

Research on the key factors influencing the construction of Financial Shared Service Center

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Abstract: The article is considered Organization Competence Benchmark(OCB)as construction model to determine the index system of influencing factors for Financial Shared Services Center (FSSC), and uses DEMATEL method to analyze the interaction effects among selected factors influencing the establishment of Financial Shared Services Center. The key influence factors for the construction of Financial Shared Services Center have great significance to the practice and theory.

1. Introduction

With the advent of the era of sharing economy, it has become an important topic confronted by a business conglomerate that how to strengthen the financial control of subsidiaries and each flow units, and how to reduce the cost of financial management effectively, end up providing a health cash flow for the whole group(Janssen, 2008). In this case, Financial Shared Services emerged. Financial Shared Service integrates and classifies all kinds resources reasonably, standardizes the basic works with high repeatability, handles core business or works with highly technical requirements separately(Jackson, 1997), so as to reduce operating costs, to improve productivity, to save human resources, and to achieve higher economic benefits. Financial Shared Service Centre is the business service center where Financial Shared Services are applied.

The problem is that nothing can be completely perfect. Though corporations have gained fruitful achievements through utilizing Financial Shared Service Center, the abstract construction of practical progress exerts so many unsolved problems(Bangxiu Zhong, 2012). More and more large corporations in other industries, such as communication industry, insurance industry, etc., attempted to establish Financial Shared Service Centers. Nevertheless, many homegrown corporations were blindness in the process of FSSC construction, and did not comprehend how to analyze their own features and execute a superior design through optimization(Ying He, 2013). In facts, when applying theoretical FSSC models into practice, many corporations are easy to get farther and farther from their expectations since for their low cognitive level and the model's incompatible property matched with real management and information level.

In order to solve these problems, this paper, based on the framework of Organizational Competence Benchmark (OCB) for international project management, establishes the influencing factor model for the establishment of Financial Shared Service Center. In addition, Laboratory Decision making Trial and Evaluation Laboratory (DEMATEL) was used to conduct a confirmatory study on the importance degree and the mutual influence relationship among the factors of Financial Shared Service Center, so as to find out the key factors influencing a company to establish a FFSC.

2. Construct the index system of influencing factors of FSSC

2.1 Model basis: international Project Management Professional Organization competency benchmark (OCB)

Organizational Competence Benchmark (OCB) divides the project management ability into five parts: Governance, Management, Organizational Alignment, People's Competences, and Resources.

The five parts conform to all the aspects that a project needs to cover before, during, and after the implementation. Since the construction of Financial Shared Service Center is equivalent to the implementation of a common project, OCB is suitable for the research.

2.2 Establishment of Index system of influencing factors for constructing FSSC

Based on 18 basic indexes of five dimensions of OCB model, the questionnaire was issued to accounting-relevant financial experts, managers and project personnel who engaged in Financial Shared Service by using the Likert five-point scale. According to the result of the collected questionnaire, six irrelative indexes were selected, and the final index system of influencing factors was determined as shown in Table 1.

Table 1. Index System of Key Factors Influencing the Establishment of FSSC

Primary Index	Secondary Index
Governance (D1)	Strategy & Mission (c11)
	Development (c12)
	Leadership (c13)
Management (D2)	Project Management (c21)
	Solution Management (c22)
Organizational Alignment (D3)	Process Integration (c31)
	Structure Integration (c32)
People's Competences (D4)	Staff Competency Requirements (c41)
	Staff Competency Development (c42)
Resources (D5)	Resources Requirement (c51)
	Resources Acquisition (c52)
	Resources Development (c53)

3. DEMATEL Method: A Method to identify the key factors

By questionnaire survey above, we have screened out relatively critical indicators and constructed fundamental evaluation system for FSSC. DEMATEL will be used to determine the interaction among indicators and dimensions in the key factor model.

3.1 DEMATEL Demonstration

DEMATEL is a kind of approach to assist the complex and systematic factorial analysis by using graph theory and matrix theory. It studies the interrelationship among indicators and weighs the importance level of them in the whole system. DEMATEL strips out the key factor model of the study outputs, and builds the influence diagram finally.

In our research, firstly, we need to calculate the results of interaction matrices for the interaction impacts among indicators. Secondly, on the basis of questionnaires, which is designed for experts in financial management field or interviewees to express their opinions about such impacts, the paper interprets the logic relationships and direct impacts among the key indicators in the system through determinant calculus, judge whether such interaction is strong or weak, then filter the weak indicators, and finally simplify the model structure. In a word, the purpose of DEMATEL is to make complicated task simple. The specific application steps are as follows.

3.1.1 Constructing average score matrix

Experts scored the direct impacts between groups of indicators. The questionnaires is designed by Lickert Five-Point Scale—"no impact-0", "lower impact-1", "general impact-1", "higher impact-3", "highest impact-4". Then we gather and compile these scores and calculate the matrix A of average scores. a_{ij} indicates the impact of index i on index j.

$$A=[a_{ij}]n*n \quad (1)$$

3.1.2 Constructing direct impact matrix

Sum up each row of matrix A. Set the max value of each row is A_{max} . Calculate the direct impact matrix G.

$$G=A/A_{max} \quad (2)$$

3.1.3 Constructing total impact matrix

Matrix T is a matrix sum up the direct and indirect impact, and it calculate the potential impacts among indicators. The effectiveness of the power of a normalized matrix N declines constantly. $\lim_{q \rightarrow \infty} (I + N + N^2 + \dots N^q) = (I - N)^{-1}$ Among the formula, I is the $n \times n$ unit matrix. Sum up each element to calculate the total impact matrix T. t_{ij} indicates the impact of index i on index j.

$$T=[t_{ij}]_{n \times n}, i, j=1, 2, \dots, n \quad (3)$$

3.1.4 Calculate the affecting degree and affected degree

To get the affecting degree, sum up each row of matrix T. To get affected degree, sum up each column of matrix T.

3.1.5 Calculate the centrality and causality of each factor

Centrality is the sum of affecting degree and affected degree. Centrality denotes affected degree of one factor on the whole factor system. Causality is the difference between affecting degree and affected degree. If causality value is positive, the factor affects other factors to a high degree. The factor is called cause factor. If causality value is negative, the factor is affected by other with a high degree. The factor is called result factor.

3.1.6 Draw Descartes coordinate system

Centrality is the horizontal axis and causality is the vertical axis. The position of each factor in the coordinate system is marked. Analyze the importance level of each factor. In Matrix T, O_i indicates the total degree that factors in the row affect all the factors in other rows directly or indirectly, and I_i indicates the total degree that factors in the column affect all the factors in other columns directly or indirectly. In this way (O_i+I_i) can be seen as the importance degree of dimension i in the system, which we have mentioned above, centrality. The higher the value of (O_i+I_i) is, the closer the relationship between the factor itself and the dimension that the factor in is. (O_i-I_i) (Causality) is the contribution level of dimension i in the system. When the value of (O_i-I_i) is positive, the factor tend to be classified as a cause factor. When the value of (O_i-I_i) is negative, the factor tends to be classified as a result factor.

3.2 Identification of Key Factors Influencing the Establishment of FSSC

Using the DEMATEL method, the calculation process is as described in steps 1-6 of DEMATEL above. And the factors that affect the construction of the Financial Shared Service Center are shown in figure 1.

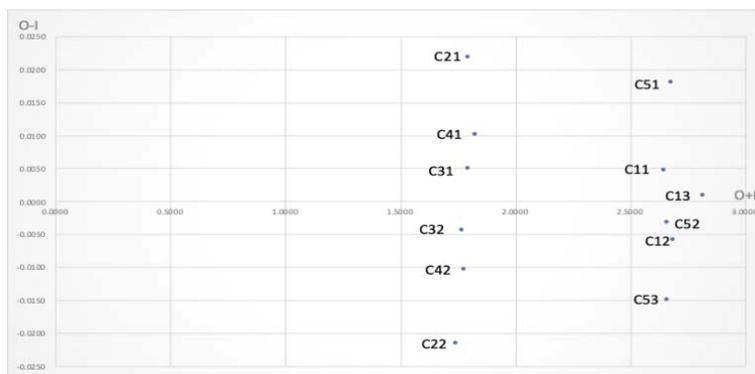


Fig.1 Relationship Chart of factors influencing the Construction of FSSC

3.3 Analysis of Causality

The cause factors directly affect the whole system and play a leading role in the system. According to Fig.1, The order of influencing factors based on the degree of cause from high to low is as follows: c21_c51_c41_c31_c11_c13_c52_c32_c12_c42_c53_c22. The values of Project Management (c21), Resource Requirements (c51), Staff Competency Requirements (c41), Process Integration (c31), Strategy & Mission (c11), and Leadership (C13) are all positive. So they all belong to the type of cause factor. The remaining values of Resource Acquisition (C52), Structural Integration (C32), Development (c12), Staff Competency Development (c42), Resource Development (c53) and Solution Management (c22) were all negative, so they all belong to the type of result factor.

4. Conclusion

The paper regards the construction of FSSC as the implementation of a project based on the company strategic objectives, from the view of project management, through the method of model reference, and based on Organization Capability Benchmark (OCB) model. Then the DEMATEL method is used to process the data obtained by the questionnaires. According to the rank of causality of each factor and dimension, we can know that the key influencing factors of constructing the FSSC are Project Management, Resource Requirements, Staff Competency Requirements, Process Integration, Strategy & Mission, and Leadership. If a corporation prepares to build a FSSC, the research in this paper will provide the company reference in the process of construction and avoid the risks and uncertainty. For the companies that have implemented the FSSC, they can use the model in the paper to formulate the index system of influencing factors, to weigh the performance of these factors influencing FSSC, and to focus on the following performance of the mentioned six key influencing factors, thus providing theoretical support for the practice of FSSC.

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