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SERVICE QUALITY AND QUEUE

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ABSTRACT

While active buyers can bring a firm stable income, their perceptions of service quality can help the firm improve its service. This investigation identifies five factors that influence service quality for queuing customers. This investigation also identifies the causality relationships among five factors that influence service quality. Tangibility and responsiveness should be foci for a service company hoping to change customer perceptions to service quality. Tangibility directly enhances responsiveness and assurance. Tangibility indirectly enhances reliability and empathy. Moreover, responsiveness enhances assurance and empathy. Responsiveness directly enhances reliability. Through enhancing responsiveness and tangibility, customers should develop good feelings regarding service quality.

Keywords: Service industry, waiting line, service quality.

INTRODUCTON

Some successful service companies have demonstrated that customers can actually be attracted by a queue [1]. However, service quality seems irrelevant to the queue, while its effects on queuing customers deserve study. The fact that a customer is queuing to make a purchase in a store implies a degree of loyalty, as well as some certainty of income when that customer makes payment. Accordingly, it is worth verifying how that customer perceives service quality. Through analyzing perceptions of service quality in queuing customers, this investigation can better understand the psychology of queuing customers [2-7]. Dissatisfied customers will not queue to make a purchase [5] [8-12]. To identify queuing customer perceptions to service quality, this study administers a questionnaire to survey queuing customers. A pre-test has verified the questionnaire reliability and validity.

The remainder of this paper is organized as follows. Section 2 reviews the literature. Section 3 then details the research method and proposed questionnaire. Subsequently, Section 4 describes the analytical results. Finally, Section 5 describes conclusions.

REVIEWS

Service characteristics and other factors, such as service flows, expectations of satisfaction, service environments, and even encouragement from friends, can cause queues. Notably, service flow comprises the steps involved in service provision [13-15]. Efficient service flow can help front-line workers provide satisfactory services in a timely manner that minimizes the need for queuing, while inefficient service flow can generate queues. Significantly, customers may willingly queue for a service to derive associated satisfaction. For instance, customers will line up early to avoid missing out when a service company offers a promotion on certain products. Furthermore, all customers must wait when timely service cannot be provided [14] [16].

If a customer is willing to join a queue, the service provider has a better chance of increasing revenue. Service companies thus should target queuing customers with promotions during pre-process waiting ([17-19]. Company products, brands, and corporate image can all provide sound reasons for customers to queue, but service quality also encourages customer to queue. Customers can form negative perceptions of a company if it provides poor quality service. However, previous investigations have not adequately studied the quality of service provided to queuing customers [20-22].

Previous studies have provided standards for verifying customer satisfaction with service quality. Companies can verify service quality by comparing consumer satisfaction with service quality before and after service provision. Restated, customer assessments regarding their satisfaction with service quality can be adopted to measure their perceptions of wait experiences before and after queuing [23]. Among these studies, five dimensions — tangibility, reliability, responsiveness, assurance, and empathy ([24-27]) — are summarized to assess the influence of customer satisfaction in different sectors.

RESEARCH METHOD

The questionnaire comprises three parts and has been modified using pre-testing. The first part, dealing with the service quality, comprises 21 questionnaire items modified from literatures [28-30]: tangibility, reliability, responsiveness, assurance, and empathy (Table 1), to clarify waiting consumer perceptions to service quality [28-29] [31-32].

Table 1 Question Items

Dimension	Q.No	Item
Assurance	CS-06	The service sector has provided satisfactory service on my first visit.
	CS-08	The service sector can provide the services they promise.
	CS-07	The service sector enthusiastically solves problems when they occur.
	CS-05	The service sector delivers on its promises in a timely manner.
Responsive	CS-18	Employees offer attentive service.

ness	CS-21	Employees show good willingness to help customers.
	CS-19	The company provides timely service.
	CS-20	Employees provide prompt service.
Empathy	CS-14	The company offers all customers the same service.
	CS-16	Employees demonstrate understanding of my needs.
	CS-15	The trading hours of the shop suit my schedule.
Reliability	CS-17	The service sector has sufficient resources to meet customer needs.
	CS-09	The service sector provides perfect service.
	CS-10	Employees can tell me the exact timing of service provision.
Tangibility	CS-12	Employees are reassuring.
	CS-11	The service sector is always well prepared to provide good service.
	CS-02	The facilities of the service company attract me.
	CS-01	The service sector has up-to-date equipment.
	CS-03	Employees dress well.
	CS-04	Attractive additional services are offered, such as: after-sales service.

Samples are obtained from locations in Taiwan that are well-known for queuing. This study selected respondents standing as they waited in front of restaurants and snack shops that are famous for long queues of customers. This investigation selected 25 companies, including 15 restaurants (four branches of Din Tai Fung and 11 small restaurants) and ten snack shops (e.g. Foyishan, Kobayashi, etc.). Twelve of the sampled companies were located in northern Taiwan, five in central Taiwan, and eight in southern Taiwan. The completed questionnaires are analyzed using SPSS Statistics™ version 18.0. Additionally, the hypotheses are checked using SPSS AMOST™ version 18.0. Of the 478 responses, 421 were valid. The sampling results show that male respondents (49.4%) display almost the same results as female respondents (50.6%). Additionally, a sample size exceeding 400 is good for causality relationship analysis.

RESEARCH RESULTS

Analytical results indicate that 208 males (49.4%) and 213 females (50.6%) responded to the questionnaire survey. Most of the respondents ranged from 21-25 years old (35.5%) (Table 1). Of the 421 respondents, 187 (44.4%) were from northern Taiwan, 109 (25.9%) were from central Taiwan, 115 (27.3%) were from southern Taiwan, and ten (2.3%) were from eastern Taiwan. The proportion of respondents willing to wait 30 minutes for their favorite goods was 359 (85.27%).

This section verifies the causality relationship among tangibility, reliability, responsiveness, assurance, and empathy using the structure equation model. The question items CS-04, CS-09, CS-12, CS-14, CS19, and CS-05 are eliminated from the rest of analysis because of low factor load. The internal structure fit reveals the qualification of five dimensions (Table 2). The average variance extracted for each factor exceeds 0.5 [33]. Furthermore, the reliability and composite reliability of each dimension exceeds 0.7 [33]. All individual item reliabilities of each questionnaire item exceed 0.5. Table 3 shows discriminant validity. All constructs are valid.

Table 2 Internal structural fit

Latent Variable	Q.No	individual item reliability	composite reliability	average variance extracted
Tangibility	CS-01	0.615	0.817	0.698
	CS-02	0.676		
	CS-03	0.504		
Empathy	CS-17	0.658	0.846	0.648
	CS-15	0.507		
	CS-16	0.780		
Responsiveness	CS-21	0.520	0.796	0.565
	CS-20	0.619		
	CS-18	0.557		
Assurance	CS-08	0.716	0.856	0.665
	CS-06	0.596		
	CS-07	0.684		
Reliability	CS-10	0.578	0.746	0.595
	CS-11	0.612		

Table 3 Discriminant Validity

	Tangibility	Responsiveness	Reliability	Assurance	Empathy
Tangibility	0.698				
Responsiveness	0.144	0.565			
Reliability	0.053	0.371	0.595		
Assurance	0.162	0.498	0.401	0.665	
Empathy	0.085	0.484	0.216	0.353	0.648

Finally, the analytical results reveal tangibility as the main concern of consumers. Tangibility positively and directly influences responsiveness. Tangibility positively affects assurance both directly and indirectly. Tangibility also indirectly affects reliability and empathy. A service company should focus on the provision of attractive tangible services. Additionally, if a company provides queuing customers with a sense of responsiveness, they will perceive it as reliable, secure and empathetic. Employees should be trained to provide timely and active service. Reliability directly enhances assurance. A company should cultivate an image of being able to provide good quality service.

CONCLUSION

Queuing customer perceptions of service quality are important to discuss, because customers willing to queue represent actual buyers. A service company must retain actual buyers through providing good service quality. Identifying the importance of each factor that influences service quality, service companies can adopt marketing strategies to help retain buyers. This study designed a questionnaire that it administered to queuing customers in front of 25 restaurants and snack shops in Taiwan that were noted for frequent long waiting lines. This study identified a causality relationship among five factors of service quality: tangibility, reliability, responsiveness, assurance, and empathy. A service company that regularly has long queues should focus on improving its tangibility and responsiveness. Improved responsiveness and tangibility should give customers the impression of good service quality.

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