

Financial Sharing Service Quality: Evidence from X Company[†]

Huabo Yue^{1,*} and Pankaewta Lakkanawanit²

¹College of Graduate Studies, Walailak University, Nakhon Si Thammarat 80160, Thailand

²School of Accountancy and Finance, Walailak University, Nakhon Si Thammarat 80160, Thailand

(*Corresponding author's e-mail: 1245019285@qq.com)

Abstract

This studies aims to analyze the quality of financial sharing services using SERVQUAL measurement method and make suggestions to improve the quality of financial sharing services. The research takes the theory of process re-engineering as the theoretical framework. Referring to the SERVQUAL measurement method of service quality research, this paper selects the reliability, responsiveness, guarantee and empathy factors. According to the actual development of financial sharing service in the Chinese market, an internal control factor is added, forming 5 factors affecting the quality of financial sharing service. The sample was 246 employees from the X Company Financial Shared Services Center. The basic information of the survey includes age, working hours, and educational background. This study found that the employees of the Financial Sharing Service Center of X Company agreed that the obvious factors affecting the quality of the financial sharing service were responsiveness and guarantee, followed by empathy, internal control and reliability. However, there is no different level of service quality between age groups, work time, and education level. It is suggested that enterprises pay attention to responsiveness and guarantee in the implementation of financial sharing services, ensure the business processing efficiency and salary level of the financial sharing service center personnel, and then ensure that the efficiency and results of the financial sharing service system meet the development requirements of the company.

Keywords: Financial sharing services, Quality, Efficiency, China

Introduction

As an enterprise in continuous growing at the same time, the enterprise's business is changing in diversification, in order to continuously improve the efficiency of the enterprise, we need to build a comprehensive processing of the center of the business platform, quickly and accurately complete the daily business processing and data results, so the Financial Shared Service Center (FSSC) was born. Financial sharing service centers are often based on cost reduction, separate non-core support activities from business segments, combined into a new division with a separate fair management structure. The FSSC, through an organizational structure, composed of relatively independent units or business divisions and avoid generating duplication of work to improve company performance. By using a higher level of centralization and standardization, enterprises can reduce their administrative costs by up to 30 % (Quinn et al., 2006). Besides, the FSSC unifies the system and process and greatly improve the risk control ability of enterprises (Soalheira, 2007). FSSC originally originated from a very simple idea: To centralize certain transaction functions (such as accounting treatment, employee wages and benefits treatment, etc.) of each branch of the group, so as to achieve scale effect and reduce operating costs. Many Fortune 500 companies have introduced and established a "shared service" operation model. According to a survey by Accenture (Accenture) in Europe, more than 30 multinational companies with " financial sharing service centers in Europe have reduced their financial operating costs by an average of 30 %.

[†]Presented at the Conference in Management: Summer 2022 (July 9, 2022 at Walailak University, Thailand)

With the strong growth of China's economy, the multinational enterprises and regional headquarters in China are increasing year by year, and the international competitiveness of Chinese enterprises is becoming increasingly prominent. The internal control, management and operation optimization of these enterprises has become the tip of the iceberg and gradually surfaced, so IT, HR, especially FSSC, began to be quietly popular. Microsoft, Tesla, GE, ABB, McDonald's and many other enterprises in China have established shared service centers. It is predicted that by 2020, more than 90 % of companies in developed countries and regions such as Europe and the United States will set up shared service centers. Among all kinds of shared service centers, the most popular one in the world is FSSC, where various financial processes are concentrated on a specific platform, usually including financial payable, receivable, general ledger, fixed assets and so on. This model will bring significant results in improving efficiency, cost control, strengthening internal control, information sharing, improving customer satisfaction and resource management.

Through the analysis of the current situation of the financial sharing services of X Company. X company is a large enterprise with a wide range of business. Its financial sharing services use the latest computer information technology, and its financial sharing service functions are relatively complete. X consists of a large number of employees, and I am working in this company, which is conducive to investigation and data collection. On the 1 hand, studying the quality of the financial sharing service quality of X Company can timely find out the problems existing in the operation of the financial sharing service center of X Company and improve them. On the other hand, some experience and lessons can be summarized to promote the planning of other companies to build the financial sharing service centers and avoid the generation of type of problems. This paper summarizes the factors affecting the quality of financial sharing services, and investigates the factors affecting the quality of financial sharing services among employees working in the FSSC of X Company, mainly studying the following 2 issues:

1) To what extent is the level of Financial Sharing Service Quality of company X?

2) Is there any different level of Financial Sharing Service Quality when compare between age, work time, and education level?

Through the research of the above problems and combined with the literature research of scholars on financial sharing services in the industry, this paper takes the factors of financial sharing service quality as the independent variable and financial sharing service quality as the dependent variable, and confirms the relationship between independent and dependent variables through regression analysis. Therefore, the research objectives of this paper are mainly:

1) To explore the level of Financial Sharing Service Quality of company X.

2) To examine different level of Financial Sharing Service Quality when compare between age, work time, and education level.

Literature review

Concept of the financial sharing service.

Financial sharing services originate from the concept of shared services. Shared services were first proposed by Gunn et al. (1993). They believe that the core of sharing is a new management concept of sharing organizational members and technologies when providing services, so that the company can gain competitive advantages from decentralized management. This paper explains what a financial sharing service center is through a literature review and examples.

Quinn (1999), the main founder of shared services research econ out in shared services: Mining for Corporate Gold that shared services are a business operation whose concept is "customer-centered + service charge = business". The customer as the center means: Clear customer base is the background department security, the other departments of the company as a customer, customer actual demand and willing to pay the price of products or services is the biggest business guidance, background department according to these needs and price requirements to design products, provide targeted services.

Bryan (2003), points out that shared services, as an innovative concept and a platform to help companies grow, often extend from the most common financial services to information technology, human

resources and procurement. In today's complex business environment, even if you are not using a shared service, you may be serving a company that uses the model or enjoying the service that is using it.

According to Triplett and Schulman (2000), shared services are to centrally allocate dispersed resources across organizations in the company, and provide financial services to various internal customers with lower operating costs and better services, so as to enhance enterprise value and finally realize the maximization of enterprise value.

Denburgh et al. (2000), believe that the core of shared services is a value-added strategy that concentrates internal transactions of the same nature into a new business unit to provide the required services to internal customers. Shared service is through in one or more places to the integration of personnel, technology and process, will those with economies of scale and scope of financial business into the Shared service center, thus reflects the cost savings, knowledge accumulation and internal and external customer service quality and the application of new technology.

Longphre et al. (1999), sees shared services as part of a sustained, competitive business strategy that eliminates cyclical reversals of concentration and dispersion, allowing companies to save costs and achieve steady returns through integration. Shared service centers provide valuable services to customers, and customers are willing to buy their services many times, and their cost, quality and timing are very competitive. From the research and development of foreign Shared services, in the years after 1993, has gradually made clear the Shared service is as an independent organization entity, through the integration or merger of the company business and centralized configuration, to provide services for the company's business unit, according to the formal or informal service agreement charge service activities.

Chinese scholars have rare specialized research on shared services, mainly in the financial field, and started late. The most representative views include:

According to Zhang et al. (2003), the shared service center exists within the enterprise and serves the internal customers of the enterprise. Secondly, the shared service center operates as an independent business body according to the market mechanism. It provides service to internal customers and charges fees, while the internal customers have the right to choose the service supplier outside the enterprise. The reason why it is called "sharing" is because each business unit within the enterprise no longer sets up their own background departments, and all the background support is uniformly provided by the service sharing center, and they "share" the services of the service center. The services provided by the shared service center for all business units or other departments within the enterprise can include finance, fund management, personnel, information system support, legal consulting, marketing, procurement, research and development, etc.

Shared service is in a way of organization management function, it refers to the enterprise scattered in different business units of financial, human resource management, IT transitional or need to give full play to the professional skills activities, separated from the original business unit, established by the independent entity to provide unified services (Liu, 2004).

Lian (2005), believes that shared services is an innovation of management mode, and the shared service Center, an independent entity, can provide cross-regional and cross-organizational business process processing and expertise services to the group's parent companies and other branches.

Zhang et al. (2008), believes that shared service is a new management mode of multinational enterprise groups, which can significantly reduce the processing cost of group daily affairs, improve efficiency, and support the effective implementation of enterprise group strategy. Therefore, the shared service mode has been widely paid attention from the theoretical and practical circles. The so-called financial sharing service is the management mode established on the basis of the deep change of the financial organization. Enterprise organization will be independent accounting financial organization stripping or relying on the legal entity of financial organization, make the branch of financial organization merger to sharing service center, shared by the financial service center of the group member unit simple, repetitive, common, standardized business, so as to realize the centralized financial management and accounting.

On the basis of the definition of foreign financial sharing service, He and Zhou (2013), proposed that the definition of financial sharing service should emphasize 4 aspects: Combine or merge some independent service activities in companies with multiple operating units, become an independent entity focusing on

providing value-added services to internal customers, no longer set up background support agencies to unify the services of the financial sharing service center; financial sharing service center aims to save costs, improve efficiency, create value, and improve the quality of service to the parent's internal customers.

Wang (2016), believes that starting from the concept of sharing service, it is proposed that financial sharing service does not simply process the financial work at all levels in the accounting center, but establish a new cooperation strategic unit with centralized division and some functions of subsidiaries. Financial sharing emphasizes the reset of enterprise business process, so that business departments have the energy to focus on the improvement of customer value, the mining of business growth and talent training, from the trivial financial accounting, information technology maintenance, resource allocation and other issues, and unified to the financial sharing service center. Sharing services are not only sharing data between departments, but also sharing internal customer services.

Chen and Li (2017), proposed in the creation of financial sharing services of enterprise groups in the era of big data that the financial sharing service center is becoming increasingly mature and become the data center of enterprises. Represents by cloud computing, big data processing, mobile internet, a new round of information technology make financial sharing service center can effectively manage a large number of fragmented data, real-time collection, sorting, analysis, report, to meet the needs of the enterprise financial monitoring, financial planning and strategic decision-making, financial sharing service center has become a support enterprise management decision-making service center.

The basic concept of integrated sharing service and domestic and foreign for financial sharing service concept, financial sharing service refers to a large number of repeated, easy to achieve standardization, flow accounting from the decentralized business department, focus on a new independent operating business unit (financial sharing service center) for process re-engineering, standardization, centralized processing, in order to improve business efficiency, and reduce cost, strengthen control, improve customer satisfaction, create value, and finally improve the group's overall financial management level of a operation management mode.

Take TCL Financial Sharing Service Center of Group Corporation as an example: The whole system framework of Financial Sharing Service Center includes core modules, operational support and basic platform, as shown in the figure below. The core module of the sharing center realizes cost management, fund management, receivables and payable management, tax management, general ledger management, credit approval, fixed asset management, main data management and other business processing. Operation support supports the circulation of the whole financial sharing business. Through the function of image management and dispatching workers, the circulation of paper documents is closely connected with the electronic document process online and offline. The basic platform for customized and flexible application is an effective tool for rapid implementation and rapid operation.

In this study, the financial sharing service center refers to the enterprise group using modern advanced network science and technology, a large number of repeated, easy to standardize, process financial work from the decentralized financial department, by focusing on a separate operating financial sharing service center for unified standard processing to all departments and subsidiaries. The services are provided anytime and accurate financial services to improve business efficiency, and reduce cost, strengthen control, improve customer satisfaction, create value, finally improve the group's overall financial management level of a management model.

Dimensions of quality of financial sharing service

The quality of financial sharing service comprises of 5 dimensions: Internal control, reliability, responsiveness, guarantee and empathy. Parasuraman et al. (1988), the proposed 5GAP model is specifically used to analyze the root causes of quality problems, namely visibility, reliability, responsiveness, guarantee, and empathy. This study integrates previous literature studies, comprehensively extracting internal control, reliability, responsiveness, guarantee and empathy as the independent variable and financial sharing service quality as the dependent variable.

Internal control is to plan the organizational structure, management system and business process of the financial sharing service center, so that the management and operation of the financial sharing service center

meet the internal control requirements of the enterprise and maximize the role of the financial sharing service center.

Reliability is achieved by setting up and planning the professional knowledge of personnel, equipment software, hardware, and operation standardization of the financial sharing service center, so that the financial sharing service center can smoothly run its responsibilities according to the requirements of the enterprise.

Responsiveness is that the financial sharing service center personnel set the processing speed of the business, the system processing speed, the system transmission of the business processing results, so that the financial sharing service center can work efficiently according to the requirements of the enterprise.

Guarantee is to plan the personnel salary, network facilities and information security of the financial sharing service center, so as to provide human and material resources for the operation of the financial sharing service center.

Empathy is to plan the business service communication effect of the financial sharing service center, improve the convenience of work and enhance the overall strength of the company, so that the overall service effect of the financial sharing service center can be better reflected.

There are some studies used this dimensions to measure the service quality. Li (2020) found that the Responsiveness indicates that the financial sharing service center has poor performance in the speed of service provision, and the improvement of corresponding work efficiency has a certain impact, which thus affects the quality of financial sharing service. In addition, Sun (2016) examined the level of service quality and found that the empathy factors were high, indicating that service providers have high communication ability for business and good quality of financial sharing services.

Research theory of factors affecting the quality of financial shared services-process re-engineering theory

Hammer (1990), put forward the 2 core concepts of process re-engineering theory, 1 restructuring and process enterprise. He believed that the company can adopt modern science and technology means to redesign the core process of the existing business to promote the enterprise to improve its business performance. Process re-engineering theory is a question of the traditional basic theory of division of labor. Its core idea refers to the business workflow of the enterprise, redesign the overall management and operation mode of the enterprise, change the original work process, so as to adapt to the new challenges in the market competition. For financial sharing services, process re-engineering integrates financial functions and integrates financial functions with a complete platform or center, which is more conducive to financial role. By redesign business processes, it can help financial departments and management to grasp financial information more centrally and reduce decision-making mistakes. In addition, financial sharing services can also help enterprises to take this opportunity to redesign the financial work model more in line with the market competition characteristics, and enhance the ability of enterprises to deal with internal and external risks.

Financial sharing center is the application of process re-engineering theory in the field of financial management. For enterprise group business unit of the financial department of organizational structure and workflow integration and redesign business processes, can help enterprises establish more suitable for the new stage of market competition characteristics of financial service center, can also reduce the cost for enterprise work efficiency, enhance the enterprise management for financial control of each link, reduce the operational risk of the enterprise internal.

Research methodology

Population, sampling and data collection

The population is 300 employees of the financial sharing service center of X Company. The sample is a large forestry enterprise with about 3,000 and 300 employees. According to Krejcie, R. & Morgan, D (1970), the sample size of 300 populations is 169 samples. The tool does collect data is online questionnaire. The questionnaire was delivered to the all employees. The number of effective questionnaires responded back was 246, and the recovery proportion was 82 %.

Findings

Respondent profiles

The respondent is 300 employees of the Financial Sharing Service Center of X Company. They are the management and ordinary employees of the Financial Sharing Service Center. They have been serving the financial sharing service for many years and have a deep understanding and feeling of the financial sharing service. The investigation for them can get good actual data, which is of great significance to study the factors affecting the quality of financial sharing services.

Descriptive analysis of respondents

In order to make the sample data authentic and differentiated, the questionnaire set demographic variables such as age, adopted anonymous questionnaire, described demographic characteristics of effective samples, and frequency analysis of basic information obtained the number and percentage of sample cases. The high proportion indicates that the population tends to be high.

The age group, 18 people chose "25 and below", accounting for 7.3 %, 55 "26 - 35", accounting for 22.4 %, 129 "36 - 50", accounting for 52.4 %, and 44 "50 and above", accounting for 17.9 %.

In the working time group, 23 people chose "less than 5 years", accounting for 9.3 %, 55 people chose "5 - 10 years", accounting for 22.4 %, 124 people chose "11 - 15 years", accounting for 50.4 %, and 44 people chose "more than 15 years", accounting for 17.9 %.

In the degree group, 46 people chose "below bachelor's degree", accounting for 18.7 %, 181 "undergraduate students", accounting for 73.6 %, 12 "postgraduate students", accounting for 4.9 %, and 7 "doctoral students", accounting for 2.8 % (as reported in **Table 1**).

Table 1 Frequency and percent of the Factors effecting on Financial Sharing Service Quality: Evidence from X company.

Basic information	Variable	Frequency	Percent
Age	Age of 25 and under	18	7.3
	Age of 26 - 35 years	55	22.4
	Between 36 - 50 years old	129	52.4
	Age 50 and over	44	17.9
Work time	Less than 5 years	23	9.3
	Year 5 - 10	55	22.4
	Years 11 - 15	124	50.4
	More than 15 years	44	17.9
Degree	undergraduate program below	46	18.7
	undergraduate program	181	73.6
	Master degree candidate	12	4.9
	doctoral candidate	7	2.8

Table 2 shows the responsiveness factor has the highest mean and the smallest standard deviation ($M = 3.953$, $SD = 0.569$), and the smallest distance from the overall Service Quality mean and standard deviation ($M = 3.785$, $SD = 0.485$), indicating that the respondents generally agree that the responsiveness factor is the most critical factor affecting the quality level of the financial shared service, followed by the guarantee factor ($M = 4.186$, $SD = 0.582$).

Table 2 Mean and standard deviation of the financial sharing service quality.

Financial sharing service quality	N	Mean	SD
Internal controls	246	3.537	0.885
Reliability	246	3.785	0.940
Responsiveness	246	3.953	0.569
Guarantee	246	4.186	0.582
Empathy	246	3.706	0.642
Overall service quality	246	3.785	0.485

Table 3 shows the highest influence factors at 25 years and younger were responsiveness, guarantee, and empathy (responsiveness $M = 4.019$, $SD = 0.4197$, guarantee $M = 4.241$, $SD = 0.4197$, empathy $M = 3.778$, $SD = 0.4984$). Next by internal control and reliability (internal control $M = 3.130$, $SD = 0.9157$, reliability $M = 3.611$, $SD = 1.0801$). Age groups of 26 - 35 have considered higher responsiveness, guarantee, and empathy (responsiveness $M = 3.982$, $SD = 0.6066$, guarantee $M = 4.085$, $SD = 0.7004$, empathy $M = 3.818$, $SD = 0.6568$). Next by internal control and reliability (internal control $M = 3.733$, $SD = 0.7547$, reliability $M = 3.933$, $SD = 0.8990$). Age groups of 36 - 50 years were identified as responsiveness, guarantee, and empathy (responsiveness $M = 3.972$, $SD = 0.5271$, guarantee $M = 4.238$, $SD = 0.5452$, empathy $M = 3.690$, $SD = 0.6591$). Next by internal control and reliability (internal control $M = 3.499$, $SD = 0.9253$, reliability $M = 3.752$, $SD = 0.9431$). Age 50 and older considered responsiveness, guarantee and empathy (responsiveness $M = 3.833$, $SD = 0.6839$, guarantee $M = 4.136$, $SD = 0.5765$, empathy $M = 3.583$, $SD = 0.6189$). Next by internal control and reliability (internal control $M = 3.568$, $SD = 0.8614$, reliability $M = 3.765$, $SD = 0.9306$).

The results show that there is no different level of service quality among different age groups for all dimensions and overall scores (at 0.05 significance level). This implies that the perception of service quality of employees from different age groups is not significantly different, but the internal control was significantly associated with the investigated age group ($F = 2.309$, $p = 0.077$).

Table 3 One-way ANOVA test for comparison of the financial sharing service quality by users regarding the users' age groups.

Financial sharing service quality	Age group	N	Means	SD	Age group	df	MS	F	Sig
Internal controls	Age of 25 and under	18	3.130	0.9157	Between groups	3	1.780	2.309	0.077
	Age of 26 - 35 years	55	3.733	0.7547	Within groups	242	0.771		
	Between 36 - 50 years old	129	3.499	0.9253	Total	245			
	Age 50 and over	44	3.568	0.8614					
Reliability	Age of 25 and under	18	3.611	1.0801	Between groups	3	0.638	0.719	0.541
	Age of 26 - 35 years	55	3.933	0.8990	Within groups	242	0.887		
	Between 36 - 50 years old	129	3.752	0.9431	Total	245			
	Age 50 and over	44	3.765	0.9306					
Responsiveness	Age of 25 and under	18	4.019	0.4197	Between groups	3	0.266	0.819	0.484
	Age of 26 - 35 years	55	3.982	0.6066	Within groups	242	0.325		
	Between 36 - 50 years old	129	3.972	0.5271	Total	245			
	Age 50 and over	44	3.833	0.6839					
Guarantee	Age of 25 and under	18	4.241	0.4248	Between groups	3	0.357	1.054	0.369
	Age of 26 - 35 years	55	4.085	0.7004	Within groups	242	0.338		
	Between 36 - 50 years old	129	4.238	0.5452	Total	245			
	Age 50 and over	44	4.136	0.5765					
Empathy	Age of 25 and under	18	3.778	0.4984	Between groups	3	0.493	1.199	0.311
	Age of 26 - 35 years	55	3.818	0.6568	Within groups	242	0.412		
	Between 36 - 50 years old	129	3.690	0.6591	Total	245			
	Age 50 and over	44	3.583	0.6189					
Overall service quality	Age of 25 and under	18	3.722	0.4609	Between groups	3	0.134	0.569	0.636
	Age of 26 - 35 years	55	3.855	0.4876	Within groups	242	0.236		
	Between 36 - 50 years old	129	3.775	0.5037	Total	245			
	Age 50 and over	44	3.750	0.4380					

Table 4 shows the highest influence factors at less than 5 years were responsiveness, guarantee and empathy (responsiveness $M = 3.986$, $SD = 0.4870$, guarantee $M = 4.087$, $SD = 0.7332$, empathy $M = 3.855$, $SD = 0.5108$). Next by security, internal control and reliability (internal control $M = 3.232$, $SD = 0.8901$, reliability $M = 3.623$, $SD = 1.0651$). From 5 - 10 years, it was responsiveness, guarantee and empathy (responsiveness $M = 4.006$, $SD = 0.5719$, guarantee $M = 4.188$, $SD = 0.5975$, empathy $M = 3.794$, $SD = 0.6431$). Next by internal control and reliability (internal control $M = 3.739$, $SD = 0.7473$, reliability $M = 3.927$, $SD = 0.8430$). The 11 - 15 year working group rated the impact as responsiveness, guarantee and empathy (responsiveness $M = 3.960$, $SD = 0.5386$, guarantee $M = 4.215$, $SD = 0.5480$, empathy $M = 3.680$,

SD = 0.6577). Next by internal control and reliability (internal control M = 3.478, SD = 0.9324, reliability M = 3.763, SD = 0.9672). Over 15 years working groups were identified as responsiveness, guarantee and empathy (responsiveness M = 3.848, SD = 0.6837, guarantee M = 4.152, SD = 0.5816, empathy M = 3.591, SD = 0.6504). Next by internal control and reliability (internal control M = 3.606, SD = 0.8665, reliability M = 3.750, SD = 0.9182).

The results show that there is no different level of service quality among different work time groups for all dimensions and overall scores (at 0.05 significance level). This implies that the perception of service quality of employees from different work time groups is not significantly different, but the internal control was significantly associated with the working time group investigated at the 0.10 significance level ($F = 2.171, p = 0.092$).

Table 4 One-way ANOVA test for comparison of the financial sharing service quality by users regarding the users' work time groups.

Financial sharing service quality	Work time group	N	Means	SD	Work time group	df	MS	F	Sig
Internal controls	Less than 5 years	23	3.232	0.8901	Between groups	3	1.676	2.171	0.092
	Year 5 - 10	55	3.739	0.7473	Within groups	242	0.772		
	Years 11 - 15	124	3.478	0.9324	Total	245			
	More than 15 years	44	3.606	0.8665					
Reliability	Less than 5 years	23	3.623	1.0651	Between groups	3	0.609	0.687	0.561
	Year 5 - 10	55	3.927	0.8430	Within groups	242	0.887		
	Years 11 - 15	124	3.763	0.9672	Total	245			
	More than 15 years	44	3.750	0.9182					
Responsiveness	Less than 5 years	23	3.986	0.4870	Between groups	3	0.222	0.682	0.564
	Year 5 - 10	55	4.006	0.5719	Within groups	242	0.325		
	Years 11 - 15	124	3.960	0.5386	Total	245			
	More than 15 years	44	3.848	0.6837					
Guarantee	Less than 5 years	23	4.087	0.7332	Between groups	3	0.128	0.374	0.772
	Year 5 - 10	55	4.188	0.5975	Within groups	242	0.341		
	Years 11 - 15	124	4.215	0.5480	Total	245			
	More than 15 years	44	4.152	0.5816					
Empathy	Less than 5 years	23	3.855	0.5108	Between groups	3	0.534	1.300	0.275
	Year 5 - 10	55	3.794	0.6431	Within groups	242	0.411		
	Years 11 - 15	124	3.680	0.6577	Total	245			
	More than 15 years	44	3.591	0.6504					
Overall service quality	Less than 5 years	23	3.696	0.5588	Between groups	3	0.319	1.364	0.255
	Year 5 - 10	55	3.891	0.4160	Within groups	242	0.234		
	Years 11 - 15	124	3.750	0.4877	Total	245			
	More than 15 years	44	3.795	0.5094					

Table 5 shows the highest influence factors at undergraduate program below were responsiveness, guarantee and empathy (responsiveness M = 4.022, SD = 0.5183, guarantee M = 4.210, SD = 0.4627, empathy M = 3.862, SD = 0.6386). Next by internal control and reliability (internal control M = 3.703, SD = 0.8292, reliability M = 4.007, SD = 0.7935). The undergraduate program group considered the higher influence as responsiveness, guarantee and empathy (responsiveness M = 3.961, SD = 0.5766, guarantee M = 4.171, SD = 0.6122, empathy M = 3.680, SD = 0.6406). Next by internal control and reliability (internal control M = 3.510, SD = 0.8907, reliability M = 3.738, SD = 0.9592). The Master Degree Candidate group rated the higher influence as responsiveness, guarantee and empathy (responsiveness M = 3.750, SD =

0.5149, guarantee M = 4.250, SD = 0.4741, empathy M = 3.417, SD = 0.5528). Next by internal control and reliability (internal control M = 3.306, SD = 0.7972, reliability M = 3.917, SD = 1.1112). The doctoral candidate group identified the higher impact as responsiveness, guarantee, and empathy (responsiveness M = 3.619, SD = 0.7052, guarantee M = 4.286, SD = 0.7310, empathy M = 3.857, SD = 0.7164). Next by internal control and reliability (internal control M = 3.524, SD = 1.2301, reliability M = 3.286, SD = 0.8483).

The results show that there is no different level of service quality among different degree groups for all dimensions and overall scores (at 0.05 significance level). This implies that the perception of service quality of employees from different degree groups is not significantly different, but empathy was significantly associated with the degree surveyed ($F = 1.975, p = 0.118$).

Table 5 One-way ANOVA test for comparison of the financial sharing service quality by users regarding the users' degree groups.

Financial sharing service quality	Degree group	N	Means	SD	Degree group	df	MS	F	Sig
Internal controls	undergraduate program below	46	3.703	0.8292	Between groups	3	0.680	0.867	0.459
	undergraduate program	181	3.510	0.8907	Within groups	242	0.784		
	Master degree candidate	12	3.306	0.7972	Total	245			
	doctoral candidate	7	3.524	1.2301					
Reliability	undergraduate program below	46	4.007	0.7935	Between groups	3	1.539	1.758	0.156
	undergraduate program	181	3.738	0.9592	Within groups	242	0.875		
	Master degree candidate	12	3.917	1.1112	Total	245			
	doctoral candidate	7	3.286	0.8483					
Responsiveness	undergraduate program below	46	4.022	0.5183	Between groups	3	0.502	1.560	0.200
	undergraduate program	181	3.961	0.5766	Within groups	242	0.322		
	Master degree candidate	12	3.750	0.5149	Total	245			
	doctoral candidate	7	3.619	0.7052					
Guarantee	undergraduate program below	46	4.210	0.4627	Between groups	3	0.062	0.180	0.910
	undergraduate program	181	4.171	0.6122	Within groups	242	0.342		
	Master degree candidate	12	4.250	0.4741	Total	245			
	doctoral candidate	7	4.286	0.7310					
Empathy	undergraduate program below	46	3.862	0.6386	Between groups	3	0.805	1.975	0.118
	undergraduate program	181	3.680	0.6406	Within groups	242	0.408		
	Master degree candidate	12	3.417	0.5528	Total	245			
	doctoral candidate	7	3.857	0.7164					
Overall service quality	undergraduate program below	46	3.848	0.4199	Between groups	3	0.184	0.782	0.505
	undergraduate program	181	3.773	0.5039	Within groups	242	0.236		
	Master degree candidate	12	3.833	0.3892	Total	245			
	doctoral candidate	7	3.571	0.5345					

Conclusions and discussion

From the research results, it shows that the most obvious factors affecting the quality of financial sharing services are responsiveness and guarantee, followed by empathy, internal control and reliability.

Data analysis shows that the overall level of satisfaction of the age group, working time group and education group on the financial sharing service quality is not very high, indicating that the financial sharing service level of X Company needs to be further improved. The age group, the internal control, reliability, responsiveness and empathy factors in the working time group and the education group were not significantly related, and the reason may be that the difference between the various factors is small, which is worth our further excavation and research. Anyway, the results of the study, different from the results of previous research, that is people from more note financial sharing service quality reliability to responsiveness and affordable, with the progress of Chinese society, people began to pay more attention to their feelings, such as salary, network use, this is very important discovery. Enterprise response and guarantee in the implementation of financial sharing services, to ensure that the financial sharing service center personnel business processing efficiency and pay level treatment meet the industry development requirements, and then ensure that the financial sharing service system processing efficiency and results meet the company development requirements, planning and design of internal control organization, management system and process design, provide necessary professionals and equipment and facilities meet the financial sharing service center, ensure the network information security, set up standardized process and operation specification. Improve the communication effect of the financial sharing service center and the role of the company's operation and management.

References

- Bryan, B. (2003). *Essentials of shared service* (1st ed.). New Jersey, United States: John Wiley & Sons.
- Chen, & Li. (2017). Creation of enterprise group financial sharing services in the era of big data. *Accounting Monthly*, 4, 17-21.
- Denburgh et al. (2000). *Doing more with less*. Electric Perspectives.
- Gunn, R. W., Carberry, D. P., Frigo, R., & Behrens, S. (1993). Shared services: Major companies are re-engineering their accounting functions. *Management Accounting (USA)*, 75(5), 22-29.
- Hammer, M. (1990). *Re-engineering work: Do not automate, obliterate*. Massachusetts, United States: Harvard Business Publishing.
- He, & Zhou. (2013). An empirical study of key factors in implementing financial sharing services by Chinese enterprise groups. *Accounting Study*, 10, 59-97.
- Krejcie, R., & Morgan, D. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Lian. (2005). *On the shared service management mode and its implementation and control* (Doctoral dissertations). Massachusetts: Northeastern University.
- Liu. (2004). *Decision making, implementation and evaluation of shared services* (Doctoral dissertations). Shanghai: Shanghai Jiao Tong University.
- Longphre, M., Li, D., Gallup, M., Drori, E., Ordoñez, C. L., Redman, T., Wenzel, S., Bice, D. E., Fahy, J. V., & Basbaum, C. (1999). Allergen-induced IL-9 directly stimulates mucin transcription in respiratory epithelial cells. *The Journal of Clinical Investigation*, 104(10), 1375-1382.
- Parasuraman, A. P., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple - item scale measuring consumer perceptions of service quality. *Journal of Retaining*, 64(1), 12-40.
- Quinn et al. (2006). *Technology enabling growth increasing efficiency, reducing costs - the opportunity for the finance team*. Working Paper.
- Quinn, B., Cooke, R. S., & Kris, A. (1999). *Shared service: Mining for corporate gold*. London, England: Pearson Education Limited.
- Soelheira, J. (2007). Designing a successful plan for your shared service centre. *International Journal of Business Information Systems*, 3, 217-230.
- Triplett, A., & Schulman, J. (2000). Managing shared service with ABM. *Strategic Finance*, 8, 40-5.

- Wang. (2016). Thinking on the transformation from group enterprise financial centralized management to shared service. *Chinese Chief Accountant*, 2.
- Zhang et al. (2003). The new “Background” service sharing center for the enterprise. *Enterprise Reform and Management*, 2, 10-11.
- Zhang et al. (2008). Research and practice of financial sharing service model. *Management Case Study and Review*, 3, 19-27.