Evaluation Service Quality in Processed Food Importation Certification: A Combination of SERVPERF and Importance-Performance Analysis

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ABSTRACT

This research aims to evaluate and increase service quality to acquire customer satisfaction from the Directorate. Due to the close correlation to customer satisfaction, service quality has been considered a critical factor for service providers' success. Therefore, consumers' perception becomes a crucial component in assessing service quality. The public service quality evaluation was based on the guideline elements from the Minister of Administrative and Bureaucratic Reforms regulation No.14 of 2017. The SERVPERF was applied to measure service quality according to the customers' perception of responsiveness, assurance, tangibles, empathy, and reliability. At the same time, Importance-Performance Analysis (IPA) was used to identify indicators in need of improvement. The result reveals the lowest mean performance score of the empathy dimension, and the five dimensions have a positive correlation to overall service quality. Assurance, empathy, and tangible were significant predictors. Furthermore, based on the results of the IPA, sub-variables Q5, Q29, Q31 are importantly perceived by the customers but the low performance of the Directorate.

Keywords: Customer Satisfaction, Importance-Performance Analysis, Public Service, Service Quality, SERVPERF

JEL Classification: L80, L84, L89
INTRODUCTION

Customer satisfaction will improve as service quality increases, directly impacting customer loyalty, complaint behaviors, word-of-mouth connectivity, repeat purchases, and institutional profits (Mehta et al., 2000; Ladhari et al., 2008). Customer satisfaction plays a significant role and is a substantial factor in influencing customer behavioral intentions (Ardani et al., 2019).

As a supplier of essential services, the government should know the stresses that drive organizations to enhance their performance by giving adequate public services to their customers (Kadir et al., 2000). The government sector typically offers monopolistic services, and consumers have a poor negotiation position. It was also mentioned in some other aviation research (Sohail & Al-Gahtani, 2005). Nevertheless, under the new paradigm, government bureaucracy transformation focuses on improving government services provided by government agencies.

LITERATURE REVIEW

The SERVPERF Model
Service quality measurement techniques that focus strictly on how consumers perceive the company's performance or "performance only measures demonstrates The SERVPERF (Ali et al., 2010). In SERVPERF, respondents rate themselves by comparing their perceived performance to their performance expectations (Carrillat et al., 2007). The five quality dimensions used in this paper are reliability, responsiveness, assurance, empathy, and tangibles (Saputri, 2018; Taan, 2019).

Importance-Performance Analysis
Importance-Performance Analysis (IPA) is a method for identifying the importance of attributes and their performance in providing a product or service. As a result, point to Abalo et al. (2007), the main objective of IPA is diagnostic, assisting management teams in identifying critical aspects where the service is unsatisfactory or outperforming (Griffin & Edward, 2012).

RESEARCH METHOD

Methods
The research method is quantitative through statistical calculation processes using IBM SPSS 26 to analyze responses.

Data collections
The research polled 266 consumers who signed up for the service between June and August of 2021. The survey tool was structured in Indonesian and contained 33 queries. It also has nine evaluation aspects that correspond to the assessment provisions in the Minister of Administrative and Bureaucratic Reforms regulation No.14 of 2017.

Data analysis
The reliability analysis of the SERVPERF study was calculated as 0.986. The alpha coefficient in the Importance-Performance Analysis study was calculated as 0.988. In determining the relationship between service quality dimensions and explaining the effect of service quality dimensions, this study uses correlation analysis and binary logistic regression.
RESULTS

Table 1 depicts descriptive statistics of the characteristic of respondents, including gender, age, education, and service submission. Males constituted 51.9 percent of the participants. The majority of respondents (44 percent) are between the ages of 26 and 30. Around 56% of respondents have a college/graduated school level of education, and most customers propose certification for the company where consumers work of 98.1%.

Table 1. Respondents’ demographics (n = 266)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>128</td>
<td>48.1</td>
</tr>
<tr>
<td>Male</td>
<td>138</td>
<td>51.9</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 26 years old</td>
<td>23</td>
<td>8.6</td>
</tr>
<tr>
<td>Group of 26 -36 Age</td>
<td>116</td>
<td>43.6</td>
</tr>
<tr>
<td>Group of 37 - 47 Age</td>
<td>83</td>
<td>31.2</td>
</tr>
<tr>
<td>Over through the age of 47</td>
<td>44</td>
<td>16.5</td>
</tr>
<tr>
<td>Level of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School or Equivalent</td>
<td>42</td>
<td>15.8</td>
</tr>
<tr>
<td>Diploma</td>
<td>33</td>
<td>12.4</td>
</tr>
<tr>
<td>College/Graduate School</td>
<td>149</td>
<td>56</td>
</tr>
<tr>
<td>Postgraduate School/Profession</td>
<td>41</td>
<td>15.4</td>
</tr>
<tr>
<td>The purpose of service submission</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Propose certification for the company where consumers work</td>
<td>261</td>
<td>98.1</td>
</tr>
<tr>
<td>Propose certification for the other companies</td>
<td>5</td>
<td>1.9</td>
</tr>
</tbody>
</table>

The SERVPERF model's reliability analysis of dimension items, means, standard deviations, and reliability scores show in Table 2. Overall, the SERVPERF mean was calculated as 5.03± 0.024. Customers ranked assurance (5.05 ± 0.094), reliability (5.04 ± 0.029), and tangible (5.04 ± 0.062) as the most significant service quality dimensions. The empathy aspect had the lowest mean score (5.01±0.062), while all other items were above the overall scale.

Table 2. Reliabilities score of dimensions of SERVPERF, Means, and Standard Deviations

<table>
<thead>
<tr>
<th>Items in Each Dimension</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Responsiveness (∝ = 0.960)</strong></td>
<td>5.04</td>
<td>0.081</td>
</tr>
<tr>
<td>Q1. The easiness to accomplish service requirements</td>
<td>5.04</td>
<td>0.879</td>
</tr>
<tr>
<td>Q2. Service requirements in conformance with informed requirements</td>
<td>5.01</td>
<td>0.896</td>
</tr>
<tr>
<td>Q3. The follow-up of personnel in meeting customer demand can be monitored.</td>
<td>4.99</td>
<td>0.903</td>
</tr>
<tr>
<td>Q4. The service application's customer-independent data input and upload system are user-friendly and straightforward.</td>
<td>5.27</td>
<td>0.808</td>
</tr>
<tr>
<td>Q5. Officers quickly reply to troubles with the service application system that customers encounter when entering</td>
<td>4.94</td>
<td>0.959</td>
</tr>
</tbody>
</table>
data independently.

Q6. The info about service charges is clear 5.30 0.800
Q7. The service payment system is simple and quick 5.40 0.757
Q8. The service unit is good at managing complaints 4.82 0.949
Q9. Consumers can easily and satisfactorily obtain consulting services 4.74 1.015
Q10. According to the SLA, the agent responds to every complaint/consultation that is received. 4.83 0.967
Q11. How would you score the procedure/service flow’s ease of use? 5.06 0.836

Assurance/Safety ($\propto = 0.927$) 5.05 0.094

Q12. What is your opinion on suitability? What are the intermediate products/services listed in the service standard, and what are the results? 5.08 0.834
Q13. Agents can establish security in terms of the confidentiality of consumer data. 5.26 0.793
Q14. How do you evaluate the competence of serving officers? 5.09 0.858
Q15. Agents can direct the services provided by the institution that consumers expect (technical competence and product regulations) 5.08 0.787
Q16. Agents can conduct a thorough and accurate evaluation of the service document requirements. 5.06 0.890
Q17. Consumers will be compensated in accordance with the provisions if agents fail to provide services on time. 4.72 1.041

Tangible ($\propto = 0.949$) 5.04 0.062

Q18. What is your assessment of the accessibility of infrastructure support in this service unit to provide public services? 4.99 0.815
Q19. Public service space availability and quality 5.03 0.798
Q20. The service area is outfitted with cutting-edge technology. 5.05 0.773
Q21. Service locations are easily accessible, and there are facilities to assist consumers with disabilities. 4.99 0.882
Q22. Officers who serve customers are always present at the service counter during service hours, both during face-to-face and online services. 4.96 0.912
Q23. Employee dress neatness and courtesy 5.21 0.753

Empathy($\propto = 0.942$) 5.01 0.065

Q24. Do you think the officers are polite and capable of communicating effectively (verbally or in writing)? 5.11 0.846
Q25. Officers are compassionate and strive to provide relevant information to the needs of their customers. 5.07 0.821
Q26. Consumers receive services that meet their needs and have enough time during operational service hours. 4.95 0.962
Q27. If there is a problem, the unit has a representative who can calm the customer down. 4.89 0.919

Reliability ($\propto = 0.954$) 5.04 0.029

Q28. The service time or working hours is carried out following the provisions 4.96 0.898
Q29. Agents provide services dependably and consistently following established procedures. 5.01 0.864
Q30. Completion of services performed following the regulations. 5.07 0.894
Q31. How would you rate the response time and speed of personnel or system applications in service? 5.01 0.888
Q32. Service history (approval/rejection) can be accurately stored by the service system. 5.15 0.827
Overall Scale ($\alpha = 0.986$) 5.03 0.024

Note: $\alpha =$ Chronbach's alpha

The relationship between the five dimensions of SERVPERF is known based on the Pearson correlation coefficient described in Table 3. Correlations in positive direction with a significance level of 99 percent were discovered across all dimensions. It means that the better one perceives one dimension, the better one perceives the others.

Table 3. SERVPERF Dimensions and Service Quality Correlation Matrix

<table>
<thead>
<tr>
<th>Dimensions of SERVPERF</th>
<th>Responsiveness</th>
<th>Assurance</th>
<th>Tangibility</th>
<th>Empathy</th>
<th>Reliability</th>
<th>Overall Service Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsiveness</td>
<td>r 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assurance</td>
<td>r 0.927</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangible</td>
<td>r 0.865</td>
<td>0.876</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td>r 0.878</td>
<td>0.865</td>
<td>0.893</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliability</td>
<td>r 0.882</td>
<td>0.879</td>
<td>0.899</td>
<td>0.898</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>r 0.855</td>
<td>0.859</td>
<td>0.827</td>
<td>0.843</td>
<td>0.871</td>
<td>1</td>
</tr>
<tr>
<td>Service Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Correlation is significant at the 0.01 level (2-tailed).

Table 4 displays the binary logistic regression results for high and low overall service quality scores in SERVPERF latent constructs. The model's Chi-square test scores demonstrated that it is a good fitting model. Chi-square has a value of 166.593 and a probability of p <0.05 in the case model. Point to the Cox and Snell R-Square, and the logistic model explains 46.5 percent of the variance in perception of service quality (high or low). Nagelkerke R-Square is 0.779 in this study. It indicates a moderately strong relationship of 77.9 percent between the SERVPERF dimensions predictors and the prediction (of overall service quality score) (high or low). The most dominant factor related to the level of perceived overall service quality is the assurance (EXP B = 160.055), followed by empathy (EXP B = 27.665) and tangible (EXP B = 14.880).

Table 4. Predictors of High or Low Service Quality

<table>
<thead>
<tr>
<th>Dimensions of SERVPERF</th>
<th>B</th>
<th>Std.Error</th>
<th>Wald</th>
<th>Sig.</th>
<th>Exp (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsiveness</td>
<td>0.877</td>
<td>1.248</td>
<td>0.494</td>
<td>0.482</td>
<td>2.403</td>
</tr>
<tr>
<td>Assurance</td>
<td>5.076</td>
<td>1.637</td>
<td>9.616</td>
<td>0.002*</td>
<td>160.055</td>
</tr>
<tr>
<td>Tangible</td>
<td>2.7</td>
<td>0.76</td>
<td>12.615</td>
<td>0.000*</td>
<td>14.88</td>
</tr>
<tr>
<td>Empathy</td>
<td>3.32</td>
<td>0.807</td>
<td>16.912</td>
<td>0.000*</td>
<td>27.665</td>
</tr>
<tr>
<td>Reliability</td>
<td>-3.261</td>
<td>1.721</td>
<td>3.592</td>
<td>0.058</td>
<td>0.038</td>
</tr>
<tr>
<td>Constant</td>
<td>-4.849</td>
<td>1.102</td>
<td>19.373</td>
<td>0.000</td>
<td>0.008</td>
</tr>
</tbody>
</table>

Summary
The Importance Performance Analysis (IPA) matrix results split the responses into four corners, as illustrated in Figure 1.

**DISCUSSION**

The empathy dimension has the lowest mean performance score. Based on the data on processed food importation certification services provided, the service increases every year, indicating an increase in personnel workload. In addition, the focus on one dimension of service, such as assurance, makes personnel judged by customers to be less empathetic in providing services.

As one of the predictors of overall customer satisfaction, it is critical to improving empathy dimension performance. According to Shanka, M.S (2012), improvements made to increase this dimension are by providing continuously training through the provision of caring and prompt service skills, and acknowledging staff who committed to adjusting quality service, and gaining recognition from consumers. Furthermore, Kim H.J (2011) found that a high proportion of service-oriented frontline employees influences restaurant diners’ perceptions of service quality, resulting in diners’ satisfaction and loyalty. (Kim, 2011; Shanka, 2012).

Consumers show assurance and responsiveness as the most important correlation service quality dimensions revealed in Table 3. Based on the analysis results above, each dimension of SERVPERF is positively correlated, which indicates that the better one's perception of one dimension, the better the perception of the other dimensions.
Designate to Ladhari (2009), Dahiyat et al. (2011), and Samen et al. (2013), service quality is an important predictor of customer satisfaction (Izogo & Ogba, 2015). Maladi et al. (2019) found that service quality has a significant influence on consumers satisfaction and retention, and service quality, particularly empathy and responsiveness (Maladi et al., 2019). While Wang and Shieh (2006) and Akdree et al. (2020) found all five dimensions are significant indicators of high service quality and correlated with overall service quality.

This research shows that the most influential dimensions of customer satisfaction are assurance, empathy, and tangible. According to Rasyida et al. (2016), IPA results can assist managers in identifying attributes that need to be improved. The service quality of Q5, Q29, Q31 is still not good and has a high importance value by consumers. In this case, management should place these sub-variables as a top priority for improving the service quality. For instance, the system should be improved to respond to troubles with the service application system that customers encounter when entering data independently. Management should ensure that personnel realizes that maintaining consistency, rate response time, and speed service quality according to established procedures are part of their jobs.

CONCLUSION

This study evaluates the quality of service using the SERVPERF and IPA models in a public service institution. The mean performance for assurance, responsiveness, tangible, and reliability dimensions was higher than mean performance for the overall scale, while empathy was lower than the overall scale. The research findings can help develop service implementation strategies and policies to improve service quality, which will improve consumer perceptions of service quality and increase their trust.

All five dimensions of SERVPERF have a positive correlation in determining overall service quality in processed food importation certification. In the SERVPERF, assurance, empathy, and tangible were major antecedents of high levels of perceived overall service quality. The analysis of the level of importance and performance of service quality was carried out on the five dimensions shows that the service quality of Q5, Q29, Q31 is still not good.

LIMITATION

The proposed improvements are based on the literature. There needs to be expert judgment to assess the suitability of the strategy.

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DECLARATION OF CONFLICTING INTERESTS

The authors claim that no conflicts of interest exist.

REFERENCES


