INTEGRATION OF SERVICE BLUEPRINT AND KANO MODEL: A NEW PERSPECTIVE OF SERVICE QUALITY FRAMEWORK

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ABSTRACT
Despite all the criticism it has received, SERVQUAL model introduced by Parasuraman is still the most common model adopted by prior researchers concerning the study of service quality. However, the 10 SERQUAL determinants are normally applied in service quality research either as exogenous variable (i.e. success factors for service quality) or endogenous variable (as service quality performance measures) in the form of first order research model. Hence, aligning with Service Blueprint concept, this paper proposes a new service quality model which splits the 10 SERQUAL determinants into three noteworthy levels based on the intensity of interaction between customers and service providers. Level 1 consist of SERQUAL determinants that driven by customer that without interaction with service provider. Level 2 made up of SERQUAL determinants that involved interaction between customer and service providers, and Level 3 comprise of determinants that driven by service providers without involvement of customer. In addition, based on Kano Model, the new service quality model views the level 2 determinants as exogenous variables toward organizations quality performance (i.e. endogenous variable). Moreover the new model advocates level 1 and 3 determinants as moderator and mediator respectively between level 2 determinants and quality performance. The new service quality model has descriptive value in terms of studying, classifying and assessing the relationships that govern service quality determinants and quality performance.

Keywords: Service quality; customer satisfaction; Kano model; styling; service blueprint; SERQUAL

1. INTRODUCTION
Service quality is viewed by prior researchers as the overall judgment of services delivered by the service provider towards meeting customers’ expectation, and it is generally accepted as an antecedent of overall customer satisfaction1. According to Parasuraman et al.2, the ability of the service provider to meet or exceed customer expectations is also representing the quality performance of the service provider.

Theoretically, the level of service quality is dependent on the proportionate of customer expectations and customer perceptions toward the service. In line with this concept, service quality level can be defined as the difference between customer expectations prior to the service provision and the customer perceptions of the service provided3. If the perceived quality level of the services offered to the customer is lower than expected, it will end up with dissatisfaction.

In another aspect, if the customers' perceived service quality is higher than expectation, then it can leads to high levels of customers satisfaction. Therefore, while businesses dealing with satisfaction levels of customers, the assessment should be focused on identifying the differences between customers' expectations and perceptions.

2. DETERMINANTS FOR SERVICE QUALITY
The SERVQUAL model introduced by Parasuraman et. al.² is the most common method used to measure service quality⁴. SERVQUAL model categorize the measurement of service quality into 10 dimension which comprised of tangibility, reliability, responsiveness, competence, courtesy, credibility, security, access, communication, and understanding the customer. Each of the dimensions plays a different role on evaluating and assessing the level of service quality.

The 10 service quality dimensions are widely adopted by prior researchers either as attributes for service quality performance⁵⁻⁷ or as the determinants for the success of service quality management³,⁸,⁹. The 10 service quality determinants can be further classified into three category base on the nature or property of the determinants, which are namely Searching Dimension, Experiencing Dimension and Credence Dimension as shown in Table 1.

Searching Dimension comprise of activities perform by the customer prior to the commencement of service. Such as activity of comparing service charges among different service providers; searching of the location of service provided, and judging the reputation of the service provider. Tangibility and credibility are the 2 SERQUAL determinants that grouped under Searching category.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Service Quality Attributes</th>
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<tbody>
<tr>
<td>Search</td>
<td>Tangibles - the physical evidence of the service</td>
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<tr>
<td></td>
<td>Credibility - trustworthiness, believability, and honesty</td>
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<tr>
<td>Experience</td>
<td>Access - approachability and ease of contact</td>
</tr>
<tr>
<td></td>
<td>Courtesy - politeness, respect, consideration, and friendliness</td>
</tr>
<tr>
<td></td>
<td>Reliability - consistency of performance and dependability</td>
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<td></td>
<td>Responsiveness - willingness or readiness of employees to provide service</td>
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<tr>
<td></td>
<td>Understanding the customer - making the effort to understand the customer’s needs</td>
</tr>
<tr>
<td></td>
<td>Communication - keeping customers informed and listening to them</td>
</tr>
<tr>
<td>Credence</td>
<td>Competence - possession of the required skills and knowledge to perform the service</td>
</tr>
<tr>
<td></td>
<td>Security - freedom from danger, risk, or doubt</td>
</tr>
</tbody>
</table>

Experiencing dimension comprise of 6 SERQUAL determinants, which are Access, Courtesy, Reliability, Responsiveness, Understanding the customers and Communication. These 6 determinants share the commonality where they are attributes or activities take place during the service. The other 2 determinants, Competence and Security are categorized under Credence dimension which are attributes that only could be assessed post the commencement of service.

3. SERVICE BLUEPRINT

Service blueprint (SB) is one of process analysis and design tools used in operation management to evaluate and assign resources to services delivery process¹⁰. Service blueprint was first introduced by Lynn Shostack¹¹ for the purpose of developing service innovation for new service delivery process as well as to assess and improve the quality of service.
The concept of service blueprint (Figure 1) focuses on the interaction between service provider and customer. Hence, service blueprint illustrates the entire service delivery process and activities (or so called service roadmap) in a “flow chart” format including the responsible departments. In addition, Service Blueprint categorized service delivery process and activities into 3 levels based on the intensity of interaction between service providers and customer. Level 1 of service blueprint consist of activities that under control by customer, or steps that taken by customers without interaction with services provider. Level 2 made up of service delivery activities that involved interaction between service provider and customer. While, Level 3 are activities under control by service provider, these are activities that performed by service provider and not visible by the customer.

Service blueprint views the 3 interaction levels from different perspective in term of strategy setting and operation management. For instance, the improvement effort for Level 1 activities shall focus on educating customer and modifying customer expectation. Whereas the attention for Level 2 activities shall be on personnel selection and training, and improvement on Level 3 activities should be driven by process or service innovation.

Fig 1. Service Blueprint by Heizer and Render (2013)

4. KANO MODEL
Kano theory was introduce by Nariaki Kano in 1980s and it is widely used as theory of product development.
Kano theory stressed on the important of product attributes toward customers satisfaction. As such, Kano model categorizes product design attributes into 3 categories base on the nature of customer satisfaction, which are expected attributes, wanted attributed and excitement attribute as shown in Figure 2.
Based on Kano concept, absence of expected attributes causes extreme customer dissatisfaction, however upgrading the performance of expected attributes will only result in a diminish improvement on customer satisfaction. Wanted attributes are those for which “more is better” and will improve the customer satisfaction incrementally. While excitement attributes are the unexpected attribute by customer which can contribute to an uprising satisfaction. These are normally revolution attributes that result in extreme customer satisfaction, and the absence of excitement attribute will not lead to dissatisfaction.

5. A NEW PERSPECTIVE OF SERVICE QUALITY

Despite all the criticism it has received, the SERVQUAL scale is remarkable as it is the most common service quality determinants used by prior researchers. However, the commonality shared by prior researchers in the study of service quality is the 10 SERVQUAL determinants are normally used as exogenous variable (as success factors) or endogenous variable (as performance measure) in the first order research model.

The concept of Service Blueprint and Kano Model suggest that service attributes and customer satisfaction should be viewed from different perspective. Service Blueprint emphasizes on level of interaction between service provider and customer, and split services attributes into 3 levels base on the interaction between both. While Kano Model views customer expectation from 3 levels of “must have”, “the more the better” and “excitement”. As such, this paper argue that base on Service Blueprint and Kano Model’s concepts, the 10 SERQUAL determinants could be further classify into 3 levels to form a second order research model. The criterion of classification is based on the level of interaction between service providers and customer underlying by Service Blueprint concept, as well as the level of customer expectation triggering by Kano Model principle. The new service quality model developed base on Service Blueprint and Kano Model is illustrated in Figure 3.

There are 3 uniqueness of the new service quality model: First, the model categorizes the 10 SERVQUAL determinants base on level of interaction between service providers and customer, level 1 consist of Tangibles, Credibility and Access which are activities performed by customer without interaction of service provider.

Level 2 made up of determinants that involved interaction between customer and service provider, which are Courtesy, Reliability, Responsiveness, Understanding the customers and Communication. Level 3 are determinants that mainly driven by service provider which comprise of Competence and Security.

Second, based on the concept of Kano Model, the research model argues that level 1 determinant (Tangibles, Credibility and Access) are the “must have” service quality attributes. The existence of
level 1 determinants will only result in a diminish improvement on customer satisfaction; however absence of expected attributes causes extreme customer dissatisfaction. As such, the proposed model suggests that level 1 determinant acts as moderator between the relationship of Level 2 determinants and quality performance.

Third, the model places level 3 determinants (Competence and Security) as excitement attribute which can contribute to an uprising customer satisfaction. As such, level 3 determinants acts as mediator between the relationship of Level 2 determinants and quality performance.

6. CONCLUSION
The new service quality model proposed in this paper has descriptive value in terms of studying, classifying and assessing the relationships that govern service quality determinants and quality performance. Hence, the continuation of this paper is data collection to test the relevance and validity of the newly proposed model, and to assess the correlation between each service quality determinants.

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References


