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**Study on the Comparison of the Level of
Customer Satisfaction and the Customer
Importance for “the Attitude of Service
Provider” between Taiwan and Japan**

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Abstract

Taiwan is already one of serviced society and demand for service will increase more in the future. Therefore a lot of people have researched on the area relating to service in Taiwan. However there is only a few researches on the comparison of service between countries, therefore this study analyze the difference in the level of satisfaction and importance for service between Taiwan and Japan. In past, marketing strategies are based on 4P (Product, Price, Place, Promotion) which is for physical products. However service products have different characteristics such as intangibility, inseparability and variability, and perishability. Therefore V.A Zeithaml and M.J Bitner, the author of "Service Marketing" add 3P (People, Physical Evidence, Process) to the original marketing mix of 4P. Since most of the service activities are provided by "People", "People" is the most significant factor. Therefore one of the new 3P, "People" will be researched in this study. As the service industry is too broad, this study only focuses on the customers and service providers of department store in Taiwan and Japan as the object. The purpose of this study is to understand the difference in the level of satisfaction and importance for the attitude of service provider in order to improve the service quality in Taiwan.

Approximately a hundred questionnaires are collected from each country to understand the customer's evaluation for the reliability and responsiveness, assurance, and empathy of service provider. For the analysis of this study, four kind of analytical methods are used:

1. Snake Plot and Z-test ----- analysis for the means of the satisfaction and importance level
2. Principal Component Analysis ----- analysis for the influential item on the satisfaction and importance level
3. Independent Sample T-test ----- analysis for the gap in the satisfaction and importance level between Taiwanese and Japanese customers for each evaluation item
4. Kruskal-Wallis H Analysis ----- analysis for the impact of different consuming time and frequency of purchasing on the satisfaction and importance level

As a result of this analysis, it is found that Taiwanese customers have higher level of the satisfaction and importance than Japanese customers overall. Moreover Taiwanese customers tend to more care about the standardized service such as assurance of service provider, whereas Japanese customers tend to more care about the customized service such as the empathy of service provider. In my opinion, since Taiwan and Japan have a lot of similarities in culture and life style, the difference in the level of satisfaction and importance is influenced by the stage of serviced society. Therefore it might be possible to say that the more serviced the society is, the more customized service people want for service provider.

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Chapter 1. Introduction

1-1 Motive of Study

Taiwan is already one of serviced societies. Service is activity provided for making our life better and more convenient, therefore the consumption of service means that we experience such activities.

In economics, the progress of serviced society is called “development of serviced economy”. This serviced economy is measured as the following three indexes.

- a) The output of the service industry has more than half of GDP (gross domestic production).
- b) The number of workers in the service industry has more than half of the total number of workers.
- c) There is the development of service in the manufacturing industry.

As can be seen from those indexes, Taiwan is becoming serviced economy and it has the potential to develop more in the future. For instance, such activities as traveling, movie and education, and medical treatment make our life more enjoyable and convenient, and solve many problems. Those activities are in the process of service and can be seen anywhere as one scene of daily life today in Taiwan, therefore everyone has a lot of opportunities to experience different kind of service everyday.

A couple of decades ago, as there are not so many department stores, a group of friends or everyone in a family make an appointment and go to a department store together. Today however, as can be seen from the number of department stores, there are several department stores in any large or small cities in Taiwan. Therefore it is one of leisure activities for moderns to go to department store at the weekend, and department store is gradually to be a part of our life style. Therefore the chance of having service is also increasing dramatically compared with before. In particular, after the entry of Japanese style of department store (i.e. Sogo), Taiwanese consumers have experienced completely new type of service style with sincere attitude of service providers and well-arranged physical facilities. With the tendency towards serviced society, people have more chance to have service, therefore the study of service management has been focused and researched more lately. The most of past business

management theories are based on manufacturing products, whereas service management theories are based on service products including service production process. The reason why service needs its own business management theory is because service products have different characteristics such as intangibility, inseparability and variability from physical products. Accordingly some problems cannot be solved in the past business management theory. Therefore it is very important to understand the difference between traditional marketing based on physical products and service marketing based on service products in terms of business management strategy.

1-2 Study Purpose

Taiwan is already towards serviced society and people have more opportunities to have service in the future. Therefore they have focused on the study related to service and started researching on service lately. As a result, some new management theories such as service management theory are presented. Service management is business management theory that regards service as the product. The past management theory is on the assumption that physical product is the main object of management in manufacturing industry and that the marketing mix consists of 4P (Product, Price, Place, Promotion). However when service is regarded as the product, there are specific characteristics such as intangibility, inseparability and variability, and perishability that are different from physical product. For that reason, V.A Zeithaml and M.J Bitner (R.29), the author of “Service Marketing” add 3P (People, Physical evidence, Process) to the original marketing mix which is based on physical product. This new 3P is the biggest difference between service product and physical product in marketing mix. Since most of the service activities are provided by “People”, “People” is the most significant factor. Therefore one of the new 3P, “People” will be researched in this study.

There are mainly four important factors that effect service quality when “People” (service provider) provides service with customer.

- a) Reliability ----- to provide promised service
- b) Assurance ----- to offer technical knowledge and experience
- c) Responsiveness ----- to meet customers’ needs speedily
- d) Empathy ----- to sympathize with customers

Since service process is as important as outcome of service in service production, service provider should put a lot of efforts on creating the effectiveness in both outcome and process. Moreover service provider plays a significant role in the process of service production, the attitude of service provider has a great influences on the service quality.

There are five basic principals in the attitude of service provider.

- a) understand the situation from customer’ s point of view
- b) speak with polite and courteous manner
- c) make customers feel free and comfortable
- d) esteem customers’ self-respect

e) treat customers fairly

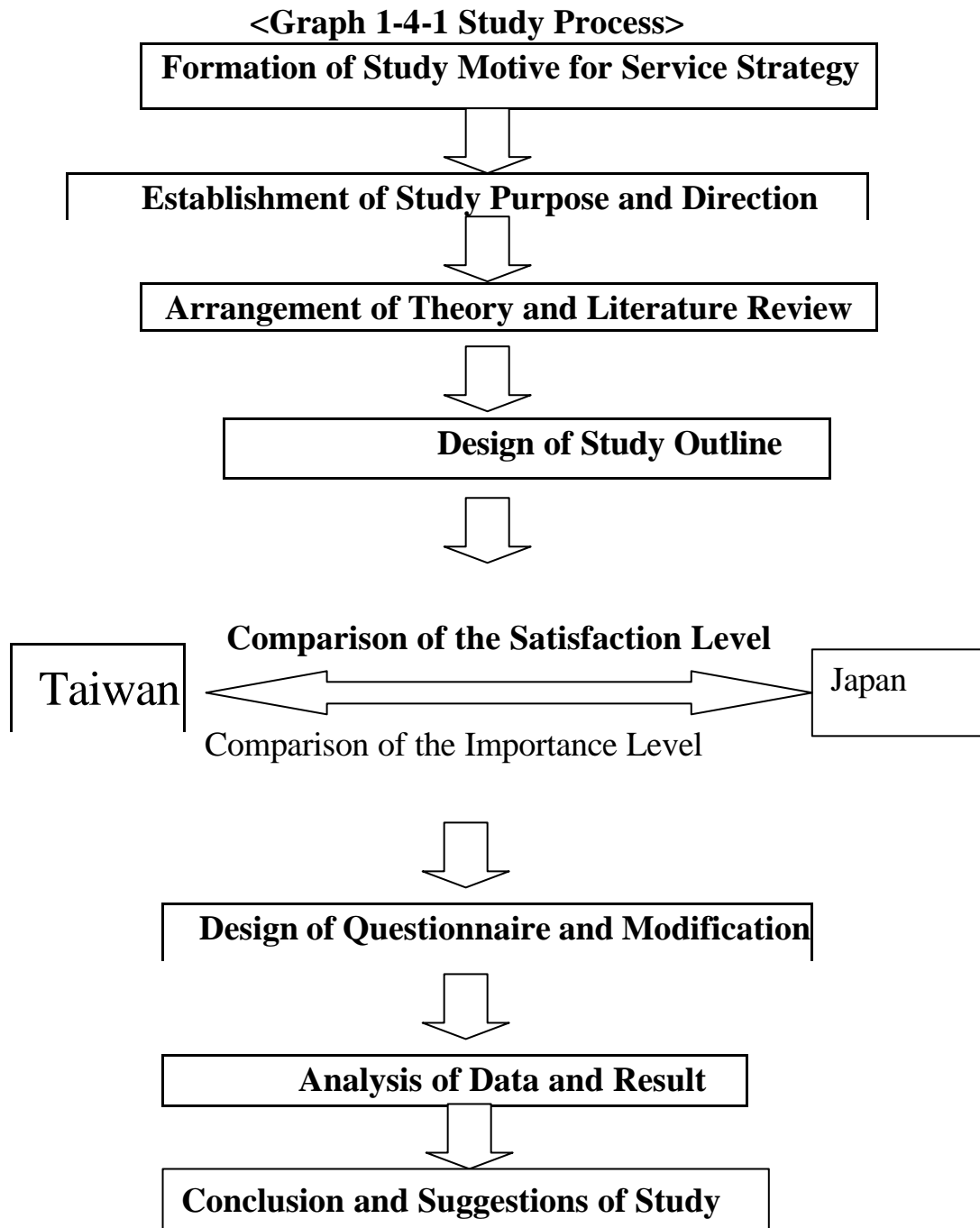
In Western countries, the research on service management and service marketing has begun to be focused even since 15 years ago. Most of the department of business management in Western university offer the subject for service management. The number of researchers is increasing dramatically, therefore the international exchange network called IASRE (international academic service research education) that integrated the university and research organizations in Europe with that in America, was established. In Japan, the concept of service management such as the attitude of service provider and the layout of a store, after-sale service has been already spread among people. There have been a lot of researches on the field related to service management and service marketing since a very early time. Moreover there is the objective organization that does research and investigation on this area of study and all the result are shown by one reliable index that measures the level of satisfaction for the product by Japanese consumers. On the contrary, even though Taiwan is already serviced society, there is not many researches on the area of study related to service strategy mix especially the concept of new 3P. In particular, there is only few studies on the comparison of service strategy between Taiwan and Japan.

Therefore the difference in service strategic management between department stores in Taiwan and Japan will be researched, analyzed and discussed in order to improve the domestic standard of service quality.

1-3 Study Area

- a) As the field of service industry is too broad, this study only focuses on Taiwanese and Japanese well-known department store industry as the study object.
- b) The big difference between traditional marketing and service marketing is that there are the new added 3P (People, Physical Evidence, Process) in service marketing strategy. Because most of service activities involve “People” who provide customers with service, “People” is the most significant factor. Therefore the service strategy related to “People” will be researched in this study.
- c) The influence of “People”, one of new 3P, on customer satisfaction will be researched in this study. In this study, “People” called service provider means those who provide customers with service at department store.
- d) The difference in the cognition of service strategy and service style between department store industry in Taiwan and that in Japan will be understood with random sample from questionnaire survey.

1-4 Study Process



Chapter 2. Literature Review

2-1 Concept of Service

The word “service” is originally from Latin word “Servitum”, which means “slave’s work for master”, that is one kind of “duty”. Through many years of development, the concept of service cannot be represented by only original meaning of the word. The followings are many different concepts of service defined by some scholars or organizations:

(a) Kolter’s definition (R.22): “Service is a kind of activity or expression that one side offers another. It is basically intangible and also does not get involved ownership rights. Moreover it is not necessary to require attached or substantial products.

(b) Yoshio Shirai (R.32): “Service is an intangible activity for customer satisfaction.”

(c) Yasuhiko Ushida (R.30): “Service is based on physical, mental and social fitness. Social fitness means contribution for the society or other people by working.”

(d) Buell’s definition (R.6): “Service is for sales or assorted goods and offered with each kind of activities, benefits or satisfactions.

(e) Dr. Juran’s definition (R.13): “Work performed for others.” As can be known from this definition, the final judgment or service quality should be made by served person.

There are mainly four characteristics of service according to the definition of many professors.

a) Intangibility: Service quality cannot be calculated, measured or tested beforehand. Before purchasing, a customer cannot see or touch, therefore it is difficult to evaluate whether or not service is good after purchasing.

- b) **Inseparability:** Service and the source providing service normally cannot be separated since service is produced by providers and customers simultaneously no matter whether it is provided by people or machine. Moreover unlike manufacturing products, service cannot be bought whenever customers need.
- c) **Variability:** Since a large part of service requires the communication between service providers and customers, the same kind of service can be changed largely in different time, different place or by different service providers. Moreover service providers have different personalities, emotions and attitudes, and skill, therefore there is a large variability in providing service.
- d) **Perishability:** As service normally cannot be stocked, the production adjustment is relatively inflexible. Therefore in such industry with high production investment cost as airline, department store and hotel industry, the level of production utilization has a great influence on the effectiveness of operation.

There are also other characteristics for a certain kind of service except for the above main characteristics of service.

- a) **Production of service cannot be standardized.**
- b) **Customers anticipate in the process of service.**
- c) **Service skill is sold directly to the customers.**
- d) **Service cannot be produced in large amount.**
- e) **The level of service providers' judgments is high in the service production.**
- f) **Service facilities are relatively close to customers.**
- g) **The measurement of service effectiveness is subjective.**
- h) **Pricing system is relatively complicated.**

2-2 Marketing Strategy for Service Product

As can be known from the concept of service, service product is characteristically different from physical products, therefore the service product has its own marketing mix, 7P. The big difference between marketing strategy for physical products and service marketing strategy is the added 3P (People, Process, Physical Evidence). According to Zeithaml and Bitner (R.29), this new 3P is called the “Evidence of Service” that builds customer’s service experience and has a great influence on service quality and customer satisfaction. Now, it will be introduced the service marketing strategy that consists of the traditional marketing strategy of 4P (Product, Place, Promotion, Price) and the service marketing strategy of new 3P (People, Physical Evidence, Process).

2-2-1 Service Product

There are following decisive factors for service product.

a) Design of Service Concept

According to Mitsuteru Shimaguchi (R.17), the concept of service products is needs that express company’s insistence uniquely for differentiation of service concept. Therefore the design of service concept is to market-in those market needs that are understood by customer segmentation, and conceptualize and express as product.

b) Decision of Service Quality

The level of service quality has to be decided in terms of the result and process of service. This is closely related to the service concept, therefore this can be regarded as a part of the concept.

c) Design of Service Package

The factors that constitute of service include the core service, sub-service, contingent service, potential service. Service is offered with service package, combination of different service factors.

d) Product Line and Brand

The product line is important especially for service that offers different kind of service products such as department stores. Branding is to put a brand name and sell as a brand product. There are many effects for branding and the service products also can be a brand with brand name.

2-2-2 Place

The place originally means location in the marketing mix, however it now includes the meaning of distribution channel for the product. Because of the characteristics of service product, location and channel should be considered as place in the service marketing:

a) Location

Unlike physical products, service product cannot be distributed, therefore customers have to get to the place where service is produced. Therefore the location is especially important for service product.

b) Channel

With the development of information system, service activities based on information resource such as finance, education, advertisement can have more channel choices. As more and more service are available anyplace at anytime, the location will be not a significant factor especially for service using information technology in the future.

2-2-3 Promotion

As service is an intangible activity, the contents or quality of service product are difficult to express by promotion. Therefore the most effective promotion tool for service product is from-mouth-to-mouth effect. The evaluation of customer who has already experienced, can have a direct influence on the heart of potential customer. Therefore it is very important to provide good quality of service for spreading good reputation. At the same time, the complaint management is as important as attracting new customers since there are many benefits from complaint management including creating loyal customer and improving service quality.

a) Propaganda Advertisement

For the promotion of service products, it is difficult to express the contents of service directly. Therefore other methods for visibility are used such as expressing image or reliability.

b) Physical Factor

Since customers are more likely to feel risky for having service because of characteristics of service, physical factors such as building or uniform, facilities are helpful for customers to image service contents or service quality as tangible factors relating to service.

2-2-4 Price

Purchasing service does not involve a transfer of ownership. Therefore customer pays for “promise” by experiencing provided service products. Since the relationship between cost and price cannot simply apply a formula in service production, the quality evaluation function for price is important for customers. Therefore it is important to reduce the customer’s anxiety for price setting and set an understandable price.

a) Berry and Yadav’s price strategy

Customer’s judgment for product value has a great influence on the decision of product purchase. No matter how expensive the product is, customer purchase valuable products willingly. Therefore, how to show the product value to customers is the key point in price setting for service products. Price is also the means of communication with customers. Berry and Yadav (R.27) propose three patterns of price strategy with price setting and strategic tool.

<Table 2-2-4 Berry and Yadav’s Price Strategy>

PRICE STRATEGY	FOR CUSTOMER VALUE	STRATEGIC TOOL
Price setting based on customer satisfaction	Reduction of customer anxiety	- service guarantee - price based on benefit - flat rate price
Price setting for customer relationship	Long-term relationship with company, which is benefit for customer	- long-term contract - offer of service package
Price setting based on efficiency	Cost reduction and share of the profits with customer in service production	- cost leader

2-2-5 People

Since people provide service, people is the most influential factor in service production. Service provider who has assurance, reliability, responsiveness, empathy can make customer get a feeling of satisfaction. The following graph describes the task and strategy in service marketing.

<Table 2-2-5 Task and Strategy for Human Resource in Service>

TASK	STRATEGY
Employment	Internal marketing
Motivation	Empowerment
Fixation rate	Reengineering
Employee satisfaction	Working environment
Promotion of ability	Reward system
Support for business activity	Business tool
	Ideology, leadership

2-2-6 Physical Evidence

Physical evidence means all physical environmental factors relating to service production such as building, layout, external environment and uniform. There are mainly two basic roles for physical evidence. One is to be a part of experience and another is to communicate service quality to customers. Bitner (R.29) calls place where service is provided as “service escape” and points four following functions:

- a) Package function ----- for covering service and giving a certain image
- b) Facilitator function ----- for promoting the joy of service production and consumption experience to both customers and employees, and raising service quality
- c) Socializer function ----- for promoting interaction between customers and employees, or among customers
- d) Differentiation function ----- for emphasizing differentiation against competitive companies or different character of service contents

2-2-7 Process

From customer’s point of view, service process can be classified by mainly two different measurements. Since the position of service in the measurement decides what kind of service should be provided, those measurements are important in service marketing. No matter what the tendency of service process is, the most important thing is whether or not the service can meet the customer’s requirement. Therefore service process has to be well-organized and integrated with other service marketing mix.

a) Level of Standardization

This is about whether the service process is standardized or customized. The more standardized the service process is, the more stable and same service is required. On the other hand, in customized service process, service that can meet different customer's requirement is important. In general, people tend to have more and more customize service.

b) Level of Customer Involvement

This is about how much customer is involved in the service process. Regardless of the level, customer is involved in some part of service production. For instance, service such as fast food restaurant and coin laundry is regarded as the high level of customer involvement, whereas full service such as hotel and hospital is regarded as the low level of customer involvement.

2-3 Literature of Customer Satisfaction

A lot of business enterprises look very heavily on customer satisfaction to take competitive advantage. In this chapter, the definition and theory of customer satisfaction, and factors of influencing customer satisfaction will be discussed.

2-3-1 Definition of Customer Satisfaction

- (a) Katsuyoshi Ishihara (1992) (R.14) argues customer satisfaction in service industry is not only to improve quality, but also to improve every aspect of service including price, quantity, delivery time, environment, cleanness, security.
- (b) Kotler (1984) (R.22) highlights that customer satisfaction is personal feeling towards happy or disappointment, which comes from the difference between personal experience for product performance and personal expectation for the product after comparing those two. To be concrete, the satisfaction is the function of actual performance and expectation.
- (c) Oliver (1981) (R.19) argues that customer satisfaction is gained surprise in customer's own experience and is a kind of emotional responses to things.
- (d) Solomon (1985) (R.18) sees customer satisfaction as the total personal behavior of purchasing product.
- (e) Lovelock, C.H., (1988) (R.16) argue that the level of customer satisfaction is measured by the multiplication of customer expectation and service proves and output.
- (f) Engel, Roger and Blackwell (1993) (R.11) argue that customer satisfaction is the comparison between actual performance of products after using and expectation for the products before using. If there is consistent between two, customer can get satisfaction, whereas if there is no consistent between two, customer cannot get satisfaction.

2-3-2 Theory of Customer Satisfaction

Many scholars have done a lot of researches on customer satisfaction and have presented different theories of customer satisfaction. Oliver and Desarbo (1988) (R.20) provide the following three models that explain the process of forming customer satisfaction.

(1) Perspectives of Interest

There are two kinds of customer satisfaction theories based on the Perspectives of Interest Theory as follow:

a) Equity Theory

Heppertz, Arenson, and Evans (1978) firstly apply the Equity Theory in the study of organization behavior in marketing. In the process of consuming product or service, people have one kind of transactional relationship and they compare the value gained from consuming experience with input cost. Only when they have a balance between quality and price, they get satisfaction.

b) Attribution Theory

The Attribution Theory is originally from the study of organization behavior. People who have tendency of internal attribution, regards a lack of own ability or effort as the cause of failure. Weuner, Russell, and Lerman (1978) apply the Attribution Theory in the customer satisfaction. They recon that the level of customer satisfaction is a kind of attribution function, which proves people with internal attribution have relatively higher level of satisfaction than people with external attribution.

(2) Expectancy-Disconfirmation

There are mainly eight customer satisfaction theories based on the Expectancy-Disconfirmation Theory as follow:

a) Assimilation Theory

This theory is developed based on the Cognitive Dissonance Theory presented by Festinger (1975). The point is that when people find the gap between expectation for the product and actual performance, they adjust the evaluation for the product. They can avoid the dissonant situation by making the gap smaller.

b) Contrast Theory

This theory presented by Hovland, Harvey, and Shrif (1957) is the contrast phenomenon of the Assimilation Theory. The basic assumption is that when people find the gap between expectation for the product and actual performance, they make the gap larger.

c) Assimilation-Contrast Theory

Hovland, Harvey, and Shrif (1957) present the Assimilation-Contrast Theory. They point that when people find the gap between expectation for the product and actual performance, there exists acceptable area and unacceptable area in their mind. If the gap is in acceptable area, the assimilation effect occurs. Therefore they make the gap smaller and feel satisfied. On the other hand, if the gap is in unacceptable area, the contrast effect occurs. Therefore they make the gap larger and feel unsatisfied.

d) Generalized Negativity Theory

Carlsmith and Elliot (1963) argue that when people find the gap between expectation for the products and actual performance, they take completely negative attitude towards the product no matter how big or small, positive or negative the gap is. This makes their evaluation for the product performance worse.

2) Comparison Level Theory

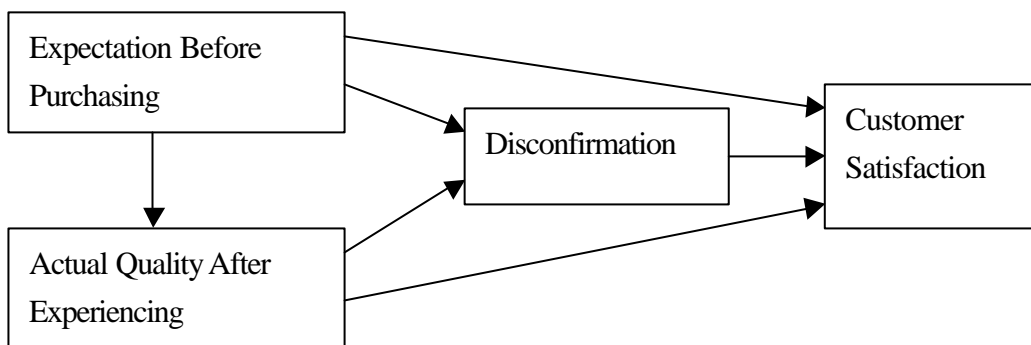
Thibaut and Kelly (1957) point that satisfaction is through human interaction and is produced in the disconfirmation of specific comparison level and product performance. Latout and Peat (1979) explain customer satisfaction by developing own theory. They argue that people set the comparison level based on their expectation, which is similar to the Adaptation-Level Theory. However the main difference is that the Adaptation-Level Theory is usually not regarded as the judgment of evaluation, on the other hand the Comparison Level Theory is viewed as the judgment of evaluation.

3) Expectancy-Disconfirmation Theory

Oliver and Desarbo (1988) argue that the level of satisfaction is formed by expectation before purchasing and actual quality after using, and disconfirmation between those two. First of all, people have expectation for the product they want to purchase. This expectation becomes the standard of satisfaction level after purchasing. After completing the transaction, people compare the actual quality after using and expectation before purchasing. The gap between those two creates the disconfirmation and becomes the standard of judgment for satisfaction level. Aderson and Sullivan (1993) see the Expectancy-Disconfirmation model from different point of view and adds some changes on the Expectancy-Disconfirmation model.

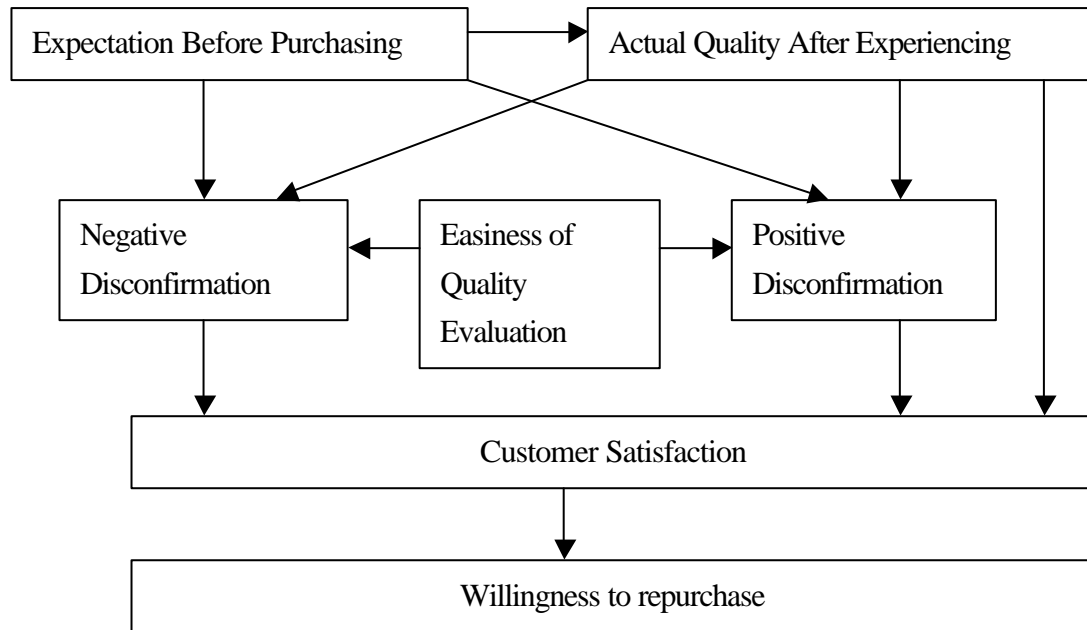
- a) Disconfirmation can be divided into positive disconfirmation and negative disconfirmation.
- b) Positive disconfirmation and negative disconfirmation can accept the effect of quality evaluation easily.
- c) Customer satisfaction effects the willingness to repurchase.

<Graph 2-3-2a Expectancy-Disconfirmation model>



Source: Oliver, R.L. and W.S. Desarbo (1988), "Response Determinants in Satisfaction Judgment", Journal of Consumer Research, Vol. 14, March 1988, pp.495-507

< Graph 2-3-2b Expectancy-Disconfirmation model after amendment >



Source: Anderson, E.W and M.W. Sullivan (1993), "The Antecedent and Consequences of Customer Satisfaction for Firms", *Marketing Science*, Vol.12, No2, Spring 1993, pp.125-143

4) Adaptation-Level Theory

Helson (1964) insists that only when people are in own adaptation level, they feel stimulated. In other words, their sensitivity is influenced by personal adaptation level, that is, the expectation level for product before purchasing. Therefore the level of satisfaction changes only when something important occurs in the adaptation level. When their evaluation for product after purchasing is not equal to the adaptation level, the disconfirmation occurs and the net effect of disconfirmation becomes the level of customer satisfaction. Oliver (1981) applies in the basic decisive factors of customer satisfaction level. The expectation level before purchasing and the variable for relative effectiveness of product have an influence on the decisive factor of customer satisfaction level. And this variable level becomes the disconfirmation level.

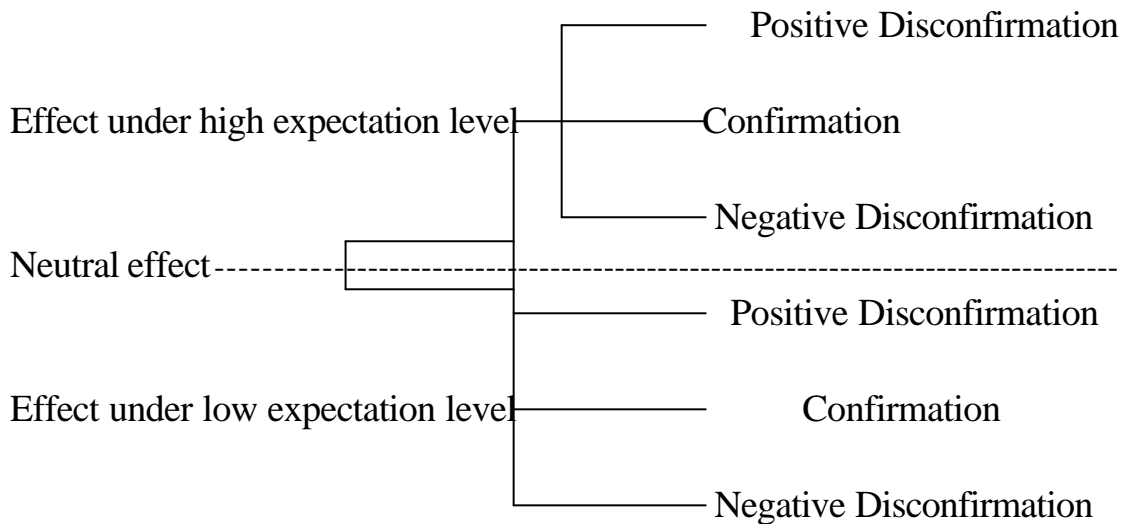
There are three kinds of outcomes based on the positive or negative of disconfirmation and the level of disconfirmation:

- a) If actual performance after purchasing can exceed expectation for the product before purchasing, the positive disconfirmation effect occurs, which leads to customer satisfaction.
- b) If actual performance after purchasing is equal to expectation for the product before purchasing, confirmation effect occurs.

- c) If actual experience after purchasing is lower than expectation for the product before purchasing, the negative disconfirmation effect occurs, which leads to dissatisfaction.

Oliver regards the adaptation level as the expectation level not only for setting standard but also for the basis for judgment of product efficiency. Moreover the disconfirmation is regarded as the main cause of changing the adaptation level. And the change of satisfaction level is adverse effect and it adjusts the adaptation level.

<Graph 2-3-2c Adaptation-Level Theory>

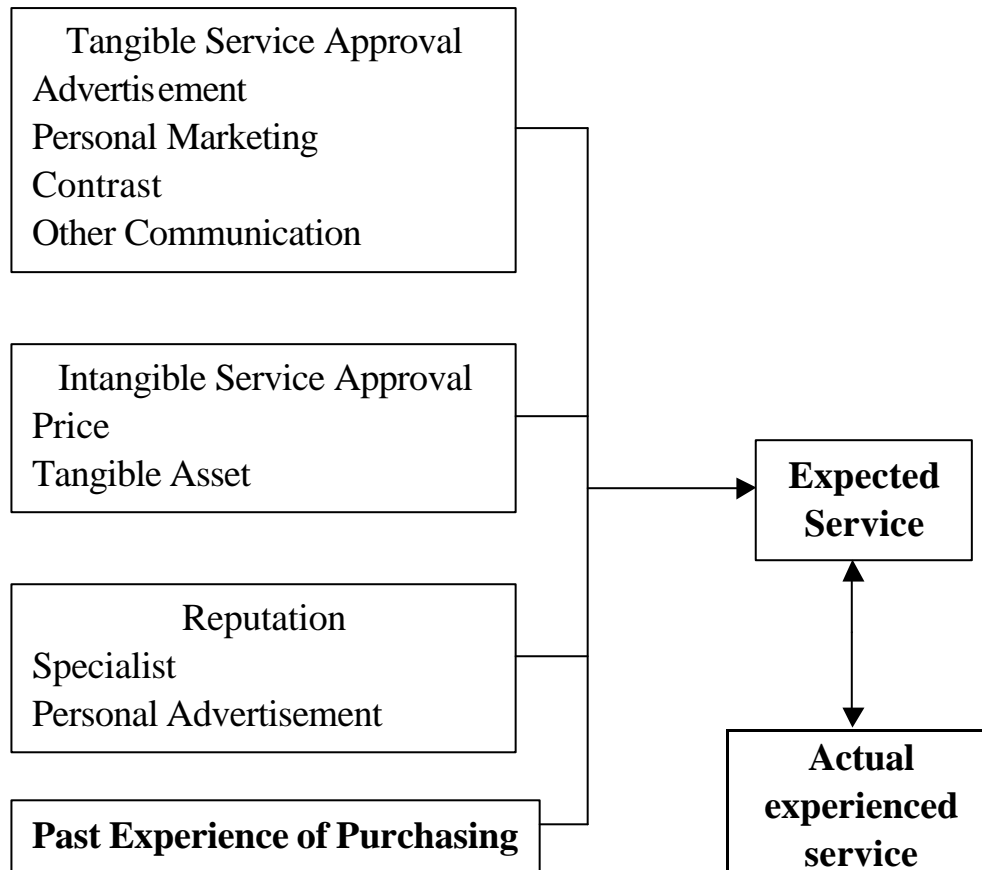


source: Oliver, Richard L (1981), "Measurement and Evaluation of Satisfaction Processes in Retail Setting", Journal of Retailing, Vol.57, No.3, Fall 1981, pp25-48

5) Customer Expectation Theory:

Parasuraman, Zeithaml and Berry (1993) present the Customer Expectation Theory which recon that customer satisfaction is the gap between customer's expectation for products before purchasing and actual performance after using. As can be seen from the graph 2-3-2.d, the variances that effects expected service are tangible service approval, intangible service approval, reputation, and past experience of purchasing.

<Graph 2-3-2d Customer Expectation Theory>



Source: Parasuraman A. V.A. Zeithaml, and L.L. Berry (1993), "The Nature and Determinants of Customer Expectations of Service", Journal of the Academy of Marketing Service, Vol.21, No.1, Winter 1993, pp1.-12

(3) Redress Process:

The Redress Process Theory is different from the Expectancy-Disconfirmation Theory and the Perspectives of Interest Theory. The big difference is that when the latter two theories discuss the occurrence of customer dissatisfaction, they only focus on whether or not customers take actions, or how they behave in the process of compensation. However, they do not directly discuss the influence of customer satisfaction on their after-purchasing behavior.

2-4 Service Quality

It is significant to focus on service quality in service marketing since quality of service products is evaluated by customers subjectively. Therefore the key strategy in service marketing is to satisfy customers and create royal customers by providing a good quality of service whenever they have service. The point is the level of quality and how to create the image of the value.

2-4-1 Classification of Service Quality

No matter whether it is physical or service product, quality can be classified based on how customers evaluate the quality.

a) Search Quality

This kind of quality is possible to be evaluated before purchasing the product. This kind of quality can be used in evaluating the quality of most physical products such as clothes, jewels, furniture and car since those can be evaluated by touching or using the products.

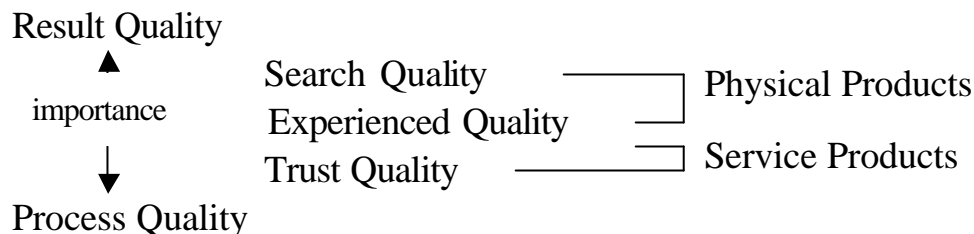
b) Experience Quality

This kind of quality is evaluated by using the products during or after purchasing. Customers can evaluate the quality by actually using and experiencing the product. This can be used in evaluating the quality of most service products such as travel tour, hair dresser, beauty salon.

c) Trust Quality

This kind of quality is difficult to evaluate whether or not the service has expected effect even after actually experiencing the product. Customers have to decide to purchase by trusting the product since the effect of service cannot be known immediately. This can be used in evaluating the quality of fixing car or computer, consultant and fortune teller.

<Graph 2-4-1 Classification of Service Quality>



Source: J.L. Heskett, W. E. Sasser, Jr. and C.W.L. Hart (1990), "Service Breakthroughs", The Free Press, 1990 p.37

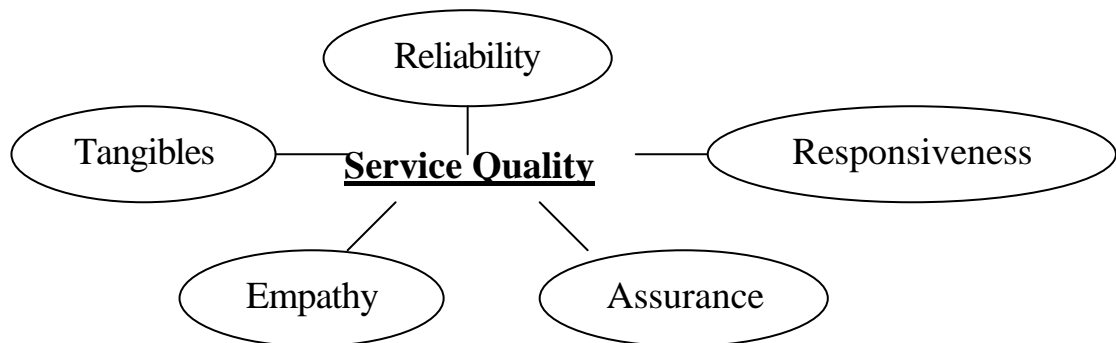
As can be seen from the Graph 2-4-1, the service quality cannot be evaluated immediately. Therefore the process of service is as important

as the result of service. If customers cannot evaluate the effect immediately, they use process quality as the evaluation standard of the total quality.

2-4-2 Standard of Service Quality

Service quality can be evaluated by the SERVQUAL. This evaluates customer's subjective quality on service in terms of reliability and responsiveness, assurance, and empathy, tangibles.

<Graph 2-4-2 SERVQUAL>



Source: A. Parasuraman, V.A. Zeithaml and L.L. Berry (1988), "SERVQUAL", Journal of Retailing, Vol.64, No.1, Spring 1988

a) Reliability

This is the evaluation standard for service product itself especially for core service. This is trust for ability that company can provide exactly promised service.

b) Responsiveness

This is about service provider's behavior and attitude towards responding customer's request actively and speedily in service production. It includes the speed of service production and service provider's eagerness to satisfy customer's requirement.

c) Assurance

This is about the evaluation for service provider's knowledge and skill and manners to customers. It means company and employee's ability to give an image of trust and certainty for service quality to customers.

d) Empathy

This is evaluating the service provider's attitude towards understanding

customer's personal problem or feeling and solving the problem together.

e) Tangibles

This is about communication tools of service quality such as exterior or interior of building, uniform, pamphlet. Those tangibles create the environment for service production as a part of service quality and help to understand the service quality in advance.

Chapter 3. Analytical Framework and Hypotheses

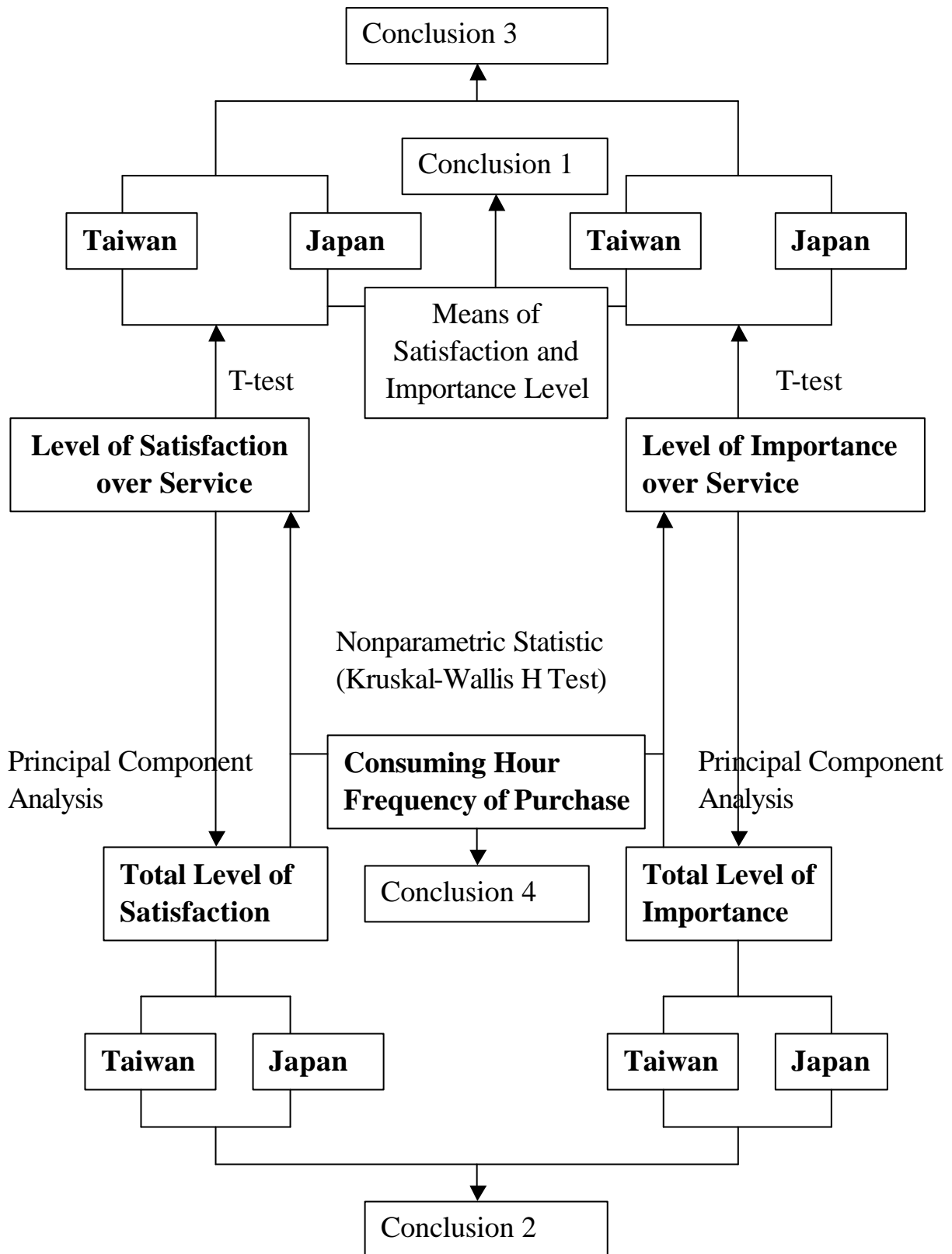
The structure and method for this study will be developed based on the study purpose in Chapter One and the literature review in Chapter Two and a reference of the related domestic and foreign research. The purpose of this chapter is to build the outline of study analysis, the statistic method and the study hypothesis, and to design the questionnaire and to explain the random method and sample structure.

3-1 Study Subject

As mentioned in Chapter One, the object of this study is customers of department stores. Moreover a large number of customers at department stores is female in general, therefore the female customers are regarded as the subject of this study. For Taiwan, the subjects of department stores customers use are the Chung-Yo department store, the most well-known in the middle Taiwan and Mitsukoshi and Sogo department store, the famous Japanese department stores in the Northern Taiwan. For Japan, the subjects of department stores are Mitsukoshi and Takashimaya department store, the most well-known department stores and located most large cities in Japan.

3-2 Outline of Study Analysis

<Graph 3-2-1 Outline of Study Analysis>



3-3 Study Hypothesis

Based on the study purpose and the outline of study analysis, the study provides the following hypothesis.

Level of Satisfaction

Hypothesis One:

- (a) The means of satisfaction level for Taiwanese customers is less than 3 at each evaluation items for the attitude of service providers.
- (b) The means of satisfaction level for Japanese customers is less than 3 at each evaluation items for the attitude of service providers.

The Z-test is used for the analysis of this hypothesis.

Hypothesis Two:

There is no obvious difference in the level of satisfaction at each evaluation items for the attitude of service providers between Taiwanese consumers and Japanese consumers.

The independent sample T-test is used for the analysis of this hypothesis.

Hypothesis Three:

- (a) Among Taiwanese consumers with different consuming time, there is no obvious difference in the level of satisfaction at each evaluation items for the attitude of service providers.
- (b) Among Taiwanese consumer with different purchasing frequency, there is no obvious difference in the level of satisfaction at each evaluation items for the attitude of service providers.

The Kruskal-Wallis test is used for the analysis of this hypothesis.

Hypothesis Four:

- (a) Among Japanese consumers with different consuming time, there is no obvious difference in the level of satisfaction at each evaluation items for the attitude of service providers.
- (b) Among Japanese consumer with different purchasing frequency, there is no obvious difference in the level of satisfaction at each evaluation items for the attitude of service providers.

The Kruskal-Wallis test is used for the analysis of this hypothesis.

Level of importance

Hypothesis One:

- (a) The means of satisfaction level for Taiwanese customers is less than 3 at each evaluation items for the attitude of service providers.
 - (b) The means of satisfaction level for Japanese customers is less than 3 at each evaluation items for the attitude of service providers.
- The Z-test is used for the analysis of this hypothesis.

Hypothesis Two:

There is no obvious difference in the level of importance at each evaluation items for the attitude of service providers between Taiwanese consumers and Japanese consumers.

The independent sample T-test is used for the analysis of this hypothesis.

Hypothesis Three:

- (a) Among Taiwanese consumers with different consuming time, there is no obvious difference in the level of importance at each evaluation items for the attitude of service providers.
 - (b) Among Taiwanese consumer with different purchasing frequency, there is no obvious difference in the level of importance at each evaluation items for the attitude of service providers.
- The Kruskal-Wallis test will be used for the analysis of this hypothesis.

Hypothesis Four:

- (a) Among Japanese consumers with different consuming time, there is no obvious difference in the level of importance at each evaluation items for the attitude of service providers.
 - (b) Among Japanese consumer with different purchasing frequency, there is no obvious difference in the level of importance at each evaluation items for the attitude of service providers.
- The Kruskal-Wallis test will be used for the analysis of this hypothesis.

3-4 Study Method

Based on the outline and purpose of study analysis, the following methods are used for this study.

1. Literature Review

This method is to collect the related literature and discuss the evaluation items of service quality in department industry.

2. Questionnaire Survey

This method is to survey the influential factors of the attitude of service providers and the service quality at department stores on the level of satisfaction and importance of Taiwanese and Japanese customers.

3. Z-test and Snake Plot

This method is to analyze the means of the satisfaction and importance level for the attitude of service provider.

4. Principal Component Analysis

This method is to use the relatively small number of variables as the represent of original large number of variables and analyze each variable in the distribution of the total level of satisfaction and the total level of importance, and understand the mutual relationship with the Principal Component value.

5. Independent Samples T-test

This method is to test the gap in the level of satisfaction and importance between Taiwanese and Japanese customers for each evaluation items regarding the attitude of service provider.

6. Kruskal-Willis test

This method is to understand the impact of different consuming time and frequency of purchasing on the level of satisfaction and importance for the attitude of service provider.

3-5 Design of Questionnaire

1) Content of Questionnaire

Based on the purpose and outline of the study, the difference of service management strategy between Taiwan and Japan will be analyzed and understood with the case of department store. The questionnaires are written in both Chinese and Japanese, and are handed out to the Japanese and Taiwanese consumers. The questionnaire consists of two parts, consumer's general information and the evaluation items for the attitude of service providers. The latter part is measured by the level of satisfaction and importance. Both questionnaires are translated from English, therefore the content of both questionnaires is the same. The following is the content of questionnaire.

First Part: Consumer's General Information

The purpose of the first part is to gather consumer's general information. This survey includes the followings:

- (1) age
- (2) occupation
- (3) frequency of purchasing
- (4) consuming amount
- (5) consuming time

Second Part: The Evaluation Items for the Attitude of Service Providers

This part is to ask the Taiwanese and Japanese consumers' opinions about the attitudes of service providers at department stores by measuring the level of satisfaction and importance.

<Reliability>

- (1) Service provider's trust in customers and dealing with payment
- (2) Service provider's accuracy in recording data
- (3) Service provider's explanation of products while sales
- (4) Service provider's accuracy in providing exact service
- (5) Service provider's reliability on after-sale service and guarantee

<Responsiveness>

- (6) Service provider's response and communication method while sales

- (7) Service provider' s speed and handling while after-sale service
- (8) Service provider' s positive towards meeting customer' s request
- (9) Service provider' s offering information
- (10) Service provider' s positive towards contact and communication with regular customer

<Assurance>

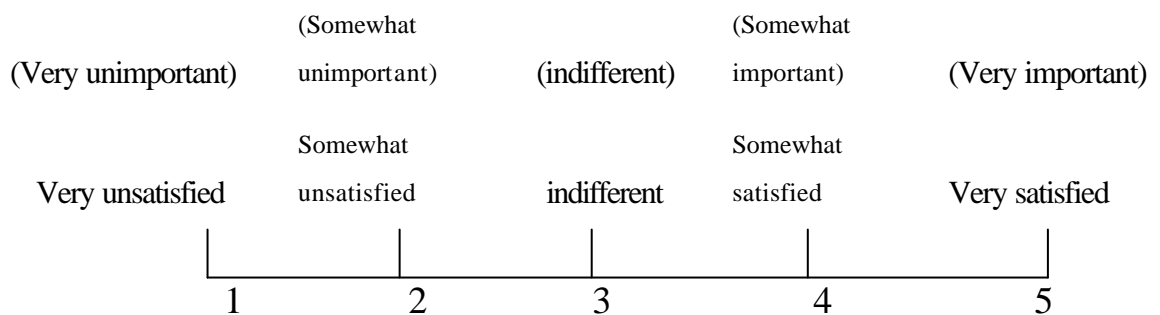
- (11) Service provider' s treatment without disturbance to customer
- (12) Service provider' s treatment in a polite and courteous manner
- (13) Service provider' s offering technical knowledge and skill
- (14) Service provider' s friendly smile and refined way of speaking
- (15) Service provider' s sincere aftercare and friendly treatment
- (16) Service provider' s appearance

<Empathy>

- (17) Service provider' s sincere attitude towards dealing with problem solving for customer
- (18) Service provider' s customized service depending on personal needs
- (19) Service provider' s attitude towards respecting customer
- (20) Service provider' s effort for a long-term relationship with customer
- (21) Service provider' s attitude and way of dealing customer' s complaints

2. Measurement Methods

The five point graph is used for this study as the measurement method. The more right and positive the evaluation is, the higher the score of evaluation is. On the other hand, the more left and negative the evaluation is, the lower the score of evaluation is. For instance, the more satisfied the customer gets for the item, the higher the score of the item is. The score ranges from one to five. The graph is shown as the example.



3-6 Random Method

The random sampling method is used for this study. This is the questionnaire survey method that distributes questionnaires to customers of department stores at random. The survey time is basically everyday a week. However the peak day of department stores is from Friday night to Sunday and the peak hour is around noon and night time. Therefore the survey time is concentrated on the peak time. The place where questionnaires are distributed is at the entrance in the first floor and at the rest area in each floor. The collected questionnaires are regarded as the representative of the sample only after customers completes filling in the questionnaires.

<Table 3-6-1 Collected Questionnaire>

Country	Number of questionnaire Distributed	Number of questionnaire available	Percentage of questionnaire available
Taiwan	150	102	68%
Japan	150	101	67.33%

3-7 Distribution of Customer's General Information

Two hundreds and three questionnaires were collected for this study in total. The distribution of customer's general information is shown in the Table 3-7-1, 3-7-2, 3-7-3, 3-7-4, 3-7-5.

3-7-1 Age Distribution

There are five categories for customer's age in this study, that is, 10~20 years old, 20~30 years old, 30~40 years old, more than 50 years old. The samples of the Taiwanese and Japanese customer are classified into different age group and the number of people and the proportion are analyzed. As can be seen from the Table 3-7.1, the majority of both Taiwanese customers and Japanese customers is concentrated on the age group of 20~30 years old and 30~40 years old. For Taiwan, the age group of 20~30 years old is 68 people and that of 30~40 years old is 15 people, which accounts 81.39% of the total samples. For Japan, the age group of 20~30 years old is 41 people and 30~40 years old is 25 people, which accounts 65.34% of the total samples.

<Table 3-7-1 Age Distribution>

Age	Number of Taiwanese	Percentage	Number of Japanese	Percentage
10~20years old	2	1.96%	3	2.97%
20~30years old	68	66.67%	41	40.59%
30~40years old	15	14.72%	25	24.75%
40~50years old	7	6.86%	11	10.89%
50years old~	10	9.80%	21	20.79%
Total	102	100%	101	100%

3-7-2 Occupation Distribution

There are five categories for customer's occupation in this study, that is, office worker, housewife, public servant, student, others. The samples of the Taiwanese and Japanese customer are classified into different occupation group and the number of people and the proportion are analyzed. As can be seen from the Table 3-7-2, the majority of both Taiwanese customers and Japanese customers is concentrated on the occupation group of office worker and student. For Taiwan, office workers are 35 people and student are 31 people, which accounts 64.7% of the total sample. For Japan, office workers are 36 people and students are 25 people, which accounts 60.39% of the total sample.

<Table 3-7-2 Occupation Distribution>

Occupation	Number of Taiwanese	Percentage	Number of Japanese	Percentage
Office worker	35	34.31%	36	35.64%
Housewife	13	12.75%	17	16.83%
Public servant	11	10.78%	16	15.84%
Student	31	30.39%	25	24.75%
Others	12	11.76%	7	6.93%
Total	102	100%	101	100%

3-7-3 Frequency of Purchase Distribution

There are five categories for customer's frequency of purchase in this study, that is, once a 6 months, once a 3 months, once a month, once a 2 weeks, once a week. The samples of the Taiwanese and Japanese customer are classified into different group depending on the frequency of purchase and the number of people and the proportion are analyzed. As can be seen from the Table 3-7-3, Taiwanese customers are likely to purchase less frequently than Japanese customers. For Taiwan, the majority of people is concentrated on the group of people who purchase once a six month, once a three months, once a month. For Japan, on the other hand, more customers purchase more frequently as can be seen from the big difference in the number of people who purchase once a week, 2.94% for Taiwan and 25.74% for Japan.

<Table 3-7-3 Frequency of Purchase Distribution>

Frequency of purchase	Number of Taiwanese	Percentage	Number of Japanese	Percentage
Once a 6 months	26	25.49%	14	13.86%
Once a 3 months	28	27.45%	25	24.75%
Once a month	31	30.39%	18	17.82%
Once a 2 weeks	14	13.73%	18	17.82%
Once a week ~	3	2.94%	26	25.74%
Total	102	100%	101	100%

3-7-3 Consuming Amount Distribution

There are five categories for customer's consuming amount in this study, that is, less than NT\$1,000, NT\$1,000~3000, NT\$3,000~5,000, NT\$ 5,000~10,000, more than NT\$10,000. The samples of the Taiwanese and Japanese customer are classified into different consuming amount group and the number of people and the proportion are analyzed. As can be seen from the Table 3-7-4, the most of both Taiwanese customers and Japanese customers spend less than NT\$5,000. In particular, the customer group those who spend NT\$1,000~3,000 occupies a large proportion of total samples, 52.94% for Taiwan and 39.60% for Japan.

<Table 3-7-4 Consuming Amount Distribution>

Consuming amount	Number of Taiwanese	Percentage	Number of Japanese	Percentage
~NT\$ 1,000	28	27.45%	25	24.75%
NT\$ 1,001~3,000	54	52.94%	40	39.60%
NT\$ 3,000~5,000	12	11.76%	25	24.75%
NT\$ 5,000~10,000	6	5.88%	8	7.92%
NT\$ 10,000~	2	1.96%	3	2.97%
Total	102	100%	101	100%

3-7-5 Purchasing Hour Distribution

There are five categories for customer's average purchasing hour in this study, that is, less than 30 minutes, 30 minutes~1 hour, 1~2 hours, 2~3 hours, more than 3 hours.

The samples of the Taiwanese and Japanese customer are classified into group those who spend different purchasing time and the number of people and the proportion are analyzed. As can be seen from the Table 3-7-5, Taiwanese customers are likely to spend more time on purchasing than Japanese customers. Most Taiwanese customers spend more than one hour for purchasing (87.93%), while the majority of Japanese customers spends one to two hours (52.48%) or half an hour to one hour (27.72%).

<Table 3-7-5 Purchasing Hour Distribution>

Purchasing Hour	Number of Taiwanese	Percentage	Number of Japanese	Percentage
~30minutes	2	1.96%	4	3.96%
30minutes~1hour	10	9.80%	28	27.72%
1~2hours	38	37.25%	53	52.48%
2~3hours	30	29.11%	10	9.90%
3 hours~	22	21.57%	6	5.94%
Total	102	100%	101	100%

Chapter 4. Study Analysis

In this chapter, all collected sample data and appropriate statistic method will be used for study analysis. This part consists of two main analysis, the level of satisfaction and the level of importance. The following section will explain in detail base on the study purpose and analyze and the result of collected surveys will be analyzed.

4-1 Analysis of the Comparison in the Satisfaction Level for the Attitude of Service Provider between Taiwan and Japan

The Principal Component analysis will be used as the analysis method to understand the influential item on the satisfaction level regarding the attitude of service provider. Moreover the Snake Plot and the Z-test will be used to understand the difference in the means of the satisfaction level between Taiwanese and Japanese customers. In addition, the independent sample T-test will be used to test the gap of the satisfaction level for the attitude of service provider between Taiwanese and Japanese customers. The Nonparametric Statistic (Kruskal-Wallis H Analysis) will be used to understand the impact of different consuming time and frequency of purchasing on the satisfaction level for the attitude of service provider.

4-1-1 Analysis for the Mean of the Satisfaction Level

There are 21 evaluation items for the attitude of service provider in this study. The snake graph will be used to understand the difference of means between Taiwanese and Japanese consumers of department store in the level of satisfaction for each evaluation items. Moreover the Z-test will be used to test whether the mean of consumer satisfaction for those 21 evaluation items is less than 3 or not. The result of the analysis is shown in 4-1-1.

**<Graph 4-1-1 Snake Plot of the Means and Standard Deviation for
the Satisfaction Level>**

Item	Country	N	Means	Std. Deviation	Means	Std. Deviation
P1	(TW) 1.00	102	3.52	.67		
	(JPN) 2.00	101	3.36	.77		
P2	1.00	102	3.56	.61		
	2.00	101	3.21	.71		
P3	1.00	102	3.30	.70		
	2.00	101	3.14	.66		
P4	1.00	102	3.38	.69		
	2.00	101	3.29	.78		
P5	1.00	102	3.36	.85		
	2.00	101	3.37	.72		
P6	1.00	102	3.32	.87		
	2.00	101	3.28	.83		
P7	1.00	102	2.93	.84		
	2.00	101	3.15	.83		
P8	1.00	102	3.25	.68		
	2.00	101	3.03	.74		
P9	1.00	102	3.31	.69		
	2.00	101	3.23	.68		
P10	1.00	102	2.77	.76		
	2.00	101	2.95	.73		
P11	1.00	102	3.78	.79		
	2.00	101	2.69	.89		
P12	1.00	102	3.30	.70		
	2.00	101	3.23	.92		
P13	1.00	102	3.19	.61		
	2.00	101	3.03	.64		
P14	1.00	102	3.23	.70		
	2.00	101	3.03	.77		
P15	1.00	102	2.97	.72		
	2.00	101	3.16	.70		
P16	1.00	102	3.76	.66		
	2.00	101	3.51	.74		
P17	1.00	102	3.30	.71		
	2.00	101	3.12	.67		

<Graph 4-1-1 Snake Plot of the Means and Standard Deviation for the Satisfaction Level (continued)>

P18	1.00	102	3.24	.71	
	2.00	101	2.93	.68	
P19	1.00	102	3.05	.69	
	2.00	101	3.12	.73	
P20	1.00	102	2.68	.83	
	2.00	101	2.97	.81	
P21	1.00	102	2.83	.77	
	2.00	101	3.06	.66	

Means Std. Deviation

<Table 4-1-1 Z-test for the Means of the Satisfaction Level>

Evaluation Item	Importance Level (TW)		Importance Level (JPN)	
	Z value	Reject Item	Z value	Reject Item
P1	7.74		4.64	
P2	9.21		2.92	
P3	4.34		2.09	
P4	5.54		3.69	
P5	4.25		5.11	
P6	3.72		3.34	
P7	-0.82		1.79	
P8	3.60		0.41	
P9	4.55		3.37	
P10	-2.98		-0.68	
P11	-2.73		-3.44	
P12	4.34		2.49	
P13	3.06		0.46	
P14	3.21		0.39	
P15	-0.41		2.25	
P16	11.54		6.79	
P17	4.25		1.78	
P18	3.47		-0.98	
P19	0.71		1.69	
P20	-3.88		-0.37	
P21	-2.16		0.90	

Note: $Z_{0.01} = 2.33$

Reject $u > 3$

P1~P21 the attitude of service provider

As can be seen from the Graph 4-1-1, the means of the satisfaction level for the attitude of service provider are all different no matter whether it is

Taiwan or Japan. Moreover as can be seen from the Table 4-1-1, under the level of 0.01, the evaluation items are more than 3, which is consistent with the Graph 4-1-1. As a result of this analysis, it is found that Taiwanese customers are satisfied with more than half of the evaluation items, whereas Japanese customer are only satisfied with less than half of the items.

The evaluation items with highest means for Taiwanese customers are (P11) Service provider's treatment without disturbance to customer (3.78), (P16) Service provider's appearance (3.76), (P2) Service provider's accuracy in recording data (3.56).

The evaluation items with lowest means for Taiwanese customers are (P20) Service provider's attitude towards building a long-term relationship with customer (2.68), (P10) Service provider's positive towards contact and communication with regular customer (2.77), (P21) Service provider's attitude and way of dealing customer's complaints (2.83).

The evaluation items with highest means for Japanese customers are (P16) Service provider's appearance (3.51), (P5) Service provider's reliability on after-sale service and guarantee (3.37), (P1) Service provider's trust in customers and dealing with payment (3.36).

The evaluation items with lowest means for Japanese customers are (P10) Service provider's positive towards contact and communication with regular customer (2.95), (P11) Service provider's treatment without disturbance to customer (2.69), (P18) Service provider's providing different service depending on personal needs (2.93).

4-1.2 The Principal Component Analysis of the Total Satisfaction Level

The Principal Component Analysis is used to understand the difference between Taiwanese and Japanese customers of department store in the satisfaction level for the attitude of service provider. From this analysis, the first principal component and the second principal component of each evaluation item in the factor pattern as follow:

<Table4-1-2a Factor Pattern for the Satisfaction Level of Taiwanese Customers>

Evaluation Item	Factor Pattern	
	First Principal Component	Second Principal Component
X14	0.78	-0.10
X21	0.78	-0.12
X5	0.71	0.01
X15	0.71	-0.23
X7	0.71	-0.06
X12	0.68	0.09
X17	0.68	0.18
X19	0.66	-0.15
X10	0.65	-0.41
X13	0.64	0.11
X6	0.62	0.15
X18	0.62	0.15
X20	0.60	-0.56
X11	0.59	0.04
X4	0.59	0.23
X9	0.58	-0.21
X8	0.57	-0.09
X3	0.56	0.17
X1	0.52	0.45
X2	0.48	0.25
X16	0.31	0.65

Note: X1~21 the attitude of service provider

<Table4-1-2b Factor Pattern for the Satisfaction Level of Japanese Customers>

Evaluation Item	Factor Pattern	
	First Principal Component	Second Principal Component
X15	0.75	0.06
X21	0.74	-0.39
X4	0.74	0.20
X20	0.72	0.06
X5	0.71	-0.23
X7	0.70	-0.15
X12	0.69	-0.20
X13	0.67	-0.20
X6	0.66	-0.23
X14	0.66	-0.32
X17	0.64	-0.07
X19	0.63	-0.22
X16	0.62	-0.26
X2	0.59	0.48
X8	0.59	0.54
X3	0.58	0.44
X10	0.58	0.13
X11	0.52	0.11
X18	0.42	-0.16
X1	0.41	0.38
X9	0.41	0.53

Note: X1~21 the attitude of service provider

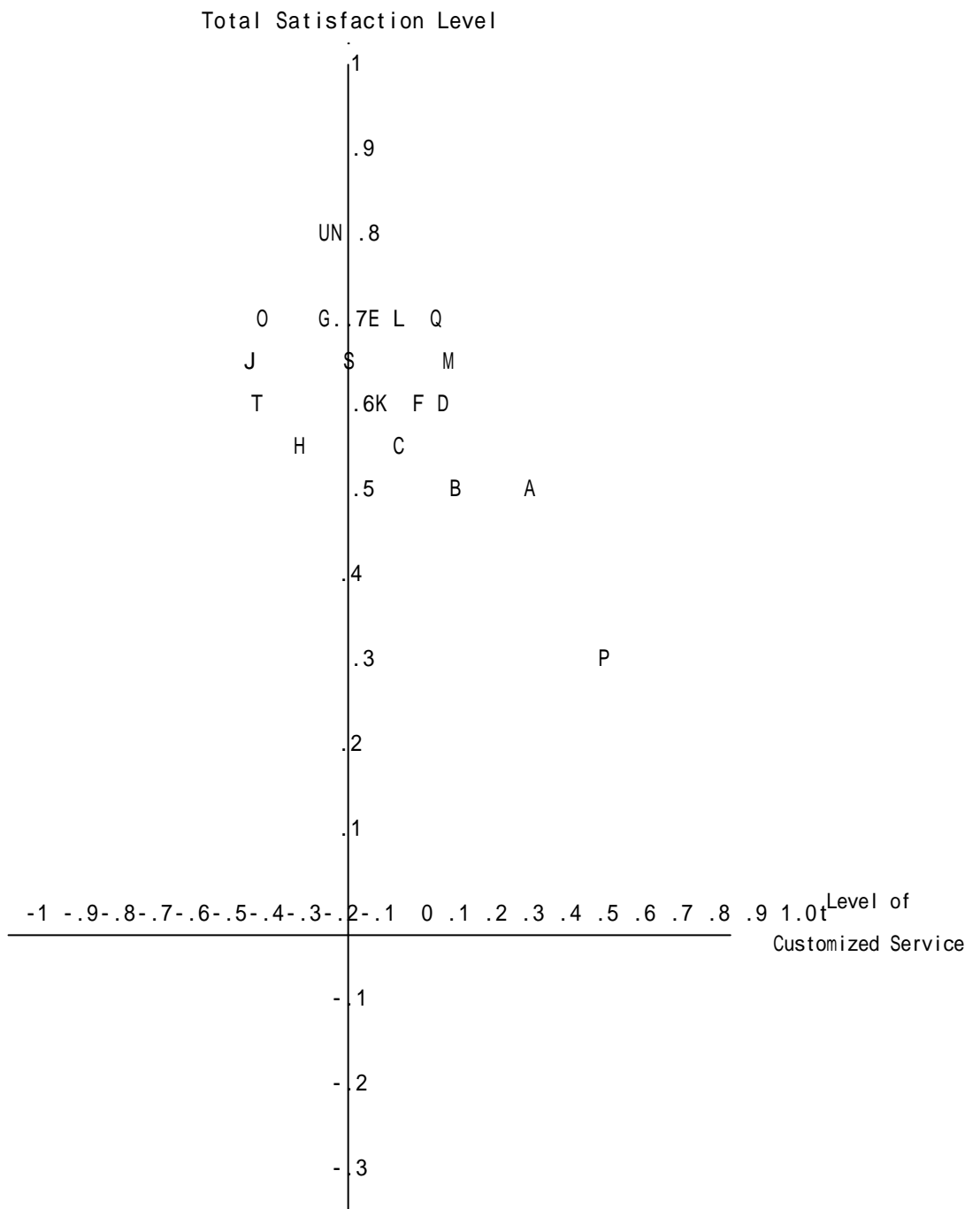
The implication of the first principal component: As can be seen from the factor pattern, the first principal components of the evaluation items

are all positive. Therefore the first principal component can be regarded as the “Total Evaluation”, which implies the “Total Satisfaction Level”.

The implication of the second principal component: As can be seen from the factor pattern, the evaluation items with positive principal component are related to the customized service of service provider. The evaluation items with negative principal component, on the other hand, are related to the standardized service of service provider. Therefore the second principal component can be regarded as the “Level of Customized Service”.

In order to understand the level of satisfaction and customized service, the distribution of each first principal component graph is given as follow.

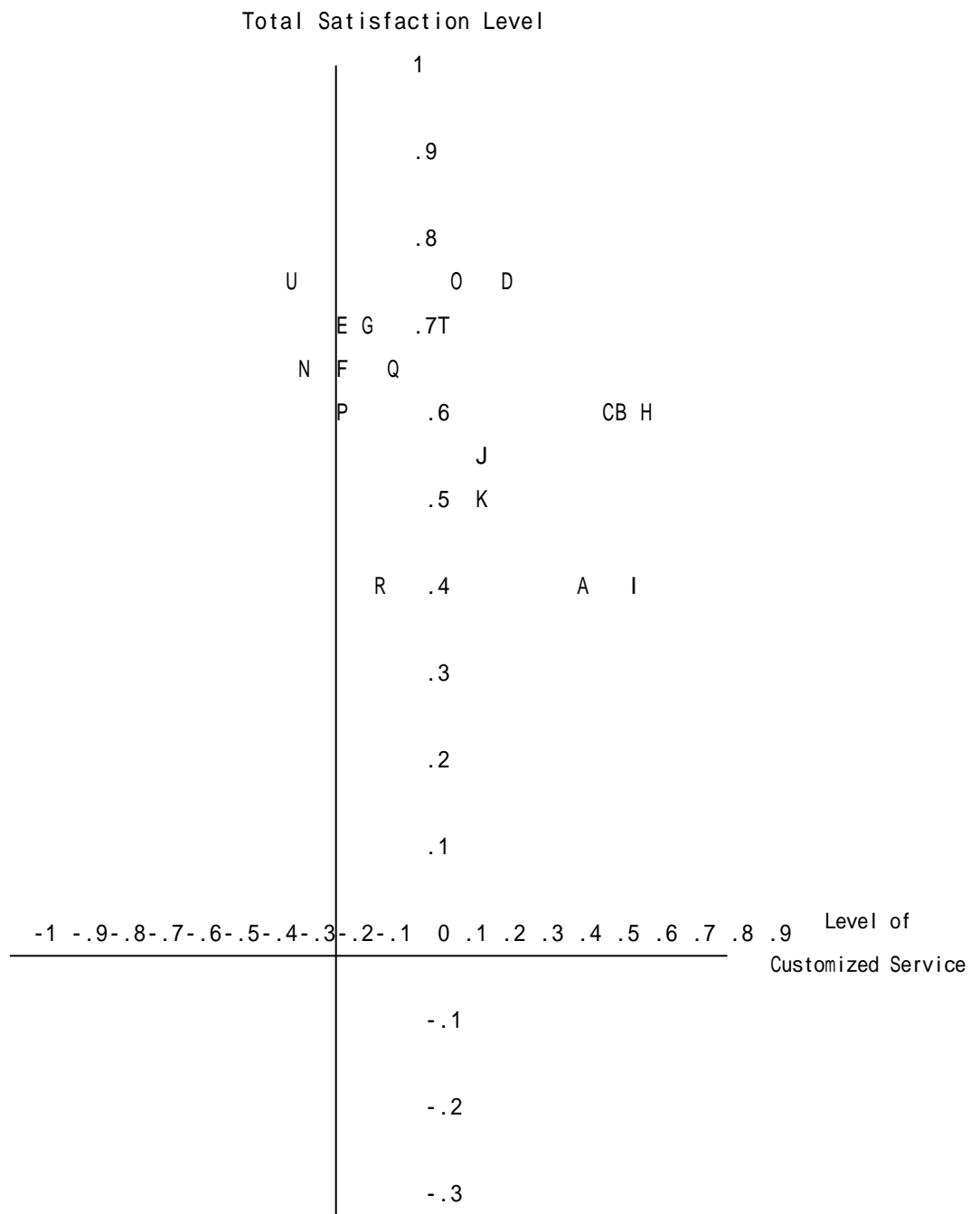
<Graph 4-1-2a Distribution of Factor Pattern for the Satisfaction Level of Taiwanese Customers>



note: X1~21 the attitude of serviced provider

X1=A	X2=B	X3=C	X4=D	X5=E	X6=F
X7=G	X8=H	X9=I	X10=J	X11=K	X12=L
X13=M	X14=N	X15=O	X16=P	X17=Q	X18=F
X19=S	X20=T	X21=U			

<Graph 4-1-2b Distribution of Factor Pattern for the Satisfaction Level of Japanese Customers>



note: X1~21 the attitude of service provider

X1=A	X2=B	X3=C	X4=D	X5=E	X6=F
X7=G	X8=H	X9=I	X10=J	X11=K	X12=L
X13=M	X14=N	X15=O	X16=P	X17=Q	X18=R
X19=S	X20=T	X21=U			

As can be seen from the Graph 4-1-2a, the factor patterns for Taiwanese customers are all differently distributed. The closer the factor pattern is

to the implication of the first principal component, the total satisfaction level, the more the effect of the factor pattern is on the total satisfaction level. On the other hand, the further the factor pattern is to the total satisfaction level, the less the effect of the factor pattern is on the total satisfaction level. From this analysis, it is found that the most influential items on the total satisfaction level are (X14) Service provider's friendly smile and polite way of speaking, (X21) Service provider's attitude on customer's complaints, whereas the less influential item on the total satisfaction level is (X16) Service provider's appearance.

As can be seen from the Graph 4-1-2b, the factor patterns for Japanese customers are all differently distributed. The most influential item on the total satisfaction level is (X15) Service provider's sincere aftercare and friendly reception, (X21) Service provider's attitude on customer's complaints, (X4) Service provider's accuracy in offering promised service, whereas the less influential items on the total satisfaction level are (X1) Service provider's trust in customers and dealing with payment, (X9) Service provider's positive attitude towards offering information.

4-1-3 The Independent Sample T-test for the Satisfaction Level

The independent sample T-test will be used to understand the difference between Taiwanese and Japanese customers of department store in the satisfaction level for the attitude of service provider. The result of the test is shown in the Table 4-1-3.

<Table 4-1.3 T-test for the Satisfaction Level between Taiwanese and Japanese Customers>

Evaluation Item	County	Means	T value	P value
P1	TW (T)	3.52	1.611	0.109
	JPN (J)	3.36		
P2	T	3.56	3.783	0.000*
	J	3.21		
P3	T	2.30	1.725	0.086
	J	3.14		
P4	T	3.38	0.922	0.358
	J	3.29		
P5	T	3.36	-0.032	0.974
	J	3.37		
P6	T	3.32	0.389	0.698
	J	3.28		
P7	T	2.93	-1.858	0.065
	J	3.15		
P8	T	3.25	2.156	0.032*
	J	3.03		
P9	T	3.31	0.897	0.371
	J	3.23		
P10	T	3.77	-1.690	0.093
	J	3.95		
P11	T	3.78	0.771	0.441
	J	3.69		
P12	T	3.30	0.666	0.506
	J	3.23		
P13	T	3.18	1.786	0.078
	J	3.03		
P14	T	3.23	1.896	0.059
	J	3.03		
P15	T	2.97	-1.875	0.062
	J	3.16		
P16	T	3.76	2.629	0.009*
	J	3.50		

<Table 4-1-3 T-test for the Satisfaction Level between Taiwanese and Japanese Customers (continued)>

P17	T	3.30	1.907	0.058
	J	3.12		
P18	T	3.24	3.126	0.002*
	J	3.93		
P19	T	3.05	-0.700	0.485
	J	3.11		
P20	T	2.68	-2.552	0.011*
	J	2.97		
P21	T	2.83	-2.241	0.026*
	J	3.06		

Note: * $P < 0.05$ X1~X21 the attitude of service provider

As can be seen from the Table 4-1-3, the satisfaction level for the attitude of service providers are all different. There are six evaluation items with obvious difference in the satisfaction level between Taiwanese

customers and Japanese customers: (P2) Service provider's accuracy in recording data, (P8) Service provider's response on customer's request, (P16) Service provider's appearance, (P18) Service provider's customized service for customer's different request, (P20) Service provider's attitude towards building a long-term relationship with customer, (P21) Service provider's attitude on customer's complaints.

The satisfaction level of Taiwanese customers for most evaluation items is higher except for (P7) Service provider's speed and attitude while after-sale service, (P10) Service provider's dairy contact and communication, (P15) Service provider's sincere aftercare and friendly reception, (P20) Service provider's attitude towards building a long-term relationship with customer, (P21) Service provider's attitude on customer's complaints.

Overall, the obvious difference in the satisfaction level between Taiwan and Japan is found especially in the empathy of service provider.

4-1-4 Kruskal-Wallis H Analysis for the Satisfaction Level in Different Consuming Time and Frequency of Purchasing

The Nonparametric Statistic (Kruskal-Wallis H Analysis) will be used to analyze the satisfaction level for the attitude of service provider in different consuming time and frequency of purchasing. This part researches on Taiwanese and Japanese customers with different (A) consuming time and (B) frequency of purchasing.

The Nonparametric Statistic (Kruskal-Wallis H Analysis) will be used to understand the influence of different consuming time and frequency of purchasing on the satisfaction level for the attitude of service provider. The result of analysis is shown in the Table 4-1-4a (Taiwan), Table 4-1-4b (Japan).

<Table 4-1-4a Kruskal-Wallis H Analysis for the Satisfaction Level of Taiwanese Customers with Different Consuming Time and Frequency of Purchasing>

Evaluation Item	Different Consuming Time		Different Frequency of Purchasing	
	Chi-Square Value	P Value	Chi-Square Value	P Value
P1	0.139	0.998	4.262	0.372
P2	0.760	0.944	0.604	0.963
P3	3.566	0.468	1.318	0.858
P4	4.076	0.396	0.967	0.915
P5	7.287	0.121	0.285	0.991
P6	1.007	0.909	3.087	0.543
P7	6.426	0.169	1.667	0.797
P8	3.889	0.421	4.141	0.387
P9	2.726	0.605	6.367	0.173
P10	1.119	0.891	1.361	0.851
P11	2.701	0.609	6.865	0.143
P12	3.657	0.454	6.225	0.183
P13	1.665	0.797	6.695	0.153
P14	3.427	0.489	3.297	0.509
P15	4.355	0.360	3.364	0.499
P16	6.102	0.192	8.277	0.082
P17	2.745	0.601	0.943	0.027*
P18	5.340	0.254	6.340	0.175
P19	4.903	0.297	2.153	0.708
P20	5.442	0.246	3.363	0.499
P21	1.833	0.767	6.648	0.156

Note: P1~P21 the attitude of service provider

*P<0.05

<Table 4-1-4b Kruskal-Wallis H Analysis for the Satisfaction Level of Japanese Customers with Different Consuming Time and Frequency of Purchasing>

Evaluation Item	Different Consuming Time		Different Frequency of Purchasing	
	Chi-Square Value	P Value	Chi-Square Value	P Value
P1	2.510	0.643	1.646	0.801
P2	2.761	0.599	2.479	0.648
P3	8.124	0.087	1.078	0.898
P4	1.395	0.845	4.836	0.305
P5	5.115	0.276	0.821	0.936
P6	3.836	0.429	1.531	0.821
P7	7.519	0.111	2.055	0.726
P8	3.281	0.512	7.984	0.092
P9	2.104	0.717	7.552	0.109
P10	3.815	0.432	4.473	0.346
P11	1.364	0.850	12.211	0.016*
P12	2.958	0.565	2.074	0.722
P13	2.588	0.629	2.806	0.591
P14	2.022	0.732	2.665	0.615
P15	3.854	0.426	0.582	0.965
P16	7.716	0.103	1.692	0.792
P17	8.963	0.062	6.524	0.164
P18	8.134	0.087	5.560	0.235
P19	3.782	0.436	12.799	0.012*
P20	4.430	0.351	5.770	0.217
P21	10.948	0.027*	2.298	0.681

Note: P1~P21 the attitude of service provider *P<0.05

As a result of the analysis, there are some differences in the satisfaction level among the customers with different consuming time and frequency of purchasing both in Taiwan and Japan.

As can be seen from the Table 4-1-4a for Taiwanese customers, there is no obvious difference in the satisfaction level for the attitude of service provider because of different consuming time or frequency of purchasing overall. However it is found that different frequency of purchasing has an influence on the satisfaction level for (P17) Service provider's sincere attitude towards dealing with problem solving for customer.

As can be seen from the Table 4-1-4b for Japanese customers, there is no obvious difference in the satisfaction level for the attitude of service provider because of different consuming time or frequency of purchasing overall. However it is found that different consuming time has an influence on the satisfaction level for (P21) Service provider's attitude on customer's complaints, and different frequency of purchasing has an influence on the satisfaction level for (P11) Service provider's treatment without interrupting customer, (P19) Service provider's attitude on caring about customer.

It is found that the different consuming time and frequency of purchasing tend to have an influence on the satisfaction level for the empathy of service provider for both Taiwanese and Japanese customers.

4-2 Analysis of the Comparison in the Importance Level for the Attitude of Service Provider between Taiwan and

Japan

The Principal Component analysis will be used as the analysis method to understand the influential item on the importance level regarding the attitude of service provider. Moreover the Snake Plot and the Z-test will be used to understand the difference in the means of the importance level between Taiwanese and Japanese customers. In addition, the independent sample T-test will be used to test the gap of the importance level for the attitude of service provider between Taiwanese and Japanese customers. The Nonparametric Statistic (Kruskal-Wallis H Analysis) will be used to understand the impact of different consuming time and frequency of purchasing on the importance level for the attitude of service provider.

4-2.1 Analysis for the Means of the Importance Level

There are 21 evaluation items for the attitude of service provider in this study. The snake graph will be used to understand the difference of means between Taiwanese and Japanese consumers of department store in the level of importance for each evaluation items. Moreover the Z-test will be used to test whether the mean of importance level for those 21 evaluation items is less than 3 or not. The result of the analysis is shown in 4-2-1.

<Graph 4-2-1 Snake Plot of the Means and Standard Deviation for the Importance Level>

Item	Country	N	Means	Std. Deviation	Means	Std. Deviation

P1	(TW)	1.00 102	4.04	.72
	(JPN)	2.00 101	3.99	.84
P2		1.00 102	4.03	.70
		2.00 101	3.64	.87
P3		1.00 102	4.33	.73
		2.00 101	3.79	.84
P4		1.00 102	4.23	.80
		2.00 101	3.84	.90
P5		1.00 102	4.08	.77
		2.00 101	4.00	.93
P6		1.00 102	4.28	.83
		2.00 101	3.97	.89
P7		1.00 102	4.32	.77
		2.00 101	4.07	.87
P8		1.00 102	3.97	.81
		2.00 101	3.77	.93
P9		1.00 102	3.65	.85
		2.00 101	3.54	.89
P10		1.00 102	3.69	.86
		2.00 101	3.03	.99
P11		1.00 102	4.12	.84
		2.00 101	4.05	1.02
P12		1.00 102	4.26	.86
		2.00 101	4.10	.91
P13		1.00 102	4.10	.72
		2.00 101	4.17	.83
P14		1.00 102	4.33	.67
		2.00 101	3.89	.86
P15		1.00 102	4.00	.77
		2.00 101	4.11	.88
P16		1.00 102	3.84	.76
		2.00 101	3.79	.95
P17		1.00 102	4.27	.73
		2.00 101	3.97	.84

<Graph 4-2.1 Snake Plot of the Means and Standard Deviation for the Importance Level (continued)>

P18		1.00 102	4.07	.73
		2.00 101	3.83	.83

P19	1.00	102	4.19	.79	
	2.00	101	3.82	.86	
P20	1.00	102	3.51	.88	
	2.00	101	3.50	.87	
P21	1.00	102	4.25	.75	
	2.00	101	3.94	.83	

Means
Std. Deviation

<Table 4-2-1 Z-test for the Means of the Importance Level>

Evaluation Item	Importance Level (TW)		Importance Level (JPN)	
	Z value	Reject Item	Z value	Reject Item

P1	14.51		11.75	
P2	14.79		7.42	
P3	18.12		9.43	
P4	15.18		9.32	
P5	14.07		10.78	
P6	17.44		10.92	
P7	17.13		12.07	
P8	11.93		8.34	
P9	4.60		6.13	
P10	8.02		7.30	
P11	13.18		10.25	
P12	16.71		10.06	
P13	15.16		12.73	
P14	19.62		10.37	
P15	12.97		12.57	
P16	11.17		8.32	
P17	17.38		11.52	
P18	14.54		9.93	
P19	14.97		9.50	
P20	5.76		5.63	
P21	16.59		11.27	

Note: $Z_{0.01} = 2.33$

Reject $u > 3$

P1~P21 the attitude of service provider

As can be seen from the Graph 42-1, the means of the importance level for the attitude of service provider are all different no matter whether it is Taiwan or Japan. Moreover as can be seen from the Table 4-2-1, under the level of 0.01, most of the evaluation items are more than

3, which is consistent with the Snake graph 4-2-1. As a result of this analysis, it is found that both Taiwanese customers and Japanese customers look heavily on the evaluation items for the attitude of service provider.

The evaluation items with highest means for Taiwanese customers are (P3) Service provider's explanation about characteristics of product and handling (4.33), (P14) Service provider's friendly smile and polite way of speaking (4.33), (P7) Service provider's speed and attitude while after-sale service (4.32).

The evaluation items with lowest means for Taiwanese customers are (P20) Service provider's attitude towards building a long-term relationship with customer (3.51), (P9) Service provider's positive attitude towards offering information (3.65), (P10) Service provider's daily contact and communication (3.69).

The evaluation items with highest means for Japanese customers are (P15) Service provider's sincere aftercare and friendly reception (4.11), (P12) Service provider's treatment in a polite and courteous manner (4.10), (P7) Service speed and attitude while after-sale service (4.07) and (P13) Service provider's offer of technical knowledge and skill.

The evaluation items with lowest means for Japanese customers are (P10) Service provider's daily contact and communication (3.03), (P20) Service provider's attitude towards building a long-term relationship (3.50), (P9) Service provider's positive attitude towards offering information (3.54).

4-2-2 The Principal Component Analysis for the Total Importance Level

The Principal Component Analysis is used to understand the difference

between Taiwanese and Japanese customers of department store in the importance level for the attitude of service provider. From this analysis, the first principal component and the second principal component of each evaluation item in the factor pattern as follow:

<Table4-2-2a Factor Pattern for the Importance Level of Taiwanese Customers>

Evaluation Item	Factor Pattern	
	First Principal Component	Second Principal Component
X7	0.77	-0.11
X15	0.77	-0.12
X17	0.76	-0.23
X12	0.72	-0.18
X6	0.72	-0.05
X19	0.71	-0.30
X4	0.70	-0.13
X3	0.70	-0.13
X5	0.70	0.15
X18	0.68	0.08
X21	0.68	-0.22
X14	0.67	-0.28
X13	0.67	-0.00
X10	0.56	0.33
X11	0.56	-0.46
X8	0.55	0.30
X16	0.55	0.30
X2	0.49	0.41
X9	0.49	0.44
X20	0.47	0.43
X1	0.42	0.55

Note: X1~21 the attitude of service provider

<Table4-2-2b Factor Pattern for the Importance Level of Japanese Customers>

Evaluation Item	Factor Pattern	
	First Principal Component	Second Principal Component
X7	0.79	0.11
X13	0.78	-0.07
X12	0.77	-0.27
X5	0.76	0.32
X17	0.75	-0.31
X15	0.75	-0.36
X6	0.74	0.07
X8	0.73	0.28
X11	0.71	0.22
X21	0.70	-0.06
X18	0.69	-0.26
X14	0.68	-0.31
X3	0.68	0.37
X4	0.66	0.47
X1	0.65	0.06
X19	0.65	-0.43
X16	0.64	-0.44
X9	0.63	-0.02
X20	0.52	0.13
X2	0.52	0.50
X10	0.43	0.24

Note: X1~21 the attitude of service provider

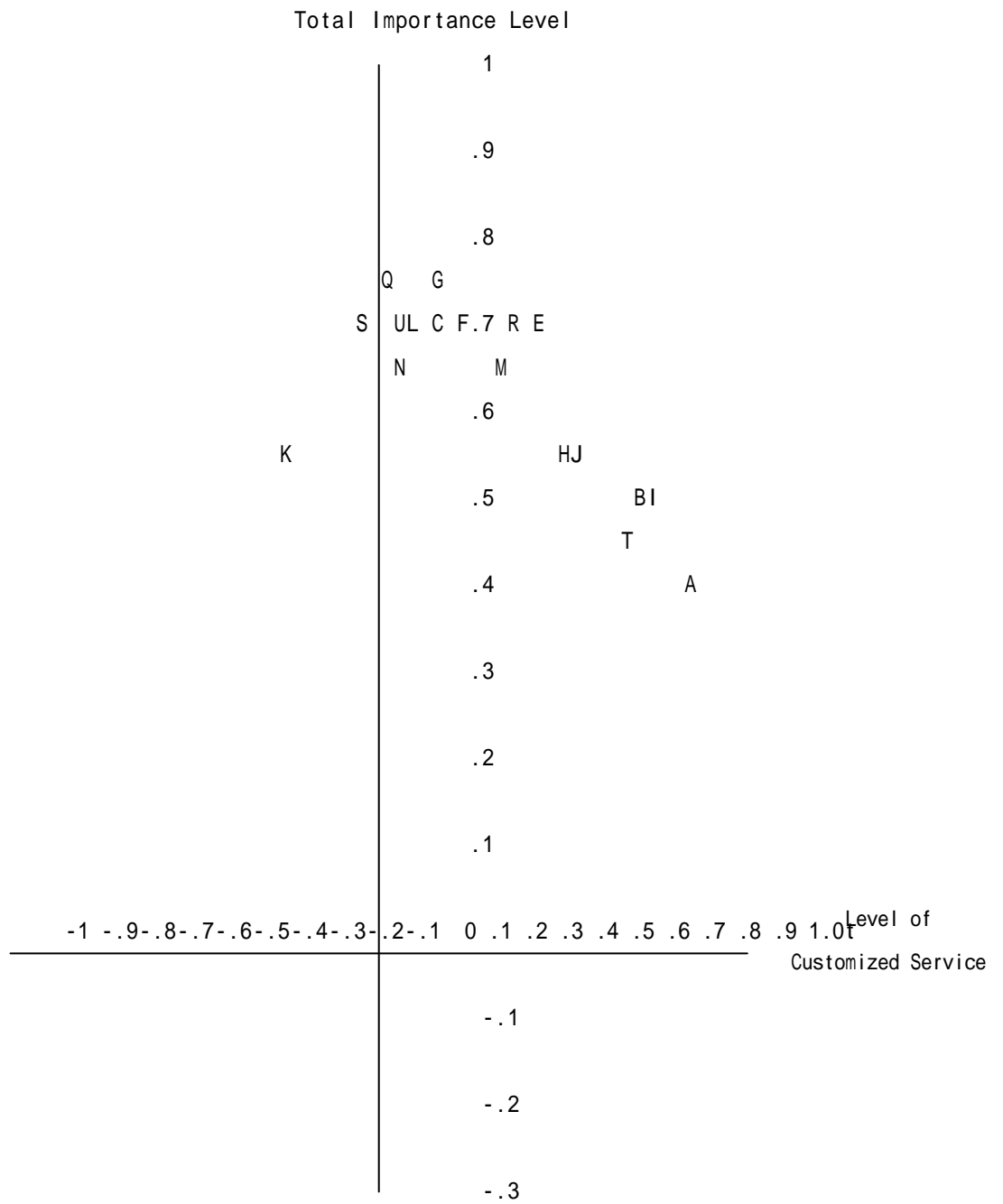
The implication of the first principal component: As can be seen from the factor pattern, the first principal components of the evaluation items are all positive. Therefore the first principal component can be regarded

as the “Total Evaluation”, which implies the “Total Importance Level”.

The implication of the second principal component: As can be seen from the factor pattern, the evaluation items with positive principal component are related to the customized service of service provider. The evaluation items with negative principal component, on the other hand, are related to the standardized service of service provider. Therefore the second principal component can be regarded as the “Level of Customized Service”.

In order to understand the level of importance and customized service, the distribution of each first principal component graph is given as follow.

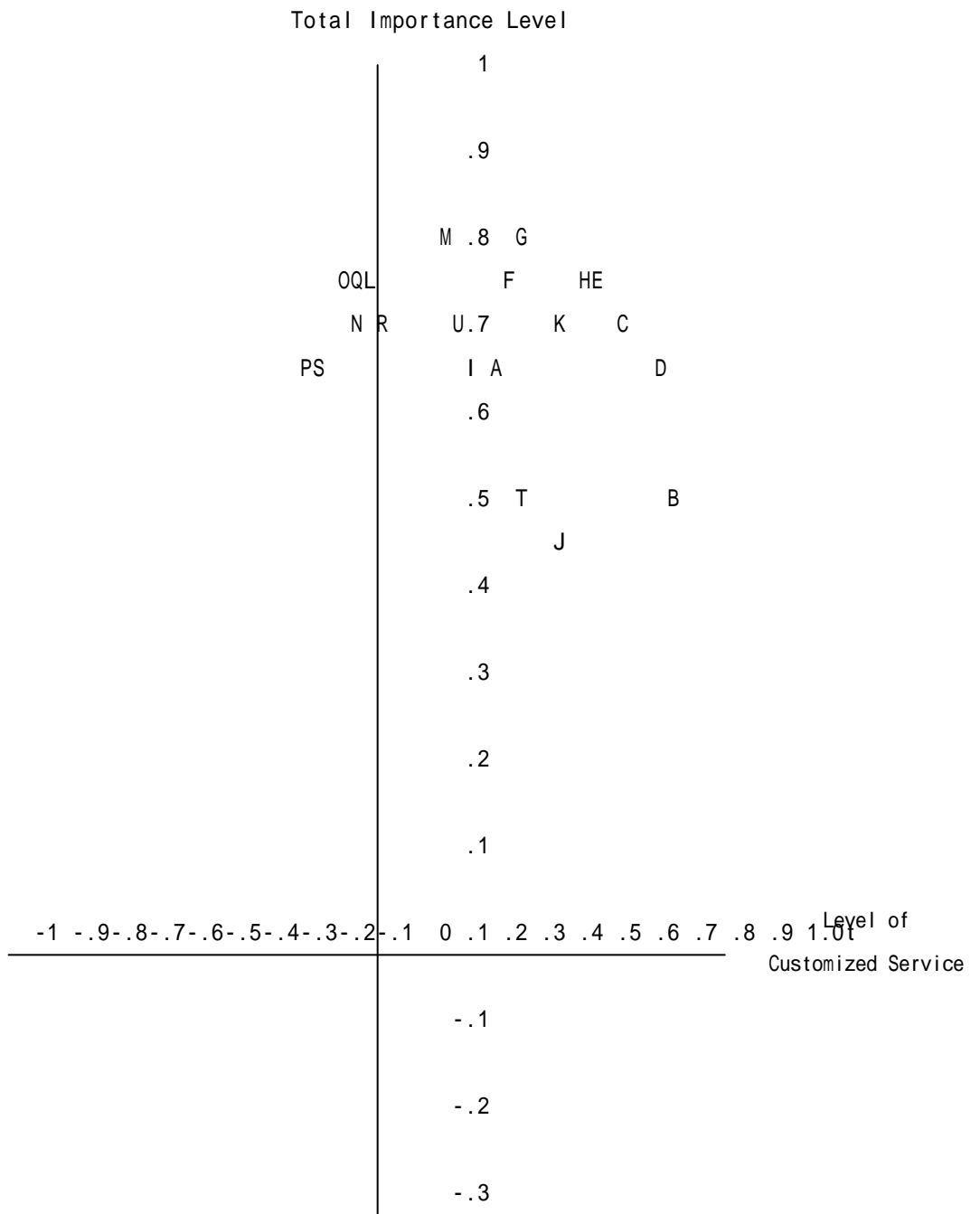
<Graph 4-2-2a Distribution of Factor Pattern for the Importance Level of Taiwanese Customers>



Note: X1~21 the attitude of service provider

X1=A	X2=B	X3=C	X4=C	X5=E	X6=F
X7=G	X8=H	X9=I	X10=J	X11=K	X12=L
X13=M	X14=N	X15=G	X16=H	X17=Q	X18=R
X19=S	X20=T	X21=U			

<Graph 4-2-2b Distribution of Factor Pattern for the Importance Level of Japanese Customers>



Note: X1~21 the attitude of service provider

X1=A	X2=B	X3=C	X4=D	X5=E	X6=F
X7=G	X8=H	X9=I	X10=J	X11=K	X12=L
X13=M	X14=N	X15=O	X16=P	X17=Q	X18=R
X19=S	X20=T	X21=U			

As can be seen from the Graph 4-2-2a, the factor patterns for Taiwanese customers are all differently distributed. The closer the factor pattern is to the implication of the first principal component, the

total satisfaction level, the more the effect of the factor pattern is on the total satisfaction level. On the other hand, the further the factor pattern is to the total satisfaction level, the less the effect of the factor pattern is on the total satisfaction level. From this analysis, it is found that the most influential items on the total importance level are (X7) Service provider's speed and attitude while after-sale service, (X15) Service provider's speed and attitude while after-sale service, whereas the less influential item on the total satisfaction level is (X1) Service provider's trust in customers and dealing with payment.

As can be seen from the Graph 4-2-2b, the factor patterns for Japanese customers are all differently distributed. The most influential items on the total importance level are (X7) Service provider's speed and attitude while after-sale service, (X13) Service provider's offer of technical knowledge and skill, whereas the less influential item on the total satisfaction level is (X10) Service positive daily contact and communication with regular customers.

4-2.3 The Independent Sample T-test for the Importance Level

The independent sample T-test will be used to understand the difference

between Taiwanese and Japanese customers of department store in the importance level for the attitude of service provider. The result of the test is shown in the Table 4-2-3.

<Table 4-2-3 T-test for the Importance Level between Taiwanese and Japanese Customers>

Evaluation Item	Country	Means	T value	P value
P1	TW (T)	4.04	0.448	0.655
	JPN (J)	3.99		
P2	T	4.02	3.498	0.001*
	J	3.64		
P3	T	4.33	4.884	0.000*
	J	3.79		
P4	T	4.22	3.195	0.002*
	J	3.84		
P5	T	4.08	0.657	0.512
	J	4.00		
P6	T	4.28	2.743	0.007*
	J	3.97		
P7	T	4.32	2.179	0.030*
	J	4.06		
P8	T	3.97	1.621	0.107
	J	3.77		
P9	T	3.65	0.839	0.403
	J	3.54		
P10	T	3.69	5.043	0.000*
	J	3.03		
P11	T	4.12	0.517	0.606
	J	4.05		
P12	T	4.26	1.410	0.160
	J	4.10		
P13	T	4.10	0.261	0.793
	J	4.07		
P14	T	4.33	4.069	0.000*
	J	3.89		
P15	T	4.00	-0.93	0.350
	J	4.10		
P16	T	3.84	0.424	0.672
	J	3.79		

<Table 4-2-3 T-test for the Importance Level between Taiwanese and Japanese Customers (continued)>

P17	T	4.27	2.746	0.007*
	J	3.97		

P18	T	4.06	2.143	0.033*
	J	3.83		
P19	T	4.19	3.131	0.002*
	J	3.82		
P20	T	3.51	0.119	0.905
	J	3.49		
P21	T	4.25	2.734	0.007*
	J	3.94		

Note: X1~X21 the attitude of service provider *P<0.05

As can be seen from the Table 4-2-3, the importance level for the attitude of service providers are all different. There are eleven evaluation items with obvious difference in the importance level between Taiwanese customers and Japanese customers: (P2) Service provider's accuracy in recording data, (P3) Service provider's explanation about

characteristics of product and handling, (P4) Service provider's accuracy in offering promised service, (P6) Service provider's service while sales, (P7) Service provider's speed and attitude while after-sale service, (P10) Service provider's daily contact and communication, (P14) Service provider's friendly smile and polite way of speaking, (P17) Service provider's sincere attitude towards dealing with problem solving for customer, (P18) Service provider's customized service for customer's different request, (P19) Service provider's attitude on caring about customer, (P21) Service provider's attitude on customer's complaints.

The importance level of Taiwanese customers for most evaluation items is higher, therefore Taiwanese customers look more heavily on the attitude of service provider than Japanese customers.

Overall, the obvious difference in the importance level between Taiwan and Japan is found especially in the empathy of service provider, which is consistent with the T-test for the satisfaction level.



4-2-4 Kruskal-Wallis H Analysis for the Importance Level in Different Consuming Time and Frequency of Purchasing

The Nonparametric Statistic (Kruskal-Wallis H Analysis) will be used to analyze the importance level for the attitude of service provider in

different consuming time and frequency of purchasing. This part researches on Taiwanese and Japanese customers with different (A) consuming time and (B) frequency of purchasing.

The Nonparametric Statistic (Kruskal-Wallis H Analysis) will be used to understand the influence of different consuming time and frequency of purchasing on the importance level for the attitude of service provider. The result of analysis is shown in the Table 4-2-4a (Taiwan), Table 4-2-4b (Japan).

<Table 4-2-4a Kruskal-Wallis H Analysis for the Importance Level of Taiwanese Customers with Different Consuming Time and Frequency of Purchasing>

Evaluation Item	Different Consuming Time		Different Frequency of Purchasing	
	Chi-Square Value	P Value	Chi-Square Value	P Value
P1	5.630	0.229	3.352	0.501
P2	4.841	0.304	10.330	0.035*
P3	2.265	0.687	1.932	0.748
P4	1.729	0.785	0.946	0.918
P5	8.651	0.326	1.204	0.878
P6	1.120	0.891	2.935	0.567
P7	2.516	0.642	1.124	0.890
P8	3.910	0.418	0.380	0.984
P9	1.012	0.908	4.128	0.389
P10	1.399	0.844	3.032	0.552
P11	1.325	0.857	1.315	0.859
P12	5.044	0.283	1.999	0.736
P13	3.469	0.483	2.844	0.584
P14	4.468	0.346	1.182	0.878
P15	1.695	0.792	0.224	0.998
P16	2.877	0.579	3.370	0.498
P17	1.978	0.740	3.179	0.528
P18	4.413	0.353	0.264	0.992
P19	1.092	0.986	1.495	0.827
P20	3.085	0.544	2.388	0.665
P21	5.710	0.152	1.975	0.740

Note: P1~P21 the attitude of service provider *P<0.05

< Table 4-2-4b Kruskal-Wallis H Analysis for the Importance Level of Japanese Customers with Different Consuming Time and Frequency of Purchasing >

Evaluation Item	Different Consuming Time		Different Frequency of Purchasing	
	Chi-Square Value	P Value	Chi-Square Value	P Value
P1	1.781	0.776	14.623	0.006*
P2	7.673	0.104	4.070	0.397
P3	4.885	0.299	3.857	0.426
P4	2.440	0.655	7.091	0.131
P5	6.346	0.175	6.393	0.172
P6	3.688	0.450	4.793	0.309
P7	2.474	0.649	4.577	0.334
P8	6.748	0.150	6.574	0.160
P9	9.178	0.057	5.642	0.231
P10	8.703	0.069	3.150	0.533
P11	7.102	0.131	6.837	0.146
P12	4.484	0.345	3.146	0.534
P13	1.976	0.740	6.182	0.186
P14	3.091	0.543	5.138	0.273
P15	3.572	0.467	2.792	0.593
P16	7.478	0.113	2.930	0.570
P17	5.261	0.262	2.118	0.714
P18	5.229	0.265	3.292	0.510
P19	2.609	0.625	7.437	0.115
P20	7.737	0.102	12.716	0.013*
P21	5.756	0.218	12.485	0.014*

Note: P1~P21 the attitude of service provider *P<0.05

As a result of the analysis, there are some differences in the importance level among the customers with different consuming time and frequency of purchasing both in Taiwan and Japan.

As can be seen from the Table 4-2-4a for Taiwanese customers, there is no obvious difference in the importance level for the attitude of service provider because of different consuming time. However it is found that different frequency of purchasing has an influence on the importance level for (P2) Service provider's accuracy in recording data.

As can be seen from the Table 4-2-4b for Japanese customers, there is no obvious difference in the importance level for the attitude of service provider because of different consuming time. However it is found that different frequency of purchasing has an influence on the importance level for (P1) Service provider's trust in customers and dealing with payment, (P20) Service provider's attitude towards building a long-term relationship, (P21) Service provider's attitude on customer's complaints.

It is found that the different frequency of purchasing tend to have an influence on the importance level for the reliability of service provider for both Taiwanese and Japanese customers. Moreover Japanese customers with different frequency of purchasing have different importance level for the empathy of service provider.

Chapter 5. Conclusion and Suggestion

5-1 Study Conclusion

The purpose of this study is to understand the difference in the level of satisfaction and importance for the attitude of service provider at department store between Taiwan and Japan by using survey. Based on the study conclusion, the suggestions will be given to the service providers of department store for improving the service quality in Taiwan. As can be seen from the result of study analysis in chapter 4, different nationality, culture and standard of living bring about some difference in the level of satisfaction and importance for the attitude of service provider. With the study analysis, we can understand the current situation of service providers in Taiwan and Japan, and the influence of difference in nationality on consumer's satisfaction and importance level for the attitude of service provider. In this chapter, the conclusion of study analysis can be divided into two parts, the level of satisfaction and importance.

5-1.1 Conclusion of the Study on the Satisfaction Level

(1) The evaluation items with highest means for Taiwanese customers are (P11) Service provider's treatment without disturbance to customer, (P16) Service provider's appearance, (P2) Service provider's accuracy in recording data .

The evaluation items with lowest means for Taiwanese customers are (P20) Service provider's attitude towards building a long-term relationship with customer, (P10) Service provider's positive towards contact and communication with regular customer, (P21) Service provider's attitude and way of dealing customer's complaints.

The evaluation items with highest means for Japanese customers are (P16) Service provider's appearance, (P5) Service provider's reliability on after-sale service and guarantee, (P1) Service provider's trust in customers and dealing with payment.

The evaluation items with lowest means for Japanese customers are (P10) Service provider's positive towards contact and communication with regular customer, (P11) Service provider's treatment without disturbance to customer, (P18) Service provider's providing different service depending on personal needs.

(2) From the analysis of the principal component analysis, it is found that the most influential items on the total satisfaction level for Taiwanese customers are (X14) Service provider's friendly smile and polite way of speaking, (X21) Service provider's attitude on

customer's complaints, whereas the less influential item on the total satisfaction level is (X16) Service provider's appearance.

On the other hand, the most influential item on the total satisfaction level for Japanese customers is (X15) Service provider's sincere aftercare and friendly reception, (X21) Service provider's attitude on customer's complaints, (X4) Service provider's accuracy in offering promised service.

(3) From the analysis of Ttest, there are six evaluation items with obvious difference in the satisfaction level between Taiwanese customers and Japanese customers: (P2) Service provider's accuracy in recording data, (P8) Service provider's response on customer's request, (P16) Service provider's appearance, (P18) Service provider's customized service for customer's different request, (P20) Service provider's attitude towards building a long-term relationship with customer, (P21) Service provider's attitude on customer's complaints.

Moreover the satisfaction level of Taiwanese customers for most evaluation items is higher except for (P7) Service provider's speed and attitude while after-sale service, (P10) Service provider's dairy contact and communication, (P15) Service provider's sincere aftercare and friendly reception, (P20) Service provider's attitude towards building a long-term relationship with customer, (P21) Service provider's attitude on customer's complaints.

(4) From the Nonparametric analysis, there is no obvious difference in the satisfaction level for the attitude of service provider because of different consuming time or frequency of purchasing in Taiwan overall. However it is found that different frequency of purchasing has an influence on the satisfaction level for (P17) Service provider's sincere attitude towards dealing with problem solving for customer. The different consuming time and frequency of purchasing tend to have an influence on the satisfaction level for the empathy of service provider for both Taiwanese and Japanese customers.

5-1.2 Conclusion of the Study on the Importance Level

(1) From the analysis of Z-test, the evaluation items with highest means for Taiwanese customers are (P3) Service provider's explanation about characteristics of product and handling, (P14) Service provider's

friendly smile and polite way of speaking, (P7) Service provider's speed and attitude while after-sale service.

The evaluation items with lowest means for Taiwanese customers are (P20) Service provider's attitude towards building a long-term relationship with customer, (P9) Service provider's positive attitude towards offering information, (P10) Service provider's daily contact and communication.

The evaluation items with highest means for Japanese customers are (P15) Service provider's sincere aftercare and friendly reception, (P12) Service provider's treatment in a polite and courteous manner, (P7) Service speed and attitude while after-sale service and (P13) Service provider's offer of technical knowledge and skill.

The evaluation items with lowest means for Japanese customers are (P10) Service provider's daily contact and communication, (P20) Service provider's attitude towards building a long-term relationship, (P9) Service provider's positive attitude towards offering information.

(2) From the Principal Component analysis, it is found that the most influential items on the total importance level for Taiwanese customers are (X7) Service provider's speed and attitude while after-sale service, (X15) Service provider's speed and attitude while after-sale service, whereas the less influential item on the total satisfaction level is (X1) Service provider's trust in customers and dealing with payment.

The most influential items on the total importance level for Japanese customers are (X7) Service provider's speed and attitude while after-sale service, (X13) Service provider's offer of technical knowledge and skill, whereas the less influential item on the total satisfaction level is (X10) Service positive daily contact and communication with regular customers.

(3) From the analysis of T-test, there are eleven evaluation items with obvious difference in the importance level between Taiwanese customers and Japanese customers: (P2) Service provider's accuracy in recording data, (P3) Service provider's explanation about

characteristics of product and handling, (P4) Service provider's accuracy in offering promised service, (P6) Service provider's service while sales, (P7) Service provider's speed and attitude while after-sale service, (P10) Service provider's daily contact and communication, (P14) Service provider's friendly smile and polite way of speaking, (P17) Service provider's sincere attitude towards dealing with problem solving for customer, (P18) Service provider's customized service for customer's different request, (P19) Service provider's attitude on caring about customer, (P21) Service provider's attitude on customer's complaints. The importance level of Taiwanese customers for most evaluation items is higher.

- (4) From the Nonparametric Analysis, there is no obvious difference in the importance level for the attitude of service provider because of different consuming time. However it is found that different frequency of purchasing has an influence on the importance level for (P2) Service provider's accuracy in recording data. The different frequency of purchasing tend to have an influence on the importance level for the reliability of service provider for both Taiwanese and Japanese customers. Moreover Japanese customers with different frequency of purchasing have different importance level for the empathy of service provider.

In summary, there are many differences in the level of satisfaction and importance for the attitude of service provider. This might be because of the difference in nationality or culture. However as Taiwan and Japan have more similarities in culture and life style, the difference in the level of satisfaction and importance might be influenced by the stage of serviced society. As can be seen from the study analysis, Taiwanese customers more focus on the standardized service such as assurance of service provider, whereas Japanese customers more focus on the customized service such as the empathy of service provider. Therefore it might be possible to say that the more serviced the society is, the more customized service people want.

5-2 Suggestion

Based on the conclusion of this study that researches on the level of

satisfaction and importance for the attitude of service provider, the followings are suggested to the service providers to improve service quality in Taiwan.

- (1) As can be seen from the analysis for the means of satisfaction and importance level, Taiwanese customers are relatively less satisfied with **(P20) Service provider's attitude towards building a long-term relationship with customer, (P10) Service provider's daily contact and communication, (P21) Service provider's attitude on customer's complaints.**

Moreover Taiwanese customers look more heavily on (P3) Service provider's explanation about characteristics of product and handling, (P14) Service provider's friendly smile and polite way of speaking, (P7) Service provider's speed and attitude while after-sale service. Therefore service providers should treat customers with the consideration of those items.

- (2) As can be seen from the Principal Component Analysis, the most influential items on the total satisfaction level for Taiwanese customers are (P14) Service provider's friendly smile and polite way of speaking, (P21) Service provider's attitude on customer's complaints.

Moreover the most influential items on the total importance level are (P7) Service provider's speed and attitude while after-sale service, (P15) Service provider's sincere aftercare and friendly reception. Therefore service provider should provide service with assurance.

In summary, as mentioned in the conclusion of this analysis, the more serviced the society is, the more customized service people want for service providers. Therefore service providers in Taiwan can refer the level of satisfaction and importance of Japanese customers for each evaluation items as the future trend of customer demand in Taiwan.

5-3 Future Study

The big difference between service marketing strategy and

traditional marketing mix 4P is the added 3P of People, Physical Evidence, Process. This study only focuses on one of the added 3P, therefore there are a lot of other areas to research on service management in the future.

Although People is the most influential factor on customer satisfaction, Physical Evidence and Process are also necessary factors to provide a good quality of service. Therefore other added 2P of service marketing mix, Physical Evidence and Process can be researched as new topic of service management in Taiwan.

Moreover this study only focuses on the comparison of the satisfaction and importance level for the attitude of service provider between Taiwan and Japan. However as can be seen from the result of this study, there are some questions that need a further research such as the reason for the higher total satisfaction level in Taiwan than in Japan. Therefore further research is required based on the conclusion of this study.

As can be seen from the study of service management in Taiwan, there are not many researches on service contact, internal marketing and relationship marketing. Therefore more scholars need to research on those kind of study area to improve the quality of service management.

In addition, the study of service management in Taiwan is based on not domestic but foreign reference or research data. Although the basic concept of service management might be similar, each country has own characteristics of service style or management. Therefore it is better to research and develop own concept and model of service management based on the characteristic of different service.

Taiwan is already one of serviced society, therefore the study of service is getting more important. However there is no many researches on service management regardless of the rapid development of service industry in Taiwan. Therefore more study for service management will be required to develop better serviced society.

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