A TAXONOMY OF SERVICE QUALITY STRATEGIES

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Abstract:
This paper will describe the development and numerical analysis of alternative service quality strategies. For the methodology, this study uses taxonomy to establish different service quality strategies. This taxonomy is based on a cluster analysis method. This study establishes strategic groups based on all of the critical success factors from the related literature. Furthermore, the relationship between clusters of service quality strategy groups and service quality indices will be observed. We believe that powerful contributions will be produced by the research results, which will also provide practical implications. Firms will be able to precisely select an appropriate strategy to satisfy service quality requirements from different market customers.

Keywords: service quality, strategic, taxonomy, competitiveness
1. INTRODUCTION

Because service quality is shown to have a significant positive influence on customer satisfaction, improving and maintaining service quality has become an important issue for practitioners. In fact, high loyalty will be produced when customers have positive comments regarding service quality, and ultimately, business performance will be improved. For this reason, researchers and practitioners have tried to identify service quality indices and continue to explore how to improve and enhance service. In the service quality indices, SERVQUAL from Parasuraman et al. (1985, 1988) is a typical example, and researchers and practitioners believe that its effective measurement techniques can help achieve service quality in every industry. SERVQUAL identifies five dimensions to measure for the achievement of service quality. These dimensions include reliability, to perform the promised service dependably and accurately; responsiveness, willingness to help customers and to provide prompt service; assurance, the knowledge and courtesy of employees and their ability to convey trust and confidence; empathy, the provision of caring, individualized attention to customers; and tangibles, the appearance of physical facilities, equipment, personnel, and communication materials. A few studies such as Buttle (1996), Asubonteng et al. (1996) and Cronin Jr. and Taylor (1994) tried to identify additional indices or to renew SERVQUAL to measure service quality. However, more researchers such as Newman (2001), Wisniewski (2001), Jiang et al. (2002), Wong (2002), Iwaarden et al. (2003), Tan and Kek (2004), Pakdil and Harwook (2005), Pakdil and Aydin (2007), Ladhari (2009), Chen et al. (2009), Kumar et al. (2009), and Bose and Gupta (2013) indicated that the original five indices from SERVQUAL are still better than new indices for concisely measuring service quality, as they have a wide range of adaptability for every industry. For this reason, these five indices are widely adopted to measure service quality.

However, improving and achieving high-quality service is a more important mission than measuring it. Existing studies just focus on measuring service quality using the SERVQUAL scale or on setting the service quality to a single variable and trying to identify critical success factors; further, they explore the relationship between different factors and the service quality variable. Therefore, we still lack research that explores how to improve and enhance these indices. For problem solving, constructing service quality strategies based on service quality indices and related critical success factors may provide an alternative approach. Critical success factors can represent a quality gap, however, they can also be used as a base for internal operations planning and modification (Cândido, 2005; Shahin and Samea, 2010). Using a guide of critical success factors, practitioners can plan and modify related internal operations practices to improve a specific service quality index (Chan and Mills, 2002; Bahri et al., 2012). In addition, they can select fit and homogeneity factors to construct alternative service quality strategies, which can enhance a specific service quality index (Donnelly, 1999; Pun et al., 2000; Cândido, 2005; Shahin and Samea, 2010).

Two problems still need to be deeply explored: the construction of alternative service quality strategies based on critical success factors and the relationship between alternative service quality strategies and each service quality index. Based on the above, this study will establish strategy groups based on all critical success factors from the related literature. Furthermore, the relationship between clusters of service quality strategy groups and service quality indices will be observed.

2. LITERATURE REVIEW - CRITICAL SUCCESS FACTORS FOR SERVICE QUALITY

According to research purpose, this paper tries to identify critical success factors from the related literature. Based on the related studies, 13 critical success factors are discussed, including service attitude and behaviour, customer emotions and perceptions, commitment, customer relationship, service innovation, cultural and cross-cultural awareness, experience quality, industry knowledge, customer experience management, internal operations management of service provider, gender differences, listening, and service switching.

2.1. Service attitude and behaviour

Service attitude and the behaviour of the service provider have a significant effect on service quality when providers are facing the customer and providing services. Related studies such as Butcher et al. (2001), Farrell et al. (2001), Yoon et al. (2001), Castro et al. (2004), Specht et al. (2007), Bodet (2008), and Söderlund and Rosengren (2008) indicate that the attitude and behaviour of the service providers...
generate the customer’s first impression when the customer contacts the provider, asks a question, or requires a related service. In fact, the majority of customers usually judge service quality by their first impression. Therefore, these studies indicate that a service provider usually obtains a high service quality evaluation when they exhibit a positive attitude and positive behaviour toward the customer. However, these studies also indicated that negative service attitudes and behaviour will cause adverse effects. For this reason, service attitude and behaviour are regarded as a critical success factor in service quality.

2.2. Customer emotions and perceptions

Service delivery to customers should be easy because they reveal their emotions during the service process, including perceptions, feelings, expectations, etc. According to related studies such as Mattila and Enz (2002), Cunningham et al. (2005), Edvardsson (2005), White (2006), Kuo et al. (2009), Yavas et al. (2004), White and Yu (2005), Ladhari (2009), Lu and Shiu (2009), and Han and Ryu (2009) service providers should be conscious of customers’ emotional delivery and should respond immediately. Otherwise, customers may interrupt service or express discontent. Afterward, service quality will be negative and further affect competitive performance.

2.3. Commitment

According to related empirical studies (Harrison-Walker, 2001; Dean, 2007; Lai, 2015), service quality can be affected and enhanced significantly by achieving commitment: a contract between service providers and customers (Sharma and Patterson, 1999; Gustafsson et al., 2005; Castaing, 2006). Customers generally think highly of experiencing a service commitment from service providers. Therefore, achieving commitment usually directly affects customer satisfaction, and customer satisfaction usually further affects service quality evaluation. Therefore, related studies such as Coulter and Coulter (2002), Johnston (2004), Alexandris et al. (2004), Hur et al. (2010), and Hur et al. (2013) indicated that achieving commitment has a critical influence on service quality and cannot be ignored.

2.4. Customer relationship

Understanding and delivering based on customer demand has become an ongoing concern for competitive advantage (Wang et al., 2004). Customer demand is based on the customer’s perspective and behaviour. To understand and deliver on customer demands, service providers should connect with the customer and analyse and understand the customer’s perspective and behaviour. For this reason, the establishment of customer relationships should be widely adopted. The establishment of customer relationships usually means constructing a close relationship between service providers and customers. In a close relationship, service providers can easily measure and observe the customer’s perceptions and behaviours. Therefore, by establishing a customer relationship, customer demands will be easy to obtain. According to related studies such as Chowdhary and Prakash (2007), Huang (2008), Keramati et al. (2009), Chen and Hu (2010), Wu and Lu (2012), and Gebauer and Kowalkowski (2012) customers will positively evaluate service quality when their demands are satisfied. Therefore, the establishment of a customer relationship plays a critical role in enhancing service quality.

2.5. Service innovation

Service innovation occurs when service providers redesign and redevelop the existing service model based on customer demands (Tidd et al., 2001). Schulteß et al. (2010) noted that an innovative service model can immediately satisfy customer demand even when demand varies. In addition, because firms can immediately develop a new service model based on varied customer demands, the customer will positively evaluate service quality and further extend and maintain their relationship with the service provider. Based on the above, Agarwal et al. (2003), Victorino et al. (2005), Prajogo (2006), Tseng et al. (2008), and van Riel et al. (2013) further explored the relationship between service innovation and service quality through empirical testing and found that a relationship exists. They further indicated that service innovation has a critical influence on service quality.

2.6. Cultural and cross-cultural awareness

Furrer et al. (2000), Reynolds and Smith (2010), and Schumann et al. (2010) indicated that customers from different cultures may have different preferences, taboos, customs, etc. Therefore, service
providers should pay attention and should adjust their service model or approach based on different cultures to satisfy customer demand. According to Patterson and Smith (2003) and Patterson and Mattila (2008), service providers usually receive a high service quality evaluation when the service model is designed based on customer demands from different cultures. Thus, emphasizing cultural and cross-cultural awareness has a positive effect on service quality and importance has been attached to these qualities in recent years.

2.7. Experience quality

With customer demands increasing and diversifying, Pine and Gilmore (1999) indicated that experience will play a critical role in competitive advantage. In recent years, an increasing number of researchers also found that providing a pre-experience can improve customer loyalty and more concisely satisfy customer demands (Yu and Fang, 2009; Chang and Horng, 2010). Experience usually offers higher value because it creates a personal impression and memories. A memorable experience will affect the customer’s perceived value and determine whether they accept the service and whether they give a high service quality evaluation. For this reason, an increasing number of researchers have tried to explore the influence of experience quality. They found that experience quality has a positive effect on service quality, thereby further improving the competitive performance of service providers (Flanagan et al., 2005; Keng et al., 2007; Wu and Liang 2009).

2.8. Industry knowledge

This factor relates to the immediate response from the service provider when a customer is within the service process. Customers always have questions or doubts during the service process. Román (2003), Koyama et al. (2003), and Olsen (2004) indicated that customers will receive a positive impression if service providers can respond immediately and effectively. However, this type of response requires rich industry knowledge. For this reason, an increasing number of service providers are gradually focusing on training to improve industry knowledge. This type of knowledge is necessary and has a positive effect on service quality. Related studies such as Coulter and Coulter (2002) and Ranaweera and Prabhu (2003) demonstrate that the relationship between rich industry knowledge and service quality certainly exists and has importance.

2.9. Customer experience management

Today’s service industry requires more than just a stable service model because customer demands vary. To satisfy varied customer demands, service providers should focus on and manage the customer’s service experience. Customer experience includes every point of contact between the customer and service. By effectively managing the customer experience, service providers can immediately modify the existing service and can further satisfy varied demands (Grewal et al., 2009). The management model calls this process ‘customer experience management’ (CEM). As stated above, CEM is a collection of processes that track every interaction between customers and service providers. The goal of CEM is to optimize the service model by analysing the results of the interaction experience (Palmer, 2010). According to related studies, through CEM, customers will increase their loyalty and service quality will be affected and significantly improved (Coye, 2004; Zillur, 2006; Walter et al., 2010; Helkkula, 2011).

2.10. Internal operations management of the service provider

Malhotra and Mukherjee (2004) indicated that internal operations management is important for service organizations because it provides a link between the external customer and the internal operations of the organization. A service model is usually established through planning and internal operations practices. Positive planning and practices will ensure the creation of an effective service model. For this reason, emphasizing internal operations planning and practice often has a positive effect on service quality; thus, when managers work to improve the effectiveness of internal operations, overall service quality will be enhanced (Collier, 1991; Davis, 1991; Dean, 2004; Wang, R.T., 2007).

2.11. Gender differences

Gender differences usually translate into different customer demands. Researchers have found that gender differences were significantly related to service quality expectations for professional service.
For example, female customers usually pay more attention to physical representations, cleanliness and appearance during service encounters (Lee et al., 2011); female customers also generally have higher service quality expectations than male customers (Díaz-Martín et al., 2000). Therefore, studies suggest that service providers should develop a service model based on gender differences (Spathis et al., 2004; Yelkur and Chakrabarty, 2006; Luoh and Tsaur, 2007; Gruber et al., 2009). In addition, these studies also demonstrate that emphasizing and developing different service models based on gender differences have a positive effect on service quality.

### 2.12. Listening

Communication is important during the service provision process. The purpose of communication during the service provision process is to identify customer demands. Through communication, the service provider can understand customer demands and, further, can respond correctly. Therefore, communication is necessary. However, to be an effective communicator, improved listening skills are a priority (Yang and Fang, 2004). Related studies indicate that by listening to customers, service providers can identify critical service demands that must be satisfied; customers will give high service quality evaluations when demands are satisfied effectively (LeBlanc and Nguyen, 1999; Glynn et al., 2003). In addition, poor listening usually leads to a lack of sufficient care by service providers in service interactions, and feelings of being ignored trigger poor perceptions from customers. Thus, listening usually has a positive effect on improving service quality (Broderick and Vachirapompuk, 2002; Bienstock et al., 2003; Yang, 2003).

### 2.13. Service switching

Service switching occurs when customers decide to leave an old service provider and switch to a new service provider. Usually, customers must face a switching cost when adapting to a new service model. However, the switching cost will decrease if the new service providers offer positive assistance in the adaptation process. Customers usually have good impressions and perceptions when they experience positive assistance. Service quality is related to customers’ impressions and perceptions; thus, an increasing number of studies have begun to explore influence when customers switch to a new service provider. According to related studies such as Lee and Cunningham (2001), Grace and O’Cass (2001), Han et al. (2011), and Edward and Sahadev (2011), assisting customers to adapt and, further, decreasing their switching cost should significantly affect service quality. Its influence therefore becomes a critical factor for improving service quality.

### 3. METHODOLOGY

Based on its research purpose, this study adopts a taxonomy approach to explore the data. Taxonomic inquiry has emerged as an important type of research in the field of strategy, and it has been applied extensively to classify or group on the corporate and business levels, as well as to strategic processes, managerial behaviour, etc. Using the taxonomy concept in statistics for a cluster analysis can aid in the selection of the most appropriate number of clusters. In its analysis process, this study first explores the data and the number of clusters through a two-step cluster analysis. In the two-step cluster analysis, the hierarchical clustering model is adopted first to generate a dendrogram and an agglomeration schedule. Based on the dendrogram and the agglomeration schedule, we determined the number of clusters. Subsequently, to ensure the hierarchical stability of the results and to understand the composition of the clusters, we iterated a $K$-means cluster analysis. The third step involved testing the cluster results. We used an ANOVA to test for differences between clusters and to further identify service quality strategies for each cluster. In addition to the cluster analysis, the research also explores the relationship between service quality strategies and service quality indices. To explore the relationship, ANOVA was again conducted. Furthermore, to find the critical competitiveness of each strategy, this study adopts within-cluster paired-sample $t$-tests.

### 4. RESULTS

161 samples were analysed in this study. Table 1 shows the cluster results determined according to the two-step cluster analysis; 4 clusters are identified in table 1.
Table 1: Result of clusters

<table>
<thead>
<tr>
<th>Structure of cluster</th>
<th>Cluster means</th>
<th>Standard errors</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Service attitude and behavior</td>
<td>4.3590</td>
<td>0.7095</td>
<td>0.000**</td>
</tr>
<tr>
<td>2. Customer emotional and perceived experience quality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Experience quality</td>
<td></td>
<td></td>
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<tr>
<td>4. Customer experience management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Listening</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cluster 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Internal operations management of service provider</td>
<td>4.6936</td>
<td>0.6216</td>
<td>0.000**</td>
</tr>
<tr>
<td>2. Industry knowledge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cluster 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Commitment</td>
<td>4.0419</td>
<td>0.8450</td>
<td>0.000**</td>
</tr>
<tr>
<td>2. Customer relationship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Service innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Service switching</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Cluster 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Culture and cross-cultural</td>
<td>3.6957</td>
<td>1.0339</td>
<td>0.000**</td>
</tr>
<tr>
<td>2. Gender difference</td>
<td></td>
<td></td>
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</tbody>
</table>

Based on table 1, four clusters can be labelled. Cluster 1 was labelled “service behaviour improvement.” According to the structure of cluster 1, we found that attitude and behaviour, emotions and perceptions, experience quality, experience management, and listening should be applied to customer contact. Therefore, this cluster belongs to an instant response strategy. Cluster 2 was labelled “internal service operational improvement.” Within the structure of cluster 2, the factors focus on the relationship between service quality and the continuous improvement of internal operations. Thus, this strategy trends toward relationship improvement. Cluster 3 was labelled “customer relationship strategy.” Within this cluster, achieving commitment, establishing a relationship establishment, enacting continuous innovation to meet diverse customer demands, and assisting in new customer adaptation to the service model can all increase positive evaluations and trust from customers. Thus, the strategy focuses on establishing a long-term relationship. Cluster 4 was labelled “difference strategy.” The structure of this cluster focuses on a strategy to emphasize differences based on culture and gender.

In addition to identifying the four service quality strategies, this study further explores the relationship between strategies and the service quality indices. Table 2 shows the relationships between strategies and service quality indices according to the ANOVA analysis. Based on table 2, we found that the service behaviour improvement strategy performs better than other service quality strategies, and it can improve all service quality indices. With the internal service operational improvement strategy, only responsiveness can be improved. The customer relationship strategy is better than the internal service operational improvement strategy because reliability, assurance, and tangibles can be improved when service providers select a strategy primarily related to service quality. Finally, the difference strategy surprisingly cannot improve any service quality indices, although the related literature indicates that culture and gender are critical factors affecting service quality.

Table 2: Relationships between strategies and service quality indices

<table>
<thead>
<tr>
<th>Reliability</th>
<th>Responsiveness</th>
<th>Assurance</th>
<th>Empathy</th>
<th>Tangibles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1</td>
<td>F-value = 0.668 F-value = 0.000**</td>
<td>F-value = 0.974 F-value = 0.083</td>
<td>F-value = 0.941 F-value = 0.000**</td>
<td>F-value = 1.000 F-value = 0.011**</td>
</tr>
<tr>
<td>Cluster 2</td>
<td>F-value = 0.546 F-value = 0.000**</td>
<td>F-value = 0.001** F-value = 0.213</td>
<td>F-value = 0.011** F-value = 0.000**</td>
<td>F-value = 0.993 F-value = 0.993</td>
</tr>
<tr>
<td>Cluster 3</td>
<td>F-value = 0.000**</td>
<td>F-value = 0.000**</td>
<td>F-value = 0.000**</td>
<td>F-value = 0.000**</td>
</tr>
<tr>
<td>Cluster 4</td>
<td>F-value = 0.000**</td>
<td>F-value = 0.000**</td>
<td>F-value = 0.000**</td>
<td>F-value = 0.001**</td>
</tr>
</tbody>
</table>

5. CONCLUSION

This study established strategy groups according to all of the critical success factors taken from the related literature. Furthermore, the relationship between the clusters of service quality strategy groups and service quality indices were observed. According to the research results, we produce powerful contributions and provide practical implications. From this work, firms can precisely select an appropriate strategy to satisfy service quality requirements from different customer markets. As seen in
table 1, this study tried to identify four service quality strategies based on critical factors, and we found the relationships between the service quality strategies and service quality indices.

REFERENCE LIST


