

THE INFLUENCE OF COGNITIVE FACTORS ON CUSTOMER SATISFACTION

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Abstract: *In this modern era, it is important for organizations to ensure customers are satisfied from all aspects; virtual and face-to-face satisfaction during a purchase process. Since customers are identified as the main return on investments (ROI) for organization, ensuring they are satisfied will enhance organization well-being. This paper aims to identify the effect of cognitive factors namely marketing and technological factor on customer satisfaction for the purchase of Proton cars. PLS-SEM was utilized to analyse the data and the findings revealed that both factors has positive and significant influence on customer satisfaction. Therefore, it can be inferred that customers' needs must be carefully managed because treating them appropriately and ensuring their satisfaction will lead to competitive advantage and profitability for the organizations. It is hoped that Proton will be able to improve their sales and capture the market share and gain the younger generation's attention to be more attracted to the nationally make automobiles and lead Proton to be the market leader once again.*

Keywords: *Customer satisfaction, cognitive factors, Proton*

Introduction

In today's competitive market, adaption of the best service and over the edge quality products plays an important role in the economy to determine the success of businesses. Securing an elevated level of customer satisfaction may ensure the organization with differential competitive advantage from competitors and strengthen customers' commitment (Calvo-Porrall & Levy-Mangin, 2016).

Measuring customer's satisfaction includes understanding the gap between customer's expectations and conceptual performance which is a relationship between satisfaction and profitability in the organization (Kaura, 2012). The most important point in customer's satisfaction is how companies can satisfy or dissatisfy their customers from the services and products they offer. If companies want to satisfy their customers, they should first investigate

the factors which cause satisfaction or dissatisfaction (Ziethaml, Parasuraman, & Berry, 1990; 1996).

It is a bridge that a satisfied customer will purchase products from a company they are contented with and will not only come back for more purchases but will also recommend to prospective customers about the product and the company too (Suchanek, Ritcher, & Kralova, 2014). Customer satisfaction is measured using the ratings of the customers on the comparison of the previously held expectations. It is vivacious for the organization to try as best to meet the expectation to ensure the customer satisfaction is met (Suchanek, Ritcher, & Kralova, 2014).

For the case of Proton, Malaysia’s national car, it is obvious that the sales of Proton cars have plummeted tremendously over the years since it has been launched in 1986. From being the number one choice for proud Malaysians, it immensely declines in the preferences of the customers. Table 1.1 illustrates the decline of sales and market shares of Proton cars over the past 9 years (DRB-Hicom Berhad, 2017). The customer seems to switch from preferring Proton cars to some other manufacturers (Proton Interactive, 2010). A small amount of research has been done to identify the root, yet the problem still transpires. Research has been focused towards external factors (design, quality, resale value etc.) leading to customer satisfaction yet lack of research has tapped upon different factors from different field (namely marketing and technology). Realizing this, hence addressing the needs of customers by Proton is imperative with the intention to enhance their satisfaction and contribute to a monopoly in the market share once again. Therefore, this paper aims to identify the marketing factor’s effect on customer satisfaction as well as the influence of the technological factor on customer satisfaction among Proton automobile users.

Table 1.1: Sales of Proton Cars for 9 Consecutive Years (DRB-Hicom Berhad, 2017)

Year	Units Sold	Market Share
2009	148,031	27.6%
2010	157,274	26.0%
2011	158,657	26.4%
2012	141,121	22.5%
2013	138,753	21.2%
2014	115,783	17.4%
2015	102, 175	15.3%
2016	72,291	11.1%
2017	70,991	10.9%

But since it is impossible to include every facet of the perspective, the paper only attempts to cover significant variables which are the cognitive factors (marketing which include price, product quality and brand knowledge and technological factors which include information quality, system quality and online service quality) and its effect on customer satisfaction. Secondly, the present study focuses only on customers utilizing Proton cars and therefore it does not incorporate information related to other brands available in Malaysia. Third, this study is limited to data collected in the geographical area of northern Malaysia specifically Perak, Penang, Kedah and Perlis only. This is according to the division of geographical area stated by Proton Holdings themselves where Peninsular Malaysia is divided into 4 areas namely northern, central, southern and eastern (DRB-Hicom Berhad, 2017). Besides, Penang and Kuala Lumpur have the highest sales of Proton automobiles (DRB-Hicom Berhad, 2015) and according to Euromonitor International (2016), these two states are the highest retailing areas in Malaysia.

Fourth, the population of the study is the first-time consumers who are currently using Proton cars. The reason the present study focuses on first time consumers is they have not repurchase any Proton cars and thus their responses are the most valid to justify their satisfaction level. Finally, the results of this study cannot be projected accurately to other industries since the target industry will be the automotive industry in Malaysia; all the results were only projected to customers of such industry only.

Cognitive factors

According to the Theory of Cognitive, Affective and Conative Behavior, cognitive factors consists of awareness and knowledge which relates to price, product features, technologies, product and information qualities and so forth (Oliver R. L., 1999). Therefore, for the present study focuses on two independent variables namely the Marketing factors which consist of price, product quality and brand and Technological factor which includes information quality, system quality, and online service quality will be included. These variables are framed based on the theory mentioned above.

Ehsani and Ehsani (2015) indicated that price is a huge determinant where people will compare the quality and price of the product with its competitor's offerings. They also stated that price is what is forfeited in order to obtain a product or service. When the customer perceived that the price is fair with the quality provided, it will lead to higher customer satisfaction. Thus, having a high standard quality and reasonably low prices will improve customer satisfaction and maintain their commitment and loyalty.

Malik, Ghafoor, and Iqbal (2012) on the other hand, pointed out that if the quality of a product fails to meet the need of the customer, the trust will diminish, and this will give a negative impact on their satisfaction. Esaki (2013) also declared that a lower price does not mean quality is sacrificed. His research findings revealed that price will only influence customer satisfaction if the qualities of the product meet the demand of the customers. Alternatively, quality itself does have a direct impact on customer satisfaction without the influence of other factors. It shows that the quality of the product is a factor that needs to be carefully paid attention to as it has a significant effect on customer satisfaction.

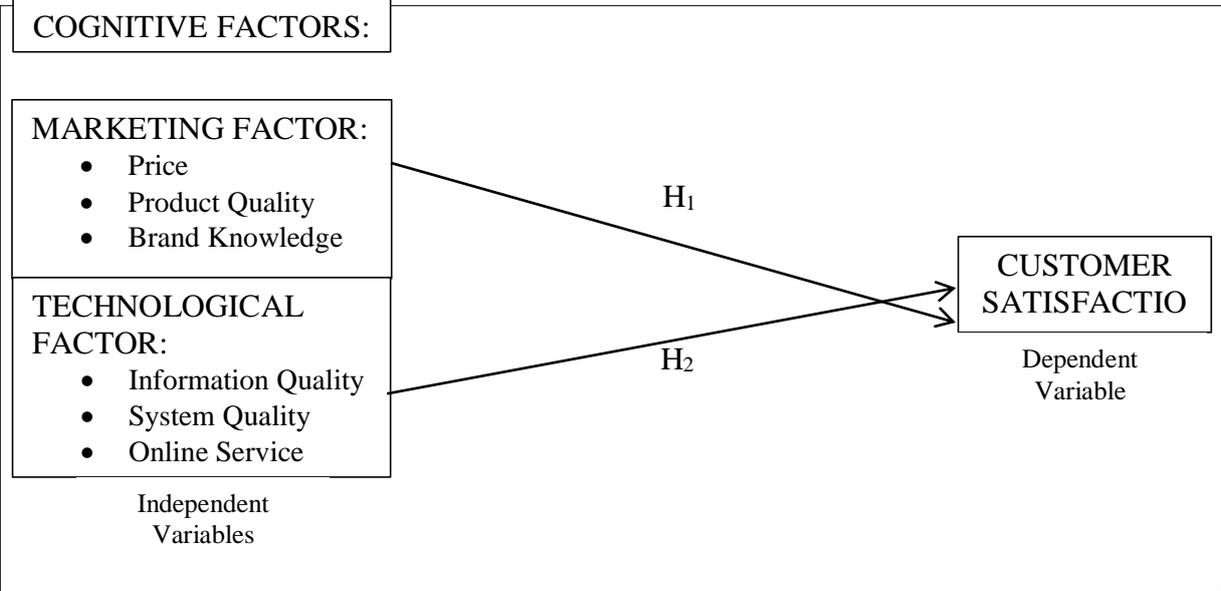
On a different note, besides price and quality, brand knowledge has a strong influence on customer satisfaction as well. This is because positive information of a brand can influence purchases. Denoting to a research by Ghandehary, Harati, and Pool (2014), brand is considered as a factor that creates product differentiation. Often customers recognize a brand as the company instead of a single product produced. Experiences with the company's products and its employees who offer good services are among the reasons brand knowledge is formulated in a customer's mind. Brand is also considered as the capital of many businesses. This is because brand creates a long-term image in a customer's mind. Different studies indicated that the actual value is not in the service or goods, but in the mind of the potential and actual customers because brand knowledge creates actual value in the mind of the customers which then leads to customer satisfaction.

Besides the marketing factors, in this modern era, technological factors play imperative roles in determining customer satisfaction a well. Rapid changes in information technology have drastically changed how services are delivered and received (Sun, 2010). With the increased utilization of the web-based information system, it has enabled online services to upsurge and grows rapidly. Sun (2010) stated that there are three attributes of e-commerce namely

information quality, system quality, and service quality respectively (DeLone & McLean, 2004). If all three of these attributes are maintained well, it will increase customer’s delight and creates satisfaction for them.

Consistent with the above findings, Raj, Rebecca, & Micheal (2016) also highlighted that social media has changed how buyer and seller interact and the increased involvement through social media and online businesses, organizations may double the profits as it leads to more satisfied customers. Raj, Rebecca, & Micheal (2016) also suggested that salesperson needs to improve their online communication skills as customer nowadays are more inclined to “google” everything first, virtually explore it before personally try the product themselves. And good reviews on the social media from previous customers will lead to more future buyers as trust has been established in previous transactions. Figure 1.1 illustrate the theoretical framework for this study.

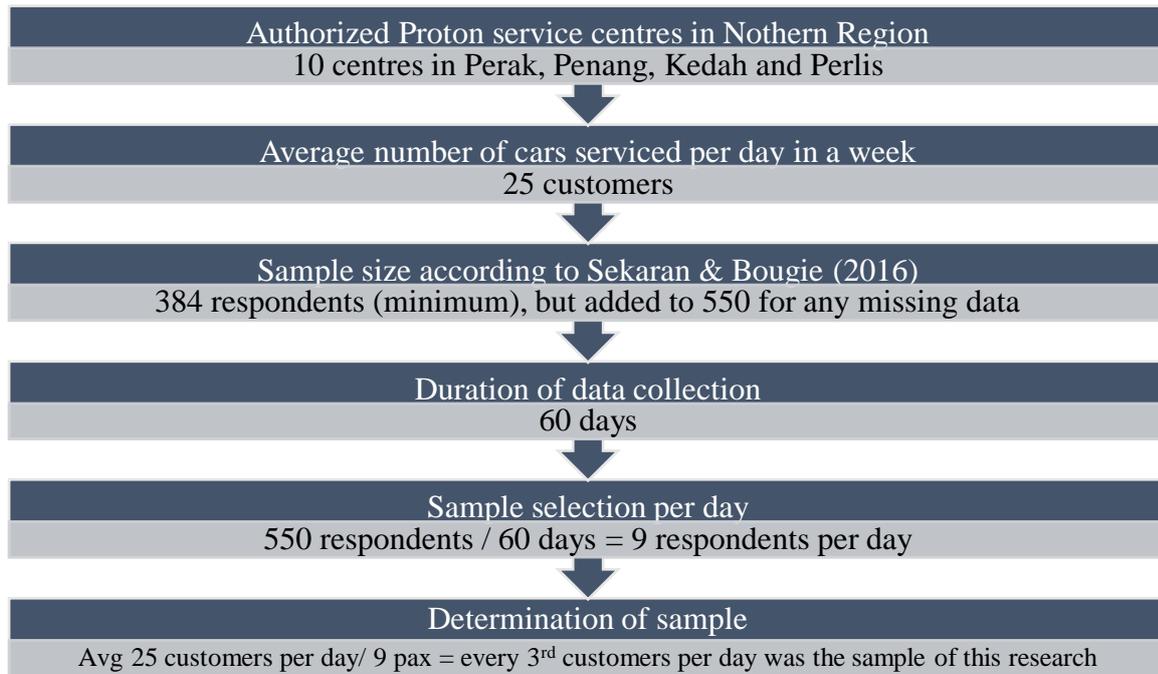
Figure 1.1 Theoretical Framework



Methodology

Since this study employed a non-experimental quantitative research design, the method that was utilized to collect the data is a self-administered questionnaire that was personally distributed to the respondents. This study is a cross-sectional study where data were collected at one point in time over the period of two months. For the present study Sekaran and Bougie (2016) method was utilized for sample size selection. Since the number of customers of Proton cars cannot be specifically determined to identify the population of the study, the maximum number was employed which was 384 people. But, based on Salkind (2006), in order to minimalize and abate sampling error, to take care of non-response rate issues that may come up, to avoid missing data, and the non-first-time users or invalid responses, a 40% increase on the sample size is implemented resulting in a total of 550 respondents for this study. To choose the sample for this study, probability random sampling was used. A probability sample is necessary if the sample is to be representative of the population (Reeves, 1992; Maznah Wan Omar, 2009). Therefore, a two-stage systematic sampling technique is employed in this study (explained in the diagram Figure 1.2). The data was collected for the duration of 2 months at all the authorized Proton Sales and Service Centers in Northern Malaysia.

Figure 1.2 Two-Stage Systematic Sampling



Findings

The present study utilized PLS-SEM to determine the outcome to accept or reject the hypotheses specified. In this study, there are two exogenous variables specifically marketing factor and technological factor. After conducting algorithm and bootstrapping, the hypothesized results were obtained. Table 1.2 illustrates the hypothesized relationship of Hypothesis 1 (H₁) and Hypothesis 2 (H₂).

Table 1.2 Hypotheses Testing

Hypothesis	Relationship (Exogenous Endogenous)	Path ->	Coefficients (β)	t-values	p-values*	Decision
H ₁	Marketing Customer Satisfaction	->	0.520	10.551	0.000	Supported
H ₂	Technological Customer Satisfaction	->	0.258	5.237	0.000	Supported

*significant at p < 0.05

H₁: There is a positive and significant influence between marketing factor and customer satisfaction among Proton automobile user.

The result indicated that marketing factor had a positive and significant influence on customer satisfaction where the path coefficient (β) is at 0.520 and t-value at 10.551. Therefore, the hypothesis is supported.

H₂: There is a positive and significant influence between technological factor and customer satisfaction among Proton automobile user.

Technological factor too had a positive and significant influence on customer satisfaction where the path coefficient (β) is at 0.258 and t-value at 5.237. As a result, the hypothesis is supported. Hence, it is concluded that all the hypothesized direct relationships from H₁ to H₂ have a positive and significant influence on the endogenous variable. Therefore, both H₁ and H₂ are accepted and supported.

Discussion

The Significance of the Marketing Factors

The findings revealed numerous remarkable discoveries that enhanced the marketing literature verdicts. The result of the present study displayed that cognitive factors namely marketing factor and technological factor were found significant in the relationship with customer satisfaction. With the results being significant and positive, this indicates that the cognitive factors (marketing and technological) do influence customer satisfaction in Malaysia automotive industry.

From the findings, the result established that the marketing factor has a positive and significant influence on customer satisfaction among Proton automobile users. This finding was consistent with those previous studies (e.g. Abdullah and Rozario, 2009; Rahman, 2014; Mahmud, Jusoff, and Hadijah, 2013; Khuong, Ngan and Phuong, 2015). In addition, the result was found supported the Theory of Cognitive, Affective and Conative Behavior and Transaction-Specific Theory.

The underlying explanation of the finding is due to like what Abdullah and Rozario (2009) based on Teas (1993) identified that a customer's overall satisfaction with a transaction will be his or her assessment of service quality, brand and product quality, and price. Meaning to say that if the customer is satisfied with these attributes, thus their satisfaction increases. When the price is reasonable, but the quality is bad, it will hinder customers to purchase a product. Likewise, if the price is very high based on the quality provided, it too will deter purchase and satisfaction. This result concurs with findings of Ehsani and Ehsani (2015) and Malik, Ghafoor, and Iqbal (2012). In realization, Proton should ensure that the price and quality of their product match thus signify the findings of the present study.

In addition, the findings of this research are also aligned with research verdicts by Esaki (2013) which discovered that price will only influence customer satisfaction if the qualities of the product meet the demand of the customers. Alternatively, quality itself does have a direct impact on customer satisfaction without the influence of other factors. Thus, if quality is sacrificed, it means customers are sacrificed as well. Ultimately, if quality is carefully taken care of, then the customer satisfaction will retain. This is parallel with the findings of research by Vazifehdust and Farokhian (2013), Suchanek, Ritcher, & Kralova (2014) and Parasuraman et.al (1988) which asserted that reliability measure is one of the most important factors in a buyer-seller relationship as it linked to trust and satisfaction in a binding connection. If one of it is unfulfilled, the other will diminish as well. Therefore, organization continuously needs to revise and monitor work processes and final output as to preserve the customer satisfaction. Moreover, the findings also revealed that brand image also has a significant impact on customer satisfaction. This is because positive information of a brand can influence purchases. Therefore, preserving a good mental picture is ultimately needed in order to ensure customer is well satisfied. This is in line with the research by Farris, Neil, Phillip and David (2010) which

indicated that when a brand has loyal customers, it received positive word-of-mouth marketing, which is not only free but highly effective as well.

Therefore, Proton's action is needed in ensuring the marketing factor specified in this present study is fully capitalized as it has a massive impact on customer satisfaction. The customer feels happy and contented when they receive what they assume and even happier if the price is lower than what they expected. Quality is proven as something that cannot be sacrificed as if sacrificing it means sacrificing the customer altogether. Brand knowledge has also an impactful purpose on customer satisfaction. Thus, Proton needs to ensure the image of Proton is enhanced in the customer's mind and carefully manage the image to ensure it would not tarnish as brand knowledge and the image will recur when repurchase intention takes place. With ensuring all these, Proton will safeguard customers to retain and return in the future.

The Significance of the Technological Factors

Apart from the marketing factor, the second cognitive factor which is the technological factor has been identified to have a significant impact on customer satisfaction as well. This result is consistent with findings from Ganguli & Roy (2011), Hung, Chen, & Huang (2014), Parasuraman, Zithaml, & Malhotra (2005) as well as Raj, Rebecca, & Micheal (2016). It is also aligned with the DeLone & McLean's (2003) Information System Success Theory which highlighted that there are three focal e-service qualities that affect not only intention to use, but impacts on user's satisfaction which are namely information, system, and online service qualities.

The fundamental elucidation of this finding is first; online information quality which refers to the quality of the information that the system can store, deliver, or produce is one of the conjoint dimensions along which information systems are evaluated by customers (DeLone & McLean's, 2003). The information quality impacts both a user's satisfaction with the system and the user's intentions to use the system. It will, in turn, impact the extent to which the system is able to produce benefits for the user and organization (DeLone & McLean's, 2003). Meaning to say, the quality of information that is provided by the system which meets the customer needs easily will provide better satisfaction because what they were searching was easily obtained.

The overall quality of a system is also one of the most common dimensions along which information systems are evaluated. System quality indirectly impacts the degree to which the system is capable to deliver benefits to enhance usage intentions and user satisfaction. This has been highlighted in the Information System Success Theory by DeLone & McLean's (2003). Overall quality is specified for the usability, reliability, responsiveness, flexibility, integration, navigation, accessibility and timeliness of the website system (DeLone & McLean, 2004). Websites that are reliable, responsive when instructed as well as practical will be the definitive choice of users. This is for the reason that websites practicality enhances customer positive experience using it and customers seek for convenience when purchasing product and ease of information seeking. Hung, Chen, & Huang (2014) stated that due to low entry cost to the online market, fierce competition exists among organizations and the competition is unavoidable. Therefore, organizations need to ensure the system is reliable, stable and functional at all time because online switching cost is so rapid, that losing customers may occur within minutes.

Finally, the findings also exhibit that the third dimension which is the online service quality also has an impact on customer satisfaction. It is the roles of the salesperson to improve online communication to enhance customers understanding and decision made. When inquiries are

responded swiftly, customers can make up their mind and close the deal faster. This is consistent with finding by Raj, Rebecca, & Micheal (2016), Shahi (2012) and Muhammad Tahir Jan & Kalthom Abdullah (2014). If the right human resources are matched with information technology, it will reduce the frustration of information seeking and gathering and finally lead to customer satisfaction. Since technology can be access anywhere in this modern era, utilizing for marketing purpose as well as customer service will provide maximum benefit to the organization as well as a better gratification to the users. With that in mind, Proton needs to enhance its website usability, practicality as well the responsiveness since it is proven that technological factor has a strong contingent effect on their customers.

Conclusion

The present study, in conclusion, has attempted to extend the literature while creating a link of the relationship among the cognitive factors namely the marketing and technological factors and customer satisfaction. The dimensions of the marketing factor were price, product and service quality and brand knowledge. On the other hand, the dimensions of the technological factor were information quality, system quality, and online service quality. Therefore, the findings of the present study are consistent with the Theory of Cognitive, Affective and Conative Behavior and this paper also established the integration of two dimensions from a different field, namely the marketing and information technology. This study proves the significant direct effect in combination both factors have on customer satisfaction.

It can be inferred that the management of Proton should be cautious in determining the factors that contribute to customer satisfaction. Proving proper training and gaining feedback will assist the management in improving their services and products offered. As customer satisfaction has been identified as the key performance indicator of organizations, treating this issue appropriately will lead to competitive advantage and profitability for the organizations. In conclusion, based on the above results and discussions, the present study contributed significantly in term of theoretical and practical contributions. It is hoped that Proton will be able to improve their sales and capture the market share and capture younger generation's attention to be more attracted to the nationally make automobiles and lead Proton to be the market leader once again.

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