The Influence of After-Sales Service Quality and Product Quality on Customer Satisfaction

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Abstract
The objective of this study is to identify the influence of after-sales service quality and product quality on customers' satisfaction among customers who are using Proton cars in Subang Jaya. Throughout the years, both aggregates of production volume and aggregate industry volume in the Malaysia Automotive Industry have declined. Hence, customer satisfaction level was not met by the automotive sector because of certain factors such as after-sales service quality and product quality. Therefore, the objectives of this study are firstly, to evaluate the relationship between after-sales service quality and customers' satisfaction, and secondly to evaluate the relationship between product quality components and customers' satisfaction. Factor analysis, reliability analysis, and hierarchical regression were used to analyse and interpret the data. All data were generated by using SPSS. In this study, the sample size was 319 respondents by using convenient sampling technique. The results show that customers are focusing much more on product quality instead of after-sales service quality. This study would assist other researchers to gain ideas for new research and the national carmakers such as Proton, to give them an idea on how to improve their after-sales service quality and product quality in the future.

Keywords: After-sales service quality, automotive dealership, customer satisfaction, product quality.

Introduction

Customers' satisfaction is vital for every organization, firm, and company in order to keep surviving in the market. Customers' experience is important to decide whether they will repeat to use the products or services again in the near future. The idea of customers' satisfaction has drawn the enthusiasm of scholars and academics for over three decades in the light that customers are the primary source of most firms' income.

Nowadays, any industries including the automotive industry will not be exempted from the situations as stated above. This does not only affect the product or service before the sales, but it also affects the product or service after sales to which is very crucial and important for every firm to be mindful of these situations. With good after-sales service, the customer will have a positive experience and will become a loyal customer to the brand (Chiguvi, 2020). The significance of after-sales service has been generally perceived in all industry divisions. Past studies have also located significant impacts of after-sales service quality on customers' satisfaction (Sugianto & Sitio, 2020; Purwati, Fitrio, Ben, & Hamzah, 2020). Customers' dependability occurs just when the customers are pleased with the products or services (Yang & Peterson, 2004). Key findings discovered in the literature demonstrate many investigations on service quality among different business areas, for example; banking, cell phones, medical services, and so forth. However, it is observable that the automotive area has been getting less attention among scholars compared to

other different sectors (Izogo, 2015).

Since after-sales service quality and product quality are important in the automotive after-sales aspect, this study focuses on the influence of after-sales service quality and product quality on customers' satisfaction among National Automotive services and products.

Problem Statement

Throughout the years, Malaysia Automotive Industry has declined in both aggregates of production volume and aggregate industry volume. Previously, Malaysia had led the ASEAN Automotive industry in terms of production and sales but now Malaysia is ranked third place in the ASEAN Automotive industry with 454 971 vehicles as of the 3rd Quarter of 2018 (Asia Motor Business, 2018). The Malaysian sales trend in Automotive seems to decline from 666 674 units in 2015 to 576 635 units in 2017. The 3rd Quarter of 2018 still shows declining compared to previous sales volume. Globalization has spread a huge wave in the Malaysia Automotive Industry. The progression of the local automotive industry with the introduction of the Asia Free Trade Agreement (AFTA) policy has completely allowed the non-national car to penetrate the Malaysian market (Malaysia Automotive Institute, 2009). Recently, South-east Asian economies have been hit hard by ongoing COVID-19 lockdowns in response to high infection rates, bans on foreign tourist arrivals and limited fiscal responses by governments. Markets such as the Philippines, Indonesia, Thailand, and Malaysia are expected to take much longer to recover (Asia Motor Business, 2020).

After-sales service quality has been found as the source of income and competitive advantage for automakers (Wahjudi, Kwanda & Sulis, 2018). Considering the significance of after-sales service from the economic point of view, even though the underlying revenue from the Rolls-Royce' aftersales segment, decreases by 25% in 2020 (compared to 2019) driven, in particular, by lower equipment utilisation levels and mobility restrictions on service engineers due to COVID-19, it will then increase by 32% in 2021 (compared to 2020) driven, in particular, by recovery of equipment utilisation and catch up of outstanding maintenance activities (Rolls-Royce Offering Memorandum, October 2020). After-sales service is vital for all automotive makers to survive in business. Improving the quality of products or services is widely treated as a managerial perspective and its core goals are to achieve customers' satisfaction and to survive in the industry (Neyestani, 2017). Malaysia Automotive Industry includes a wide-ranging environment that is represented by design development, manufacturing, marketing, sales, and after-sales. As also explained in Industrial Master Plans (IMP 3) that the ecosystem of the automotive industry comprises research and development, manufacturing, marketing, sales, and after-sales service (Malaysia Automotive Institute, 2009).

Thus, this study highlighted and integrated after-sales service quality and manufacturer product quality on Malaysia's national carmaker by using the feedback of the automobile owners who have experience at service centres and use the Proton products and further analyse the information which is related to customers' satisfaction.

Literature Review
Customer Satisfaction

Consumers' satisfaction is one of the vital issues in business and it has affected many results including sales performance (Anselmsson, 2006; Martenson 2007). Apart from that, other scholars describe consumers' satisfaction as the choices that are made by the judgment that is influenced by certain buying decisions (Kitapci, Dortyol, Yaman & Gulmez, 2013). Furthermore, customers' satisfaction can also be described as the level of overall pleasure or gratification felt by the customer, and the effects of the service to meet customers' needs, expectations and desires (Kitapci et al., 2013). Consumers' satisfaction is also consumers' fulfillment response (Goncalves & Sampaio, 2012).

Individual correspondence enhances consumers' satisfaction not just on the account of their quick reactions and quick problem solving but also caused by the immediate correspondence of technically trained workers who assist in collecting the actual information specifically from the consumers. Likewise, this assist was to limit conceivable misinterpretation and false judgment on the significance of important aspects (Griffin, Gleason, Preiss, & Shevenaugh, 1995).

After-sales Service Quality and Customer Satisfaction

Since consumers' satisfaction was considered as the main product based on consumers' experience in several service areas (Cronin & Taylor, 1992), it is aligned with its definition that service quality is classified under customers' satisfaction as service quality is originated from the service given by the firm. Other scholars also stated that the definition of consumers' satisfaction is much related to the specific transaction (the variance between the perceived service and predicted service) conversely with attitudes, which is much more persevering and has low situational-oriented (Lewis, 1993). This idea also aligns with the idea by Gupta and Zeithaml (2006).

By referring to the relationship between consumers' satisfaction and service quality, a concept has been first suggested by Oliver (1993). According to Oliver, service quality would be a precursor for consumers' satisfaction by paying little heed to whether these ideas were combined or exchange explicitly. Some other scholars also provided empirical support for the concept that has been highlighted above where consumers' satisfaction is a result of service quality (Famiyeh, Kwarteng & Asante-Darko, 2018). To relate consumers' satisfaction and service quality, scholars have been more vigilant on the definition and the measurements of consumers' satisfaction and service quality. Satisfaction has been viewed as a wide concept, while service quality focuses mainly on the dimension of service (Wilson, Zeithaml, Bitner, & Gremler, 2008). Meanwhile, it is also mentioned that other variables such as pricing and quality of the product can affect consumers' satisfaction (Gupta & Zeithaml, 2006).

Numerous studies have attempted to explain the relationship of after-sales service quality and customer satisfaction. Based on a study by Chaichinarat, Ratanaolarn, Kiddee, and Pimdee (2018), responsiveness, empathy, and assurance have positive relationships with customer satisfaction. Another study done by Yadav and Joseph (2017) also proved that assurance, responsiveness and empathy were seen to have a significant positive effect on customer satisfaction. Baffour-Awuah's (2018) study reveals that by improving overall service quality is likely to enhance customer satisfaction. The study also revealed that responsiveness, assurance and empathy have significantly strong and positive influence on customer satisfaction. Therefore, the hypotheses proposed were:

H1a: There is a significant relationship between responsiveness and customer satisfaction.
H1b: There is a significant relationship between assurance and customer satisfaction.
H1c: There is a significant relationship between empathy and customer satisfaction.

Product Quality and Customer Satisfaction

The consumer has powerful judgment on quality, which means that product quality is not simply to only meet the criteria, the specifications and reducing the manufacturing defect, but it is also to ensure that the product is reliably in good condition when it arrives in consumers' hand (Raturi & Evans, 2004; Leung & Yan, 2013). The quality of products has a direct positive impact on market share (Saleh, 2008). By upgrading product quality, consumers' satisfaction can be increased (Cameran, Moizer, & Pettinicchio, 2010). In two decades, studies that focus on how quality is affecting customers' satisfaction has been continuously ongoing (Garvin 1988).

To meet the highest quality standard and consumers' needs, Proton needs to offer high-quality automobile products to the public. The main objective for the existence of Proton is to be the

leader in the automotive industry and to create a healthy competition among automotive players. Thus, quality is an elusive concept in the automotive industry. This concept features the quality and characteristic of a product or service that can satisfy customers' needs (Winder & Judd, 1996; Chavan, 2003).

According to Kotler and Armstrong (2010), the quality of a product depends on the ability of the product itself to be the good function which includes durability, reliability, accuracy to smoothen their operation, and also in repairing service as well as other important attributes. This theory also aligns with Bloemer and Kasper (1995), Bastos and Gallego, (2008), and also Chai, Ding, and Xing (2009). Several studies have been discussing the relationship between consumers' satisfaction and product quality by using the critical incident technique. According to Archer and Wesolowsky (1996), this technique is important to identify the simultaneous effect of product quality and consumer satisfaction in the automotive industries.

A number of studies have found that product quality has a relationship with customer satisfaction. For example, Bekele (2020) found that product quality dimensions such as product features and aesthetics have strong positive relationship with customer satisfaction. In addition, more studies revealed that product quality has a positive impact on customer satisfaction (Yusuf, Nurhilalia & Putra, 2019; Sari, 2020). Hence, the suggested hypotheses were:

H2a: There is a significant relationship between product features and customer satisfaction.
H2b: There is a significant relationship between aesthetic and customer satisfaction.

The research framework demonstrates an understanding of concepts that are relevant to the current topic of this study. Figure 1 depicts the conceptual framework which was developed based on the postulates and hypotheses established earlier in this paper, illustrating the relationship between after-sales service quality and product quality with customer satisfaction.
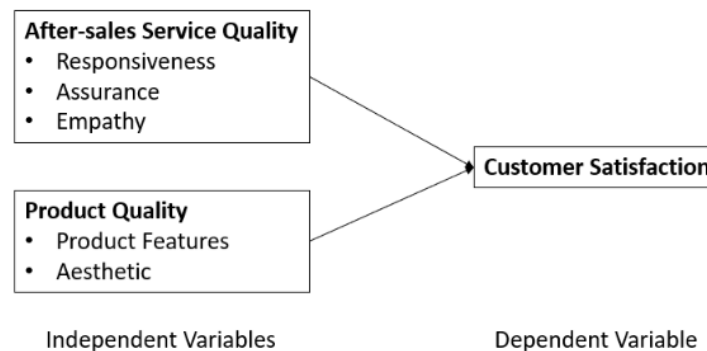

Figure 1: Conceptual framework illustrating the relationship between after-sales service quality and product quality with customer satisfaction.

Methodology

A descriptive and correlation analyses were used on the collected data to study the variables. This study was conducted in the Subang Jaya area which is the 4th largest population district in Klang Valley (Market Analysis of Malaysia, 2018). According to Subang Jaya Municipal Council (MPSJ), the population in Subang Jaya has reached 642,100 in 2015 and the population is expected to increase to 1.56 million by 2035 (The Star, 2018). This study was conducted by using a convenient sampling technique as it is normally used when the full population is unobtainable in terms of data collection. According to Sekaran and Bougie (2013), a convenient sampling technique is a data collection process from a sample of the population who are willing to or available to provide their responses. The respondents were selected conveniently who have experience with Proton. In this study, a sample size of was 319 respondents.

The research instrument is a questionnaire, adopted from Gajic and Boolaky (2015) for the first independent variable (IV) and dependent variable (DV), while for the second independent variable was adopted from Yuen and Chan (2010). In addition, the data set has successfully fulfilled the assumption testing for all the analyses of factor analysis, reliability and regressions.

Findings

Table 1: Results of Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	Sig.
	B	Std. Error	Beta	
(Constant)	0.773	0.336		0.022
Responsiveness	0.020	0.095	0.016	0.832
Assurance	0.196	0.091	0.156	0.033
Empathy	0.167	0.105	0.125	0.112
Product Features	0.211	0.095	0.169	0.026
Aesthetics	0.204	0.088	0.162	0.021
Model 1				
R^2		0.211		
Adjusted R^2		0.203		
Sig F Change		0.00		
Model 2				
R^2		0.248		
Adjusted R^2		0.236		
Sig F Change		0.00		
Durbin-Watson		1.604		

Based on Table 1, it can be observed that three service quality dimensions and two product quality dimensions show a different result. As for the service quality dimension in Table 1, it shows that responsiveness has a beta value of 0.016 with a significant value of 0.832 which is above the significant value p>0.05. This shows that the hypothesis H1a was not supported. However, assurance has a beta value of 0.156 and a significant value of 0.033 which is below p-value with 0.05. This shows that hypothesis H1b was supported. As for empathy, the beta value gathered from the analysis was 0.125 with a significant value of 0.112, which above the p-value>0.05. This shows that hypothesis H1c is not supported in this study.

As for the product quality dimensions in Table 1, it shows that product features have a beta value of 0.169 with a significant value of 0.026 which is below the significant value p>0.05. This shows that the hypothesis on H2a was supported. As for aesthetics, the beta value gathered from the analysis was 0.162 with a significant value of 0.021, which is below the p-value>0.05. This shows that hypothesis H2b is supported.

R^2 value in Model 1 is 0.211 which means the service quality variable accounts for 21% of the variation in customer satisfaction on its own. Meanwhile, adjusted R^2 indicates that the model has shrunk 4.0% (0.210-200=0.01) which shows that the model was derived less variance in the outcomes. In Model 2, the R^2 value is 0.248 which means the service quality variable with the additional product quality variable accounts 24.8% of the variation in customer satisfaction variable. Therefore, product quality variable in Model 2 has accounted for 5.0% of the variance in the study. As for the Durbin Watson statistic, it shows that the value of these data is 1.604 which is less than 2 which means the value of the variables was a positive correlation (Durbin & Watson, 1951).

Discussion

After-sales Service Quality Components and Customer Satisfaction

The result gathered in this study shows that responsiveness did not influence customer satisfaction. This finding is a contradictory to some studies (Sheriff, Roslan, & Yusoff, 2020; Shokouhyar, Shokoohyar, & Safari, 2020). Based on the finding on the relationship between responsiveness and customer satisfaction, most customers are less satisfied with the willingness of Proton to rectify faults in cars which means Proton is less likely rectifying any faulty happens to the customer's car which might lead to customers to go for other service workshops which offer better service to them. Customers were also less satisfied with the data given by the after-sales support personnel which means that the information sharing by the service personnel is not enough to understand the current situation of the vehicle. Customers also concern about the willingness of Proton After-Sales Support to help the customers.

Based on the finding found on the relationship between assurance and customer service satisfaction, most customers are satisfied with the Proton when they fix the car as promised. This finding is aligned with studies done by Famiyeh, Kwarteng, and Asante-Darko (2018) and Aiyesehinde and Aigbavboa (2021). In this study, most customers are also satisfied when Proton After-Sales support personnel provide them with the choice of product and service that required with the customer's need. The customers also satisfied with the Proton After-Sales Service personnel because they keep their promise when providing service to the customers.

In this study, there is no relationship between empathy and customer satisfaction. This finding contradicts with some similar studies (Chaichinarat, Ratanaolarn, Kiddee, & Pimdee, 2018; Kanina, 2020). Based on the finding found on the relationship between empathy and customer service satisfaction, even though customers feel satisfied with the attention given by Proton After-Sales Service Personnel, the customers feel less likely satisfied with Proton After-Sales Service Personnel on the availability of supporting the customer at any time when the customer needs them. At the same time, the customers also feel less likely satisfied with the understanding of the Proton Service Personnel towards the customer needs. Apart from that, the customer feels that Proton is not the only best interest in their heart. Thus, customers need full attention from Proton After-Sales Service personnel in any matter because this might affect customer satisfaction towards Proton After-Sales Service Quality.

Product Quality Components and Customer Satisfaction

Product features have a relationship with customer satisfaction. The finding is aligned with studies done by Waluya, Iqbal, and Indradewa (2019). Based on the finding found on the relationship between product features and customer service satisfaction, most customers are satisfied with the wide selection of specs among Proton products. At the same time, customers feel satisfied because Proton provides a wide selection of vehicle models, thus customers have rooms to choose their best models. Moreover, customers feel easy and acceptable for Proton servicing at any Proton shop or service centre. On the other hand, customers are quite concern about the availability of parts and accessories for each Proton product.

There is a relationship between aesthetic and customer satisfaction, which similar to a study done by Sari (2020). Based on the finding found on the relationship between aesthetic and customer service satisfaction, it shows that customers feel satisfied with the reliability and the accuracy of the products provided by Proton to their customers. The customers also think that Proton has a reasonable spare part price and they also feel that the Proton product is innovative.

Recommendations

In the automotive segment nowadays, customers are looking for their ways to have quick and very efficient service and maintenance for their vehicle. It shows that service is one of the most important factors that can influence customer satisfaction to be loyal to the brand. Providing good maintenance and service quality by helping the customers solve their problem would help Proton

to sustain the business and continuously keep their good relationship with the customers (Miller, 2000). Referring to Marshall and Johnston (2009), the real meaning for service quality is the expectation of the customers towards the after-sales service provided by the manufacturer or service centre. To survive in the industry, providing better service would build a good relationship with the customers (Milind & Miele, 1997).

By analysing the result of this study, a few recommendations and suggestions for future research have been constructed to help Proton and future research to expand the study and improvement in the future. In this study, it was found that most customers are less likely satisfied with the service quality provided by the service centre. One of the factors might be the quality of the service itself. Customers are willing to spend money to service the car at the service centre with hope that Proton can help them to solve their problem. It depends more on the front-liners, who are usually the service advisors or the vehicle foremen. These front-liners should give good impression in entertaining and advising the customers pertaining to their vehicle problems.

Proton also could send all the service staff for training. By providing training, it would improve staff motivation. In addition, all the knowledge gained during the training, would be beneficial for them to apply during working. Motivated workers treat customers better, and at the same time increase customer satisfaction towards Proton. Since Proton was on its way to change the landscape of the service centre to 3S (centres which offers sales, service and spare parts) and 4S (centres which offers sales, service, spare parts and body and paint services), Proton should look around other manufacturer service centres on how they treat their customers with good and fresh environment in waiting area during servicing. Proton also can consider to prepare some condiments to the customers during service waiting time. This can increase customer satisfaction level because customers find such service would be worth their money.

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