at all levels are shown in Table 2.

Table2: Judgment Matrices of Indicators at All Levels

First-level Indicators	A	B	C	D
A	1			
B	-	1		
C	-	-	1	
D	-	-	-	1

In Tables 3 to 8,  $W_i$  represents the weight of each indicator. To determine whether the judgment matrix has satisfactory consistency, the Consistency Index (CI) should be compared with the Random Index (RI). The Consistency Ratio (CR) is calculated as  $CR = CI/RI$ . When  $CR = 0$ , the judgment matrix has excellent consistency; when  $CR < 0.1$ , the consistency is good; otherwise, the consistency of the judgment matrix is poor, and the values in the matrix should be revised until  $CR < 0.1$ .

Table3: Judgment Matrix, Weight Allocation and Consistency Test of First-level Indicators

Criterion Layer	Strategic Planning (A)	Information System (B)	Organizational Personnel (C)	Process Management (D)	Weight (W)	CI	CR
Strategic Planning (A)	1	1/2.3589	1/2.0567	1/2.6451	0.151	0.04	0.045
Information System (B)	2.3589	1	1/0.8563	1/1.3614	0.262		
Organizational Personnel (C)	2.0567	0.8563	1	1/1.5126	0.236		
Process Management (D)	2.6451	1.3614	1.5126	1	0.351		

Table4: Judgment Matrix, Weight Allocation and Consistency Test of Second-level Indicators for Strategic Planning (A)

Strategic Planning (A)	Cost Adaptability (A1)	Service Quality (A2)	Operational Efficiency (A3)	Risk Resilience (A4)	Relative Weight of Second-level Indicators(%)	CI	CR
Cost Adaptability (A1)	1	2.1	0.9	2.8	31.5	0.028	0.031
Service Quality (A2)	1/2.1	1	0.429	1.333	15.2		
Operational Efficiency (A3)	1/0.9	2.333	1	3.111	43.8		
Risk Resilience (A4)	1/2.8	0.75	0.322	1	9.5		

Table5: Judgment Matrix, Weight Allocation and Consistency Test of Second-level Indicators for Information System (B)

Information System (B)	Cost Rationality (B1)	System Quality (B2)	System Efficiency (B3)	System Security (B4)	Relative Weight of Second-level Indicators(%)	CI	CR
Cost Rationality (B1)	1	0.45	0.38	1.9	14.8	0.023	0.026
System Quality (B2)	1/0.45	1	0.844	4.222	28.5		
System Efficiency (B3)	1/0.38	1.185	1	5	47.2		
System Security (B4)	1/1.9	0.237	0.2	1	9.5		

Table6: Judgment Matrix, Weight Allocation and Consistency Test of Second-level Indicators for Organizational Personnel (C)

Organizational Personnel(C)	Human Resource Cost Adaptability(C1)	Personnel Management Quality(C2)	Personnel Effectiveness (C3)	Personnel Risk (C4)	Relative Weight of Second-level Indicators(%)	CI	CR
Human Resource Cost Adaptability (C1)	1	0.32	1.8	0.45	15.8	0.031	0.034
Personnel Management Quality (C2)	1/0.32	1	5.625	1.406	52.5		
Personnel Effectiveness (C3)	1/1.8	0.178	1	0.25	9.8		
Personnel Risk (C4)	1/0.45	0.711	4	1	21.9		

Table7: Judgment Matrix, Weight Allocation and Consistency Test of Second-level Indicators for Process Management (D)

Process Management (D)	Process Cost Adaptability (D1)	Process Quality (D2)	Process Effectiveness (D3)	Process Risk (D4)	Relative Weight of Second-level Indicators(%)	CI	CR
Process Cost Adaptability (D1)	1	0.48	0.21	1.8	11.8	0.025	0.028
Process Quality (D2)	1/0.48	1	0.438	3.75	22.7		
Process Effectiveness (D3)	1/0.21	2.286	1	8.571	55.2		
Process Risk (D4)	1/1.8	0.267	0.117	1	10.3		

Table8: Summary Table of Weights

First-level Indicators	Weight of First-level Indicators(%)	Second-level Indicators	Relative Weight of Second-level Indicators(%)	Comprehensive Weight of Second-level Indicators(%)
Strategic Planning (A)	15.1	Cost Adaptability (A1)	31.5	4.76
		Service Quality (A2)	15.2	2.29
		Operational Efficiency (A3)	43.8	6.61
		Risk Resilience (A4)	9.5	1.43
Information System (B)	26.2	Cost Rationality (B1)	14.8	3.88
		System Quality (B2)	28.5	7.47
		System Efficiency (B3)	47.2	12.37
		System Security (B4)	9.5	2.49
Organizational Personnel (C)	23.6	Human Resource Cost Adaptability (C1)	15.8	3.73
		Personnel Management Quality (C2)	52.5	12.39
		Personnel Effectiveness (C3)	9.8	2.31
		Personnel Risk (C4)	21.9	5.17
Process Management (D)	35.1	Process Cost Adaptability (D1)	11.8	4.14
		Process Quality (D2)	22.7	7.97
		Process Effectiveness (D3)	55.2	19.38
		Process Risk (D4)	10.3	3.62

### 3.2 Analysis of Company A's FSSC-AHP Model

Ten experienced experts (managers and above) from Company A's FSSC evaluated the indicator value system layer, and each expert scored the indicators at the indicator layer. The scoring results are shown in Table 9.

Table 9: Summary Table of Scores and Target Values of Second-level Indicators

First-level Indicators	Second-level Indicators	Relative Weight of Second-level Indicators(%)	Comprehensive Weight of Second-level Indicators(%)	Current Score	Internal Target Value
Strategic Planning (A)	Cost Adaptability (A1)	31.5	4.76	3.8	3.5
	Service Quality (A2)	15.2	2.29	3.6	3.5
	Operational Efficiency (A3)	43.8	6.61	3.7	3.5
	Risk Resilience (A4)	9.5	1.43	3.6	3.5
Information System (B)	Cost Rationality (B1)	14.8	3.88	2.8	3.5
	System Quality (B2)	28.5	7.47	2.7	3.5
	System Efficiency (B3)	47.2	12.37	2.5	3.5
	System Security (B4)	9.5	2.49	3.6	3.5



First-level Indicators	Second-level Indicators	Relative Weight of Second-level Indicators(%)	Comprehensive Weight of Second-level Indicators(%)	Current Score	Internal Target Value
Organizational Personnel (C)	Human Resource Cost Adaptability (C1)	15.8	3.73	3.6	3.5
	Personnel Management Quality (C2)	52.5	12.39	2.6	3.5
	Personnel Effectiveness (C3)	9.8	2.31	2.8	3.5
	Personnel Risk (C4)	21.9	5.17	3.6	3.5
Process Management (D)	Process Cost Adaptability (D1)	11.8	4.14	2.7	3.5
	Process Quality (D2)	22.7	7.97	2.6	3.5
	Process Effectiveness (D3)	55.2	19.38	2.4	3.5
	Process Risk (D4)	10.3	3.62	3.6	3.5

### 3.3 Result Analysis of Company A's FSSC-AHP Model

Based on the comparison between the scores of the second-level indicators and the internal target values, the “Strategic Planning” dimension fully meets the standards and requires no additional attention; however, the three core dimensions of “Information System”, “Organizational Personnel”, and “Process Management” have multiple indicators that fail to meet the standards.

#### 3.3.1 Information System Layer: Insufficient Core Operational Capabilities and Limited Support for Business Efficiency

The three core indicators of “System Efficiency”, “System Quality”, and “Cost Rationality” under the Information System all fail to meet the targets, covering the entire “efficiency-quality-cost” chain. This reflects insufficient overall adaptability and operational stability of the system. From an operational perspective, the lack of a unified coordination mechanism among multiple systems forces cross-platform operations for business processing, increasing redundant links and directly reducing processing efficiency; the poor alignment between system functions and business needs makes it impossible to adapt to specific business scenarios, requiring manual supplementary operations, which not only reduces processing quality but also increases hidden costs; at the same time, the unbalanced allocation of system operation and maintenance resources leads to idle functions occupying costs and insufficient support for core needs, further exacerbating the vicious cycle of “poor system user experience-weak business support capabilities” and failing to meet the basic requirements for the efficient operation of financial shared services.

#### 3.3.2 Organizational Personnel Layer: Imperfect Management System and Underutilized Personnel Value

The two key indicators of “Personnel Management Quality” and “Personnel Effectiveness” under Organizational Personnel fail to meet the standards, and “Personnel Management Quality”—as a core dimension—shows a significant gap. This exposes the dual shortcomings of the management system in “development support-capability stimulation”. From a mechanism perspective, the lack of a clear design for career development paths, vague promotion standards, and a single-level structure leave employees without guidance for growth and insufficient sense of professional belonging; the performance appraisal and incentive system focuses on single quantitative indicators, ignoring qualitative capabilities and collaborative contributions, and the small incentive gap makes it difficult to stimulate employees’ initiative and innovation. Against this backdrop, personnel effectiveness is naturally limited: on the one hand, work efficiency is lower than the target, with long processing times for core businesses; on the other hand, professional capabilities are poorly aligned with business needs, with low mastery rates of key skills and excessive business error rates, preventing the effective conversion of personnel value into operational advantages of the FSSC.

### **3.3.3 Process Management Layer: Imbalanced End-to-End Operation and Insufficient Business Flow Efficiency and Value**

The three indicators of “Process Effectiveness”, “Process Quality”, and “Process Cost Adaptability” under Process Management all fail to meet the standards, covering the entire life cycle of process operation. Moreover, “Process Effectiveness”—as a high-weight dimension—shows the largest gap, highlighting systematic problems in process design and management. From a process perspective, redundant node settings, excessive cross-departmental approval levels, and lack of time-limit control result in business flow cycles far exceeding the target, leading to low processing efficiency for core businesses; process design fails to fully consider the characteristics of industry-specific businesses, and there is a lack of standardized norms for handling exceptional scenarios, resulting in large differences in processing methods, which not only reduces process compliance but also increases error rates; at the same time, the imbalance between process operation costs and value output leads to increased labor costs from redundant nodes and hidden losses from process delays, with cost inputs not effectively converted into business value, failing to support the refined operational needs of the FSSC.

## **4. Optimization Plan for Company A’s FSSC**

### **4.1 Optimization at the Information System Layer: Accelerate Data Migration and Eliminate System Redundancy**

Multi-platform data migration should follow the principles of “safety first, accuracy and efficiency” and establish a full-process management and control system. First, conduct an inventory of data assets across multiple platforms, clarify the scope of core and non-core data, and develop a classified migration strategy based on business characteristics and data value. Priority should be given to ensuring the migration of data related to strategic businesses (e.g., new energy financial data).

During the migration implementation, it is necessary to establish operational standards of “unified standards and controllable quality”: unify data formats and calibers to ensure compatibility between migrated data and existing systems; establish a data verification mechanism to conduct multiple rounds of verification from dimensions such as integrity, accuracy, and consistency, avoiding data deviations that affect business continuity; at the same time, develop emergency plans to address risks such as system failures and data loss that may occur during migration, ensuring the smooth progress of migration work.

System integration should aim to “eliminate redundancy and improve collaboration” and build an integrated system architecture: promptly clean up and take offline migrated platforms to free up hardware and operation and maintenance resources; sort out the functions of existing systems, eliminate redundant functions that are disconnected from business needs and have extremely low usage rates, and optimize system performance; achieve real-time synchronization and interconnected sharing of business data and financial data by connecting data interfaces of various systems, eliminating data silos and providing technical support for the efficient operation of financial shared services.

### **4.2 Optimization at the Organizational Personnel Layer: Improve the Assessment System and Stabilize the Talent Team**

The optimization of the performance appraisal system should adhere to the principles of “comprehensiveness and objectivity, clear orientation, and effective incentives” and build a multi-dimensional evaluation system. In designing appraisal dimensions, break through the limitations of traditional single quantitative indicators, integrate qualitative and quantitative indicators such as data application contributions, business department satisfaction, and team collaboration, and fully cover employees’ performance in business processing, value creation, and service quality. Special emphasis should be placed on strengthening the strategic relevance of key performance indicators for core positions.

The formulation of appraisal standards should follow the principles of “scientific rationality and dynamic adjustment”: combine the characteristics of energy financial shared services and strategic goals to clarify the evaluation standards and weights of each indicator; establish a dynamic optimization mechanism for appraisal standards, and regularly revise appraisal indicators and standards based on business development, strategic adjustments, and market changes to ensure that the appraisal system always adapts to the enterprise’s development needs.

The design of the incentive mechanism should focus on “differentiation and long-term effectiveness”, break the equalitarianism, and establish an incentive system closely linked to performance: widen the incentive gap between employees



of different performance levels, highlighting the incentive intensity for outstanding employees and core talents; improve the long-term incentive mechanism, linking employee performance to career development, salary growth, and training opportunities to enhance employees' sense of belonging and loyalty; at the same time, establish smooth performance feedback channels, promptly feedback appraisal results to employees, help employees clarify improvement directions, and improve employee satisfaction and retention rates.

### **4.3 Optimization at the Process Management Layer: Standardize Process Settings and Improve Operational Efficiency**

Process optimization should take “streamlining and efficiency, compliance and controllability” as the core and follow the logic of “systematic sorting-problem diagnosis-reconstruction and optimization-continuous improvement”. First, comprehensively sort out existing business processes, identify problems such as redundant nodes, overlapping responsibilities, and delayed approvals in processes based on the characteristics of energy financial shared services, and clarify the focus and direction of process optimization.

Process reconstruction should follow the principles of “standardization and modularization”: integrate overlapping links, streamline unnecessary approval levels, optimize process paths, and improve business processing efficiency; design modular process templates for different business types (e.g., conventional accounting, special project financial processing) to ensure that processes adapt to various business scenarios; at the same time, establish process standards and norms, clarify the division of responsibilities, operational requirements, and time-limit standards for each link, and reduce human operational deviations.

Risk prevention and control should be integrated into the entire life cycle of processes, and a management and control mechanism of “pre-event prevention, in-event monitoring, and post-event improvement” should be established: embed compliance verification nodes and risk early warning mechanisms in process design to prevent business risks in advance; promptly detect and intervene in process abnormalities by monitoring process operation data in real time; regularly conduct process compliance audits and effectiveness evaluations, summarize problems and experiences, and continuously optimize the process system to ensure the standardized and efficient operation of processes and improve the quality and risk control capabilities of financial shared services.

## **5. Conclusion**

### **5.1 Summary**

This study focuses on the FSSC of Company A in the energy industry and conducts research on the evaluation and optimization of operational effectiveness combined with AHP. First, against the backdrop of a global FSSC application rate of 78% and domestic policies driving the proportion of A-share listed companies with FSSCs to rise to 45% by the end of 2024, this study takes Company A's FSSC—launched in 2016 and covering multiple core financial businesses—as the research object, aiming to address issues such as inconsistent accounting standards, cumbersome processes, and weak risk control in the company's traditional decentralized financial model.

Following the principles of comprehensiveness, systematicness, goal-orientation, and feasibility, the study constructs an AHP evaluation model, establishing 4 first-level indicators (“Strategic Planning”, “Information System”, “Organizational Personnel”, and “Process Management”) and 16 second-level indicators. After scoring by over 10 experts from Company A, constructing a judgment matrix, and conducting a consistency test (all CR values < 0.1), it is determined that “Process Management” (35.1%) and “Information System” (26.2%) are first-level indicators with relatively high weights, while “Process Effectiveness” (19.38%) and “Personnel Management Quality” (12.39%) are core second-level indicators.

The current situation evaluation shows that only the “Strategic Planning” dimension of Company A's FSSC meets the standards, while there are obvious shortcomings in the three dimensions of “Information System” (e.g., subpar system efficiency and quality), “Organizational Personnel” (e.g., insufficient personnel management quality and effectiveness), and “Process Management” (e.g., imbalanced process effectiveness and quality). Based on this, the study proposes optimization plans from three aspects: information system (data migration and system integration), organizational personnel (improvement of assessment and incentive mechanisms), and process management (process reconstruction and risk control), providing

references for the improvement of Company A's FSSC and similar practices in the energy industry.

## 5.2 Research Limitations

**Limitations in Research Sample and Scope:** The study only takes the FSSC of Company A—a single energy enterprise—as the research object and does not include cases of enterprises with other scales and business structures in the industry. The single sample leads to insufficient industry universality of the research conclusions, making it difficult to fully reflect the common problems and differentiated characteristics of FSSC operations among different types of enterprises in the energy industry.

**Insufficiencies in Evaluation Indicators and Data Dimensions:** Although the evaluation indicators cover four core dimensions, they do not fully integrate the financial characteristics of new energy businesses under the “dual carbon” goal in the energy industry to design special indicators; data acquisition relies on scores from internal enterprise experts and internal target values, lacking comparisons with external industry benchmark data, making it impossible to accurately judge the competitiveness of Company A's FSSC in the industry.

**Insufficiencies in the Implementability and Effect Verification of Optimization Plans:** The proposed optimization plans are mainly based on theoretical design and do not formulate detailed implementation paths for resource investment, time cycles, and potential risks of plan implementation; moreover, no mechanism for tracking and verifying the effects after plan implementation is established, making it impossible to quantitatively evaluate the actual improvement effect of optimization measures on FSSC operational effectiveness.

**Lack of a Dynamic Evaluation Perspective:** The study adopts a static evaluation method and does not consider the impact of dynamic factors such as enterprise business expansion, policy changes (e.g., adjustments to new energy policies), and technological iteration (e.g., the in-depth application of AI in the financial field) on FSSC operations. This makes it difficult to achieve long-term and dynamic monitoring and evaluation of FSSC operational effectiveness.

## Funding

no

## Conflict of Interests

The authors declare that there is no conflict of interest regarding the publication of this paper.

## Reference

- [1] Chen, J. L. (2024). Research on the Operation Optimization of Z Company's Financial Shared Service Center under the Digital Background [Master's Thesis]. Xi'an Shiyou University. DOI: 10.27400/d.cnki.gxasc.2024.000627.
- [2] Yang, J. J. (2023). Research on the Development of Single - function Shared Service Centers to Multi - function Shared Service Centers in China. *Business Information*, (20), 134 - 137.
- [3] Xing, X. (2023). Research on the Optimization of Performance Evaluation of TJ Bridge Construction Company's Financial Shared Service Center [Master's Thesis]. Xi'an Shiyou University. DOI: 10.27400/d.cnki.gxasc.2023.000280.
- [4] Zhang, W., & Sheng, S. C. (2022). Research on the Capability Maturity Evaluation of Financial Shared Service Centers - A Case Study of G Company. *Economist*, (11), 71 - 74.