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WORLD MARITIME UNIVERSITY

China, Shanghai

Research on service quality improvement of SF Express

by

LIU JIYU

A dissertation submitted to the World Maritime University in partial Fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE

In

INTERNATIONAL TRANSPORT & LOGISTICS

2022

LIU Jiyu,2022

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Abstract

Title of Dissertation: Research on Service Quality Improvement of SF Express

Degree: Master of Science

SF Express's growth rate in recent years is lower than that of YTO, ZTO and other companies. Sf Express provides good service for middle and high-end consumers, but it has corresponding price disadvantage. YTO launched a "promised arrival" service, and JING Dong launched "Jingzunda" to compete with SF Express, which has affected THE market of SF Express. The reason for this situation is that the service quality of express delivery enterprises is getting closer and closer. Because in order to ensure SF profits, enhance competitiveness, improve their own service quality is crucial.

The purpose of this paper is to find ways to improve the service quality of SF Express. By analyzing the current service quality of SF express through relevant literature and data, and referring to SERVQUAL model, a questionnaire survey is designed. The results show that SF express lacks in the comprehensive quality of personnel and the integrity of express delivery. Therefore, an improvement scheme that requires more reasonable staff training is proposed. In combination with the PDCA cycle, The four stages of plan, do, check and act put forward suggestions and corresponding guarantee schemes.

The main results of this paper are as follows: 1. The staff training of SF express is superficial, and the management personnel and trainees do not pay attention to the staff training. 2. based on the problems found and based on the PDCA cycle, the improvement plan is put forward, mainly in understanding the training needs of employees, improving the inspection process, reasonably allocating personnel, etc. At the same time, according to the proposed improvement plan, corresponding safeguard measures have been established, such as establishing a perfect employee training reward and punishment mechanism, linking with the promotion and salary increase of employees, and establishing and promoting a good corporate culture and employee relations.

KEYWORDS: Express industry; Service quality; PDCA cycle; Staff training

Table	of	contents
-------	----	----------

Declaration	II
Acknowledgements	III
Abstract	IV
Table of contents	V
List of Tables	VIII
List of Figures	VIII

1	Intr	roduction	1
	1.1	Research Background and Significance	1
		1.1.1 Research Background	1
		1.1.2 Research Significance	1
	1.2	Research contents and methods	2
		1.2.1 Research contents	2
		1.2.2 Research methods	3

2	Lite	rature review, Introduction to theory and method	5
	2.1	Literature review	5
		2.1.1 Utilization of digital technology and information sharing	5
		2.1.2 Personnel training and management	6
		2.1.3 Literature summary	7
	2.2	PDCA Cycle	8
	2.3	SERVQUAL model	9
	2.4	Kirkpatrick model	10
3	Cur	rent situation and problem analysis of service of SF Express	11
	3.1	SF Express profile	11
	3.2	Current situation of SF express service	12
		3.2.1 Advantages of SF express service	12
		3.2.2 Problems in SF express service	16
	3.3	Cause analysis of the problem	28
4	Im	provement method	30
	4.1	Planning phase	31
	4.2	Do phase	39
	4.3	Check phase	41
	4.4	Act phase	43
5	Safe	eguard measures	44
	5.1	Reward and punishment system	44
		5.1.1 The purpose of reward and punishment system	44
		5.1.2 Principles and application methods	45
		5.1.3 Strengthen the assessment mechanism	46

	5.2	Change management concepts and innovate training methods	47
	5.3	Corporate culture and employee relations	48
6	Con	clusion and Prospect	49
	6.1	Research conclusion	49
	6.2	Research prospect	49

51

7	References	
/	NEICICIUS	

LIST OF TABLES

Table 1	16
Table 2	17
Table 3	22
Table 4	25
Table 5	26
Table 6	31
Table 7	45

LIST OF FIGURES

Figure 1

4

1. Introduction

1.1. Research Background and Significance

1.1.1. Research Background

The express industry originated in the USA in the 1970s, but it did not rise in China until the 1990s, and only China Post was the only express business operator at that time. With the continuous development of China's economy, as well as the advent of globalization and information digital era, people's demand for express delivery is rising rapidly. From 2010 to 2019, the revenue of China's express delivery industry kept increasing year by year, and the growth rate was on the rise. By 2020, the total business revenue of China's express service enterprises had reached 879.54 billion yuan, with a year-on-year growth of 17.3%. In 2021, the revenue and volume of express delivery services reached 1.04 trillion yuan and 108.5 billion pieces of business respectively, up 18% and 30% year on year respectively. More than 200,000 jobs were created, and online retail sales reached nearly 11 trillion yuan. This marks that China's express delivery industry has stepped to a new level.

At present, China's domestic express delivery industry is covered by three main groups: state-owned express, represented by China Post; private enterprises, like, SF express, Jing Dong, and Yun Da; and foreign express companies, such as FedEx and UPS. At the same time, under the advent of the epidemic era, SF Express can still maintain a leading position.

1.1.2. Research Significance

For a long time, SF Express has been the leader of China's express delivery enterprises. It adopts the direct sales model to provide high-quality services for medium and high-end customers. However, in recent years, the profit rate of SF express is lower than that of YTO, ZTO and other companies, which is due to the close service quality provided by express enterprises. Compared with other companies, SF express itself is at a price disadvantage. With the proposal of high-quality services from other enterprises, such as "promise Da" launched by YTO express and "jingzunda" provided by JD express, SF Express has a strong impact on the high-end market that SF express is proud of.

In order to improve their own competitiveness and improve service quality has become particularly important, this paper takes PDCA cycle as the theoretical guidance, analyze and combine the current service quality of SF Express, and puts forward improvement schemes and guarantee measures. The focus is to study the training and investigation of relevant personnel in express service, transportation service, distribution service and after-sales service, put forward suggestions on route planning and the application of digital technology, and make a theoretical analysis on the feasibility.

1.2. Research contents and methods

1.2.1. Research contents

Based on PDCA cycle theory, this paper analyzes the advantages and disadvantages of the services provided by SF express, improves the problems found, and puts forward safeguard measures to improve the service quality of SF express. It mainly studies the route planning, the construction and application of information system and platform, staff training and investigation in logistics activities.

- 1. Through the research background and significance to illustrate the importance of improving service quality.
- Combined with PDCA cycle theory and the actual situation of SF express, its advantages and disadvantages are analyzed.
- 3. Analyze the cause of the problem.
- 4. Put forward plans for improvement.
- 5. Give specific safeguard measures.
- 6. Summarize the research results of this paper and explain the deficiencies in the

research.

1.2.2. Research methods

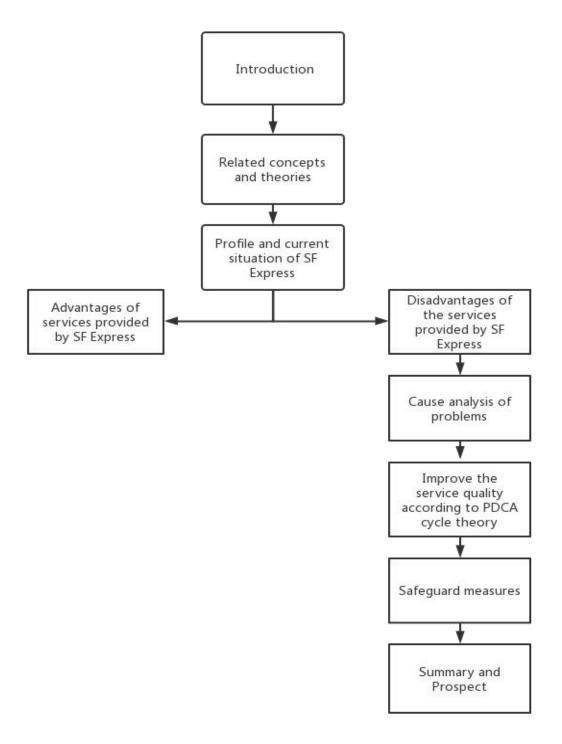
Literature research method. Through literature review, combined with SF Express operation management, to provide a theoretical basis for this paper. At the same time, understand the deficiencies in the service and put forward improvement methods according to the theoretical basis.

Comparative analysis. Through the comparison between other domestic private enterprises and SF Express, the advantages and disadvantages are summarized and suggestions are put forward.

Inductive analysis.Combined with known data and PDCA cycle theory, this paper analyzes the advantages and disadvantages of the services provided by SF express, analyzes the causes of the problems, and puts forward solutions.

PDCA cycle means that quality management is divided into four stages: plan, do, check and act. PDCA cycle theory plays an extremely important role in improving the service quality of logistics enterprises. It can be analyzed in the four stages of enterprise implementation strategy to extract the advantages, and the deficiencies will enter the next cycle until they are improved. (See figure I)

Figure 1



2. Literature review, Introduction to theory and method

2.1. Literature review

2.1.1. Utilization of digital technology and information sharing

The use of digital technology and the construction of information platform are instrumental in to the company's own improvement of service quality. At the same time, the real-time transmission of information is also conducive to improving customer satisfaction.

Liu Yanan and Gao Zhifang (2019) concluded that information technology can improve the efficiency of all links of logistics services by studying and analyzing the information construction of SF express. But it also puts forward the shortcomings of SF express. For example, its information system can not meet the needs of different customers in some links; Low utilization rate of enterprise information platform; Poor information sharing. Therefore, we should actively build information system, integrate enterprise resources and manage scientifically. At the same time, cultivate high-tech staffs and use information means to meet the needs of different customers, so as to improve the service quality.^[1]

Zhou Jiahui (2017) made a scientific analysis of SF express information system to understand the specific role of its information system in enterprise operation, and put forward improvement plan in combination with the current situation. He pointed out that SF's current information system is not flexible enough to maintain customer satisfaction; At the same time, The design of some lines is also unreasonable. We can reasonably analyze customers through the information system, so as to improve customer satisfaction and avoid customer loss. At the same time, the route design is improved through information technology, so as to save transportation time and improve service efficiency.^[2]

Deng Guangya (2020) combined with the status quo of the Internet plus and SF Express's cost control, it is concluded that the cost accounting methods of SF Express

are too backward, the financial organization structure is outdated, and the express transportation cost is too high. It is proposed that Internet information technology should be applied to cost accounting methods, and the costs should be classified and calculated by using cloud computing and big data, so as to save human resources and costs. At the same time, the organizational structure and transportation costs should be controlled. If SF express wants to improve its competitiveness, it needs to actively use advanced information technology to improve its service quality and control costs in the context of the Internet.^[3]

2.1.2. Personnel training and management

In order to improve the service quality, the improvement of staff quality and professional level is the top priority, especially the courier working in the front line. Song Sha (2020) analyzed the current training situation of SF employees and found that it lacks a complete training system, which should be formulated according to the quality of enterprise employees. Employees should be given a certain degree of pressure and evaluation. At the same time, the learning attitude of employees is perfunctory. The training of many companies is only a form. If it is used for a long time, the quality of employees will inevitably decline. At the same time, The company lacks excellent training teachers. Cause the problem of low learning enthusiasm of employees.^[4]

Zhou Xinmiao (2019) analyzed the main problems and reasons through the incentive management of SF express for employees. It is found that employees have inconsistent understanding of incentive measures, and the incentive means are too single, which will only motivate employees who want a raise, and lack innovation. Incentive measures are not significantly different from employees to managers. At the same time, there are serious defects in the incentive mechanism, which only focuses on the investigation of performance, but lacks clear standards. For example, employee incentives are non-public and have not been publicized, resulting in the

lack of effective supervision. Therefore, innovating ideas, methods and improving the mechanism are the effective measures to improve the incentive effect and form a high-quality and stable collective of employees.^[5]

Su Liting (2019) improved its management scheme by analyzing Shunfeng's current driver management system. The recruitment, training and management of drivers shall comply with the company's vision and the company's development requirements, and training shall not be arbitrarily recruited. At the same time, in terms of salary, we should follow the principles of giving consideration to efficiency and fairness, maintaining competitive advantage, incentive and differentiation. Through these Improvement measures, we can enhance the quality and service level of drivers, so as to improve customer satisfaction, profit and reputation of the company.^[6]

2.1.3. Literature summary

SF needs to further strengthen the use of digital technology. Route planning, cargo inspection and other aspects need the support of digital technology. At the same time, SF should improve its own information platform, update the cargo status in real time, and reasonably plan the website layout, so as to improve the service quality. In terms of route planning, they should actively investigate the local actual situation and make reasonable planning according to the geographical location of our own distribution points and warehouses, as well as vehicles, goods, time and other factors. The warehouse location shall be reasonably arranged according to market demand, surrounding environment and other factors. At the same time, reasonably plan the internal area, improve the efficiency of cargo transportation and ensure service quality.

Express business needs a lot of employee support, especially front-line employees, who must be subject to strict investigation. The main contents include but are not limited to: sorting and parcel sorting; Send and receive express delivery and

7

documents, and establish corresponding investigation and incentive system. Enhancing the professional quality of employees is the main way to improve the service quality of the company. Form a customer-centered theme.

2.2. PDCA Cycle

PDCA cycle divides quality management into four stages: plan, do, check and act.

Dong Guangyu (2019) studied the company's application of PDCA cycle and analyzed that the theory adopts the most basic and scientific way to find out and improve the deficiencies during the operation of the enterprise, so as to solve the problems. According to the fixed process of four stages, make accurate judgment on the problems and specify corresponding solutions to realize the effective improvement of quality management.^[7]

Liu Zhengguo (2020) concluded through literature analysis that in the plan stage of PDCA cycle, it is necessary to analyze the current situation, find problems and then make plans. In the do phase, relevant personnel and measures need to be implemented. In the check phase, it is necessary to compare with the expected value and adjust the execution rhythm. In the act stage, we need to sum up experience, draw standardized treatment methods, and put the unsolved problems into the next cycle.^[8]

Zhu Jian (2012) introduced PDCA cycle theory to improve the quality of employee training. In the training plan stage, the training scheme and available information shall be defined according to the trainees, training units and relevant needs. In the implementation stage, provide necessary guarantee for the training, and conduct assessment after the training. In the inspection stage, evaluate the training effect and expectation, and adhere to the principle of not letting go in three aspects: reason, responsibility and. In the treatment stage, the successful experience should be publicized, and the failure should be improved and prevented. Implement the whole staff, whole process and all-round quality management concept, realize total quality

management, and achieve the continuous improvement of training process and training quality.^[9]

2.3.SERVQUAL model

SERVQUAL model is a service quality evaluation system in the service industry proposed by American marketers Pala Hugh Raman, lethan Maul and Barry based on the theory of total quality management. They believe that the quality of service is closely related to the perception and expectation actually experienced by customers. Based on the service quality gap model, this model is divided into five levels: tangibility, reliability, responsiveness, assurance and empathy. At the same time, the five levels are subdivided into several indicators, and then customers can score the actual perception and expectation of each indicator in the form of questionnaire.

SERVQUAL model is a tool to judge the quality of service. Judging the service expected by customers is the primary condition for carrying out high-quality service. The key to size up the quality of their own service is whether they can approach or exceed the expectations of customers. Therefore, SERVQUAL score = actual feeling score - expected score. According to the scores calculated from the questionnaire and other data, we can judge the service quality of a company.

Ma Yaowen (2019) established SERVQUAL model, analyzed the service mode of scientific and technological logistics enterprises, and established evaluation index systems for three categories of scientific and technological logistics enterprises (e-commerce, physics education and the fourth party logistics consulting).The analysis shows that the main problem faced by China's FMCG industry is the disharmony between supply and demand. At the same time, it is proposed that a hybrid warehousing model should be constructed to solve the problem, so as to provide data support and improvement direction for relevant enterprises to improve their service capacity in the future.^[10]

Nie Qing (2019) combined with SERVQUAL model, analyzed the express service quality of private colleges and universities from five aspects: convenience, reliability, empathy, security and immediacy. Taking school teachers and students as the survey object, he concluded that the express points were scattered and complex, the express volume was large and centralized, and the pick-up time was not flexible, and gave optimization suggestions, such as establishing a unified logistics management point, improving the information management system, etc.^[11]

Zhang Lei (2019) combined with SERVQUAL model, established the service quality evaluation index system of private express enterprises. Through the design of questionnaire and the analysis of well-known private express enterprises as an example, it was concluded that the enterprise employees had insufficient communication ability with customers and could not meet various needs of customers. It was proposed that private express enterprises need to form a customer-centered service concept to improve the quality of employees, Optimize the express delivery service, boost the intelligent and digital development of enterprises, and constantly ameliorate their service quality.^[12]

2.4. Kirkpatrick model

Kirkpatrick model was proposed in 1959 and has become the most popular and widely used evaluation model in the world. It is mainly divided into four levels: reaction, learning, behavior and result. The model is widely recognized and scientific.

In October 2017, Zhao Zhiqin constructed the teacher training system and evaluation model by combining Kirkpatrick's four-level evaluation method and the current situation of teacher training in China, gradually improved and optimized it in practice, and established the file management system, feedback mechanism, filing mechanism, incentive and restraint mechanism and benefit audit mechanism. Thus, China's education and training work is more perfect and scientific, which ameliorates teachers' comprehensive ability and teaching quality.^[13]

In September 2012, Du Xiaojing found that the evaluation idea of Kirkpatrick model was consistent with the multiple balance required by MBA students. From the four aspects of response, learning, behavior and results, Du Xiaojing improved the course effect. At the same time, according to the evaluation requirements, he adopted effective education and teaching methods to realize the virtuous cycle of evaluation and education.^[14]

Zhao Yanan (2015) discussed the application of Kirkpatrick model to improve the effectiveness of training by analyzing it. It is concluded that advancing the behavior of trainees is the key to improve the training quality. At the same time, the model is reversed and the business results are regarded as the purpose of training planning, so as to clarify the strategic purpose of their own company before the beginning of training. Make the training objectives more simple and clear.^[15]

Sun Jian (2018) established a set of scientific and high-quality training evaluation system based on systematic training, guided by Kirkpatrick evaluation model and drawing lessons from excellent training evaluation systems at home and abroad. At the same time, it is concluded that in order to realize the work flow of the four levels, relevant special organizations should be established to realize the continuous feedback of the evaluation through the effective supervision of each link of the training, so as to ensure the effective progress of the evaluation system. So as to realize the training needs of employees.^[16]

3. Current situation and problem analysis of service of SF Expresss

3.1. SF Express profile

SF express is the largest integrated logistics service provider in China and the fourth largest express enterprise in the world.With the vision of "building a digital ecosystem, achieving global customers; realizing common prosperity and enjoying a better life", the company provides customers with "multi industry, multi scene, intelligent digitization and integrated supply chain solutions". It not only provides customers with high-quality distribution services, but also extends to the upstream and downstream of the industrial chain, and provides customers with a set of comprehensive solutions such as procurement, production, sales and after-sales to help customers upgrade the industrial chain. According to the diversified needs of different customers and different markets, SF express adheres to the idea of "taking customers as the center, demand as the guide and experience as the foundation". According to the characteristics of customers and customer needs as the starting point, SF Express provides services and solutions suitable for customers and forms a differentiated competitive advantage.SF express continues to improve service quality and achieve common progress and development between itself and customers. On the one hand, ensure the timeliness of service and improve customer experience and satisfaction. On the other hand, improve resource efficiency and provide customers with high cost performance services.

At the same time, SF express is also an intelligent logistics company with the dominant position of network scale. Through the research on the domestic logistics industry, the layout of "Sky Network + Earth Network + information network" has been formed, forming a network system with the strongest control and the highest stability in China. The network covers most areas at home and abroad. SF adopts the direct marketing mode, which is uniformly managed by the headquarters to various organizations to ensure the service quality and increase the profit with quality.

3.2. Current situation of SF express service

In recent years, SF express began to comprehensively promote the digital process. In order to gradually ameliorate its service quality, the company followed the PDCA cycle for quality management. From the work plan, do, check and act, step by step, always maintain the integrity of each work.

3.2.1. Advantages of SF express service

Pay attention to the application of professional technology

SF is committed to becoming a data technology service company with independent third-party industry solutions. Through years of accumulated data and experience in many industries and the use of leading intelligent and digital technology, SF has now developed into a leader in the express industry. In the development of SF express, SF has been committed to applying various innovative technologies. For example, in 2018, SF implemented the smart logistics development strategy, used advanced technologies such as Internet of things, big data and automation to build a smart logistics network and improve the efficiency of the whole logistics activities, which greatly improved the service quality and provided a clear direction for the development of other logistics enterprises. SF won the 2020 logistics technology innovation award, 2020 top ten innovative leading enterprises of smart logistics, 2020 science and technology award of postal industry and other awards.

(1)Logistics technology drives intelligent business growth to achieve sustainable development

Smart map:Pay close attention to multiple links from customer orders to distribution, and provide intelligent location decision-making services more suitable for the actual environment. The average daily requests for cloud services reached 430 million, and the average daily requests for terminal SDK exceeded 800 million.

Scenario packaging scheme:Effectively and quickly respond to the packaging needs of fresh cold chain, epidemic prevention supplies and other scenes, iteratively update about 30 packaging schemes of fresh cold chain products, and ensure the safe landing of disinfection products. Ensure the integrity of the transport.

Information security:SF has a perfect information security protection system(Safety capability baseline, safety operation capability, Devops safety capability, safety ecological capability).The customer's personal information is well protected. SF

13

passed the annual audit of ISO27001 information security management system and iso27701 privacy information management system.

(2) Data technology services of independent third-party industry solutions

Smart supply chain solutions:Rely on advanced technologies such as cloud computing, Internet of things, big data and blockchain to meet the diversified needs of different customers. Launched several sets of standardized supply chain solutions in 3C, auto parts, shoes and clothing, medicine and other fields, effectively meeting different needs.

Digital intelligence service: Actively build the era of data trust, combine with the independent and controllable blockchain infrastructure, and provide visual, traceable, anti-counterfeiting, certificate storage and reliable solutions according to different needs of customers.

Smart city:SF helps solve the problem of data decision-making in government application through professional map ability, combined with years of data and related government data. At present, it has played a great role in intelligent transportation, urban management, public security emergency, land planning and other fields.

Efficient and reliable global logistics infrastructure network

Covering 335 prefecture level cities in China, the urban coverage rate is as high as 99.4%. It covers 2859 county-level cities in China, covering 97.5% of county-level cities in China. However, there are still large loopholes in rural areas.

SF is China's largest and the world's leading cargo airline and the largest cargo owner of air cargo in China.Ezhou Huahu airport, jointly built by SF and the Chinese government, will be the first cargo hub airport in Asia and the fourth in the world.It entered the test flight phase in March 2022.Ezhou Huahu airport, as the core air cargo hub, can reach 90% of the country within two hours.Near the airport, industries such as high-end manufacturing, biomedicine, fresh and cold chain, cross-border e-commerce, electronic spare parts and emergency rescue will be introduced to help realize national industrial upgrading and meet the needs of different customers in combination with the perfect smart logistics network of SF express.At the same time, it greatly curtails the service time and enhances customer satisfaction.

It has rich transportation mode resources and can provide customers with domestic and cross-border multimodal transport services.SF express network has 10 hub level intermediate transfer stations, 37 aviation and railway stations, and about 410000 people.At the same time, strong railway transportation is used to help the development of characteristic businesses in remote areas.In addition to the express business, the company has formed the transportation capacity of domestic bulk materials such as grain, coal and special metals, locked in the top customers in the industry, and formed a replicable multimodal transport solution.

Last kilometer:Fcbox has realized the layout in more than 200 cities, 160000 residential areas and more than 300000 machine outlets across the country. The cumulative number of couriers registered on the platform is up to 4.6 million and serves 360 million consumers.As an important part of SF Express's "last mile" plan in recent years, fcbox can meet customers' different receiving needs, have flexibility and improve some customer service experience. In other respects, it can improve the efficiency of express delivery in the distribution process.During the epidemic period, fcbox gave full play to the advantages of "contactless delivery mode".At the same time, contactless distribution makes customers form the habit of picking up express from the express cabinet, which is expected to accelerate the development of the intelligent express cabinet industry.

The business model of strong control over the whole network has both stability and flexibility

SF express adopts a strong direct marketing model for the whole network, and the company headquarters holds most of the core resources. This has a strong control over logistics activities, operation and management. This helps the company to

implement the plan and strategy with a high degree of unity from top to bottom, so as to ensure the effective achievement of the strategy.So as to heighten the operation efficiency and service quality of cargo transportation, so as to enhance customer satisfaction and customer loyalty. On the basis of ensuring the control of key links and core resources, different resource acquisition modes are adopted to make the company's network more flexible and elastic. Through the standardized operation control process formed by years of experience accumulating and the leading digital technology in the whole industry, it can effectively ensure the controllability and stability of the whole logistics link, realize the coordination of network, customers, technology and resources, and form complementarity and interoperability with already owned businesses.

3.2.2 Problems in SF express service

When investigating the problems existing in SF express service, two schemes are mainly adopted. The first is to investigate relevant data and literature to find problems. The second is to establish a questionnaire and analyze the problems.

3.2.2.1 Data and literature survey

(1)Effective appeal rate of major express delivery enterprises of SF Express(See Table 1)

Unit: number of effective appeals / million express mails

Date	Appeal	D
	rate	Ir

Table 1

Date	;	Appeal	Distribution of appeal rate of main problems		Effective	
		rate	Incur loss	Delivery service	Loss and	appeal rate
			through delay		damage	
2022.0	02	3.98	0.42	0.13	3.26	0.04
2022.0	01	3.50	0.25	0.14	2.94	0.03
2021.1	12	5.34	0.47	0.20	4.37	0.04

2021.11	4.27	0.44	0.13	3.52	0.04
2021.10	6.49	0.52	0.19	5.55	0.07
2020.11	2.88	0.38	0.13	2.23	0.03
2018.02	0.87	0.33	0.22	0.22	3.46
2018.01	0.69	0.11	0.19	0.31	2.43

Average effective appeal rate of major express delivery enterprises in China(See table 2)

Unit: number of effective appeals / million express mails

Date	Appeal	Distribution o	Distribution of appeal rate of main problems		Effective
	rate	Incur loss	Delivery service	Loss and	appeal rate
		through delay		damage	
2022.02	3.43	1.06	0.59	1.62	0.55
2022.01	3.08	0.64	0.57	1.66	0.42
2021.12	3.41	0.77	0.61	1.83	0.51
2021.11	2.80	0.69	0.51	1.43	0.33
2021.10	2.48	0.50	0.43	1.40	0.27
2020.11	2.04	0.48	0.48	0.88	0.22
2018.02	6.75	2.20	2.43	1.90	11.15
2018.01	5.03	1.36	1.77	1.76	12.65

Table 2

According to the notice on the complaints of users in the postal industry issued by the State Post Office of the people's Republic of China in recent years, the mail complaint rate of SF Express has been basically the same or higher than the national average in recent years. Although the fast delivery speed has always been the advantage of SF compared with other express companies, with the continuous approach of express service quality and high-tech technology, this advantage is no longer huge compared with a few years ago.

According to relevant data, the main reason for SF Express's complaint is the damage and authenticity of express delivery. That is, SF is relatively weak in the security of express delivery. Compared with the national average, the cargo safety rate is low.

Security. The service of express industry must meet the specified needs of customers, and ensure that the goods maintain their original form, function and nature in transportation and delivery, that is, they must be delivered to customers safely, which is the most fundamental and important demand of express service.

In recent years, unreasonable sorting incidents of express delivery have occurred continuously. According to relevant reports, in a branch of SF express, when workers unload the car, some people directly throw the express from the car in order to save energy and time. During sorting, in principle, the express delivery can only be put down when it is less than 30cm away from the ground, but many employees throw it directly from their hands. There was also a big problem when loading. The express was directly thrown into the carriage. Regardless of the size and weight of the express, the express was not placed in a reasonable order and placement position. These problems will lead to the damage of express delivery and can not guarantee the needs of customers.

According to the data, in recent years, with the continuous development of express business, the improvement of business volume is not directly proportional to the improvement of the company's ability to withstand. Especially during the express peak period (November and December), SF Express's mail appeal rate has increased significantly, and its proud speed is also greatly limited.Due to the late start of distribution in domestic fast-moving enterprises, there are still defects in the logistics distribution system. While holidays and other large-scale promotional activities bring a lot of sales performance, this disadvantage will also appear. The delivery volume of goods showed a rapid growth trend, but the damage and loss of packages also increased significantly. Such express service will greatly reduce the customer satisfaction of consumers and businesses.

With the continuous progress of express delivery business, consumers' requirements for express delivery are increasing, and they also hope to feel better service. In addition to the hope that express companies can provide punctual, fast and safe services, they also have great expectations in the service attitude of express personnel. They hope to get more enthusiastic service, as well as more flexible and humanized service.

However, SF express often has the problem of improper communication between express operators and consumers. For example, in the process of receiving goods by express, due to the uncertainty and complexity of the environment and the dispersion of receiving places, couriers will spend a lot of time on the way, resulting in problems such as late receipt or missing goods. At the same time, due to the travel all day and the uncertain factors brought by the weather and traffic environment, the time will be uncontrollable, resulting in customer dissatisfaction. At the same time, couriers will also have bad emotions, resulting in poor communication and attitude with customers

For emergencies that may occur during express delivery and the immediate needs of customers, SF express should make corresponding flexible emergency preparations. For after-sales service, some customer service personnel lack service awareness, service skills and hard service attitude. SF's concept is customer service-oriented, but some people forget this concept and will quarrel with customers. This is a sign of the company's employees' weak sense of service.

(2)Single product and insufficient diversification may not satisfy the various requirements of customers and markets. SF Express's main business is to provide high-quality products and services in the Chinese market compared with similar

express enterprises.SF's medium and high-end products are mainly reflected in the pursuit of the fastest transportation mode based on air transportation.Unlike other domestic express companies of the same type, it mainly focuses on road transportation and railway transportation.Unlike other domestic express companies of the same type, it mainly focuses on road transportation and railway transportation.Unlike other domestic express companies of the same type, it mainly focuses on road transportation and railway transportation.Unlike other domestic express companies of the same type, it mainly focuses on road transportation and railway transportation. Therefore, SF Express has great disadvantages in terms of price. Although this approach can avoid the giants of medium and low-end express enterprises and foreign medium and high-end express enterprises, and can occupy a large number of domestic medium and high-end markets, it also means losing the medium and low-end customers who occupy most of the market.At the same time, the high-end business provided by other domestic express enterprises to standard shunfen Express has also appeared in large numbers in recent years. For example, Jingdong's "jingzunda" has seized part of the customers and market, which has had a strong impact on SF express.

The layout of service outlets is not perfect.SF express adopts a direct sales strategy, which is directly invested and operated by the company's headquarters. At the same time, the network construction of SF express is not comprehensive enough. A large number of outlets are established in the first and second tier developed cities and towns, while remote areas and rural areas do not have a wide range of coverage due to factors such as less express business, high cost and low income, which greatly reduces the consumers' sense of identity with SF express and is equivalent to giving up part of the market. At the same time, SF Express has just started its overseas business with a single service type, which is not conducive to SF becoming an international express enterprise, which still needs a long way to go.

3.2.2.2 Questionnaire investigation

(1)Construction of SERVQUAL model

With the help of SERVQUAL model, combined with the advantages and

disadvantages of SF express found above and the actual business of express companies, this paper establishes six levels of SERVQUAL: tangibility, reliability, guarantee, responsiveness, empathy and security.

Tangibility. It mainly includes the appearance of SF express transportation tools, equipment, personnel and communication methods. Because the service is invisible, customers often look for the realistic physical characteristics that reflect the service quality when they perceive the service quality. The specific indicators established are:Express facilities and equipment, Network facilities and environment, Online website construction and Employee dress.

Reliability. It mainly refers to that express enterprises can accurately and reliably complete the services they provide. Reliability is the most significant object for clients in express service. The specific indicators established are: On time delivery, Accuracy of goods and Safety of goods.

Guarantee. It mainly refers to the professional quality of the SF's employees and the outer image of the business This will slowly raise the client's confidence value, thus raise the customer's trust in the company's service quality. The specific indicators established are: Discrimination, Professional quality and Corporate image.

Responsiveness. It means that the company can quickly and effectively meet the different needs of customers. In case of service problems, it can be remedied in time, so as to minimize the negative impact. The specific indicators established are:Business handling,Online query,Customer service and Customer service.

Empathy. It refers to the ability to approach customers and understand their different needs. Be able to put customers first and consider the interests and convenience of customers. Supply clients with customized and vary services. In the express industry, serving customers is the key. The specific indicators established are: Type of express delivery, Customer interests, Diversified demand and Service attitude.

Security. It mainly refers to the safety of customers and the environment, the

21

elimination of genuine injure to them, and the protection of customer privacy.The specific indicators established are:Dangerous goods and Customer information At the same time, subdivide these six levels and divide them into 19 specific indicators.(See Table 3)

Table 3

Level	Serial number	Specific indicators	Description of specific indicators	
	Q1	Express facilities and equipment	SF has advanced means of transportation and adopts various modes of transportation such as air transportation, land transportation and so on.	
m 11.11%	Q2	Network facilities and environment	SF Express's working network environment and facilities are good, and there has been no situation.	
Tangibility	Q3	Online website construction	The wechat official account, app and official website of SF express are completely established and easy to use, which can meet the different needs of customers.	
	Q4	Employee dress	SF express employees wear work clothes and are clean and tidy.	
	Q5	On time delivery	SF express can deliver the goods within the specified time.	
Reliability	Q6	Accuracy of goods	SF express can deliver the goods to the designated place without sending the wrong goods.	
	Q7	Safety of goods	SF express can protect the safety of packages in the transportation of goods without damage or loss.	
Guarantee	Q8	Discrimination	SF express employees can quickly and accurately identify and deal with customer needs.	
	Q9	Professional quality	SF express employees have professional working skills, skilled business and standardized operation.	
	Q10	Corporate	SF Express has a good corporate image	

		image	and won customer support.
Responsiveness	Q11	Business handling	SF express can effectively and quickly handle relevant businesses for customers, such as door-to-door pick-up, etc.
	Q12	Online query	SF Express's logistics instant information is uploaded quickly and accurately.
	Q13	Customer service	SF express service phone is unblocked, which can respond to different needs of customers in time.
Empathy	Q14	Type of express delivery	SF express can provide customers with different delivery methods, such as next day delivery, ordinary express, etc.
	Q15	Customer interests	SF express can consider the interests of customers and take some convenient measures, such as monthly payment.
	Q16	Diversified demand	SF express can establish service places, arrange business hours and provide door-to-door services according to the market needs of customers.
	Q17	Service attitude	SF express employees have a good service attitude, are warm and friendly to customers and have strong communication skills.
Security	Q18	Dangerous goods	SF express carries out strict cargo inspection to avoid harm to people and the environment.
	Q19	Customer information	SF express strictly protects customers' personal privacy information without information disclosure and other problems.

(2) Questionnaire survey and analysis

Questionnaire design

This paper designs a questionnaire according to a service quality assessment system of express enterprises established above, in order to understand customers' projection and actual awareness of SF express service quality. Analyze the perceived service value of customers for SF express, and then give research directions for improving the service quality of SF express. The set of questions is separated into three pieces. The first piece is the basic information of the participants, such as sex, age(It is divided into three stages: under the age of 20, from 21 to 30, and over 31.), frequency of express delivery(It is separated into three pieces: at least once a week, at least once a month and at least once half a year.), etc. The second piece is the expectation of customers for the specific indicators established by the service quality assessment system of SF enterprises.The last piece is the actual perceived value of the specific indicators established by the express enterprise service quality evaluation system.

The questionnaire was scattered from May 1, 2022 to May 13, 2022. The respondents were selected from students, colleagues, elders and the Internet. Through actual investigation and network investigation. A total of 63 questionnaires were scattered in this survey, and 57 were finally Replied, with a recovery rate of 90.4%. Excluding the questionnaires with incomplete filling and significant errors, the number of valid questionnaires received in this survey is 52, and the effective rate of the questionnaire is 82.5%.

The scoring form of the questionnaire refers to Likert scale, which is used to evaluate the situation of each specific index. The evaluation of each specific index has five levels: very agree (very significant), agree (significant), general, disagree (insignificant) and very disagree (very insignificant). And give these five evaluation specific values, which are 5, 4, 3, 2 and 1 respectively. Through the questionnaire, the respondents score, and numerical calculation, we can get the score of SF service quality.

Questionnaire analysis

The part of male and female respondents in this questionnaire survey is close (30 males and 22 females). Most of them are between the ages of 21 and 30, calculating for 71%, and most of the respondents are users who often use SF express, calculating for 85%. Most of them are students and young workers.

The average score of the actual service perception value and service expectation value of each specific index is calculated through the scoring of 19 specific indicators by 52 investigators with computer software.

Through the formula:

Perceived Service Quality = Service Perception - Service Expectation

Customer Satisfaction = Service Perception / Service Expectation

Table	4
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Level	Serial number	Specific indicators	Actual service perception value	Service expectation	Service quality	Customer satisfaction%
Q1		Express facilities and equipment	4.17	4.38	-0.21	95.18%
Tangibility	Q2	Network facilities and environment	4.10	4.27	-0.17	95.95%
	Q3	Online website construction	4.21	4.29	-0.08	98.21%
	Q4	Employee dress	4.19	4.25	-0.06	98.64%
	Q5	On time delivery	4.56	4.62	-0.06	98.75%
Reliability Q6	Q6	Accuracy of goods	4.13	4.29	-0.15	96.41%
	Q7	Safety of goods	3.96	4.52	-0.56	87.66%
	Q8	Discrimination	4.08	4.21	-0.13	96.80%
Guarantee	Q9	Professional quality	4.10	4.17	-0.08	98.16%
	Q10	Corporate image	4.27	4.31	-0.04	99.11%
Responsiv eness	Q11	Business handling	4.02	4.15	-0.13	96.76%
CHESS	Q12	Online query	4.04	4.21	-0.17	95.89%

	Q13	Customer service	4.08	4.35	-0.27	93.81%
Q14	Type of express delivery	3.98	4.12	-0.13	96.73%	
Empathy	Empathy Q15	Customer interests	4.12	4.21	-0.10	97.72%
Q	Q16	Diversified demand	4.06	4.15	-0.10	97.69%
	Q17	Service attitude	3.92	4.37	-0.44	89.87%
Socurity	Q18	Dangerous goods	4.10	4.19	-0.10	97.71%
Security -	Q19	Customer information	4.33	4.38	-0.06	98.68%

Table 5

Level	Specific indicators	Average value of service quality	
Tangibility	Q1,Q2,Q3,Q4	-0.13	
Reliability	Q5,Q6, <mark>Q7</mark>	-0.26	
Guarantee	Q8,Q9,Q10	-0.08	
Responsiveness	Q11,Q12, <mark>Q13</mark>	-0.19	
Empathy	Q14,Q15,Q16,Q17	-0.19	
Security	Q18,Q19	-0.08	
Overall service quality	Q1~Q19	-0.16	

According to the calculated optimistic and wrong scores and scores of service quality, the service quality level of SF express can be judged. When the service quality is optimistic, the actual service quality of the SF is better than the level expected by clients, which proves that users are very satisfied with this aspect. When the service quality is wrong, it indicates that the service provided by the company does not content the necessity of clients and needs to be ameliorated. When the service quality approaches zero, it proves that the services provided by the company can essentially content the needs of clients and need to be maintained.

As can be seen from the above table, customers are satisfied with the speed of SF express transportation, and there is basically no problem of express delay. At the

same time, there are strict rules for the protection of user information, which basically will not cause the problem of user privacy disclosure, so that customers have high trust in SF express, and the company image is good and trustworthy in the eyes of most people. From the perspective of customer satisfaction, the customer satisfaction of most service indicators of SF express is more than 90%, but none of them can reach 100% or even exceed. Therefore, we should further improve these indicators to improve customer satisfaction.

However, it can also be seen that some cases are serious and can not be recognized by customers. In terms of cargo safety, SF Express has experienced frequent problems in recent years. Violent sorting has occurred continuously in recent years. According to relevant reports, in some operation outlets, in order to save time and effort, enterprise employees say that customers' parcels are thrown directly from the car to the ground, which does not ensure the integrity of parcels, and even lead to damage to goods. According to the notice on the complaints of postal users issued by the State Post Office of the people's Republic of China in 2021, the main reason for SF Express's complaints is the damage or loss of goods, which is higher than the national average.Express enterprises are service-oriented enterprises, which must meet the specified needs of customers, and ensure that the goods maintain their original form, function and nature in transportation and delivery, that is, they should be delivered to customers safely, which is the most fundamental and important demand of express services.

Secondly, we can also see that SF also lacks in customer service and employee attitude compared with other indicators. Whether it is telephone customer service or on-site pick-up and delivery employees, they will affect customers' views on SF express at the first time. Some telephone customers are impatient in dealing with complaints. At the same time, they are unable to meet some of the customers' needs, and their professional quality is slightly lacking. At the same time, the attitude of the

dispatch staff in the delivery process is loose and even impatient, which will straight influence the client's sense of the company and client satisfaction. Through the previous literature search, news and data query, combined with the questionnaire survey, we can see that SF has strong advantages in distribution speed, but there are still great deficiencies in ensuring the safety of goods. If you want to continue to improve SF Express's customer satisfaction and market share, these major problems need to be improved in time.

According to the calculation of SF express, the service quality provided by SF express is much lower than the average value of -0.0, which indicates that SF Express has a lot of room to improve. Especially in terms of reliability, responsiveness and empathy, SF express needs to improve the current service standards and employees' working attitude to avoid adverse situations.

3.3. Cause analysis of the problem

(1)The quality of employees is generally low.

China's express industry is developing very fast, which leads to the extreme lack of high-end logistics talents. Because the technical content required by the express delivery industry is not high and the threshold is small, because the express enterprises have less training for employees, and most of them enter the job after a few days of entry and study. But for the express industry, the people contacted by customers and consumers are precisely these front-line express workers. The image of the SF is intimate associated to the image of the courier. Customers' evaluation of SF express is the speed brought by its air transportation, followed by the service attitude of front-line express personnel. Most of SF Express's employees are technical secondary school or below, and only have academic requirements for company managers and internal clerks. In SF express, the number of people with university degree accounts for one third at most. Moreover, the comprehensive quality of some employees is low. In daily work communication, we can always hear

some personnel's abuse and dissatisfaction with customers, and rarely find problems from ourselves. Since customers choose to believe in SF express, they should try their best to meet the needs of customers and serve customers.

At the same time, in this era of information and digitization, front-line couriers also need to comply with the trend of the times. Many businesses need to operate online, which requires guiding the operating employees to have a deeper understanding of the workflow. At the same time, front-line couriers should also have a special understanding of the functions of their posts, which requires employees to have certain professional knowledge and literacy.

In order to earn more profits, some small express enterprises employ a large number of express personnel with poor service and low quality. Therefore, SF express and other large express companies are also recruiting a large number of such employees in order to avoid exceeding their express service price, which needs to be avoided in time. Otherwise, the company will not be able to manage its employees well, and the turnover rate of express delivery personnel will increase, resulting in some problems that have a great wrong effect on the SF. It has a strong effect on the SF's image and reputation. The outflow of talent is serious, and it is hard to bring in and retain talents. Express enterprises are enterprises that serve customers, so the quality of service directly affects the satisfaction of customers, thus affecting the long-term development of the company. Enterprises should not only consider profits, not enough understanding of customers and not enough scientific service concept. In some areas, the internal managers of the company have not been in office for a long time and have insufficient understanding of logistics service management. They just want to improve profits. This misunderstanding will reduce the enthusiasm of employees and even produce a negative mentality, which will affect their work.

(2)SF Express has too few service outlets in remote and rural areas. However, these regions often have the greatest market potential. With the development of the country,

the demand for express delivery in these regions will also rise rapidly. However, the reality is often not optimistic enough. The business volume and profits of service outlets in most rural areas can not independently support the operation of the outlets. There are two main reasons for the lack of service outlets in rural and remote areas. First, the scope of rural areas is wide, the surrounding traffic conditions are poor, and the traffic settings are not perfect, which will lead to the high cost of express business. At the same time, the distribution of clients in agricultural areas is scattered and in short supply, and the business volume of opening a separate service network will be very low. Secondly, the implementation of SF Express's "last mile" business (door-to-door business) is very difficult, and it is difficult to provide door-to-door service in some areas. Compared with services in cities and towns, this will lead to customer complaints and dissatisfaction and affect the company's image. At present, SF express mainly take on the method of outward extension of service outlets in rural and remote areas, which accounts for 90%.

4. Improvement method

According to the above questionnaire survey and significant data survey, in order to improve the service quality of SF express, what is most needed now is to improve the comprehensive quality and professional ability of SF express staffs. The employees in the express industry are mainly express workers who work in the front line and contact with customers, which represents the overall image of the company. Therefore, the training of staffs become very important. Combined with the PDCA cycle theory, this paper makes a suggestion and Analysis on the four links of express staff training, with the most important goal of improving the service quality of SF express.(See Table 6)

Table 6

Stage	Step	Management content		
Plan	1	Analyze the current situation of the company and find problems.		
	2	Analyze the problem.		
	3	Improve the problems found and formulate measures.		
Do	4	Implement the improvement measures.		
Check	5	Summarize the implementation process and results according to the		
		requirements of the specified plan.		
	6	Sum up experience and keep good places.		
Act	7	Put the bad places or problems into the next PDCA cycle.		

4.1. Planning phase

The planning stage is to find the problems in existence of SF, analyze the trouble, specify the solutions and measures that can solve the trouble, and set the target value at the same time.

Discovery and analysis of problems in SF Express staff training

(1) The company does not pay enough attention to employee training

The company does not pay enough attention to employee training as a whole, especially the training of front-line couriers, and the concept of training is relatively backward. The management personnel of the company take staff training more as a measure to enable staffs to enter the post quickly, and think that staff training is time-wasting and laborious. When it is not suitable for their own post, they are more disposed to take the place of staffs instead of helping employees enhance themselves. At the same time, they can not transfer the concept of express enterprises , focusing on customers to employees. More training is just to instruct the process and expertise of express delivery.

The company's employees regard employee training as a kind of task, just follow a

process, and pay less attention to it. They didn't realize the improvement of their career brought by employee training, especially when part of the training overlapped with working time, they abandon the chance of training, resulting in resistance.

Due to the lack of attention to employee training, some branches have not set up special personnel training departments, and the personnel department often selects administrative personnel to be responsible, resulting in the lack of smooth connection of work and restricting the progress of training.

(2)There is inadequate perception of why training, that is, the demand for training In order to carry out employee training well, the company should comprehend the reason of training and to make clear the direction of training. Express delivery enterprises are the companies to serve the clients, so meeting customer needs is the most critical.The company shall make clear what the company's employees lack at present and formulate corresponding training plans and indicators. However, some branches did not investigate and analyze the training needs. Due to the immoderate number of personnel in SF, the SF's training plan is often stipulated by the managers themselves, resulting in the training plan not in line with the SF's development and staff development.

(3)The implementation process of training is not perfect

The facility configuration of enterprise staff training is not perfect. In terms of teaching, the company often takes two forms. The first is that the company's managers speak and communicate with the staffs. In the view of the staffs, it is totally mechanical and can not be well listened to. Therefore, the company's concept and culture can not be well transmitted. The second is that old employees lead new employees, often just to help understand the workflow, and there is no good teaching on possible problems or points needing attention.

The staff training system is set up in a single way, and the reward mechanism for training is monotonous. It is often oral commendations of knowledge or a little substance prize. It does not associate the training assessment with promotion and salary increase, which can not drive the enthusiasm of employees. At the same time, the safeguard measures are not in place, and the time conflict has not been reasonably arranged. These problems will lead to insufficient employee training participation and other problems.

(4)The assessment of staff training is limited to the surface

After the employee training, there is no corresponding evaluation and analysis of the staff's learning process and results, which is just a formality. Therefore, it is hard to improve the quality of staffs and service quality through staff training.

(5)Formulate training plan and system.

First of all, The purpose of employee training is to enhance the comprehensive quality and professional expertise of SF's staffs, combined with the development strategy of the enterprise. The construction of employee training system should be based on the company's development plan and vision. SF express aspires to build a digital ecosystem and achieve global customers. It is expected to become the preferred partner of all customers, the leader of the global command supply chain and the enterprise pursued by the world's excellent express employees in 2025.

The implementation of the company's plan requires not only the outstanding decision of the administration, but also the close teamwork between staffs at all levels. At the same time, through the evaluation of the existing personnel ability and quality, the plan and main attack direction are specified.

The overall planning includes the training of enterprise echelons according to the development needs of employees from top to bottom. In addition, the cost and time of training are planned. For example, according to the low and peak seasons of the express industry, centralized training is carried out one month before the peak season. Funds also need to be protected from being cut by other matters, but also to avoid waste.

At the same time, according to the overall planning, each division should also formulate its own training plan, and scientifically specify the training plans of various departments and different posts according to the development plan of SF and the training objective plan and direction of the overall human resources.

(6)Training needs analysis

What the company and employees want to get through staff training is the basis and prerequisite of training project design. At present, the training demand analysis of SF express is too simple. It only designs the training through the problems and the opinions put forward by the heads of various departments. This manner only take care of the form and does not show solicitude for the details.

The training demand analysis should be based on the flow genuine circumstances of the company, so that the training can get effective results. Analyze relevant organizations, positions and personnel. That is to clarify the tasks of individuals and organizations in combination with the development strategy and actual situation of the enterprise, and devise specific training plans according to the required professional knowledge, capability, expertise and staff development needs.

A.Workflow of demand analysis

The analysis of training needs mainly needs four points: relevant investigation preparation, investigation, scientific analysis of the investigation results and confirmation of training needs.

In the preparation stage of the investigation, the following work needs to be prepared: collect relevant data and sum up, understand the immediate circumstances of the SF and the marketplace, enhance the channels and ability to obtain information, specify the investigation plan, clear the work target and establish a scientific team to analyze the investigation results. The preparatory work in the early stage is very important. Investigation and preparation must be carried out in combination with the current situation and development strategy.

The specific work to be done in the investigation stage is to understand the actual needs of the investigation staff and summarize and sort out the collected results. At this stage, the methods of investigation can be questionnaire, interview, observation, declaration of department head, analysis of actual defects, performance analysis, etc. In the third stage, the main work flow of the scientific analysis stage includes: scientifically sorting and summarizing the obtained employee needs, summarizing and analyzing the training contents required to meet the needs. There is no room for carelessness at this stage, which requires the company's managers and excellent staff to discuss and analyze together.

The last stage is the demand confirmation stage. The work required in this stage is to summarize the work results of the previous stage, analyze the needs and wrong, and confirm the training devise. When the stage is completed, evaluation is needed to confirm whether the training plan meets the needs of employees and conforms to the strategic development of the company.

B. Multi plane analysis

The analysis of training needs needs needs to consider the following three aspects: personnel, organization and position.

Personnel analysis mainly includes employees' work attitude, work enthusiasm, quarterly performance appraisal, professional knowledge and comprehensive quality. By comparing the practical work status of staffs with the expected work status of the company, further clarify the work objectives and direction that need training. During personnel analysis, the training needs of employees should be clarified through the usual performance appraisal or the evaluation of the heads of various departments. At the same time, the real level and ability of employees should be clarified according to the status and performance of employees in their actual work.

Organizational analysis is to comprehensively analyze the employee's overall ability, competency, work attitude and representation assessment according to the SF's rules

and the organization's work indicators and standards, and understand the specific training substance according to the results of scientific analysis. Organizational analysis consists of two parts: organizational goal analysis and organizational resource analysis. A scientific and orderly organizational goal and task is the basis and necessary factor for the good development of all departments of the enterprise. The content of training needs to be determined according to the organizational goal and serve the organizational goal.SF express aims to build smart logistics, closely connects with various e-commerce logistics and online platforms, and is committed to meeting the different needs of customers. Enterprises should carry out training plans based on these objectives. Organizational resource analysis is mainly to analyze the human, material and financial resources invested by the enterprise. We should ensure the investment of these resources in training and prohibit the occurrence of shortage and waste.

Position analysis is to analyze the needs of employees in each position according to different positions and combined with the work contents and indicators required by different positions, so as to obtain specific training contents. At the same time, the training of different posts should be related to the superior and subordinate and upstream and downstream, understand the work content of the posts related to them, and expand professional ability and comprehensive quality.

(7)Develop training plan

After the training needs are clarified, according to the form of 5w2h and the specific requirements of the company and various departments, clarify the training project (what), the purpose (why), the staff who will conduct the training (who), the specific time (when), the place (where), the way and form of training (how), the number of training participants and expenses (how much).

The express industry is developing faster and faster, and gradually moving towards intelligence and digitization. Therefore, I believes that we should take more care to

the training of staffs, but the training of on-the-job personnel should also be paid attention to. New employees have high work enthusiasm, and due to the continuous rise of national education level, the comprehensive quality and learning ability of newly introduced logistics talents are also constantly improving. However, new staffs do not fully understand the company's understanding and work content, so superintendent should pay special attention to the training of new staffs and render strong support, which can enhance the effect and effectiveness of training to a certain magnitude. For new staff, they can swiftly comprehend their work, and it is particularly important to be competent. At the same time, the SF's new employee training should make them comprehend, agree with the SF's culture and development strategy. At the same time, they should make a reasonable plan for their later career according to their positions, and are willing to take part in the training in the future.

Based on the current development and problems of SF express, the main contents of the training are to enhance the comprehensive quality of employees, understand the corporate culture and professional expertise (mainly including comprehending and learning the advanced technology developed by the company, such as app and the use of intelligent equipment). Its purpose is nothing more than to enhance the service quality of SF express and enhance customer satisfaction. Trainers should not only know about new employees, but also have the participation of the company's leadership. For example, all branches across the country recommend excellent employees and managers to give speeches and impart experience. Most of the training time is concentrated before the peak season of express business, which can reduce the occurrence of emergencies and problems, such as loss and destruction.

Combined with the impact of the current epidemic, the training is mainly carry out in the form of network conference. At the same time, this method can help the company solve some problems such as funds, and arrange more employees to participate, which is full of flexibility. If conditions permit, each branch can organize offline

meetings by itself. Excellent employees in the company can spread their experience and form a instruct mechanism for the old to help the new. The teacher personally teaches the new students to help them quickly understand their work and reduce errors. In order to safeguard the power of training, various guarantee measures should also be established. At the same time, it can be considered to broadcast in the form of documentary at the lunch stage to publicize the positive energy culture and corporate culture, so as to make employees subconsciously identify with the company culture and improve employees' enthusiasm.

Complying with the principle of equality, teamwork and win-win results, we actively promote the "team culture" of SF express, so that employees can continue to grow in the environment of competition and cooperation and realize the embodiment of self-worth. The company is like a team. for the sake of win the game, all employees unite together to learn together, grow together, train together and make progress together. During the training, this good corporate culture should be publicized. The honor of the team is the best way for each member to achieve self-growth. Actively promoting excellent corporate culture can greatly enhance the ardour and staff satisfaction and ensure the retention rate of employees. At the same time, it also creates firm conditions for better service and better customer service.

For SF express, the focus of training is on new employees, the use of financial resources is focused on investment, and the professional skills of new employees are improved, so that the company can provide better services, improve profits, reduce employee turnover to a certain extent, and increase the stability of the enterprise team. For new employees, they can be promoted to their posts faster and reduce mistakes.

Of course, the training of on-the-job employees can't be left behind, but they don't have to be as cumbersome as new employees. They have fully mastered the basic professional skills. However, the old employees of SF express are often those with low educational background, so improving the comprehensive quality of employees is the top priority. Actively promoting the customer-oriented concept is the most important thing to do. At the same time, the on-the-job employees should be collectively trained in digitization and intellectualization to adjust to the tendency of the times and the development trend of SF. And energetically response to the call of the state and carry out collective learning according to the temporary regulations and rules introduced by the state, so as to avoid violating relevant regulations and damaging the company's image.

At present, most of the staff training of SF express adopts the outsourcing mode, which is organized and set up by the post office with the assist of the company. Therefore, the company is often not required to provide training venues. Therefore, for temporary training, it is often necessary to borrow meeting rooms, reception halls and other places, which will conflict with other work. In order to improve the training quality and save time, the company should set up special training venues and complete equipment. The inflow of new employees will occur every year. At the same time, the training of on-the-job employees will be carried out in combination with the off peak season, so there will be no waste of resources and other problems.

At the same time, the professional ability of training teachers can most affect the training effect. Therefore, SF express should make much account of the training of training teachers. It should combine the combination of outside and in-house first-class staffs to understand the excellent experience of other enterprises and actively publicize the useful experience of its own staffs.

4.2. Do phase

After the decision in the planning stage is accomplished, the next procedure is the do phase of the training. The employees and managers of various departments of SF express should actively and orderly carry out employee training activities according to the previously specified training plan, coordinate various resources of the

enterprise, try their best to implement each step of the plan and achieve the expected objectives.

The do phase is the most significant phase in the PDCA cycle, In addition to implementing the specified plans and measures, it is also necessary to comprehensively administration and track the staffs participating in the training after the training, try to avoid the problem of staffs asking for leave due to work conflict and other factors, and control the cost at the same time. Meanwhile, in the training process, SF express shall set up a special supervision department to supervise all links in the implementation stage of employee training, including but not limited to: employee participation, training process, training lecturer's teaching, employee acceptance, etc. This can avoid the risk of training and ineffective process.

In the stage of employee training, the original training plan shall be strictly followed. In case of deviation, problems shall be found, analyzed and corrected in time.Strict archives management system and attendance mechanism should be established and improved. Training files should not simply be summarized and classified according to post and other factors, but should be analyzed and evaluated for different employees, summarized into documents and sealed. Special departments should be responsible for the attendance mechanism, strictly assess the participation of employees, manage class discipline to prevent distraction and other situations, and eliminate the occurrence of bad situations such as signing on behalf of others, leaving late and early, and participating on behalf of others.

At the same time, we should establish a risk control system for employee training. As the most important part of an enterprise, employee training is also a major investment project of the company, so there will be some risks. Because the fierce competition in various domestic express delivery industries may lead to low employee loyalty and brain drain, we should establish a risk control system and strengthen prevention while training employees.

SF Express's own internal lecturer is a department leader and excellent express worker. As an elder, we should energetically join into the employees in the training process, integrate with the staffs, and seriously impart excellent work experience and corporate philosophy. At the same time, a position similar to that of a psychological tutor should be arranged to communicate with employees in their spare time, so as to understand the immediate needs of employees and their acceptance and satisfaction with training at any time. In this way, we can immediately find the problems in the training, improve the efficiency and quality of the training, and prevent the bad mood of staffs, so as to decrease the turnover rate of employees, heighten the service ardour of staffs, and ameliorate the service quality.

Employee training is a process that employees must go through. Therefore, employee training activities should be included in the contract system of SF express, and labor training management should be established according to law. Employees have the obligation and responsibility to energetically join in the training, and ensure the training quality at the same time. Use legal means to protect the development of enterprises and control potential risks.

4.3. Check phase

The check stage is the effect inspection stage, that is, to check whether the training results and procedure have reached the expected objectives. Two points need to be paid attention to in the inspection stage. One is to compare with the expected training target and check whether the training items correspond to the set target one by one. Second, observe the data results and use the most accurate and practical data to test the results in real time, which can not be judged subjectively. For example: attendance, employee satisfaction, sales volume, etc.

SF express should evaluate the training through questionnaires, speak to sb. face to face and other forms during the training process and at the winding-up stage of the training, and conduct learning tests at the end of the training. The inspection

elements should include but not limited to: employee satisfaction, employee identity, employee evaluation of training lecturers, and whether the learned knowledge can be applied to practical work. Since most of the training is set up one month before the peak season of the express industry, the effect and quality of this training can be judged by the performance change of the trained employees in the peak season.

The learning test mainly tests whether staffs have greatly improved in knowledge, service attitude, professional skills and comprehensive literacy. Understand the results and training quality by asking department heads, market customers and employees themselves.

At present, the most popular employee training assessment method is Kirkpatrick evaluation model, which includes four levels: reaction, learning, behavior and result.

A. Reaction.It refers to the veritable feelings of the employees take part in the training on the training lecturers, training contents, training facilities, etc. The satisfaction of these factors should be investigated, and the evaluation indicators should be refined, and then judged according to the survey results.

B. Learning.Judging from the degree of mastering the learning knowledge of the staffs participating in the training, mainly including theoretical knowledge, written examination of comprehensive quality, and practical operation of professional skills.

C. Behavior.From the behavior of the staffs joining in the training after the training, special investigators need to be sent to enter the workplace to test the employees' work behavior. Whether the training has been well improved, whether the working ability has been promoted, and whether the business is skilled, so as to evaluate the effect of the training.

D. Result.Judging from whether the employees participating in the training can bring more profits and benign promotion to the company in their work after the training. Mainly through employee performance, customer satisfaction and evaluation, feedback from colleagues and leaders around.

4.4. Act phase

Act stage is the improvement processing stage of PDCA cycle, which mainly takes corresponding measures according to the conclusions reached in the inspection stage. It mainly includes two parts. The first is standardization and fixed advantages. Save the training methods, contents and experience that are helpful to employees and use them in later staff training to take precautions against the recurrence of problems. At the same time, record the effective means in the company's rules and regulations and training guidance documents, reserve opinions on those measures that play a small role, and draw the final conclusion after long-term practice.Second, analyze and summarize the problems in the training process or the omissions in the training plan, and put them into the next PDCA cycle. It is impossible to perfectly formulate excellent training only by one PDCA cycle. SF express should also carry out long-term training according to the actual situation of each employee and each post. For those problems that cannot be solved temporarily, invest in the next cycle, so as to find the most appropriate training scheme in line with SF Express's own development strategy in the PDCA cycle. Whenever a PDCA cycle is completed, the plan for the next new cycle should be considered and new objectives and measures should be formulated.

At the end of a training cycle, both excellent successful experience and failed experience are valuable assets for the company. This kind of experience can not only be spread through meetings, emails and other forms, but can be summarized and classified, and a publicity platform can be built to provide employees with reading and learning by themselves.

For those problems that cannot be properly solved after multiple PDCA cycles, we can no longer follow the old methods and rules, otherwise it will lead to numbness and laissez faire for such matters and can not be improved. A step-by-step feedback

system should be established. Problems that cannot be solved by the division can be fed back to senior regions or headquarters for help. Until the problem is effectively solved.

5. Safeguard measures

5.1. Reward and punishment system

5.1.1 The purpose of perfecting the staff training reward and punishment system

Employee training reward and punishment refers to the punishment given by the company for the indicators completed during employee training, the achievement of staff performance after training, and errors caused by work ability or other factors. The main purpose of improving the reward and punishment mechanism of staff training is to incite staffs to energetically take part in the company's staff training and improve their enthusiasm. Employees, management, training instructors and other relevant personnel can be rewarded and punished respectively. Create an attractive and motivated staff training atmosphere and environment. At the same time, the training process should be closely combined with the promotion and performance salary of employees, the administration target of the management layer, and the achievement and development strategy of the company. The training reward and punishment mechanism of staff training is a necessary factor to guarantee the go on wheels of staff training. The analysis and inspection of training is an important basis for the implementation of the reward and punishment mechanism. SF express needs to be fair, fair and open, and the work efficiency of training can be effectively improved through an effective reward and punishment mechanism.

5.1.2. Principles and application methods of reward and punishment system

(1)Principles of reward and punishment system

From the perspective of assessment, we should be impartial and overt, comply with

the principle of "encouraging excellence, criticizing backwardness, rewarding and punishing, clear rewards and punishments, transparent and open information", and mainly reward and praise new employees to incite their progress.

At the operational level, the reward and punishment mechanism is an auxiliary management tool for employee training. The principle of "who uses who bears" shall be followed in the formulation, supervision and cost bearing of training plan.

At the level of punishment upgrading, administrative punishment can be supplemented for employees who have made continuous work mistakes, left early or absent from work sooner or later for many times, or failed to make progress in training for many times.

(2)Application method

Set up different indicators according to different scenarios, different posts and different identities, and set scores according to the importance of the indicators. If there is no reward or deduction of a certain score, money will be given or deducted accordingly, which will be reflected in the payment of wages at the end of the month. If the accumulated points reach a certain peak, it will affect the year-end bonus, and even be classified as unqualified in the annual assessment.

The assessment process of reward and punishment mechanism mainly includes three steps: submission, review and CC.See the table below for details.(see Table 7)

Table	7
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Step	Process node	Specific description of steps
Submit	Regulatory authorities	Explain the reasons for the reward or
		punishment according to the relevant
		systems and reward and punishment
		mechanisms established by the company.
Department	Reward and punish	Review the reasons and standards of

audit	managers of	rewards and punishments
	corresponding	
	departments	
Reviewed by	Reward and	Check and determine the standardization of
HR	punishment handler of	the process
Department	personnel department	
Approval	Department head of	Confirm and review the reward and
	the employee who is	punishment facts
	rewarded or punished	
CC	Relevant departments	Filing and sorting

5.1.3. Strengthen the assessment mechanism

The assessment of employee training can not be completed in a short time, but is long-term and diversified according to the different employees. Training assessment is not only to investigate the improvement and mastery of employees' professional skills after training, but also to investigate the attendance of employees and the content completion of training instructors in the training process. At the same time, it should also evaluate the comprehensive quality of employees, including but not limited to: communication ability, professional ethics, safety education, company culture, etc., so as to better understand employees and lay a good foundation for subsequent training work. SF express shall adopt the principle of regular inspection to inspect the training results within a period of time, which can be conducted on a monthly or quarterly basis.

At the same time, the regulatory authorities should combine the results of the investigation with the reward and punishment mechanism and promotion institution, give cash rewards and oral praise to excellent employees, vigorously publicize the excellent experience within the SF, and conduct special training for staffs with

relatively poor performance, so as to better comprehend the significance of staff training and ensure the training work in the future, so that every people can make progress in staff training. The combination of assessment and promotion system can better heighten the warmth of employees to join in training, so as to advance themselves, ameliorate the service quality of the company and improve performance.

5.2. Change management concepts and innovate training methods

SF express should strengthen the publicity of employee training, so that the premise members of the company, especially the old employees and management who have been on the job for a long time, can ameliorate the cultivation and development of staffs to a degree related to the existence and important development of the company. Change the management personnel of SF Express's concept of employee training from "replaceable" to "necessities for the development of the company", and form a concept that "although training cannot meet the progress of all employees, it is a chronic death for the company to not carry out employee training". Therefore, when conducting employee training, the company should be guided by the development strategy of the enterprise and fully consider the intention and needs of employees.

The professional skills that SF express first-line couriers must learn include but are not limited to: goods delivery, door-to-door pick-up, package sorting, document production, etc. In addition to adopting the training method of taking the old with the new, different training methods can also be adopted for different posts through collective training, special training and scenario simulation. For example, the management needs special training to ensure effectiveness and practicality. At the same time, we should adopt the job rotation learning system. New employees can study in different positions, not only understand this position, but also understand other positions associated with it, so as to enrich the work experience of new employees. At the same time, the training and learning in various branches can also accelerate the teamwork of staffs in various positions and improve themselves. Now, with the arrival of the epidemic and the development of science and technology, online training, as a new training mode, has entered the enterprise. Online training can simplify the training process, but it should be noted that online training should not occupy employees' rest time as much as possible to avoid reducing employees' satisfaction.

5.3. Corporate culture and employee relations

Form a corporate culture in line with their own development strategy, actively publicize the corporate culture to on-the-job employees and improve their recognition. Ten years of trees, a hundred years of people. Talents can not be cultivated in a short time. Only through continuous learning and good cultural edification can we produce professionals who meet the requirements of the company. SF express should maintain its "team culture" to enable employees to cooperate, compete and grow with each other in their daily work. In their daily work, they publicize the enterprise's core values of "achieving employees and customers". Make employees more agree with the decisions made by SF and strive to ameliorate the service quality of SF.

At the same time, SF express needs to increase personnel care. At the moment of the epidemic, human resources are relatively tight. Over time, employees will have a negative heart and even lead to personnel loss. Therefore, enterprise care has become very important.For employees' opinions or complaints, a special platform should be set up for employees to use, and feedback should be given within a short working day.For the psychological confusion of employees, they should regularly contact the professional department for one-to-one interviews.Regular physical examination of employees and holiday condolences. Good health and good mood are the motivation of employees to work hard, which has a crucial decisive effect on improving service quality. Through various forms of employee care, we can curtail the distance between employees and SF. When the enterprise makes relevant decisions, we can get the

support of staffs, elevate the sense of ascription of staffs, and work harder with more peace of mind.

6. Conclusion and Prospect

6.1. Research conclusion

Guided by the PDCA cycle theory, this paper analyzes the existing circumstances of service quality of SF express, puts forward improvement measures for the existing problems, formulates solutions in strict accordance with the PDCA cycle process, and puts forward guarantee measures. The research conclusions are as follows: Although SF express is a leading private express enterprise in China, there is still much room for amelioration in service quality. Especially in terms of guaranteeing the safety of packages and the comprehensive quality and professional skills of employees in express enterprises. For the above problems, the proposed improvement plan is mainly on staff training. Through PDCA cycle, suggestions are put forward in four stages to ensure the quality of staff training. At the same time, based on this improvement scheme, this paper puts forward corresponding guarantee measures, establishes corresponding reward and punishment mechanism and employee care, so as to eliminate employees' negative mentality and increase employees' trust. So as to improve the service quality.

6.2. Research prospect

Due to the author's theoretical level and time constraints, this paper has some deficiencies. The research on improving the service quality of SF express needs more in-depth and extensive research. Improving the service quality needs to be carried out from many aspects. Due to the lack of personal cognition, we can only select staff training for further research, which inevitably leads to omissions and incorrect analysis. At the same time, the improvement of service quality of express enterprises can not be completed in a short time. It needs the demonstration of relevant

departments and long-time practice to reach a conclusion, which is of value of continuous research.

Reference list:

[1] Liu Yanan & Gao Zhifang (2019). Research on the impact of informatization on the performance of SF express enterprises and its countermeasures Logistics engineering and management (07), 43-46 doi:

[2] Zhou Jiahui (2017). Application analysis of SF express information system Mall modernization (21), 50-51 doi:10.14013/j.cnki. scxdh. 2017.21.027.

[3] Deng Guangya & Zhang Chunyu (2020). Research on cost control of SF Express company under the background of "Internet plus". China market (23), 177-178

doi:10.13939/j.cnki. zgsc. 2020.23.177.

[4] Song Sha, Yao chenjing & Qiang ningjuan (2020). Analysis of SF express employee training plan Economic Research Guide (26), 69-70 doi:

[5] Zhou Xinmiao (2019). Research on employee incentive mechanism in Shunfeng express enterprise management Intelligence (10), 244-245 doi:

[6] Su Liting & Cheng Huan (2015). Research on the construction of driver management system in SF Express (Group) company Knowledge economy (04), 100 doi:10.15880/j.cnki. zsjj. 2015.04.067.

[7] Dong Guangyu (2019). Application of PDCA cycle in enterprise safety management Enterprise reform and management (10), 33 + 75 doi:10.13768/j.cnki. cn11-3793/f.2019.1126.

[8] Liu Zhengguo.(2020). Research on operation Management optimization of X Logistics Company (Master's thesis, Changsha University of Science and Technology).

[9] Zhu Jian, Li Meng & Han Yi (2012). Training management and effect evaluation system based on PDCA cycle Value Engineering (11), 187-188 doi:10.14018/j.cnki. cn13-1085/n.2012.11.136.

[10] Ma Yaowen & Yu Fei (2019). Analysis of service mode of scientific and technological logistics enterprises based on SERVQUAL model Logistics engineering and management (03), 57-59+62

[11] Nie Qing & Ni Weiying (2019). Research on campus express service quality evaluation of private colleges and Universities Based on SERVQUAL model -- Taking Zhejiang Shuren University as an example National circulation economy (33), 32-35 doi:10.16834/j.cnki. issn1009-5292.2019.33.013.

[12] Zhang Lei & Peng Ke (2019) Research on service quality evaluation system of private express enterprises -- Taking Hubei Shunfeng express as an example Science and technology entrepreneurship monthly (07), 85-88

[13] Zhao Zhiqin (2017). The application of Kirkpatrick evaluation method in the construction of teacher training quality evaluation system Continuing education (10), 61-63 doi:10.13981/j.cnki. cn11-3315/g4.2017.10.023.

[14] Du Xiaojing & Gao Jie (2012). Evaluation of MBA course effect based on Kirkpatrick model Journal of College of adult education, Hebei University (03), 84-89 doi:10.13983/j.cnki. jaechu. 2012.03.005.

[15] Zhao Yanan (2015). Research on the application of the basic principles of Coriolis model in improving the effectiveness of training Continuing education (05), 47-48 doi:10.13981/j.cnki. cn11-3315/g4.2015.05.017.

[16] Sun Jian (2018). Research on the establishment of enterprise training evaluation system Instrument user (06), 109-111