# A Comparison of Consumer Behaviors in China and Taiwan

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#### **Abstract**

The purpose of this research is mainly to make an analysis and comparison of the purchasing behaviors of consumers in Mainland China and Taiwan. We precede this research with a questionnaire survey. In Mainland China, we targeted consumers of 10 department stores of the Parkson Plaza Co., Ltd. that are located in 10 different cities. In Taiwan, we selected 3 department stores of the Far Eastern Department Stores in 3 cities.

The results of this analysis indicate the importance of quality attributes to the consumers for both Mainland China and Taiwan, albeit with some differentiations. The consumers in China are more focused on the merchandise for example as well as imitation, quality and price. Contrarily, the consumers in Taiwan are more attentive to service quality and parking issues.

On the level of evaluation of satisfaction, the differences are not so obvious for both sides. For example, the quality attributes of "No imitation products" and "Friendly servers" are ranked as the most satisfactory items for both sides. Generally speaking, the service quality of Taiwan's department stores is very outstanding. There are also some differences in the areas of lesser satisfaction between consumers of China and Taiwan. The consumers in China identified the quality attribute "the designs of merchandising, display and the usage of each floor" as the most dissatisfactory item, while the performance on this quality attribute is well accepted by the consumers of Taiwan's department stores. Another contradiction is that Taiwan's consumers are more concerned about "Parking"; this quality attribute obtained much less attention from the consumers in Mainland China.

From the analysis of determinants that will have impacts on the willingness of customers to buy again, we found that the viewpoints of consumers from both sides are quite similar. The two main factors are "quality of merchandise" and "service quality". However, the consumers in Mainland China care more about "the price of merchandise"; this is less important to the consumers in Taiwan.

We may conclude from the importance and satisfaction level of the quality attributes and determinants for return customers that differences are caused mainly by the different management of the department stores and the different living circumstances of people across the straights.

Key words: Purchasing behaviors, quality attributes, satisfaction level

### I. Introduction

Both academic research and industrial experience reveal that delivering high service quality can achieve business benefits. including increased revenue, cost savings and higher market share (Thompson et al. 1985; Zeithaml et al. 1996). Therefore, there are many companies, especially in the service industries, which use the service quality as the competitive strategy for success and survival (Ferguson & Zawacki, 1993; Lewis, 1993; Zeithaml et al. 1996; Kandampully, 1998). Thus, most businesses in the service industries devote themselves the improvement of the quality of providing service. However, it is the customer who measures the service quality (Deming, 1986; Ferguson & Zawacki, 1993). The performance of service quality is not self-measured by the service provider; it is assessed, in accordance to every aspect, by the customer.

Regarding the measurement of service quality, the concept of "perceived service quality", which is advocated by three scholars, Parasuraman, Berry and Zeithaml, has been well recognized by academic

researchers and experts (Kandampully, 1998). It is defined as the difference between expectations. customer perceptions and (Zeithaml et al. 1998). Customers measure service quality by comparing actual perceptions of the received service with the service they expect (Parasuraman 1985; Kandampully, 1998). These experts also developed a measuring "SERVQUAL" (Parasuraman et al. 1988), which is widely used by many scholars and experts (Hemmasi et al. 1994).

However, Teas (1993) has commented that customer expectation is lacking discriminate validity in the application of SERVOUAL; it becomes the shortages in the tool of SERVQUAL. Teas Therefore, suggested removing the measurement of "Expectation" keeping only the measure "perceptions in the measurement of service quality". Zeithaml et al. (1996) shared the same concern regarding these perceptions operationalization is only appropriate if the primary purpose of measuring service quality is to attempt to explain the variance in some dependent construct. The traditional customer satisfaction measurement is very

of the closed to the measurement perceptions; meanwhile, it is much easier for customer to reply to questionnaires. Thus Teas (1993) suggested the business industries use the traditional method of customer When satisfaction surveys. customer recognizes quality, it is reflected in customer satisfaction (Gorst et al. 1998). Thus a customer satisfaction survey is a simple and appropriate method for measuring service quality.

Feinberg et al. (1995) used a service quality survey among the international U.S., retailing businesses in the Netherlands and Taiwan to understand whether there are any differences in the definition of service quality in these different countries, and whether or not the customers' experiences and cultural heritage will have influences. The results of this research show the measurement of service quality by customers will be impacted by an individual customer's experience and cultural background; thus, considerations of quality attributes on consumer behavior will vary in different countries.

Taiwan and Mainland China inherited the same Chinese culture, but there are substantial differences in the economic development, social environment, GNP and so on. Therefore, the consumers in these two areas should have many different considerations regarding their purchasing behavior; this is a very practical issue calling for further research.

The research presented here selects one of the retailing business groups in both areas, and then focuses on their department stores located different cities in to customer surveys on the importance of quality attributes and customer satisfaction. By using these surveys, we can obtain analysis results about the actual perceptions of service quality and the purchasing behaviors of consumers in these retailing groups. We also processed the data to verify if the customers' perceptions of and their service quality purchasing behaviors were influenced by such factors as culture background or economic environment, as well as personal experience. We also used a comparison of the indexes of importance and satisfaction to make further analysis on the areas to be improved in the performance of service quality for each department store, and for the two sides' retailing groups.

# II. The conduction of surveys

We conducted this research in co-operating with the Parkson Plaza Co., Ltd., in Mainland China, and Far Eastern Department Stores Ltd., in Taiwan. As the territory of China is really big, we only selected 10 department stores, located in 10 different cities, of Parkson Plaza Co., Ltd., including Shanghai, Dalian, Qingdao, Xian, Wuxi, and Guangzhou. In Taiwan, we selected three

department stores, located in Hsinchu, Chiayi and Hualian, of the Far Eastern Department Stores Ltd., to process this survey.

This research was conducted via questionnaires to the customers of each department store. Since the customers are measuring service quality in accordance with important quality attributes recognize (Settee & Ross, 1985; Babbar, 1992), therefore, we conducted interviews with the management team and some customers of those cooperating department stores in order to identify the quality attributes that are recognized as important to the customers. After the interviews and further discussion, we selected 20 important quality attributes in all. Then we used these 20 items to design the questions for the survey on importance and on satisfaction. Both surveys are designed in accordance with Likert-type. The importance level of the quality attributes is evaluated on a five-point scale from 1 as "not important" to 5 "very important". The measurement of the satisfaction level is in the same manner, from 1 as "very dissatisfactory" to 5 as "fully satisfactory". The questionnaire was piloted with several customers until completed, and then processed into the formal survey.

The surveys were conducted by the method of random sampling in each of the cooperating department stores, having the consumers fill out the questionnaire. There were more than 100 questionnaires prepared

After excluding the each store. questionnaires, there questionable were around 100 to 150 validated questionnaires for each store. Focusing on the calculation of the Cronbach's a-values from the total of 13 department stores, the values range from 0.80 to 0.93. This means that there was a very high consistency in the questionnaire test (Cooper & Emory, 1995).

As we had already conducted many intensive interviews with the management team and the consumers of these department stores while designing this questionnaire, and also made pilot tests and some amendments, it is trustworthy that the content validity is very good. Sample mean and standard deviation, analysis of variance, and correlation analysis were the basic statistical methods used in this research.

# III. The analysis of the importance of quality attributes and the study of purchasing behaviors

We first analyzed the sample mean and standard deviation of the survey regarding the importance of quality attributes. In using the sample mean, we can display the importance level of the quality attributes that are identified by the customer. Then, in accordance with the analytic results on the importance of quality attributes, we could investigate consumers' purchasing behavior and tendencies. Therefore, we list out the ranking of the importance instead of the

means and standard deviation on the quality attributes of this total of 13 department stores. In this part we used the values of mean to rank the attributes. If the means of two or more attributes are the same, then the one with a smaller deviation will be listed prior to the others. We use the number to show the importance level. The smaller number will show higher importance level; on the other hand, the bigger number will show the lesser importance level (see Table 1).

Table 1 shows the ranking of the importance level of quality attributes for the 10 department stores in Mainland China. We find the degree of consensus is very high; that is the consumers in the different cities verv similar opinions importance level of quality attributes, and this is very astonishing. From Table 1, we understand the "pirated product" is the most critical concern for the consumers in China; the results show that 8 out of 10 department store customers identify this item as the most important attribute (ranking No. 1), and other two department store customers are ranking this attribute as No. 2. This is because pirated products in China are a severe problem; it is very easy to get the pirated products in the market. The item ranking is "the second quality merchandise" (there are 2 dept. stores ranking this as No. 1, 3 dept. stores as No. 2, and 2 dept. stores as No. 3). This can also be understood easily; generally

speaking, the products made in Mainland China used to have some quality problems, thus the consumers are paying more attention to quality of goods.

factors include the "price merchandise", "the return or refund for the defective item", and "the proper settlement As most the complaint". merchandise is sold at a higher price in department stores then in the stores in the marketplace, and the average income of the people in China is much lower generally compared to Taiwan, consumers are very concerned about the prices of merchandise in department stores. The department store Guangzhou is the only exception regarding "price of merchandise"; this is because the economic development in this city was much earlier than others, thus the average income of the residents is higher than other cities. Compared with other developed countries, the performance of quality in China is much behind standards. Generally speaking regarding department stores in China, it is very difficult to get money back for sold item. This also applies to defective items. The procedures for very replacement are also complicated. Meanwhile, customer complaints cannot be handled properly. These attributes are related to consumers' rights; customers are also more attentive.

"The labeling notes on price, validity and the source" is also considered as important to consumers. This attribute is also related to the privileges of consumers. Therefore, from the above explanation, the consumers in China are more attentive to the product itself, and also to the return of defective products. The method of handling the complaints are associated with the attributes of consumers' rights.

As to those quality attributes considered less important, the first one is "to provide the proper purchasing recommendation"; next is "the designs of merchandise display and the usage of each floor", "the speed of packaging and billing process", and the "friendly greeting from the contact personnel". Considerations of these attributes from the consumers are very close, especially on the last two items; the degree of common consensus is quite high. From this point, we can verify that the consumers in China do not consider customer services as an important quality attribute.

In Taiwan, we conducted the survey on the customers in three department stores of the Far Eastern Group, in different cities that are located in the south, north and east of Taiwan respectively. As the economic development levels and living environment different in these three locations, consumers' awareness of the importance of quality attributes is also substantially different. The degree of common consensus is much lower than what we conclude from the surveys of the 10 cities of China. Since the consensus level is not high enough, it is somewhat more difficult to categorize the

ranking of importance. Still, we can analyze the Table 1 to get the results which reveal that attributes such as "the ice-cold manner of the servers when the customer is not willing to buy", "quality of merchandise", "No pirated products", "the refund or return of defective products" and "the settlement of customer complaints", are considered important to Taiwan's consumers.

Thus, compared with consumers in China, Taiwanese are more attentive to the service attitudes. As for the "price of merchandise", it is less important to Taiwan's consumers due to the average income being much higher than China. As to the attributes related to the quality of merchandise, pirated products, return of the defective items, and the settlement of complaints are all considered important to the consumers on both sides.

From Table 1 we may see that the consumers in different cities have different considerations of the importance of quality attributes; there are very substantially different views on some attributes. For example, the attribute of "No products" is ranked as the top importance for the consumers in Hualien; this is because Hualien is located in the east of Taiwan, the economic development is much slower than other areas, and also there are problems with more serious imitation products. Generally speaking, the imitation problem in Taiwan is less critical than in China, but it is still a practical issue to the

Table 1. The importance of quality attributes ranking in China and Taiwan

					СНІ		TAIWAN						
Quality Attributes (Importance)	A	В	C	D	E	F	G	Н	I	J	Hsinchu		Hualien
I. Friendly greetings from the contact personnel	15	17	18	20	18	19	16	17	17	18	14	15	17
2. The servers manner is friendly and courteous	10	7	11	9	13	11	10	13	5	6	6	10	7
3. Listening to and understanding the customers need	11	8	9	8	11	8	9	11	4	15	7	9	13
4. Contact personnel have sufficient professional Knowledge to introduce the products	12	9	7	7	12	15	11	6	12	12	11	12	12
5. To provide proper purchasing recommendations	19	18	20	19	20	20	20	20	20	17	20	20	20
6. The ice-cold manner of the servers when the customer is not willing to buy	7	11	8	15	9	12	7	12	8	10	5	3	3
7. Prodvide the necessary assistance actively to find out the proper product as required	13	12	15	11	14	14	17	15	16	7	8	11	10
8. The speed of packaging and billing procedures	17	19	17	18	17	17	18	19	19	20	18	18	18
9. The completeness of product specifications and brands	9	15	12	13	8	9	14	8	6	13	15	17	16
10. The price of merchandise	3	4	5	6	5	7	4	4	13	3	13	14	14
11. The quality of merchandise	4	1	2	2	2	5	1	3	3	5	2	6	4
12. No pirated products	1	2	1	1	1	I	2	1	1	1	3	7	1
13. The space of each booth and layout are comfortable	18	13	13	12	10	10	15	14	14	11	17	16	15
14. The directory and signs are clear	16	14	14	14	15	13	13	9	9	14	16	13	8
15. The labeling notes on price, validity, and the source	8	5	6	5	7	3	3	2	7	8	9	8	2
16. The design of merchandise displays and the usage of each floor are satisfactory	20	16	19	17	19	18	19	18	18	19	19	19	19
17. The store is easily accessed, parking is convenient	14	20	16	16	16	16	12	16	15	16	12	2	9
18. The procedure for return or refund of defective products or wrong products is convenient	5	3	3	3	3	6	6	7	10	9	4	1	6
19. The after service provided; ex. delivery, installation, maintenance are satisfactory	6	10	10	4	4	2	8	10	11	2	20	5	11
20. The settlement to the complaints	2	6	4	10	6	4	5	5	2	4	1	4	5

# Remark:

<sup>1.</sup> City code: A-Shanghai, B-Dalian, C-Chengdu, D-Xian, E-Qingdao, F-Chongqing, G-Wuxi, H-Yangzhou, I-Guangzhou, J-Suzhou

<sup>2.</sup> The level of importance is shown in accordance with the numbers. Smaller number means higher importance.

consumers, so the ranking of this attribute is still more prominent than for the other two cities (for one it is the third and for the other, the seventh). Economic development will also have influence upon quality attributes such as "labeling notes" on the product. Therefore, the attribute of "the labeling notes on price, validity and the source" is considered as important in Hualien, ranking in the top 2. But in the other two cities, this attributes is ranked in the middle range.

As for the parking issue, as the department store in Chiayi has no parking lot, this attribute is considered as second in importance to the consumers in Chiayi. But for the other two department stores, parking lots are available for consumers, thus this attribute is given less attention by their customers. Another issue to be discussed is that the consumers in Chiayi are paying much attention to "the refund or return of the defective product" (ranking on the top level); that is, much higher than the other two cities. The major concern for the consumers in Hsinchu is the attribute "the settlement to the complaints" (ranking on the top level); that is also higher than the other two cities.

As to the quality attributes which are less important, the level of consensus is very high; these are the items "to provide proper purchasing recommendation", "the designs of merchandises display and the usage of each floor", and "the speed of packaging and

billing process". These portions are almost similar to the results from China.

From the above analysis, we can conclude that the level of importance and concerns about the quality attributes to the consumers on both sides are critically influential the condition of the living environment, economic development as well as the quality awareness of the people. These aspects will also have impacts upon the purchasing behaviors of the consumers. As there are many differences between China Taiwan, those differences will bring various considerations regarding the quality attributes. We outline the concerns as follows:

- The imitation of products is practiced very rigorously in China, and the quality of products made in China is not consistent with standards, thus the consumers "imitation" considered and "quality merchandise" as very important attributes. These attributes are also considered as important in Taiwan, but rank much lower in importance.
- The average income of people in China is generally lower than in Taiwan. Therefore, the consumers in China consider the "price" as very important, but this attribute obtains less attention from Taiwan's consumers.
- Taiwan's consumers have a level of quality awareness far above that of the consumers in China. Therefore, the service attitude of servers is considered very important to Taiwan's consumers. For

example, "the ice-cold manner of the servers when the customer is not willing to buy", which is ranked on the top of the list in Taiwan, gets less attention in China.

- Most of the consumers in Taiwan are car-owners. They care about the parking problem very much. The department store located in Chiayi is not facilitated with a parking lot thus the local consumers identify "parking problems" as their major concern, ranking it on the top of importance. Contrarily, only a very low percentage of people in China own a car, thus "parking problems" is considered as less important to the consumers in China.
- As for the attributes that gain the least attention, such as, "to offer proper purchasing recommendation", "the designs of merchandise displays and the usage of each floor", "the speed of packaging and billing process", the perceptions are very close to each other. This could be concluded as resulting from the common national trait of the same culture heritage.

# IV. Analysis and study of the satisfaction level

In this section, we process the analysis of customer satisfaction. The rule used to rank the satisfaction level listed in Table 2 is the same of ranking the importance level. There is a very interesting point in the results of survey. The customer satisfaction levels of the department stores in the 10 cities of

China have a great deal of differences. However, in Taiwan, the common consensus of the customer satisfaction level is very close. Such appearances are contrary to the results of the survey we made for the importance of quality attributes. As each of the department stores of the Parkson Group in China is a joint venture business, the parent company cannot have full control of the standardization of operations accordingly. Since the department stores in different cities using different management are models, a dissimilar standard of service quality will be performed. However, in Taiwan, each branch of the Far Eastern Department Stores is managed by the same system, and there are same standards and policies; therefore, the service procedures as well as operation systems are very similar.

Among the department stores in the 10 cities of China, regarding the consensus on customer satisfaction, although not all factors agree, we can still make some inductions and inferences. Generally speaking, attribute that is listed highest for satisfaction level is "No pirated products." Towards this point, it can be understood that department stores are aware that the major concern of customers is the issue of imitation and take the necessary precautions for customers. From Table 2, we can also identify that the cities along the coast, like Shanghai, Dalien, Qingdao, and Guangzhou, whose economic development was much earlier than other cities, thus have better

Table 2. The Satisfaction level of quality attributes ranking in China and Taiwan

Quality Asserbutes (Setiofortion Lovel)	faction level)						CHINA										
Quality Attributes (Satisfaction level)	A	В	С	D	E	F	G	Н	I	J	Hsinchu	Chiayi	Hualien				
Friendly greetings from the contact personnel	6	14	7	6	10	6	8	11	13	8	2	3	5				
The servers manner is friendly and courteous	8	3	2	3	8	2	7	2	2	3	4	1	l				
Listening to and understanding the customers need	15	16	4	1	11	1	3	5	6	9	1	5	3				
Contact personnel have sufficient professional Knowledge to introduce the products	12	18	11	5	13	10	11	8	10	4	5	4	6				
5. To provide proper purchasing recommendations	20	20	17	14	20	4	15	16	15	17	7	13	14				
6. The ice-cold manner of the servers when the customer is not willing to buy	19	19	9	8	16	7	16	14	9	14	17	20	16				
7. Prodvide the necessary assistance actively to find out the proper product as required	18	17	5	2	9	3	14	7	8	1	13	15	7				
The speed of packaging and billing procedures	9	11	8	9	17	11	12	10	16	16	8	9	4				
9. The completeness of product specifications and brands	5	6	15	17	4	16	18	19	7	11	11	18	18				
10. The price of merchandise	11	7	14	18	15	18	13	20	17	18	15	17	17				
11. The quality of merchandise	7	2	6	11	2	12	17	13	5	7	6	12	8				
12. No pirated products	1	I	3	4	1	8	6	6	1	2	3	2	2				
13. The space of each booth and layout are comfortable	4	8	20	16	3	19	4	4	11	10	18	10	12				
14. The directory and signs are clear	2	4	18	19	14	17	10	12	14	19	19	8	10				
15. The labeling notes on price, validity, and the source	16	5	1	7	6	9	1	1	3	6	9	7	9				
16. The design of merchandise displays and the usage of each floor are satisfactory	13	15	19	20	19	20	20	17	20	20	16	6	19				
17. The store is easily accessed, parking is convenient	3	13	10	13	18	15	2	3	19	15	20	19	20				
18. The procedure for return or refund of defective products or wrong products is convenient	14	9	12	12	5	13	19	9	18	5	10	16	15				
19. The after service provided; ex. delivery, installation, maintenance are satisfactory	17	10	16	15	7	14	9	15	12	13	14	14	13				
20. The settlement to the complaints	10	12	13	10	12	5	5	18	4	12	12	11	11				

## Remark:

- 1. City code: A-Shanghai, B-Dalian, C-Chengdu, D-Xian, E-Qingdao, F-Chongqing, G-Wuxi, H-Yangzhou, I-Guangzhou, J-Suzhou
- 2. The level of satisfaction is shown in accordance with the numbers. Smaller number means greater satisfaction.

prevention against pirated products and obtain a higher level of customer satisfaction in this attribute. As for the department stores that are located in the hinterland they have more problems with this issue, thus the satisfaction level is not very high.

The next satisfactory attribute is "the servers' manner is friendly and courteous." This is due to the company introducing models of service attitudes from abroad and implementing them in every branch store. The following attributes are "labeling notes on price, validity and the source" and and understanding "listening to the customer's need." However, the satisfaction levels in different stores have substantial differences. Taking for example "labeling notes", there are three department stores ranking this attribute at the top of customer satisfaction. However, in Shanghai, attribute is ranked as 16th, indicating much less satisfaction. As for the attribute "listening to and understanding customer's need", the customers in Xian and Chongging rank it on the top, but in Shanghai and Dalien rank it as 15th and 16th respectively. The reasons for such facets are the different operation systems and different regulations for the service people in each store.

The least satisfactory attributes to the consumers in China are "the design of merchandise displays and the usage of each floor" and "providing the proper purchasing recommendation". Meanwhile, these two

attributes are also verified as the least important attributes to the consumers. Next price least important are "the of merchandise" and "contact personnel will not show an ice-cold manner when the customer is not willing to buy". In China, the merchandise's selling price in the department stores is much higher than the normal market price; therefore, it is understood that the consumers are not satisfied with the prices in the department stores. As for the servers' ice-cold manner to the customers who have no intention to buy, it can only be due to the Chinese inheritance.

As to the outcome of research conducted in Taiwan, the most satisfactory attribute is manner is friendly "the servers' courteous", followed by "no pirated products", "listening to and understanding the customer's need", "Courteous greetings over the counter" and "contact personnel have knowledge sufficient professional to introduce the products" (See Table 2). These results indicate that the department stores in Taiwan can achieve customer satisfaction by the prevention of pirated product, but also via the service attitude of contact personnel and customer service. This is the result of intensive employee training implementation of quality management.

The attribute with the least satisfaction for the consumers in Taiwan is "parking"; parking is always a considerable and critical issue in Taiwan. Many department stores are facilitated with a parking lot, but the parking spaces are quite limited; most customers still face the problem of parking, thus this issue is the most dissatisfactory attribute to the consumers in Taiwan. Following "parking" are "servers will not show an ice-cold manner when customer is not willing to buy", "price of merchandise" "the completeness of produces and brands". specifications and The servers' ice-cold manner to the customers who lack willingness to buy is also due to the Chinese inheritance, as in China. Meanwhile, same as in China, the merchandise selling prices in the department stores are also much higher than the normal market prices. There are especially many large wholesale stores currently in the market; the selling prices are very competitive with a full range These situations will of merchandise. naturally influence the customer satisfaction level regarding quality attributes such as "the price of merchandise" and "the completeness of product specifications and brands".

The product's quality, price, display of merchandise, the method of quality management and the service attitude of contact personnel all affect the level of satisfaction significantly. The customer quality consciousness and living environment of consumers will also determine evaluation of service quality. We have made an analysis and study of the satisfaction level of quality attributes for consumers in China and Taiwan. We can draw conclusions as follows:

- For the department stores in China and Taiwan, efforts placed upon the prevention of pirated products have obtained much customer satisfaction.
- The department stores on both sides have devoted efforts toward upgrading service quality. Therefore, the quality attributes such as "the servers' manner is friendly and courtesy "and" listening to and understanding of the customer's need have a higher degree of customer satisfaction in China and Taiwan. The results show Taiwan has even better performance than China.
- It is possible that due to the traditional mentality and inheritance of Chinese people, the contact personnel might show an ice-cold manner or indifferent attitude to those customers who have no intention to buy. This quality attribute is verified as less satisfactory by the consumers of the department stores in both China and Taiwan.
- Since the merchandise that is sold in department stores has much higher prices than the normal markets, and the people in China generally have less income, the consumers are very concerned with the "price" issue in department stores. Although the average income is higher in Taiwan, the consumers still have less satisfaction with the "price" issue. We can understand the nature that all the consumers are expecting to use less money for better products.
- "Parking" is a very critical issue to most of the cities in Taiwan. Therefore, the consumers show the most dissatisfaction with

the "parking" quality attribute. However, since there are much fewer car owners in China currently, this quality attribute is not an issue to the department stores in China.

# V. Analysis on the quality attributes to be improved

Besides the aim to understand the actual level of customer satisfaction, the main objective for the customer satisfaction survey was to focus on those quality attributes showing less satisfaction and needing to be improved. However, the customers showed their satisfaction level and evaluated the performance of service quality based on the important quality attributes they recognized. Therefore, for those quality attributes with importance but higher with a lower satisfaction level are the areas for the take into consideration management to toward improvement. Yet, how to determine which degree is high and which low, for the importance level and satisfaction level, is a critical issue.

We have calculated the sample mean of the importance and satisfaction on each quality attribute. The median of the sample mean to the importance level as well as the median of the sample means to the customers' satisfaction can be calculated. If one quality attribute has a sample mean of importance level that is higher than the median of importance's sample means, but its sample mean of satisfaction is lower than

the median of satisfaction's sample means, then this item is categorized as a "To be improved" quality attribute.

Taking the example in Shanghai, the median of the sample means on importance The median on the level is 4.105. satisfaction is at 3.685. The sample mean of importance on the quality attribute "service providers will not show their ice-cold manner when customers are not willing to buy" is 4.23 (>4.105); the sample mean of satisfaction is 3.58 (<3.685). This item will then be list as a "to be improved" quality attribute. Table 3 shows the quality attributes which are "to be improved" department stores in China; Table 3 shows the same for the department stores in Taiwan.

Table 3 indicates the department stores in the cities Dalien, Qingdao and Guangzhou of China have less quality attributes that are identified as "to be improved". However, on the other hand, the cities Chongqing and Yangzhou have more quality attributes to be improved. Dalian, Qingdao and Guangzhou are located along the coast, while Chongqing and Yangzhou are located in the hinterlands. Therefore, it could also be acknowledge that the department stores in the cities that are located along the coast usually will have better performance on service quality. The major items of quality attributes that are categorized as "to be improved" are: "the price of merchandise", "the after service provided by the company" and "the return or refund for the defective product".

Table 3. The "To be improved" quality attributes ranking in China and Taiwan

	CHINA										TAIWAN			
Service Quality Attributes	A	В	С	D	E	F	G	Н	I	J			Hualien	
Friendly greetings from the contact personnel														
The servers manner is friendly and courteous														
Listening to and understanding the customers need		*												
Contact personnel have sufficient professional Knowledge to introduce the products		*	*											
5. To provide proper purchasing recommendations														
6. The ice-cold manner of the servers when the customer is not willing to buy	*				*		*			*	*	*	*	
7. Prodvide the necessary assistance actively to find out the proper product as required											*			
The speed of packaging and billing procedures														
The completeness of product specifications and brands						*		*						
10. The price of merchandise	*		*	*	*	*	*	*		*				
11. The quality of merchandise				*		*	*	*				*		
12. No pirated products														
13. The space of each booth and layout are comfortable						*								
14. The directory and signs are clear								*	*					
15. The labeling notes on price, validity, and the source	*													
16. The design of merchandise displays and the usage of each floor are satisfactory														
17. The store is easily accessed, parking is convenient												*	*	
18. The procedure for return or refund of defective products or wrong products is convenient	*		*	*		*	*		*			*	*	
19. The after service provided; ex. delivery, installation, maintenance are satisfactory	*		*	*		*		*	*	*	*	*	*	
20. The settlement to the complaints		*	*		*			*		*	*	*	*	

### Remark:

- 1. City code: A-Shanghai, B-Dalian, C-Chengdu, D-Xian, E-Qingdao, F-Chongqing, G-Wuxi, H-Yangzhou,  $\begin{tabular}{ll} I-Guangzhou, \ J-Suzhou \\ 2. \ The mark "$\bigstar$" means the specific quality attribute is to be improved. \\ \end{tabular}$

As for the department stores in Taiwan, the branch store in Hsinchu is performing excellent service quality; the Chiayi branch needs more improvement than others. As table 3 indicates, on the quality attributes "service providers will not show ice-cold manner when customers are not willing to buy", "the after service provided by the company" and "the settlement of customer complaints" are the areas where three department stores have contribute more efforts towards improving accordingly. The rest are "parking" and "the return or refund for the defective product".

From the above analysis we can observe some interesting differences. For example, the major quality attribute that is considered as "to be improved" in China's department stores is "the price of merchandise"; but, as verified by the consumers in Taiwan, it seems that no store in Taiwan has the same issue. In Taiwan, however, the consumers perceived "service providers will not show an ice-cold manner when customers are not willing to buy" as the quality attribute to be improved among all those three stores. This item obtained less attention in China; the result shows there are not as many stores requiring improvement on this quality attribute.

# VI. Conclusion

The people in China and Taiwan inherited

the same Chinese culture, with the same traits. However, the economic development, GNP and living environment, and even the quality awareness on the both sides, present significant differences. All these factors will influential in the consideration importance of and the measurement satisfaction with quality attributes for the Although we may consumers. analysis of the importance and satisfaction survey for the department stores that are located in 10 cities in China and 3 cities in Taiwan to discover many similar results, there are also some results with substantial differences. As for the quality attributes that are verified as "to be improved", there are some interesting differences between the department stores on both sides.

It is recognized that factors like culture, outside environment and others influence the consumers' consideration of the importance of quality attributes as well as the measurement of quality. As long as the company wants to upgrade the performance of quality, it is necessary to consider the cultural background of local citizens, the status of economic development, and the living environment and condition, in order to provide suitable services and merchandise that match with the local consumers' requirements and expectations.

Also, when conducting any survey on customer satisfaction, it is necessary to process a survey on the importance of quality attributes at the same time, in order

to find out the most critical areas of those quality attributes for further improvement.

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