MODELLING REPURCHASE INTENTION OF
PROTON AUTOMOBILE USING SEM TECHNIQUE

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DECLARATION

We hereby declare that:

(1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) Equal contribution has been made by each group member in completing the research project.

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<table>
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<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>AMOS</td>
<td>Analysis of Moment Structure</td>
</tr>
<tr>
<td>CFI</td>
<td>Comparative Fit Index</td>
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<tr>
<td>C.R.</td>
<td>Critical Ratio</td>
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<tr>
<td>df</td>
<td>Degree of Freedom</td>
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<tr>
<td>S.E.</td>
<td>Standard Error</td>
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<td>S.D.</td>
<td>Standard Deviation</td>
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<td>Est.</td>
<td>Estimate</td>
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<td>SEM</td>
<td>Structural Equation Modelling</td>
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<td>SPSS</td>
<td>Statistic Package for the Social Sciences</td>
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<td>ML</td>
<td>Maximum Likelihood</td>
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<td>NFI</td>
<td>Normed Fit Index</td>
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<tr>
<td>RMSEA</td>
<td>Root Mean Square Error of Approximation</td>
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<td>MAI</td>
<td>Malaysia Automotive Institute</td>
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<tr>
<td>ASEAN</td>
<td>Association of South East Asian Nation</td>
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<tr>
<td>AFTA</td>
<td>ASEAN Free Trade Area</td>
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<tr>
<td>WTO</td>
<td>World Trade Organization</td>
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<td>APEC</td>
<td>Asia-Pacific Economic Cooperation</td>
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ABSTRACT

The impending challenges of market liberalization due to the commencement of AFTA will greatly increase the competitive environment in Malaysia’s automotive industry. Besides price as competitive weapon, branding and marketing strategies have turned into important factors that determine the survival of industry players. Specifying to the practical context of Malaysia’s first national car project, PROTON, our research explores the indirect effects of its brand heritage on the repurchase intention of PROTON’s existing customers in Perak, Malaysia. We test and validate our hypotheses using Structural Equation Modeling (SEM). With simple random sampling technique, we manage to collect 423 complete sets of questionnaire from PROTON’s car owners who had their products purchased between year 2008 and year 2011 in Perak, Malaysia. Observing (1) brand heritage, (2) perceived product quality, (3) customer satisfaction, (4) brand trust, (5) brand loyalty, and (6) repurchase intention 6 variables, our results show that brand heritage positively affects both perceived product quality and brand trust of consumers towards PROTON. Perceived product quality has significant positive effects on customer satisfaction, and customer satisfaction positively influences brand trust. The positive impacts of brand trust and customer satisfaction on brand loyalty were also identified. Lastly, our results showed that brand loyalty has strong positive impacts on repurchase intention. Our study provides new insight on how PROTON can improve its branding strategy by leveraging and extracting the values of brand heritage.
Chapter 1: Research Overview

1.0 Introduction

Automotive industry is one of the most important driving forces for economic growths and development of manufacturing sector in Malaysia. This industry accounted for RM0.7 billion total investment in 2009 and RM2.2 billion in 2010 (MAI, 2010). With over 800 component manufacturers, the automotive industry in Malaysia has created more than 300,000 job opportunities in 2008. Among all industry players, two local manufacturers, PROTON (Perusahaan Otomobil Nasional Berhad) and PERODUA (Perusahaan Otomobil Kedua Sendirian Berhad), stay ahead of the competition with 26% and 30.1% market share respectively in 2009 (The Star, 2010).

However, the two sons of Malaysia have been long politicized and protected by Malaysia government over the past three decades (Abdullah, 2006). High tariffs, import taxes and inefficiency of domestic manufacturers have resulted in consumer welfare losses. With the recent pressures by World Trade Organization (WTO), ASEAN Free Trade Area (AFTA), Asia-Pacific Economic Cooperation (APEC), and Association of South East Asian Nation (ASEAN) established to promote greater economic efficiency, Malaysia will soon be moving forward to the liberalization of automotive market. Addressing the increased competitiveness in automotive industry resulted from the removal of trade barriers, there will be no assurance for survival of the two local manufacturers. Besides price, branding, differentiation and marketing strategies will become essential to the survival of industry players.

In this research, we focus on the brand heritage of PROTON to determine its effects on consumers’ repurchase intention. A brand is a heritage brand if its
positioning and value proposition is associated with its heritage (Urde, Greyser, & Balmer, 2007). The said “heritage” is different from “history” for their embraced time frame – “heritage” involves all past, present and future time frame, while “history” is grounded only in the past (Lowenthal, 1998). In short, the heritage in a brand can be a determining factor that strengthens the brand’s future identity, whereas the history of a brand cannot be. In this study, we consider PROTON as a heritage brand since the company emphasizes its history as a key component of branding strategy, which is, the identity of Malaysia’s first automotive brand. Furthermore, no matter how many logos PROTON have changed from the year of its foundation until today (as shown in Figure 1.1), the company’s logo still embraces the heritages, symbols and emblems of Malaysia, such as the moon, the star, and the tiger. Examining the brand heritage of PROTON can provide understanding on how PROTON can incorporate heritage into its branding strategy to strengthen its identity in future. Since PROTON is facing the impending challenge of market liberalization in future, assessing the brand heritage of PROTON allows the company to develop more sustainable competitive advantages associated with unique positioning or differentiation.

Figure 1.1: PROTON’s Logo History

![PROTON's Logo History](source)

Source: Adapted from PROTON’s corporate website

The main objective of this research is to study the indirect effects of brand heritage on repurchase intention of PROTON’s existing customer in Perak,
Malaysia. The result of this research delivers understanding on the relationship among 6 main variables including (1) brand heritage, (2) brand trust, (3) brand loyalty, (4) customer satisfaction, (5) perceived product quality, and (6) repurchase intention. PROTON can benchmark the resulting framework developed from this research to evaluate the degree of brand heritage presented in PROTON’s brand to unfold in-depth heritage branding strategy.

1.1 Research Background

PROTON was established in 1983 as the Malaysia’s first national car project (NCP), followed by its main competitor PERODUA. The company’s first car model, Proton Saga, was produced in September 1985 in a joint-venture with Mitsubishi Motors Corporation of Japan. Proton Saga earned the first international award for the company at British International Motorshow in 1988. Mitsubishi Corporation and Mitsubishi Motors Corporation are also PROTON’s major technical assistance partners and component suppliers. Despite its young age, PROTON has managed to dominate the Malaysia car market for more than twenty years, partially thanks to the protectionism government policy. Today, PROTON exports cars to various countries including United Kingdom, South Africa, Australia, Singapore, Brunei, Indonesia, Thailand, Nepal, Sri Lanka, Pakistan, Bangladesh, Taiwan, Cyprus, Mauritius, and some Middle East countries.

In 1996, PROTON acquired Lotus Group International Ltd., a British sports and racing car manufacturer, granting PROTON additional source of engineering and automotive expertise. Despite huge investment and pessimistic loss of Lotus over the past 10 years, the acquisition still provides PROTON with new opportunity for future branding strategy (Abdullah, 2010).
In 2010, Proton recorded a pre-tax net profit of RM260.9 million, recovering from the pre-tax net loss of RM319.2 million in 2009. Given the upcoming pressure of market liberalization, PROTON recently begins the journey to rebuild its business with aggressive branding and marketing strategies (See Appendix 5.1). PROTON embraces the business philosophy of quality, customer focus, innovation, teamwork, speed, and caring (“The Proton Way”). It is believed that this study can provide meaningful insight for PROTON’s future branding strategy by understanding the role of brand heritage in customers’ repurchase intention.

1.2 Problem Statement

Over the past few decades, PROTON has been heavily dependent on government protection to secure and protect its market position (Abdullah, 2006). Such government protection imposes tariffs ranging from 140 to 300 percent on any foreign cars imported into Malaysia (Chee, 2003). The commencement of AFTA in future will require Malaysia to reduce taxes on automobile or any automobile-related products imported from other ASEAN countries to less than 5 percent (Woo & Yap, 2007). Due to such heavy reliance on government policies over the past thirty years, PROTON might not be able to catch up with the quality, performance, efficiency or brand equity of other powerful competitors accumulated over time. The evidence was seen from PROTON’s net loss of RM19 million in the late 1990s (Jalleh, 2005). The poorer quality of PROTON today than other foreign cars are deteriorating the purchase confidence, trust and perceived brand image of consumers toward PROTON (Woo & Yap, 2007). Furthermore, the increasing fuel price and raw material costs after 2011 (MAI, 2011) force PROTON to deal with efficiency problems. Without the support of government in future, PROTON may face substantial market challenges.
The increased competitive environment in Malaysia’s automotive industry due to the commencement of AFTA in future will place Proton into competitive disadvantages. Before the commencement of AFTA, PROTON is competing with aggressive pricing on its economic passenger cars. However, the quality and performance of PROTON’s products are not competitive compared to foreign manufactures such as TOYOTA, HONDA, HYUNDAI, KIA, and VOLKSWAGON (Woo & Yap, 2007). Government regulated low price as competition barrier has always been the major competitive advantage of PROTON. After the commencement of AFTA, it is anticipated that there will be a huge price drop for most foreign manufacturers (Chee, 2003), causing them to be directly competing in PROTON’s same target market. Therefore, PROTON may be driven out from the competition if such low price competitive advantage is lost after the commencement of AFTA. PROTON must unfold new strategy to secure its competitive position.

According Ashari, Sim, and Teh (2010) poor quality and unimpressive design of PROTON’s automobiles are the key factors that led to poor brand image of PROTON today. Concluding all the above studies, in order to survive or remain competitive in the future automotive industry in Malaysia, it was apparent that PROTON must compete besides price. Branding strategy that is strong, unique, and sustainable to be integrated with PROTON’s existing product line may be required. With the anticipated price drop by competitors in future, PROTON’s current branding strategy of economic brand may not be able to remain competitive in the industry. Therefore, we conclude that PROTON needs a new branding, positioning and marketing strategy which can directly or indirectly improve its competitive position in the industry in future and in the long run.

Firstly, achieving the objective of rebranding will require PROTON to identify a new, differentiated, and unique branding strategy that is different from and not imitable by competitors. Secondly, in conformance to Woo and Yap (2007) it is
important for Proton to understand consumer behavior to improve marketing
decisions and to identify emerging trends in consumer marketplace. To identify a
differentiated branding strategy and to understand the consumer behavior of
PROTON, this research addresses an emerging, distinct, and new branding
category for PROTON with the use of the corporate’s heritage – heritage
branding (Urde, Greyser, & Balmer, 2007). As noted by Urde et al. (2007)
heritage of a brand helps to make a brand relevant to the present and
prospectively the future. Heritage of a brand contributes significantly to how the
company sees itself today and for the future. Such branding strategy will further
strengthen a company’s value proposition and position in future, which can be
seen as a solution to the abovementioned impending challenges facing PROTON.
Furthermore, the distinctive leverage of a company’s heritage and history in
heritage branding will unfold branding strategy that is not imitable by
competitors.

Therefore, this research primarily examines and outlines the effects and roles of
brand heritage on consumer behavior in the context of PROTON. Understanding
the effects and roles of PROTON’s brand heritage can help to determine the
feasibility of PROTON’s heritage branding, therefore unfolding new branding
strategy for the company.

1.3 Research Objective

1.3.1 General Objective
The main objective of this research is to develop a framework that provides understanding on how brand heritage can indirectly affect the repurchase intention of PROTON’s existing customers in Perak, Malaysia. This research involves 6 variables, including brand heritage, perceived product quality, customer satisfaction, brand trust, brand loyalty, and repurchase intention. Our research aims to depict the relationship among these variables.

1.3.2 Specific Objective

1.3.2.1 To investigate the relationship between brand heritage and brand trust.

1.3.2.2 To investigate the relationship between brand heritage and perceived product quality.

1.3.2.3 To investigate the relationship between perceived product quality and customer satisfaction.

1.3.2.4 To investigate the relationship between customer satisfaction and brand trust.

1.3.2.5 To investigate the relationship between customer satisfaction and brand loyalty.

1.3.2.6 To investigate the relationship between brand trust and brand loyalty.

1.3.2.7 To investigate the relationship between brand loyalty and repurchase intention.
1.4 Research Question

1. Does brand heritage affect brand trust?
2. Does brand heritage affect perceived product quality?
3. Does perceived product quality affect customer satisfaction?
4. Does customer satisfaction affect brand trust?
5. Does customer satisfaction affect brand loyalty?
6. Does brand trust affect brand loyalty?
7. Does brand loyalty affect repurchase intention?

1.5 Significance of the Study

This study provides a basis for PROTON to assess the impact of its brand heritage on repurchase intention of its existing customers. PROTON can benchmark the framework resulted from this study to identify areas of improvement for better branding strategy and better customer retention. Our study also allows PROTON to evaluate the performance of PROTON’s branding strategy in the aspect of heritage branding. The information collected for this study provides meaningful insight on consumer behaviors for PROTON to better fulfill their needs and wants.

1.6 Chapter Layout

This study consists of the following 5 chapters:

Chapter 1: Research Overview
Chapter 1: Research Overview

This chapter is the introductory chapter that outlines the overall research context. It includes research background, problem statement, research objectives, research questions, and significance of the study.

Chapter 2: Literature Review

This chapter reviews related journal articles, researches and past studies in our research area. Reviews of relevant theoretical framework, development of hypotheses and derivation of proposed research framework of this study are discussed as well.

Chapter 3: Methodology

This chapter describes how this study is carried out, including the research design, data collection methods, sampling design, operational definition of variables, measurement scales and methods of data analysis.

Chapter 4: Data Analysis

This chapter analyzes the data collected purposely for this study. It describes the demographic characteristics of respondents, presents the scale measurement of our data, interprets the results obtained from Structural Equation Modelling (SEM), and tests all the proposed hypotheses.

Chapter 5: Discussion, Conclusion and Implication of Study

This chapter summarizes and concludes the whole research project, including the summary of statistical analysis, discussion of major findings, limitations of study and recommendation for future research.

1.7 Conclusion

In conclusion, this chapter describes the upcoming challenges and problems that PROTON will be facing in future while providing the big picture and overall understanding on this research. The ultimate goal of this study is to develop a
theoretical framework that explains how brand heritage can indirectly affect the repurchase intention of PROTON’s existing customers towards the brand. Each variable is further discussed in detail in the following chapter.
Chapter 2: Literature Review

2.0 Introduction

In this chapter, we reviewed past literatures to identify variables that may have direct or indirect relationship with the dependent variable “repurchase intention”. These variables are derived from past studies, journal articles and researches that had proved their existences and impacts on repurchase intention.

2.1 Review of the Literature

2.1.1 Brand Heritage

Burghausen (2011) note that brand heritage remains an under-researched area. According to Benson, Levinson and Allison (2009) a company’s unique heritage is something that can never be duplicated or copied by a competitor. Any company’s past, history, roots or something similar that exemplify the company’s brand may be brand heritage. Urde et al. (2007) state that brand heritage includes all of the brand’s personal and cultural associations, with the brand's history invoked by various marketing-mix variables. Some other similar kinds of branding associated with heritage but differed from brand heritage are retro branding, nostalgic branding, iconic branding, and brand revival. The main characteristic that distinguishes brand heritage from others is that brand heritage embraces all time frames - from past, to present, and even to future.
The study of Urde et al. (2007) identifies the five elements of brand heritage: (1) track record, (2) longevity, (3) history important to identity, (4) core values, and (5) use of symbols. The pentagon shown below displays the five quotients of brand heritage:

**Figure 2.1: The Brand Heritage Quotient**

![The Brand Heritage Quotient](Image)

*Source: Adapted from Urde et al. (2007)*

- **Track Record** – According to Urde (2007) track record refers to the “proof” that the company has demonstrated over time, associated with its values and promises.

- **Longevity** – Longevity refers to the consistent demonstration of other heritage elements. It is difficult to be measured precisely.

- **Core values** – It refers to the company’s core values that guide its behavior and corporate strategy.
• Use of Symbols – A company whose past is reflected and expressed in communications especially via the use of symbols (Urde et al., 2007). Meaningful use of symbols can help achieve or shape an unique identity.

• History – It refers to how important the history is to a company. To some companies, history has determined who, what and where they are today. Such history plays an important role in the decision making and communication strategy of the company.

In short, the more the heritage elements are present in a brand, the higher the heritage quotient of the brand. High heritage quotient indicates that the heritage of the brand is important to the company internally and valuable to all other stakeholders externally.

Aaker (2004) explains the importance of brand heritage: “any brand, but especially those that are struggling, can benefit from going back to its roots and identifying what made it special and successful in the first place.” There are various benefits that a heritage brand can enjoy. Gardh (2009) states that a heritage brand can result in increased differentiation, loyalty and price premium compared to a new brand. In relation to this, Slater (2006) states that collection of artifacts associated with brand heritage by consumers may develop brand loyalty. From a strategic perspective, George (2004) noted that a brand infused with heritage can be leveraged, especially in global markets. Study of Wiedmann et al. (2011) states that brand heritage can provide consumers with a sense of security and well-being particularly when purchase decisions are associated with certain risks.
To measure brand heritage, a 5-item measurement is adapted from Wiedmann et al. (2011). The measurement includes continuity, success image, bonding, credibility and differentiation. According to Urde et al. (2007) the elements of brand heritage consist of track record, longevity, core values, use of symbols and history. Given such contents in the domain of brand heritage, the items we selected should be able to cover the entire scope of brand heritage dimensions.

### 2.1.2 Perceived Product Quality

Sirieix and Dubois (1999) consider that the perceived quality of a product as “the valuation made by the consumer relying on the whole set of intrinsic as well as outer dimensions of the product or the service.” However, Berry and Zeithaml (1988) state that ‘quality’ can be complex and vague in its definition. “Perceived quality” is very different from “objective quality”. According to Berry et al, the perceived quality is (1) different from the actual quality, (2) a higher level of abstraction rather than a specific attribute of a product, (3) a global assessment ranging from “bad” to “good”, and (4) is the product’s overall excellence or superiority judged by a consumer. On the other hand, the term ‘objective quality’ is the actual technical excellence or superiority of the product. Zeithaml’s result is also supported by Aaker (1991). In Aaker’s model, perceived quality is greatly different from product-based quality, objective quality and manufacturing quality. It can also be viewed as the difference between overall quality and undetected quality.

In connection with this, Garvin (1987) develops a seven dimensional construct describing the product quality. He classifies the product quality into: (1) durability, (2) features, (3) reliability, (4) serviceability (repair
service), (5) conformance, (6) performance, and (7) aesthetics. However, not all the dimensions are essentially prominent to all products or customers or in all contexts. Each dimension is still related to customer perception, which means that assessing the level of quality always involves some subjectivity (Sebastianelli & Tamimi, 2002).

A research by Vantamay (2007) outlines some characteristics of each quality dimension in the automobile industry. The first dimension—feature – includes the bells and whistles of products. They are usually the secondary components of a product that supplement the product’s basic functioning. The second dimension is conformance with specifications (the absence of defects). According to Vantamay (2007) it is a traditional, manufacturing-oriented view of quality. The third dimension is reliability, which includes the consistency of performance from each purchase to the next. The fourth dimension is durability, which measures the life of a product. The fifth is serviceability, which indicates the convenience or ability to service the product. It can also be the speed, courtesy, and competence of repair.

### 2.1.3 Brand Trust

There are many different definitions of trust over the past decades in marketing point of view. Rotter (1967) defines trust as “a generalized expectancy held by an individual that the word of another can be relied on.” Chaudhuri and Holbrook (2001) define trust as the willingness of the average consumer to rely on the ability of the brand to perform its stated function. According to McAllister (1995) trust is the extent to which a person is confident in, and willing to act on the basis of the words, actions, decisions of others. Trust is also the perceived credibility and
benevolence of a target of trust (Ganesan, 1994; Kumar, Scheer & Steenkamp, 1995).

In the social psychology point of view, many researchers classify trust into 2 dimensions – cognitive and affective (Geyskens et al., 1996; Kumar et al., 1995; Lewis & Weigert, 1985; Moorman et al., 1992, 1993; Siguaw et al., 1998). Cognitive trust is based on “good rational reasons why the object of trust merits trust (Lewis & Weigert, 1985). Therefore, competence, reliability, and predictability of the target of trust will result in cognitive trust (Johnson & Grayson, 2003; Riegelsberger et al., 2005). On the other hand, affective trust is resulted from customer’s emotional bonding with brand. Trust is also the outcome between the combination of affective and cognitive trust (Corritore et al., 2003; Riegelsberger et al., 2005).

Past studies identify 3 faces of trust: competence, honesty and benevolence (Wayne, 1999). Competence means consumers always examine the level of knowledge and skills the seller’s have and with that their capability to complete a relationship and satisfy the needs of their clients (Coulter & Coulter, 2002). Honesty is the belief that the second party will keep their word, fulfill their promises and be sincere (Gundlach & Murphy, 1993; Doney & Canon, 1997). A benevolent attitude examines the behavior of the party when an unpredicted condition arises (Ganesan, 1994). Cummings and Bromily (1996) states that benevolence is related to the assurance that the other will not exploit one’s vulnerability or take excessive advantage of one even when the opportunity is available.
To measure trust, a five-point Likert scale that encompasses all 3 faces of trust is adapted from Wayne (1999). It includes two more dimensions of trust: reliability and willingness to risk.

### 2.1.4 Brand Loyalty

Customer loyalty is found to be one of the powerful competitive tools for many companies. Loyalty is often interpreted as an actual retention, which is a cornerstone of customer relationship management (Gustafsson, Johnson & Roos, 2005). According to Oliver (1997) customer loyalty is “a deeply held commitment to re-buy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior.” Loyal customers can help business grow by increasing the future revenue and reducing the cost of future transactions of a business (Reichheld, 1996; Srivastava et al., 1998). They will also pay premium price, generate referrals, spread positive word-of-mouth and repurchase more of the product (Anderson & Mittal, 2000; Ganesh et al., 2000; Reichheld, 1996). Loyalty can lead to higher level of customer retention (Fornell, 1992; Anderson & Sullivan, 1993; Bolton & Rath, 1998), which is a byproduct of loyalty (Winer, 2001).

However, there is still no universally accepted definition of loyalty. Some researchers suggest that customer loyalty is far beyond repurchase behavior, as it consists of two dimensions - behavior and attitude, with all leading to commitment (Berne, 1997; Chestnut, 1978; Day, 1969; Jacoby & Kyner, 1973). Jacoby and Chestnut (1978) defines behavioral dimension of customer loyalty as ‘a form of repeat purchasing behaviors
directed towards a particular product or service’. On the other hand, the attitudinal dimension of customer loyalty includes a degree of positive attitude in terms of some unique value associated with a particular product or service. Some researchers also suggest that customer loyalty is resulted from both favorable attitude and repeat patronage (Dick and Basu, 1994).

Many studies show that the costs associated with attracting new customers are far more expensive than costs associated with retaining current customers (Fornell & Wernerfelt, 1987). Organizations must cater each unique customer needs to keep them loyal and satisfied. A company can only succeed by keeping customers loyal and having the capability of holding current customers (Dekimpe et al., 1997).

To measure customer loyalty, a five-item Likert scale with three operational measures was adapted from Lee (2001), Morgan & Hunt (1994), and Narayandas (1996). The measurement includes repurchasing intention, resistance of switching to competitor’s product that is superior to the preferred vendor’s product, and willingness to recommend preferred vendor’s product to acquaintances.

### 2.1.5 Customer Satisfaction

Consumer satisfaction has been comprehensively studied in marketing over the last decades. However, there is not yet any clear or unambiguous definition of satisfaction. According to Giese and Cote’ (2000), satisfaction is a summary affective response of varying intensity with a specific time point of determination and limited duration directed toward focal aspects of product acquisition and/or consumption. In 1997, Oliver
states that satisfaction is the “emotional response followed by a disconfirmation experience.” Johnson and Fornell (1991) define customer satisfaction as a customer’s overall evaluation of the performance of an offering to date. Although each study has different definition of satisfaction, they share a common concept – satisfaction is the emotional outcome of a consumer after product usage.

Due to the fact that satisfaction is one of the main goals in marketing (Erevelles & Leavitt, 1992), various frameworks and models have been constructed to define customer satisfaction more specifically. They include expectancy-disconfirmation paradigm (Oliver, 1980), the perceived performance model (Churchill & Suprenant, 1982), attribution models (Folkes, 1984), affective models (Westbrook, 1987) and equity models (Oliver & DeSarbo, 1988). However, these models set off various issues over the application of each model in different conditions and situations (Erevelles & Leavitt, 1992). Giese and Cote (2000) argue that different products and services should use different measurement items to assess satisfaction.

In addition, most research outcomes suggest that satisfaction can positively influence customer loyalty and purchase intentions across a wide range of product and service categories, including the automobile industry (Anderson & Mittal, 2000; Gustafsson et al., 2005; Bolton, 1998; Fornell 1992; Fornell et al. 1996; Reichheld, 1996;). As a customer’s overall evaluation on the product built up over time, satisfaction usually mediates the effects of product quality, service quality, price and loyalty (Bolton & Lemon, 1999; Fornell et al., 1996; Ranaweera & Prabhu, 2003). Repeated product or service usage can also create significant emotional bonding with the brand (Oliver, 1999). Baker and Taylor (1994) note that customer satisfaction is highly dependent upon the positive
perceptions of product quality by the consumers. However, the relationship between customer satisfaction and loyalty is challenged by Auh and Johnson (1997), Bloemer and Kasper (1995), Reichheld (1996), Bloemer and Lemmink (1992), and Jones and Sasser (1995). They do not deny the relationship, but question it. For example, they note that customer satisfaction may defect quicker than loyalty.

Issue such as the terms ‘perceived quality’ and ‘satisfaction’ that have been interchangeably used in the past is addressed by Rust and Oliver (1994). Compared to perceived quality, satisfaction can result from any dimension. Perceived quality is a more specific concept based on product and service features. Moreover, perceived quality can be managed to a certain level by a company where satisfaction cannot be.

According to Tsiotsou and Vasioti (2006) demographic variables such as income, education and age are fair predictors to measure the level of customer satisfaction. Bolton and Lemon (1999) discuss that satisfied customers are more likely to repurchase the product, reuse the service or revisit the store than those who are not. They may also recommend or refer the brand to their associates (Zeithaml et al., 1996). Reichheld and Teal (1996) states that satisfaction will directly affect repurchase intentions. However, Yi and La (2004) state that the adjusted expectations of customer will mediate the effect of consumer satisfaction on repurchase intentions. Anderson and Srinivasan (2003) identify five attributes of customer satisfaction which consist of (1) overall satisfaction, (2) customer favorite, (3) customer loyalty, (4) customer recommendation and (5) priority option.


2.1.6 Repurchase Intention

Repurchase intention is the individual’s judgment about buying again a designated service from the same company, taking into account his or her current situation and likely circumstances (Carr et al., 2000). Retaining customers with repurchase intentions is one of the most important tasks to be carefully considered by successful organizations. To retain customers, the first thing to remember is to satisfy them. When all the factors of perceived product quality are satisfied, this gives rise to customer satisfaction (Spreng, MacKenzie, & Olshavsky, 1996). Day and Landon (1977), and Singh (1988) state that customer satisfaction will lead to higher repurchase intention, where dissatisfaction will lead to lower repurchase intention. Oh (1999) concludes in his research that perceived quality, value, customer satisfaction, repurchase intention, and word of mouth endorsement are positively correlated with each other. According to Brown and Gulycz (2001), customer satisfaction is an important tool to retain customers in the future and with positive repurchase intentions. Dawes, Dowling, Patterson (1997) and Durvasula et al. (2004) point out that future purchase intention has positive relationship with customer satisfaction as well. In short, most researchers agree that customer satisfaction plays at least a part in determining repurchase intention (Fornell, 1976; Howard & Sheth, 1969; Howard, 1974; Oliver, 1980; Richins, 1983; Westbrook, 1987).

According to Reichheld and Sasser (1990), the benefits of customer retention include costs reduction and market share expansion. This is due to the fact that retaining or keeping a customer is much cheaper than acquiring or finding a new customer (Marzahn, 1996). Villanueva and Hanssens (2007) summarized the benefits of customer retention in five propositions: (1) it is cheaper to retain customers than to acquire them, (2)
the costs of serving long-life customers are less than those of serving new customers, (3) long-life customers improve the reputation of the company and attract new customers through word-of-mouth advertising, (4) long-life customers are less price sensitive than new customers and are therefore more willing to pay higher prices in some cases, and (5) long-life customers are more likely to buy more from the company, so that the company can increase their share-of-wallet through up-selling and cross-selling.

To measure repurchase intention, a 5-item Likert scale is adapted from Cronin and Taylor (1992), Rust et al. (1995) and Taylor & Baker (1994). The reliability and validity of such scale are consistent and homogenous with other purchase intention researchers like Kilbourne (1986), Kilbourne, Painton and Ridley (1985), Neese and Taylor (1994), Okechuku and Wang (1988), Perrien, Dussart and Paul (1985), Stafford (1998). The adapted items clearly measure most dimensions of repurchase intention including time frame, tendency to search for information, tendency to purchase and tendency to attend a trade show.

2.2 Review of Relevant Theoretical Model

In this section, we review three relevant theoretical models developed by past researchers that are specific to the automotive context. These researchers are selected on the basis that their years of research are near to ours – between 2010 and 2011. They provide us with more relevant, updated, valid and reliable benchmarks to further develop our own framework.
The study of Wiedmann et al. (2011) outlines the functions, drivers and outcomes of brand heritage as perceived by consumers in the automotive context. Based on the model, the study has found that brand heritage has significant relationship with customer satisfaction, brand trust, brand image, price premium and buying intention. However, brand trust does not positively relate to brand loyalty. The model suggests that customer satisfaction, brand trust, brand image and brand loyalty are the mediator variables that play important roles in the relationship between brand heritage and purchase intention. In short, brand heritage indirectly affects purchase intention of consumers. This is due to the fact that brand heritage affects overall image of a brand in the eyes of consumers. It influences the credibility, emotional bonding, perceived risk, perceived uncertainty, performance and price of the
brand and the product as well. The study concludes that brand heritage is an essential component to the brand’s continuing success and brand equity in past, present and future.

**Figure 2.3:** A theoretical framework for Customer Repurchase Intention: A general structural equation model.

![Diagram of framework](image)

Source: Adapted from Hellier, Geursen, Carr, and Rickard (2003)

The study of Hellier, Geursen, Carr, and Rickard (2003) incorporates the customer perceptions of equity and value and customer brand preference into an integrated repurchase intention analysis using structural equation modeling (SEM). In the framework, the study identifies seven important factors including service quality, perceived equity, perceived value, customer satisfaction, past loyalty, expected switching cost, and brand preference that directly or indirectly affect repurchase intention of consumers in automotive context. The study is specified to the comprehensive car insurance sector that is relevant to our research. Hellier et al. (2003) find that the relationship between perceived quality and repurchase intention is indirect and mediated by the other six consumption factors.
The study of Wong, Ngerng, Chin, Khoo, Liew, and Shim (2011) measures the purchase intention of consumers towards TOYOTA’s passenger cars in Mukim Tupai, Taiping, Perak, Malaysia. Their framework includes six variables: (1) perceived service quality, (2) perceived product quality and (3) perceived price fairness, (4) customer satisfaction, (5) brand trust, and (6) purchase intention. The study indicates that perceived product quality directly affects customer satisfaction, which then indirectly influences the purchase intention of consumers, mediated by brand trust. The result of their study is consistent with Cronin and Taylor (1992), Sweeney et al. (1999), MacKenzie, Olshavsky and Spreng (1996), Oh (1999), Chaudhuri (2002), Llusar, Zornoza and Tena (2001), Anderson and Mittal (2000), Gustafsson et al. (2005), Bolton (1998), Fornell et al. (1996), Reichheld (1996), Morgan and Hunt (1994), Doney and Cannon (1997), Ganesan (1994), and Garbarino and Johnson (1999). In the perspective of relationship between customer satisfaction and brand trust, the framework of Wong et al. (2011) is consistent...
with the framework of Wiedmann et al. (2011) where customer satisfaction precedes brand trust when affecting purchase intention.

Figure 2.5: The proposed framework developed for this study

![Figure 2.5](image)

Sources: Developed for the research

Figure 2.5 shows the proposed framework developed for our study. This framework is derived from our extensive review of relevant past researches, studies and literatures that are conducted in an automotive context. It serves as the foundation of this study. The framework includes 5 important factors that directly and indirectly affect repurchase intention, including brand heritage, perceived product quality, brand trust, customer satisfaction, and brand loyalty. Perceived product quality, customer satisfaction, brand trust, and brand loyalty serve as mediating variables that mediate the relationship between brand heritage and repurchase intention. Although there are disputes over the relationship between customer satisfaction and trust, we support the study of Wong et al. (2011) since it is specified to the geographic context of Malaysia which is more relevant to our research. Such relationship is also supported by the study of Wiedmann et al. (2011) where customer satisfaction leads to brand trust. Therefore, we assume that customer satisfaction leads to brand
trust in accordance to the study of Wong et al. (2011) and Wiedmann et al. (2011).

Brand heritage is selected as the only independent variable due to its importance to PROTON especially when facing the impending challenges of branding strategy and commencement of AFTA in future, as mentioned in Section 1.2 Problem Statement. According to Wiedmann et al. (2011) the heritage of a brand may be the signal of trustworthiness that saves the automotive industry players from global financial downturn and substantial market challenges. Therefore, our research is centered on brand heritage to identify how PROTON can leverage brand heritage to develop customer loyalty, which can lead to repurchase intention.

2.3 Hypothesis Development

Study of Wiedmann, Hennigs, Schmidt, and Wuestefeld (2011) identifies that brand heritage has significant impacts on brand perception and consumer behaviors. As cited in Wiedmann et al. (2011) Muehling and Sprott (2004), and Allen (2002) state that brand heritage can enhance the perceived value of consumers toward the brand while reducing the risks associated with consumers’ purchase decision. Furthermore, Urde et al. (2007) state that typical parts of a heritage brand includes credibility and trust. Gardh (2009) notes that brand heritage leads to several advantages such as increased differentiation, perception, trust, loyalty, credibility, brand longevity, price premium, and higher profit margin. Therefore, we formulate the following hypotheses:

H1: brand heritage will influences brand trust.

H2: brand heritage will influences perceived product quality.
Urde et al. (2007) state that brand heritage includes all of the brand’s personal and cultural associations, with the brand’s history invoked by various marketing-mix variables such as product, price, promotion, and distribution. The importance of perceived quality derives from its beneficial impact on repurchase intentions. However, there are many debates over their relationship. Some researchers find a direct relationship between perceived quality and repurchase intentions (Boulding et al., 1993; Carman, 1990; Parasuraman et al., 1996), whereas some of them find that there is an indirect relation mediated by customer satisfaction (Cronin & Taylor, 1992; Sweeney et al., 1999). On the other hand, MacKenzie, Olshavsky and Spreng (1996), and Oh (1999) show that perceived product quality is positively related to repurchase intention, while mediated by customer satisfaction, value, loyalty and word of mouth endorsement.

Baker and Taylor (1994) note that customer satisfaction is highly dependent upon the positive perceptions of product quality by the consumers. Although there are different views on the relationship between perceived quality and repurchase intentions, it is certain that higher perceived product quality may lead to greater consumer satisfaction, which is determined by perceived performance and expectation (Chaudhuri, 2002). If the performance outweighs the expectation of a consumer, the product can be considered as satisfactory. Thus, it is also suggested that “when perceived quality and satisfaction are regarded as overall assessments, perceived quality is understood as an antecedent of satisfaction and therefore precedes it (Lluras, Zornoza & Tena 2001).” These studies show that perceived product quality has a positive correlation with customer satisfaction. Thus, it brings us to the following hypotheses:

H3: perceived product quality will affect customer satisfaction.
Reast (2003)’s two-component model of brand trust shows both affective and cognitive trust are resulted from customer satisfaction. A consumer will only trust a supplier if he/she is certain that the supplier has the capability to fulfill or satisfy his/her demands (Voeth and Rabe, 2004). The statement is applicable across different products and services as well as in automobile industry where consumers will only select the suppliers that can best cater their needs. The influences and impacts of customer satisfaction on trust have been further supported by Geyskens, Steenkamp, and Kumar (1999), and Selnes (1998). There are also disputes over the relationship between customer satisfaction and trust – whether trust leads to satisfaction, or satisfaction leads to trust. In automotive context, Chung, Hung and Widowati (2010) suggest that brand trust leads to customer satisfaction. On the other hand, Wong et al. (2011) states that customer satisfaction leads to brand trust. In conformance to the study of Wong et al., we formulate the following hypotheses:

H4: customer satisfaction will lead to brand trust.

When an organization keeps its customer needs and demands in consideration and satisfies them, it helps an organization in retaining their brand and building their customer loyalty and values (Jamshed, 2010). According to Beerli, Martin and Quintana (2002) there has been a surging trend recently in analysing the factors influencing customer loyalty. Customer satisfaction is one of the most significant factors affecting loyalty (Oliver, 1999; Berne´, 1997; Bloemer & Kasper, 1995; Anderson & Sullivan, 1993; Boulding et al., 1993; Bloemer & Lemmink, 1992). It is noted by Drucker (1954) that the purpose of existence of a business is to create satisfied customers. Satisfied customers are more loyal to a business (Fornell, 1992).

Furthermore, satisfaction is an important predictor of customer loyalty (Yang & Peterson, 2004). The term ‘satisfaction’ has always been broadly used to define loyalty as behavioral intentions. Satisfaction will lead to loyalty, and a
loyal customer will pay premium price, generate referrals, spread positive word-of-mouth and repurchase more of the product (Reichheld, 1996; Anderson & Mittal, 2000). In an industry-scale study of automotive customers, Mittal and Kamakura (2001) demonstrated the powerful effect of customer satisfaction on customer loyalty and repurchase behavior. They state that customer satisfaction is a main factor in the formation of customer’s desires for future purchase in automobile industry. It is further supported that customer satisfaction has significant relationship with customer loyalty. Thus, we formulate the following hypotheses:

H5: customer satisfaction will lead to brand loyalty.

Trust is often considered as an important factor that develops loyalty (Morgan & Hunt, 1994). A transactional relationship between a buyer and seller will only continue if there is a presence of trust (Doney & Cannon, 1997; Ganesan, 1994; Garbarino & Johnson, 1999). In service industries like automotive industry, Nijssen et al. (2003) and Verhoef et al. (2002) conclude that customer loyalty is positively affected by brand trust. A recent correlation analysis by Hossain and Ullah (2011) discuss the positive and mutual impacts between brand trust, brand loyalty and repurchase intention. All these studies depict the relationship between trust, customer satisfaction, loyalty, and repurchase intention. Thus, it brings us to the following hypotheses:

H6: brand trust will influences brand loyalty.

Customer with repurchase intentions can be classified as customers with loyalty and trust (Park, 2004). Ranaweera and Prabhu (2003) show that trust and customer satisfaction toward a company is positively related to future repurchase intention. Numerous studies show that attitudinal loyalty is related to repurchase intention (Anderson & Sullivan, 1990; Boulding et al., 1993; Cronin & Taylor, 1992; Fornell, 1992; Mägi & Julander 1996; De Ruyter, Wetzels & Bloemer, 1998; Taylor & Baker 1994; Zeithaml, Berry &
Parasuraman, 1996). Loyal customers have greater intention to be customers of the company in future, greater willingness to spend more wallet share on each purchase and greater tendency to recommend others to be customers of the company (Keiningham et al., 2007). The same findings were also found by Barnes (1997), Chen (2008) and Zeithaml et al. (1996). Therefore, it brings us to the following hypotheses:

H7: brand loyalty will influence the repurchase intention.

2.4 Conclusion

In conclusion, we identified five variables that may directly or indirectly affect the consumers’ repurchase intention towards PROTON’s automobile, with brand heritage as the main independent variable and rest of them the mediator variables. The methodology of our research is discussed in detail in the following chapter.
Chapter 3: Methodology

3.0 Introduction

This chapter discusses the research design, data collection method, sampling process, sampling design, questionnaire design, pilot testing, construct measurement, data processing and methods of data analysis of this study.

3.1 Research Design

Zikmund (2003) states that research design is a master plan that outlines the methods, procedures and processes used to collect and analyze the needed information. This study is a descriptive study which describes the market phenomenon and consumer behaviors in Perak, Malaysia. It aims to identify and explain the relationship between brand heritage and repurchase decision of consumers towards PROTON’s automobile. The factors include brand heritage, perceived product quality, customer satisfaction, brand trust, and brand loyalty.

Hypotheses were developed based on our proposed framework as shown in Figure 2.4. These hypotheses were tested using SPSS 20.0 AMOS statistical software. Data were collected mainly through questionnaires. The use of questionnaire is justified in Section 3.4 Research Instrument. We managed to obtain a complete customer list of PROTON’s car owners in Perak state of Malaysia from year 2008 to year 2011. The list was obtained from a PROTON Edar Service Centre in Perak. The list serves as the sampling frame of our simple random sampling.
3.2 Simple Random Sampling

Black (1999), Salkind (2005), Washietl, Hofacker and Stadler (2004), and Weiner (2007) state that simple random sampling is the fairest sampling technique that provides equal opportunity for each element in the population to be invited to the research. Therefore, the resulting samples are representative of the population. However, the major challenge of simple random sampling is the difficulty in obtaining the complete population list. Since we managed to obtain the complete customer list of PROTON’s car owners in Perak state from year 2008 to year 2011, we employ the simple random sampling technique to ensure that the quality of our respondent is high enough to represent the whole target population.

3.2.1 Target Population, Sampling Frame and Sampling Elements

The list consists of total 6,533 elements, which are our target population and sampling frame. They are all owners of PROTON automobile in Perak who have their products purchased between year 2008 and year 2011. The list contains the contact information of these owners including phone numbers, home addresses and email addresses. The information regarding these owners will be kept private and confidential.

3.2.2 Sample Size

Chiu and Brennan (1990) state that a follow-up incentive such as postcard, letter or small gift may increase survey response rate by
approximately 15% to 30%. Since we expect the response rate to be less than 20% due to lack of any follow-up incentive, we purposely set the sample size to be 2,500. The study of Comrey and Lee (1992) suggests that a good marketing research should have at least 300 respondents for the data to be considered fair, acceptable and representative. The complete customer list we obtained was coded into SPSS 20.0 statistical software to randomly generate 2,500 respondents to be invited to this research. Each owner has an equal chance of 46% to be selected, regardless of their year of purchase, location of purchase, product purchased and other demographic factors.

3.3 Data Collection Method

Both primary and secondary data collection were collected for this research. Primary data was collected through questionnaires. Secondary data was collected from past researches, past studies, journal articles, historical statistics, annual reports and website information.

Data collection from questionnaires is the foundation to achieve the stated objectives of our study. First, our questionnaire was digitized into electronic form in a website to facilitate the process of data collection. Only invited respondents would obtain the website link to access to the questionnaire. Second, all the 2,500 respondents were sent with the website link via both email and mobile phone SMS. It took approximately two weeks to successfully distribute all the 2,500 questionnaires via email and mobile phone SMS. The data collection took another one month until we prohibited any access to the website link.
Out of the 2,500 respondents we managed to collect only 423 complete sets of questionnaire in electronic form with no missing data. The data was then coded into SPSS 20.0 statistical software to translate them into useful and readable format. The response rate is 16.92%.

### 3.4 Research Instrument

Questionnaire is the main instrument used in this research. Since our sample size of 2,500 is considered huge, questionnaire is the easiest, cheapest and fastest way to collect data from all the 2,500 respondents. It also eliminates any data collection bias compared to interviews, providing a more objective and consistent way to gather information. In our study, the quality of data must be as high as possible to accurately depict the relationship among the six variables, which is the main objective of this research. Furthermore, since all the variables are perceived subjectively and differently by each individual, the data collection process must not involve any subjective view of data collectors in order to ensure that the data collected actually reflect the respondent’s views.

#### 3.4.1 Questionnaire Design

Our questionnaire is separated into seven sections, with first section (Section 1) collecting demographic information of respondents and another six (Section 2-7) examining each variable. There are 38 questions in our questionnaire, including 5 questions from Section 1. We separate each variable into different section to ensure that the respondents do not confuse over the nature of each question. It also facilitates the data checking, coding, and cleaning process.
3.4.2 Pilot Test

A pilot test was carried out to ensure the validity and reliability of our questionnaire. The pilot test was conducted on respondents with similar characteristics to our target population. They are mostly university lecturers of UTAR and parents of students who are also the owners of PROTON automobile but not necessarily having their products purchased in the Perak state. They are the target of our pilot test due to their similar characteristics to that of our target population despite location of purchase. We distributed 47 sets of questionnaire to these experimental respondents to identify grammar errors, potential misleading questions and potential complex questions that may be difficult to be understood. Most questions were revised to improve the quality and understandability of each question. After collecting 47 sets of complete questionnaire from them, Cronbach’s Alpha test was conducted to eliminate and improve any poor quality or confusing question. Such pilot test allows us to improve the earlier version of our questionnaire to enhance the validity and reliability of this research.

3.5 Construct Measurement

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Adapted from</th>
</tr>
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<tbody>
<tr>
<td>Brand Heritage</td>
<td>• Urde, Greyser and Balmer (2007)</td>
</tr>
<tr>
<td></td>
<td>• Wiedmann, Hennigs, Schmidt and Wuestefeld (2011)</td>
</tr>
<tr>
<td>Constructs</td>
<td>Sample Items</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Brand Heritage</td>
<td>1. Proton’s brand is sustainable and continuous over the past 20 years.</td>
</tr>
<tr>
<td></td>
<td>2. Proton’s brand is a successful brand.</td>
</tr>
<tr>
<td></td>
<td>3. I am emotionally affected by every Proton’s behavior. Eg)</td>
</tr>
<tr>
<td></td>
<td><em>When Proton announced a new car, when Proton designed a new advertisement.</em></td>
</tr>
<tr>
<td></td>
<td>4. Proton car works as how it is advertised.</td>
</tr>
<tr>
<td></td>
<td>5. Proton’s brand is unique compared to other brands.</td>
</tr>
<tr>
<td>Perceived Product</td>
<td>1. Overall, Proton’s car quality has met my expectation.</td>
</tr>
<tr>
<td></td>
<td>2. Proton’s car has same if not more features than other similar</td>
</tr>
<tr>
<td>Quality</td>
<td>brands. Eg) Fuel types, break system, security, petrol tank size, number of seats, whistles.</td>
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<tr>
<td>------------------</td>
<td>--------------------------------------------------</td>
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<tr>
<td>3.</td>
<td>Proton’s car works properly each time I use it for my transportation needs.</td>
</tr>
<tr>
<td>4.</td>
<td>Spare parts of Proton’s car can be found easily.</td>
</tr>
<tr>
<td>5.</td>
<td>Proton’s car lasts longer than I expected.</td>
</tr>
<tr>
<td>6.</td>
<td>Proton’s car has fewer breakdowns than I expected.</td>
</tr>
<tr>
<td>7.</td>
<td>I can find service centre to service my proton car easily.</td>
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</table>

<table>
<thead>
<tr>
<th>Brand Trust</th>
<th>1. I believed that the Proton Edar Sdn Bhd is competent in its daily operation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>I can rely on my Proton’s car to meet my transportation needs.</td>
</tr>
<tr>
<td>3.</td>
<td>I believed that Proton is a trustworthy brand.</td>
</tr>
<tr>
<td>4.</td>
<td>I am willing to purchase any new Proton car.</td>
</tr>
<tr>
<td>5.</td>
<td>Proton’s employees are honest and sincere in addressing my enquiry and concerns.</td>
</tr>
<tr>
<td>6.</td>
<td>Proton never abuses any opportunity to take advantage of my property/money at the time I am servicing/purchasing my Proton car.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Brand Loyalty</th>
<th>1. I am willing to purchase a Proton’s car again.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>I am willing to pay a higher price for Proton car over other brands.</td>
</tr>
<tr>
<td>3.</td>
<td>It makes sense to buy Proton car instead of any other brand of car, even if they have the same quality and price level.</td>
</tr>
<tr>
<td>4.</td>
<td>Even if another similar brand has better features than Proton, I would prefer to buy Proton’s car.</td>
</tr>
<tr>
<td>5.</td>
<td>Even if another similar brand has lower price than Proton, I would prefer to buy Proton’s car.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Customer Satisfaction</th>
<th>1. Overall, I am satisfied with my Proton car.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>I am satisfied with the price level of Proton’s car.</td>
</tr>
</tbody>
</table>
3. I am satisfied with the performance of Proton’s car.
4. I am satisfied with the attitude and helpfulness of Proton’s staff.
5. I would recommend Proton to my friends and family members.

| Repurchase Intention | 1. I intend to buy a Proton car in the near future.
|                       | 2. If I want to buy a car again, I will buy a Proton car.
|                       | 3. I actively read Proton’s advertisement from time to time.
|                       | 4. I would attend a Proton’s automobile show if there is any in the near future.
|                       | 5. If given a right financial condition, I will buy a Proton car. |

Source: Developed for the research

3.6 Data Processing

Malhotra, Hall, Shaw, and Oppenheim (2002) state that raw data must be first converted into a proper form before they can be used in analysis (SPSS statistical software). In order to ensure that the data is in a standard quality, repetitive data filtering process has been carried out in this research.

3.6.1 Questionnaire Checking

All data collected from our questionnaires were double checked before coded into SPSS 20.0 to ensure that the data entry is accurate and has no error or mistake. Questionnaires with missing data were removed to maintain an optimal quality level of data analysis. Corrective actions were taken immediately for every detected questionnaire problem and mistake.
3.6.2 Data Coding

Data must be coded into SPSS 20.0 before it can be translated into useful or readable format by the software. The coding process involves categorizing data into numerical score or character symbol. For example, Section 1 of our questionnaire categorizes male respondents as “1” and female respondents as “2”. Section 2 and later categorizes “strongly disagree” as “1”, “disagree” as “2”, “neutral” as “3”, “agree” as “4”, and “strongly agree” as “5”. Such categorization facilitates the process of data analysis in SPSS 20.0.

3.6.3 Data Cleaning

Missing data in questionnaires refer to those questionnaires with ambiguous or missing answer (Burns & Bush, 2006). We ensure that the data collected from our questionnaires are complete, unambiguous and mistake-free before qualifying them as our data analysis material.

3.7 Data Analysis

After all data were accurately and correctly coded into the SPSS 20.0 statistical software, we performed various analyses to provide meaningful understanding on the implication of the data. The results of our analysis are presented in Chapter 4, and interpreted in Chapter 5 in readable form for further discussion.
3.8 Conclusion

In conclusion, we successfully collected 423 questionnaires from the desired 2,500 samples who are all owners of PROTON automobile and who have their products purchased between year 2008 and year 2011 in Perak, Malaysia. These data are then coded into SPSS 20.0 and SPSS AMOS for further analysis.
Chapter 4: Data Analysis

4.0 Introduction

This chapter consists of descriptive analysis, scale measurement and inferential analysis.

4.1 Descriptive Analysis

4.1.1 Demographic Characteristics of Respondents

Table 4.1 shows the demographic characteristics of all our 423 respondents who are qualified for our data analysis. Among them, 225 respondents are male (53.2%) while 198 of them are female (46.8%). Majority of the respondents are married (322) which account for 76.1% and the rest of them are singles (101, 23.9%).

In the aspect of age, 180 respondents (42.6%) fall under the age category of 31 – 40 years old. There are 9 of them are less than 21 years old (2.1%), 85 of them are between 21 and 30 years old (20.1%), 128 of them are between 41 and 50 years old (30.3%) and 21 of them are between 51 and 60 years old (5.0%). There is no respondent aged above 60 years old.

In the aspect of income status, 63 of the respondents have income below RM2,000 (14.9%), 126 of them have income between RM2,001 and
RM3,500 (29.8%), 189 of them have income between RM3,501 and RM5,000 (44.7%) and 45 of them have income above RM5,000 (10.6%).

Table 4.1 Demographic Characteristics of Respondents

<table>
<thead>
<tr>
<th>Demographic Factors</th>
<th>Labels</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Less than 21 years old</td>
<td>9</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>21-30 years old</td>
<td>85</td>
<td>20.1</td>
</tr>
<tr>
<td></td>
<td>31 – 40 years old</td>
<td>180</td>
<td>42.6</td>
</tr>
<tr>
<td></td>
<td>41 – 50 years old</td>
<td>128</td>
<td>30.3</td>
</tr>
<tr>
<td></td>
<td>51 – 60 years old</td>
<td>21</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>60 years old and above</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>225</td>
<td>53.2</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>198</td>
<td>46.8</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Single</td>
<td>101</td>
<td>23.9</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>322</td>
<td>76.1</td>
</tr>
<tr>
<td>Employment Status</td>
<td>Employed</td>
<td>306</td>
<td>72.3</td>
</tr>
<tr>
<td></td>
<td>Unemployed</td>
<td>34</td>
<td>8.0</td>
</tr>
<tr>
<td></td>
<td>Retired</td>
<td>18</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>Student</td>
<td>12</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>Self-employed</td>
<td>53</td>
<td>12.5</td>
</tr>
<tr>
<td>Income</td>
<td>Below RM2,000</td>
<td>63</td>
<td>14.9</td>
</tr>
<tr>
<td></td>
<td>RM2,001-RM3500</td>
<td>126</td>
<td>29.8</td>
</tr>
<tr>
<td></td>
<td>RM3,501-RM5000</td>
<td>189</td>
<td>44.7</td>
</tr>
<tr>
<td></td>
<td>RM5,001 and above</td>
<td>45</td>
<td>10.6</td>
</tr>
</tbody>
</table>

Source: Developed for the research
4.2 Scale Measurement

Reliability test using Cronbach’s Alpha was performed on our data. The test was conducted with SPSS 20.0 statistical software. George and Mallery (2003) suggest rules of thumb for Cronbach’s Alpha as the following: more than 0.9 as “Excellent”, more than 0.8 as “Good”, more than 0.7 as “Acceptable”, more than 0.6 as “Questionable”, more than 0.5 as “Poor”, and less than 0.5 as “Unacceptable”. In short, the Cronbach’s Alpha ranges from 0 to 1. The closer the Cronbach’s Alpha is to 1 the greater the internal consistency of the items in the scale (Gliem & Gliem, 2003). Heir et al. (2005) suggest that the value of Cronbach’s Alpha should be above 0.7 in order to consider the internal consistency of the constructs to be acceptable. The mean, standard deviation, factor loading and coefficients of Cronbach’s Alpha for all items in our research are summarized in Table 4.2.

<table>
<thead>
<tr>
<th>Variables and Items</th>
<th>Description</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Factor loading</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>BH1</td>
<td>Proton’s brand is sustainable and continuous over the past 20 years.</td>
<td>3.30</td>
<td>1.050</td>
<td>0.80</td>
<td>0.882</td>
</tr>
<tr>
<td>BH2</td>
<td>Proton’s brand is a successful brand.</td>
<td>3.30</td>
<td>1.143</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>BH4</td>
<td>Proton car works as how it is advertised.</td>
<td>3.43</td>
<td>1.105</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td>BH5</td>
<td>Proton’s brand is unique compared to other brands.</td>
<td>3.29</td>
<td>1.114</td>
<td>0.77</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>--------------------------------------------------</td>
<td>------</td>
<td>--------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td><strong>Perceived Product Quality</strong></td>
<td>0.826</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PQ1</td>
<td>Overall, Proton’s car quality has met my expectation.</td>
<td>3.49</td>
<td>1.023</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td>PQ2</td>
<td>Proton’s car has same if not more features than other similar brands.</td>
<td>3.52</td>
<td>1.122</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>PQ6</td>
<td>Proton’s car has fewer breakdowns than I expected.</td>
<td>3.64</td>
<td>1.139</td>
<td>0.76</td>
<td></td>
</tr>
<tr>
<td>PQ7</td>
<td>I can find service centre to service my proton car easily.</td>
<td>3.44</td>
<td>1.104</td>
<td>0.84</td>
<td></td>
</tr>
<tr>
<td><strong>Brand Trust</strong></td>
<td>0.876</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>I can rely on my Proton’s car to meet my transportation needs.</td>
<td>3.47</td>
<td>0.982</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>T5</td>
<td>Proton’s employees are honest and sincere in addressing my enquiry and concerns.</td>
<td>3.43</td>
<td>1.103</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>T6</td>
<td>Proton Edar Sdn Bhd never abuses any opportunity to take advantage of my property/money at the time I am servicing/purchasing my Proton car.</td>
<td>3.51</td>
<td>1.116</td>
<td>0.78</td>
<td></td>
</tr>
<tr>
<td><strong>Brand Loyalty</strong></td>
<td>0.907</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BL1</td>
<td>I am willing to purchase a</td>
<td>3.43</td>
<td>1.043</td>
<td>0.83</td>
<td></td>
</tr>
</tbody>
</table>
It makes sense to buy Proton car instead of any other brand of car, even if they have the same quality and price level.

Even if another similar brand has better features than Proton, I would prefer to buy Proton.

Even if another similar brand has lower price than Proton, I would prefer to buy Proton.

Overall, I am satisfied with my Proton car.

I am satisfied with the price level of Proton’s car.

I am satisfied with the performance of Proton’s car.

I intend to buy a Proton car in the near future.

If I want to buy a car again, I will buy a Proton car.

I actively read Proton’s advertisement from time to time.
### 4.3 Inferential Analysis

#### 4.3.1 Structural Equation Modeling

From literature review and findings in previous sections, the framework developed was tested using Structural Equation Modeling (SEM). Hoyle (1995) states that SEM is a comprehensive statistical approach to test hypotheses about relationships among observed and latent variables.

<table>
<thead>
<tr>
<th>DV4</th>
<th>I would attend a Proton’s automobile show if there is any in the near future.</th>
<th>3.53</th>
<th>1.176</th>
<th>0.81</th>
</tr>
</thead>
<tbody>
<tr>
<td>DV5</td>
<td>If given a right financial condition, I will buy a Proton car.</td>
<td>3.50</td>
<td>1.241</td>
<td>0.90</td>
</tr>
</tbody>
</table>

Source: Developed for the research

Table 4.2 states that the Cronbach’s Alpha for brand heritage, perceived product quality, brand trust, brand loyalty, customer satisfaction, and repurchase intention are 0.882, 0.826, 0.876, 0.907, 0.877, and 0.926 respectively. According to George and Mallery (2003) coefficient of Cronbach’s Alpha with value greater than 0.8 is categorized as “good” in term of reliability. Since coefficients of Cronbach’s Alpha summarized in Table 4.2 are all greater than 0.8, it indicates that there is good internal consistency of our items in each scale. In short, our data is reliable.
Ullman (1996) describes SEM as a procedure that can examine a set of relationships between one or more dependent or independent variables. Therefore, SEM would be the most suitable and appropriate way of analysis in our research since our objective is to identify the relationship between the six variables. In other word, there is no way that multiple regression or factor analysis can be used in our analysis process. Furthermore, in order to accurately and realistically depict the relationship between variables in a system, Ghasemi (2009) suggests that SEM is a more powerful alternative to multiple regression and factor analysis. We also prefer SEM to path analysis due to the fact that in path analysis, exogenous variable (one whose value is wholly causally independent from other variables in the system) is measured without any error, which is unlikely to be true in reality (Tabachnick & Fidell, 2007). SPSS 20.0 AMOS statistical software is used to conduct the SEM analysis in this research. Table 4.3 shows the description of each fit index and their acceptable thresholds. Table 4.4 shows the fit indices of our proposed model.

<table>
<thead>
<tr>
<th>Fit Indices</th>
<th>Description</th>
<th>Acceptable Thresholds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square $\chi^2$</td>
<td>Assesses the magnitude of discrepancy between the sample and fitted covariances matrice (Hu and Bentle, 1999).</td>
<td>Low $\chi^2$ relative to degrees of freedom with an insignificant p value ($p &gt; 0.05$) (Hooper, Coughlan, and Mullen, 2008)</td>
</tr>
<tr>
<td>Metric</td>
<td>Description</td>
<td>Threshold</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Relative $\chi^2$ ($\chi^2/df$)</td>
<td>When large sample size is used, Chi-square nearly always rejects the model (Jöreskog and Sörbom, 1993). When small sample size is used, Chi-square may not discriminate between good fitting models and poor fitting models (Kenny and McCoach, 2003). Due to these limitations, Wheaton et al. (1977) suggest relative $\chi^2$, a figure that minimizes the impact of sample size on Chi-square.</td>
<td>$&lt; 3.00$</td>
</tr>
<tr>
<td>RMSEA</td>
<td>Steiger (1990) states that RMSEA measures the approximate fit of the model in the covariance matrix of the population.</td>
<td>$&lt; 0.07$</td>
</tr>
<tr>
<td>NFI</td>
<td>Assesses the model by comparing the $\chi^2$ value of the model to the $\chi^2$ of the null model (Hooper, Coughlan, and Mullen, 2008).</td>
<td>$&gt; 0.90$</td>
</tr>
<tr>
<td>CFI</td>
<td>A revised form of NFI which takes sample size into account (Byrne, 1998).</td>
<td>$&gt; 0.90$</td>
</tr>
</tbody>
</table>

Source: Developed for the research
Table 4.4: Fit Indices for our proposed model

<table>
<thead>
<tr>
<th>Fit Indices</th>
<th>Values of Fit Indices for our proposed model</th>
<th>Desired Values for Good Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative $\chi^2$ ($\chi^2/df$)</td>
<td>480.811/223 = <strong>2.156</strong></td>
<td>&lt; 3.00</td>
</tr>
<tr>
<td>RMSEA</td>
<td><strong>0.52</strong></td>
<td>&lt; 0.07</td>
</tr>
<tr>
<td>NFI</td>
<td><strong>0.947</strong></td>
<td>&gt; 0.90</td>
</tr>
<tr>
<td>CFI</td>
<td><strong>0.971</strong></td>
<td>&gt; 0.90</td>
</tr>
</tbody>
</table>

Source: Developed for the research

Table 4.3 provides explanation for each fit index and their acceptable threshold. In short, fit indices that fall within the acceptable threshold indicate that the model has good fit with the data. As shown in Table 4.4, with relative $\chi^2$ (2.156) less than 3.00, RMSEA (0.52) less than 0.07, NFI (0.947) greater than 0.90, and CFI (0.971) greater than 0.90, our proposed model is well fitting to our data, after taking account into the sample size.

### 4.3.2 Hypotheses Testing

In this section, we assess all the hypotheses formulated earlier to identify whether significant relationships between variables exist in our proposed model. The results are summarized in Table 4.5.
Table 4.5: Structural Parameter Estimates

<table>
<thead>
<tr>
<th>Hypothesized Path</th>
<th>Path Coefficient (β)</th>
<th>p-value</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 Brand Heritage → Perceived Product Quality</td>
<td>0.93</td>
<td>&lt; 0.001</td>
<td>Supported</td>
</tr>
<tr>
<td>H2 Brand Heritage → Brand Trust</td>
<td>0.31</td>
<td>&lt; 0.001</td>
<td>Supported</td>
</tr>
<tr>
<td>H3 Perceived Product Quality → Customer Satisfaction</td>
<td>0.96</td>
<td>&lt; 0.001</td>
<td>Supported</td>
</tr>
<tr>
<td>H4 Customer Satisfaction → Brand Trust</td>
<td>0.72</td>
<td>&lt; 0.001</td>
<td>Supported</td>
</tr>
<tr>
<td>H5 Customer Satisfaction → Brand Loyalty</td>
<td>0.35</td>
<td>0.014</td>
<td>Supported</td>
</tr>
<tr>
<td>H6 Brand Trust → Brand Loyalty</td>
<td>0.63</td>
<td>0.008</td>
<td>Supported</td>
</tr>
<tr>
<td>H7 Brand Loyalty → Repurchase Intention</td>
<td>0.94</td>
<td>&lt; 0.001</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Source: Developed for the research

*Testing Hypothesis 1:*

Hypothesis 1 proposed that brand heritage is significantly related with perceived product quality. Our result suggested that brand heritage positively affects perceived product quality, with β coefficient of 0.93 and p-value of less than 0.001. Thus, hypothesis 1 was supported.
Testing Hypothesis 2:
Hypothesis 2 proposed that brand heritage has positive impact on brand trust. Our result showed that the $\beta$ coefficient of the relationship is 0.31 and its p-value is less than 0.001. Thus, hypothesis 2 was supported.

Testing Hypothesis 3:
Hypothesis 3 proposed that perceived product quality has significant relationship with customer satisfaction. As indicated in Table 4.5, our research identified that perceived product quality has significant positive impact on customer satisfaction ($\beta=0.96$, $p<0.001$). Our results successfully offered support for hypothesis 3. Furthermore, the indirect effect of brand heritage on customer satisfaction was identified ($\beta=0.89$).

Testing Hypothesis 4:
Hypothesis 4 proposed that customer satisfaction significantly affects brand trust. Table 4.5 showed that the $\beta$ coefficient of the relationship is 0.72 and p-value of the relationship is less than 0.001. Therefore, hypothesis 4 was supported. The result indicated that customer satisfaction is an antecedent of brand trust and therefore precedes it. It supports the study of Wong et al. (2011) and Wiedmann et al. (2011). In addition, the indirect relationship between perceived product quality and brand trust was found ($\beta=0.69$).

Testing Hypothesis 5:
Hypothesis 5 proposed that customer satisfaction has positive impact on brand loyalty. The results showed that there is a positive relationship between customer satisfaction and brand loyalty ($\beta=0.35$, $p=0.014$), supporting hypothesis 5. The indirect influence of brand heritage on brand loyalty was found as well. The $\beta$ coefficient of the indirect relationship between brand heritage and brand loyalty is 0.92.
Testing Hypothesis 6:
Hypothesis 6 proposed that brand trust is positively associated with brand loyalty. As shown in Table 4.5, the results showed that such relationship is significant ($\beta=0.63$, $p=0.008$). Thus, hypothesis 6 was supported. The indirect relationship between perceived product quality and brand loyalty was identified as well ($\beta=0.78$).

Testing Hypothesis 7:
Hypothesis 7 proposed that brand loyalty has significant relationship with repurchase intention. Our results stated that brand loyalty positively affects repurchase intention ($\beta=0.94$, $p<0.001$). Therefore, hypothesis 7 was supported.

Next, the total, direct and indirect effects between each relationship are summarized in Table 4.6.
Table 4.6: Standardized Total Effects, Direct Effects, and Indirect Effects

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variables</th>
<th>Std. Direct Effect</th>
<th>Std. Indirect Effect</th>
<th>Std. Total Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Heritage</td>
<td>Perceived Product Quality</td>
<td>0.933</td>
<td></td>
<td>0.933</td>
</tr>
<tr>
<td></td>
<td>Customer Satisfaction</td>
<td>0.307</td>
<td>0.645</td>
<td>0.952</td>
</tr>
<tr>
<td></td>
<td>Brand Trust</td>
<td></td>
<td>0.921</td>
<td>0.921</td>
</tr>
<tr>
<td></td>
<td>Brand Loyalty</td>
<td></td>
<td>0.867</td>
<td>0.867</td>
</tr>
<tr>
<td>Perceived Product Quality</td>
<td>Customer Satisfaction</td>
<td>0.963</td>
<td>0.691</td>
<td>0.691</td>
</tr>
<tr>
<td></td>
<td>Brand Trust</td>
<td></td>
<td>0.779</td>
<td>0.779</td>
</tr>
<tr>
<td></td>
<td>Brand Loyalty</td>
<td></td>
<td>0.733</td>
<td>0.733</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>Brand Trust</td>
<td>0.718</td>
<td>0.761</td>
<td>0.791</td>
</tr>
<tr>
<td></td>
<td>Brand Loyalty</td>
<td>0.354</td>
<td>0.455</td>
<td>0.809</td>
</tr>
<tr>
<td></td>
<td>Repurchase Intention</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand Trust</td>
<td>Brand Loyalty</td>
<td>0.633</td>
<td>0.596</td>
<td>0.633</td>
</tr>
<tr>
<td></td>
<td>Repurchase Intention</td>
<td></td>
<td></td>
<td>0.596</td>
</tr>
<tr>
<td>Brand Loyalty</td>
<td>Repurchase Intention</td>
<td>0.941</td>
<td></td>
<td>0.941</td>
</tr>
</tbody>
</table>

Source: Developed for the research

According to Kline (1998), direct effect can be seen in the path diagram as single arrow head that points from one latent variable to another. For indirect effect, it involves one or more intervening variables that spread the causal effect between prior variables and subsequent variables. As stated in Table 4.6, the standardized direct effect of brand heritage on perceived product quality is 0.933. This implies that due to such direct effect, if brand heritage is increased by 1 in standard deviation, perceived
product quality is increased by 0.933 in standard deviation. On the other
hand, the indirect effect of brand heritage on customer satisfaction is
0.899. This implies that due to such direct effect, if brand heritage is
increased by 1 in standard deviation, customer satisfaction is increased by
0.899 in standard deviation. The rest of the results are interpreted in this
way similarly.

Graphical interpretations (path diagram) of our SEM results are shown in
Figure 4.1. Standardized path coefficients of each hypothesis are
summarized in Table 4.7.

<table>
<thead>
<tr>
<th>Path</th>
<th>Std. Est.</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 Brand Heritage → Perceived Product Quality</td>
<td>0.93</td>
<td>0.054</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>H2 Brand Heritage → Brand Trust</td>
<td>0.31</td>
<td>0.091</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>H3 Perceived Product Quality → Customer Satisfaction</td>
<td>0.96</td>
<td>0.058</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>H4 Customer Satisfaction → Brand Trust</td>
<td>0.72</td>
<td>0.082</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>H5 Customer Satisfaction → Brand Loyalty</td>
<td>0.35</td>
<td>0.238</td>
<td>0.014</td>
</tr>
<tr>
<td>H6 Brand Trust → Brand Loyalty</td>
<td>0.63</td>
<td>0.264</td>
<td>0.008</td>
</tr>
<tr>
<td>H7 Brand Loyalty → Repurchase Intention</td>
<td>0.94</td>
<td>0.045</td>
<td>&lt; 0.001</td>
</tr>
</tbody>
</table>

Source: Developed for the research
Chapter 4: Data Analysis

Repurchase Intention, Automobile, SEM

Figure 4.1: Path Diagram of our SEM Results
According to Table 4.7, the coefficient of “Std. Estimate” refers to the standardized regression weight of each relationship. For example, the standardized estimate of the relationship between brand heritage and perceived product quality is 0.93. This implies that when brand heritage is increased by 1 in standard deviation, perceived product quality is increased by 0.93 in standard deviation. The rest of the results are interpreted in this way similarly.

For the column “Std. Error”, it refers to the standard error occurred in the regression weight estimate of the relationship. For example, the standard error of the relationship between brand heritage and perceived product quality is 0.054. This implies that the regression weight of the relationship between brand heritage and perceived product quality (0.912) has a standard error of 0.054. The rest of the results are interpreted in this way similarly.

4.4 Conclusion

In conclusion, the results of scale measurement and fit indices implied that our data are reliable and our proposed model is well fitted to the data. All the hypotheses developed for our model were supported by the presented findings.
Chapter 5: Discussion

5.0 Introduction

The main objective of this study is to develop a framework that explains the indirect relationship between brand heritage and repurchase intention of PROTON’s existing customers in Perak, Malaysia. Our research involves 423 PROTON owners who all have their products purchased between year 2008 and year 2011 in Perak, Malaysia. After analyzing the data collected from these respondents, results are presented in the previous chapter.

This chapter consists of 4 sections – summary of the statistical analyses and discussion of major findings, implication of the study, limitation of the study and recommendation for future research. The research project is then concluded by summarizing the whole project and evaluating whether we have achieved our objective of this research.

5.1 Summary and Discussion of the Major Findings

There are 423 respondents invited to our research project. They are selected regardless of their demographic factors, year of purchase, product purchased or location (branches, outlets) of purchase, using simple random sampling technique based on a complete customer list (6533 owners) between year 2008 and year 2011 obtained from a PROTON’s service centre in Perak. Therefore, the sample is representative of the target population, given the perspective that each sampling element has equal 38% chance of being invited.
Table 5.1: Summary of Hypotheses

<table>
<thead>
<tr>
<th>H1</th>
<th>Brand Heritage → Perceived Product Quality</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2</td>
<td>Brand Heritage → Brand Trust</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>Perceived Product Quality → Customer Satisfaction</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>Customer Satisfaction → Brand Trust</td>
<td>Supported</td>
</tr>
<tr>
<td>H5</td>
<td>Customer Satisfaction → Brand Loyalty</td>
<td>Supported</td>
</tr>
<tr>
<td>H6</td>
<td>Brand Trust → Brand Loyalty</td>
<td>Supported</td>
</tr>
<tr>
<td>H7</td>
<td>Brand Loyalty → Repurchase Intention</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Source: Developed for the research

After testing all the hypotheses, we successfully developed a framework that explains the relationship between brand heritage and repurchase intention. It explains how brand heritage can indirectly affect the repurchase intention of consumers, mediated by the variables perceived product quality, brand trust, customer satisfaction, and brand loyalty.

Results of the study indicate that brand heritage directly affects perceived product quality and brand trust, with $\beta$ coefficients of 0.93 and 0.31 respectively. It implies that a brand with high heritage quotient directly affects the positive perception of consumers towards the product quality of the brand. However, it should be kept in mind that the effect of brand heritage on perceived product quality is in the time frame of future. This happens since brand heritage is built up by the company from past, and the perceived product quality is measured at present. The relationship between brand heritage and perceived product quality occurs because brand heritage can be perceived externally to be relevant and valuable by customers (Urde et al., 2007). In short, if the heritage of a brand embraces certain values (eg. product quality), such values are perceived and valued by customers as well.
Consistent delivery of these promises and values (longevity) and success track record (eg. awards on product quality) will positively influence the perception of consumers towards the brand’s product quality. When applied to PROTON, since the relationship was found, it implies that PROTON has embraced some values of “product quality” in its brand heritage.

On the other hand, positive relationship between brand heritage and brand trust was found as well. Such result is consistent with the findings of Wiedmann et al. (2011). It indicates that a heritage brand results in greater trust to the company and the company’s staff, providing higher sense of security (honesty, benevolence) during purchase and higher faith in the performance of the company, the company’s staff and the company’s product (competence). Similarly, the impact of brand heritage on brand trust is in the time frame of future since brand heritage is built up by the company from past and the brand trust is measured at present. The relationship between brand heritage and brand trust occurs because trust is typically one of the key components of a heritage brand (Urde et al., 2007). According to Urde et al. (2007) trust is the foundation of how the organization sees itself today. It means that a brand will be perceived more credible, trustworthy, and reliable by consumers if the brand is a heritage brand, especially in turbulent time in automotive industry characterized by highly uncertain purchase decisions and customer disorientation (Wiedmann et al., 2011). In other word, consistent delivery of the company’s core values (longevity) and success track record from the past will give higher faith to consumers on the company’s promise and operation today, and perhaps also greater trust in future.

In addition, the significant relationship between perceived product quality and customer satisfaction was found ($\beta=0.96$). This finding is consistent with the study of Cronin and Taylor (1992), Sweeny et al. (1999), MacKenzie, Olshavsky and Spreng (1996), Oh (1999), Baker and Taylor (1994), Bolton
and Lemon (1999), Fornell et al. (1996), and Spreng, MacKenzie, and Olshavsky (1996), where perceived product quality directly affects customer satisfaction. It also supports that the relationship between perceived product quality and repurchase intention which is mediated by the factor customer satisfaction. Most researchers suggest that when the product quality is “perceived” positively by consumer, the particular consumer is more likely to be satisfied, thus more likely to repurchase the product or return to the manufacturer.

Although there are disputes over the relationship between customer satisfaction and brand trust, our results ($\beta=0.72$) supported the studies of Wong et al. (2011), Wiedman et al. (2011), and Reast (2003). It implies that customers are first satisfied, later only they trust the company and the brand. For example, a consumer will not trust any claim made by the company again if he/she is first cheated and dissatisfied by the company’s products or employees. Therefore, the higher the satisfaction of consumer, the higher the trust level of consumer towards the company. Reast (2005) states that only when customers have had satisfactory experience with the brand (expectation fulfilled), a brand is considered as credible to them (claims delivered in advertisement, packaging, or other forms of communication including personal selling are perceived as fair and sincere). Since credibility constitutes to the key component of trust, such statement explains why customer satisfaction precedes brand trust. This finding is contrary to the study of Chung, Hung and Widowati (2010) who state that trust is an antecedent of customer satisfaction in automotive industry.

In connection with this, our framework notes that customer satisfaction will also positively affect brand loyalty ($\beta=0.35$). This finding is consistent with the study of Yang and Peterson (2004), Mittal and Kamakura (2001), Bolton and Lemon (1999), Fornell et al. (1996), Oliver (1999), Berne (1997),
Bloemer and Kasper (1995), Bloemer & Lemmink (1992), Anderson and Sullivan (1993), Boulding et al. (1993), and Anderson and Mittal (2000). The results support that when customers are satisfied, they are more likely to develop attitudinal loyalty towards the brand. When attitudinal loyalty occurs, consumers simplify their decision making process by purchasing the same brand that has previously satisfied them to save efforts on evaluation and analysis among alternatives (O’Guinn, Allen, & Semenik, 2011). Therefore, the study explains how attitudinal loyalty mediates the relationship between customer satisfaction and repurchase intention.

Furthermore, positive impact of brand trust on brand loyalty was found in our study (β=0.63). This result supports the research outcomes of Morgan & Hunt (1994), Doney and Cannon (1997), Ganesan (1994), Garbarino and Johnson (1999), Nijssen et al. (2003), Verhoef et al. (2002), and Hossain and Ullah (2011). The finding states that brand trust is an important component to the development of brand loyalty. Trust must be found between customers and suppliers in order to sustain or grow their transactional relationship in long run (Doney & Cannon, 1997; Ganesan, 1994; Garbarino & Johnson, 1999). It implies that when customers trust the brand, they are more likely to return to the brand because they believe that the company possesses the necessary competence and capability to satisfactorily fulfill their needs and wants. This depicts relationship between brand trust and repurchase intention which is mediated by brand loyalty.

Finally, our study suggests that brand loyalty significantly affects repurchase intention (β=0.94). This finding is consistent with the research outcomes of Oliver (1997), Anderson and Mittal (2000), Ganesh et al. (2000), Reichheld (1996), Fornell (1992), Anderson and Sullivan (1993), Bolton and Rath (1998), Park (2004), Boulding, Kalra, Staeling, and Zeithaml (1993), Cronin and Taylor (1992), Mägi and Julander (1996), De Ruyter, Wetzels, and
Bloemer (1998), Taylor and Baker (1994), and Zeithaml, Berry, and Parasuraman, (1996). It is concluded that when customers develop attitudinal loyalty towards the brand, they spread positive word of mouth, re-patronize the store, and repurchase more of the products.

### 5.2 Implication of the Study

In short, our study provides a more comprehensive and practical understanding on the role of brand heritage in the field of consumer behavior. By applying brand heritage to PROTON, it was found that brand heritage does not just affect the brand trust, brand loyalty, and customer satisfaction (Wiedmann et al., 2011), but also both perceived product quality and repurchase intention. Our study has open up new field of research in the area of brand heritage. The indirect relationship between brand heritage and repurchase intention was identified in our research as well. Responding to the call of Urde et al. (2007), such findings indicate that brand heritage really deserves a new distinct branding category, since it affects all the key factors (brand trust, brand loyalty, customer satisfaction, perceived product quality, and repurchase intention) that are required to associate a company with unique value proposition and positioning. Our study provides a fresh new insight into the understanding on brand heritage.

#### 5.2.1 Managerial Implication of the Study

Our research identified that brand heritage indirectly affects the repurchase intention of consumers. This implies that PROTON can leverage the effect of brand heritage to identify marketing strategy to retain customers or stimulate repurchase intention. It was found that
brand heritage directly affects the consumers’ perceived product quality of the brand. This suggests that brand heritage plays an important role in marketing strategy related to consumer perception (communication). For example, marketers of PROTON can emphasize on product qualities that can be easily perceived or observed by consumers, especially feature, serviceability and aesthetics aspects such as petrol tank size (feature), number of seats (feature), type of engine (feature), type of fuel (feature), number of service centre (serviceability), and design (aesthetics). These qualities are easily perceived by consumers. By incorporating these product qualities into the products of PROTON, perceived product quality of PROTON by consumers can be significantly improved, while associating the brand heritage of PROTON with these qualities as well. For example, with the history, past success record (awards in motorsports), and core values (eg. Zoom-zoom campaign) of making high output, sporty-designed, and rotary engine car (perceived product quality), MAZDA today has successfully associated itself with the image of sporty, young and fun-to-drive (Belch & Belch, 2012). Today, when consumers think of MAZDA’s products, they perceive the quality as high performance, high output, high horsepower, and fuel inefficient. It is apparent that MAZDA’s perceived product quality today is directly affected by its brand heritage built up in the past. Therefore, understanding the impacts of brand heritage on perceived product quality provides insight on how PROTON can leverage its brand heritage to improve consumer perception towards its product quality in future.

Furthermore, it was found that brand heritage directly affects the trust of consumer. It means that brand heritage significantly enhances the purchase decision of consumers by providing them a sense of security, credibility, trustworthy, sincerity and fairness. It is noted by Doney and Cannon (1997), Ganesan (1994), and Garbarino and Johnson (1999) that
trust must present to ensure that the transactional relationship between customers and suppliers will continue in long run. Therefore, in order to sustain the business in long run, it is important for PROTON to leverage its brand heritage accumulated from past to build up consumer trust in present time and even in future. For example, if PROTON’s brand heritage is associated with the value of high quality, and such value has been consistently delivered over time, future consumers will assume that PROTON’s products are always associated with high quality, which is a form of trust. Facing the upcoming challenge of market liberalization and increased competitive environment in future, our study provides PROTON with a new insight to build long-term relationship with consumers by leveraging the impact of brand heritage on trust.

It is noted by George (2004) that a company’s brand can be leveraged if the brand is infused with a heritage, especially in global markets. As mentioned earlier, PROTON is exporting to various countries around the globe. In order to be competitive in the global market, from a strategic perspective, PROTON should identify and leverage the heritage in the company’s brand to strengthen its identity in future. It is important for PROTON to understand that leveraging brand heritage involves the time frames of past, present and future. The effects and values of brand heritage will be reflected in future, which allow PROTON to cope with the impending challenge of market liberalization. First, a company can start from its past to identify the heritage in its brand (Benson et al., 2009). Similarly, PROTON can look back into the company’s past, history, roots or something that differentiate the brand of PROTON to identify brand heritage. For example, its identity of Malaysia’s first national car project or its corporate values that emphasize quality and customer focus. Afterward, PROTON must continually embrace such “values/roots” at present time in order to successfully associate the
company’s brand with these “values/roots” in future. Lastly, PROTON must be willing to change if these brand heritages turn into countervailing forces that are contrary to the values of the company. These three steps refer to the three ways to leverage brand heritage as noted by Urde et al. (2007).

According to Urde et al. (2007) there are three ways to leverage brand heritage – uncover the brand heritage, activate the brand heritage, and protect the brand heritage. Urde et al. (2007) suggest that the first thing to look when uncovering brand heritage is the track record. Given PROTON’s various international and national awards on “car design” and “value-for-money product” (Appendix 5.1), we identify that the brand heritage of PROTON is associated with these two perspectives. In order to activate the brand heritage, we suggest PROTON to: (1) start from its Malaysia identity (history important to identity), and (2) transforming its corporate values of caring and customer focus (core values) into functional uses via product design. The recommendations are derived from Urde et al. (2007) who state that principal vehicles that activate brand heritage include product design, communications, and the brand’s history.

For the first recommendation, PROTON should put emphasis on its identity of Malaysia’s first national car project to differentiate itself from competitors, especially in the global market. The concept is similar to the furniture giant IKEA, who is originated from Sweden and always emphasize on it. IKEA incorporates its history and identity into the company’s branding strategy and has successfully differentiated itself from the competition, certainly, with marketing strategy that focuses on product innovation. PROTON can benchmark the example of IKEA by emphasizing its Malaysia identity in the global market to differentiate
itself and prevent itself from becoming “just another car”. In this way, brand heritage of PROTON can be leveraged in the branding strategy of PROTON.

Differentiating the national identity of PROTON itself is not sufficient to uniquely position the company. The second recommendation serves the purpose to transform the identity and values of PROTON into functional uses rather than “just a statement”. PROTON’s business philosophy of caring and customer focus (“The Proton Way”) can serve as the elements that PROTON should pursue in order to activate its brand heritage. In order to deliver and communicate these elements, PROTON can start from its product design.

Since we identified that brand heritage is positively related to perceived product quality, we suggest that PROTON can leverage its brand heritage by associating the corporate values of “customer focus” and “caring” with the products of PROTON. In other word, PROTON should design its products to meet the requirement of “exact customer needs” and “value-for-money”. For example, when targeting the needs of young working adults with low-medium income, PROTON should improve the fuel efficiency, minimize the price, and remove unnecessary features of its products to meet their needs (value-for-money). When targeting high income segment consumers, performance, elegant design, and features should be emphasized rather than price (exact customer needs). Concluding the above approach, it means that PROTON should be “as specific to the needs of consumers as possible”, which is, a form of niche marketing in automotive industry. In conformance to the outcome of study of Woo & Yap (2007), PROTON must carve a niche in the export market as well. If such approach is communicated to consumers via PROTON’s products at present time, with consistent delivery over time,
PROTON should be able to easily associate itself with the business philosophy of customer focus and caring in future. In other words, PROTON is transforming its brand heritage into functional uses (activating brand heritage). When this happens, consumers’ perceptions towards PROTON’s product quality will be improved in the aspect of “customer focus”, which then leads to satisfaction and trust, and eventually brand loyalty towards PROTON in future.

Finally, extracting the value of brand heritage takes time. Protecting the brand heritage of PROTON is essential. It is important to take note that the effects of brand heritage on other factors will only be seen in the time frame of future. Therefore, extracting the value of brand heritage requires PROTON to continuously work on its brand stewardship function at present time to successfully transform its brand heritage into valuable corporate asset in future (activating and protecting brand heritage). The values of brand heritage are derived from greater customer satisfaction, greater brand loyalty, higher perceived product quality, greater brand trust, and greater customer retention, as identified in our study.

5.3 Limitation of the Study

The first limitation of this research is our sampling population ranges only from year 2008 to year 2011. Car owners who had their PROTON’s cars purchased between year 2008 and year 2011 may not have stronger intention to repurchase than car owners who had their products purchased between year 2005 and 2008. This is due to the fact that according to an industry report by Malaysia Automotive Institute (MAI) the replacement cycle for new vehicle purchases in Malaysia typically ranges from three to four years. Therefore, car owners who had their PROTON’s cars purchased between year 2005 and year
2008 may have stronger intention to repurchase, thus providing information and data with higher accuracy.

The second limitation of this research is the questionnaire collection method via online may have veiled the true identity of the respondent. We are not able to identify whether the particular respondent is the targeted person who is invited to the survey. Although we had successfully filtered and removed questionnaires submitted from the same IP address, we could still not able to confirm that the respondent actually represents the targeted respondent invited to the survey. Therefore, result may bias since false respondents reduce the representativeness of target population for our data.

The third limitation of this research is our data represent only PROTON’s automobile owners in Perak state of Malaysia. In order to accurately depict the repurchase intention of consumers towards PROTON’s automobile, the target population of the research must be set on the basis of whole Malaysia.

5.4 Direction for Future Study

Firstly, we suggest that future researchers who are interested in this research field to conduct their research on PROTON’s automobile owners who had their products purchased between year 2005 and year 2008. This is due to the fact that these owners may have stronger sense of repurchase intention compared to owners who purchased their products between year 2008 and year 2011. The derived results may provide more comprehensive understanding on the repurchase intention of consumers towards PROTON’s automobile.
Besides that, we suggest that future researchers should have other states of Malaysia covered in their sampling area to provide stronger representativeness of Malaysia’s population. It helps to increase the accuracy of our developed framework.

Furthermore, for researchers who intend to conduct similar research on other brands, we suggest that they should investigate the effects of brand heritage on some other factors such as price premium, perceived price fairness, and so forth. This is because that brand heritage remains an under-researched area (Burghausen, 2011). The effects of brand heritage on other consumption factors require more exploratory research.

Finally, since our sampling area includes only Perak state of Malaysia, we suggest future researchers to include other states of Malaysia in their sampling area in order to reduce the bias of result. This is due to the fact that different areas have different demographic profiles, cultures, values, or beliefs system. Expanding the sampling area in other geographical locations will be able to provide different insight.

5.5 Conclusion

In conclusion, we achieved the objectives of our study to develop a framework that explains the relationship between brand heritage and repurchase intention of consumers towards PROTON’s automobile. The framework is able to explain the role of brand heritage in stimulating repurchase intention, providing more insight on branding strategy. We identified that perceived product quality, customer satisfaction, brand trust, and brand loyalty play mediating roles in the relationship. Therefore, we provide PROTON managers with benchmark on how they can leverage these
factors to stimulate repurchase intention. Furthermore, the information collected from respondents in Perak allows PROTON to identify areas of improvement to better fulfill their needs and wants. Last but not least, in academic aspect, our study has open up new field of research area in brand heritage. In practical context, we hope that our research project will pioneer fresh, new and different directions for branding strategy.
REFERENCES


APPENDICES

(APPENDIX 3.1)

Appendix 3.1: Certification Letter

8 February 2012

To Whom It May Concern

Dear Sir/Madam

Permission to Conduct Survey

This is to confirm that the following students are currently pursuing their Bachelor of Marketing (Honors) program at the Faculty of Business and Finance, Universiti Tunku Abdul Rahman (UTAR), Perak Campus.

We would be most grateful if you could assist them by allowing them to conduct their research at your institution. All information collected will be kept confidential and used only for academic purposes.

The students are as follows:

Name of Student | Student ID
--- | ---
Jaslyn Chin Kim Pei | 09ABB02657
Goh Warren | 09ABB09056
Goh Eng Khoo | 09ABB03327
Kha Ching Wee | 09ABB03561
Shim Poh Ping | 09ABB03821

If you need further verification, please do not hesitate to contact us.

Thank you.

Yours sincerely,

Chua Beng Hui @ Bobby Chai Boon Hui
Head of Department
Faculty of Business and Finance
Email: chuabb@utar.edu.my

Wong Lai Soon
Supervisor
Faculty of Business and Finance
Email: lwong@utar.edu.my

Address: No.8, Jalan Bersatu 13/4, 46200 Petaling Jaya, Selangor Darul Ehsan, Malaysia
Postal Address: P.O Box 13384, 50744 Kuala Lumpur, Malaysia
Tel: (603) 7956 2628  Fax: (603) 7956 1923  Homepage: http://www.utar.edu.my
(APPENDIX 3.2)

Appendix 3.2: Questionnaire

Research Project on Consumer Repurchase Intention
Toward Proton’s Automobile

Dear Sir/Madam,

Below are our final year business students who are doing their dissertation and they need your support to complete their study. Kindly provide them the related secondary information for their research purposes.

<table>
<thead>
<tr>
<th>NAME</th>
<th>Student ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kha Ching Wei</td>
<td>09ABB03561</td>
</tr>
<tr>
<td>Goh Eng Khee</td>
<td>09ABB03327</td>
</tr>
<tr>
<td>Goh Warren</td>
<td>09ABB09056</td>
</tr>
<tr>
<td>Jaslyn Chin Kim Pei</td>
<td>09ABB02657</td>
</tr>
<tr>
<td>Shim Poh Ping</td>
<td>09ABB03821</td>
</tr>
</tbody>
</table>

All the information collected is for their academic research purpose, which aims to gather a random selection of quantitative data for analysis purpose.

Your input extend to our students is highly appreciated.

Yours Sincerely,
Consumer Repurchase Intention toward Proton’s Automobile
In Malaysia

Survey Questionnaire

This questionnaire has been designed to collect relevant data of Proton’s automobile owners to assess their repurchase intentions toward Proton’s automobile.

This questionnaire consists of 7 sections. Please answer ALL questions in ALL sections.

1. takes approximately 10 to 20 minutes to complete.
2. and answers will be treated with utmost confidence.

Section 1 – Demographic Profile

This section is optional. However, your input will be greatly appreciated. The returned questionnaires will be treated with utmost confidence and no identities shall be included within our final paper.

1. What is your age?
   - Less than 21 years
   - 21 – 30
   - 31 – 40
   - 41 – 50
   - 51 - 60
   - 60 above

2. Which of the following describe you?
   - Male
   - Female

3. What is your marital status?
   - Single
   - Married

4. What is your employment status?
   - Employed
   - Unemployed
   - Retired
   - Student
   - Self-employed
   - Other (Please Specify):

5. What is your income level?
   - Below RM2,000
   - RM2,000 – RM3,500
   - RM3,500 – RM5,000
   - RM5,000 and above
Section 2 – Brand Trust

This section evaluates your trust level on Proton and how it affects your repurchase intention. Please tick the appropriate box to indicate how much you agree or disagree with the following statements.

1. I believed that the Proton Edar Sdn Bhd is competent in its daily operation.
   ![Rating Scale]

2. I can rely on my Proton’s car to meet my transportation needs.
   ![Rating Scale]

3. I believed that Proton is a trustworthy brand.
   ![Rating Scale]

4. I am willing to purchase any new Proton car.
   ![Rating Scale]

5. Proton’s employees are honest and sincere in addressing my enquiry and concerns.
   ![Rating Scale]

6. Proton Edar Sdn Bhd never abuses any opportunity to take advantage of my property/money at the time I am servicing/purchasing my Proton car.
   ![Rating Scale]
Section 3 – Perceived Quality

This section evaluates your perceived quality of Proton’s product and how it affects your repurchase intention. Please tick the appropriate box to indicate how much you agree or disagree with the following statements.

1. Overall, Proton’s car quality has met my expectation.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

2. Proton’s car has same if not more features than other similar brands.
   - Fuel type, brake system, security, petrol tank size, number of seats, whiskers
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

3. Proton’s car works properly each time I use it for my transportation needs.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

4. Spare parts of Proton’s car can be found easily.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

5. Proton’s car lasts longer than I expected.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

6. Proton’s car has fewer breakdowns than I expected.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

7. I can find service centre to service my proton car easily.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree
Section 4 – Customer Satisfaction

This section evaluates your satisfaction on Proton and how it affects your repurchase intention. Please tick the appropriate box to indicate how much you agree or disagree with the following statements.

1. Overall, I am satisfied with my Proton car.

2. I am satisfied with the price level of Proton’s car.

3. I am satisfied with the performance of Proton’s car.

4. I am satisfied with the attitude and helpfulness of Proton’s staff.

5. I would recommend Proton to my friends and family members.
Section 5 – Brand Heritage

This section evaluates the Brand Heritage of Proton and how it affects your repurchase intention. Please tick the appropriate box to indicate how much you agree or disagree with the following statements.

1. Proton’s brand is sustainable and continuous over the past 20 years.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

2. Proton’s brand is a successful brand.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

3. I am emotionally affected by every Proton’s behavior.
   *e.g., When Proton announced a new car, when Proton designed a new advertisement*
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

4. Proton car works as it is advertised.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

5. Proton’s brand is unique compared to other brands.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree
Section 6 – Brand Loyalty
This section evaluates your loyalty to Proton and how it affects your repurchase intention. Please tick the appropriate box to indicate how much you agree or disagree with the following statements.

1. I am willing to purchase a Proton’s car again.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

2. I am willing to pay a higher price for Proton car over other brands.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

3. It makes sense to buy Proton car instead of any other brand of car, even if they have the same quality and price level.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

4. Even if another similar brand has better features than Proton, I would prefer to buy Proton.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

5. Even if another similar brand has lower price than Proton, I would prefer to buy Proton.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree
Section 7 – Repurchase Intention

This section evaluates your repurchase intention toward Proton. Please tick the appropriate box to indicate how much you agree or disagree with the following statements.

1. I intend to buy a Proton car in the near future.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

2. If I want to buy a car again, I will buy a Proton car.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

3. I actively read Proton’s advertisement from time to time.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

4. I would attend a Proton’s automobile show if there is any in the near future.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

5. If given a right financial condition, I will buy a Proton car.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree
(APPENDIX 5.1)

**Appendix 5.1: PROTON’s Awards and Recognitions from 1999 to 2011**

<table>
<thead>
<tr>
<th>Year</th>
<th>Award Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>Satria GTI - Wheels Magazine - Best Hot Hatch Buy Year 1999</td>
</tr>
</tbody>
</table>
| 2001 | Certificate of Merit for 2001 NACRA Award  
Appreciation Award for sponsoring 'Le Tour de Langkawi’ 2001 event.  
Superbrand Award for Automotive Sector for 2001. |
| 2002 | Best Landscape Competition (Second Place - Factory Category)  
Appreciation Award for Contribution to the Development of Malaysian Motorsports for 2002  
KPMG/The Edge Shareholder Value Award 2002 Sectoral Winner - Industrial Market. The award measured economic profit as a percentage of invested capital.  
Highest Increase in Turnover Award among companies listed on the Kuala Lumpur Stock Exchange for financial year 2002-2003.  
Motor Vehicles and Transport Equipment Sector Leader Award among the top 1,000 Malaysian companies.  
Highest Increase in Net Profit Award among companies listed on the Kuala Lumpur Stock Exchange for financial year 2002-2003. |
| 2003 | Industry Excellence Award 2003, Quality Management Category III.  
Best Landscape Competition (First Place - Factory Category). |
| 2004 | Malaysia’s Best Brand Award.  
National Creativity & Innovation Award 2004  
PROTON Waja - 4.5 star out of a 5 star rating for being the Most Economical and Greenest Sedan in Australia |
<p>| 2005 | Reader’s Digest Super Brand 2005 – Gold Award for Car Category |</p>
<table>
<thead>
<tr>
<th>Year</th>
<th>Award Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Certification of Appreciation for the production of special documentary ‘Kelantan Royal Project 2005’</td>
</tr>
<tr>
<td></td>
<td>Special Membership Certificate to Commemorate Malaysian Industry – Government Group for High Technology’s 10th Anniversary</td>
</tr>
<tr>
<td></td>
<td>Certification of Appreciation in conjunction with Q-Day by Ministry of Co-operation and Entrepreneur Development</td>
</tr>
<tr>
<td></td>
<td>Certificate of Appreciation for the Support on the Karnival Kulim Hi-Tech Park</td>
</tr>
<tr>
<td></td>
<td>Gold Award 48th D.Y.Y.M. Sultans Cup for Malay Badminton of Malaysia 2004</td>
</tr>
<tr>
<td></td>
<td>Certificate of Appreciation from National Anti-Drug Campaign</td>
</tr>
<tr>
<td></td>
<td>Industrial Excellence Award 2003 in Quality Management</td>
</tr>
<tr>
<td>2006</td>
<td>Reader’s Digest Trusted Brand 2006 Gold Award for Car Category.</td>
</tr>
<tr>
<td></td>
<td>Nanyang Siang Pau’s 2006 Chinese New Year Greeting Advertisement Award - Full Colour Category - 5th Runner Up.</td>
</tr>
<tr>
<td>2007</td>
<td>Reader's Digest Trusted Brand 2007 Gold Award for Car Category.</td>
</tr>
<tr>
<td></td>
<td>Winner of Coolest Car of 2006, Awarded for PROTON Satria Neo by The Malay Mail</td>
</tr>
<tr>
<td>2008</td>
<td>Reader’s Digest Trusted Brand 2008 Gold Award for Car Category.</td>
</tr>
<tr>
<td></td>
<td>Asian Auto - VCA Auto Industry Awards 2008 - Best People’s Car Award for PROTON Saga</td>
</tr>
<tr>
<td>Year</td>
<td>Awards and Recognitions</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------</td>
</tr>
</tbody>
</table>
- Best Comeback Brand Award for PROTON  
China Press’ 2008 Chinese New Year Greeting Advertisement Award, Full Colour Category.  
Frost & Sullivan’s 2008 Asean Automotive Awards  
- 2008 Best Model of the Year Award for the Persona.  
Frost & Sullivan Malaysian Manufacturing Excellence Awards 2008  
- Silver Certificate of Merit for Shah Alam Plant.  
Frost & Sullivan Asia Pacific Automotive Awards  
- Best Model Of The Year (Malaysia) 2008 for Proton Persona.  
Frost & Sullivan Malaysian Manufacturing Excellence Awards 2008  
- Gold Certificate of Merit for Tanjung Malim Plant. |
| 2009 | Frost & Sullivan Asia Pacific Automotive Awards  
- Best Model of the Year (Malaysia) 2009 for Proton Saga.  
Reader’s Digest Trusted Brand 2009 Gold Award for Car Category.  
Asian Auto - VCA Auto Industry Awards 2009  
- Best Local Assembly MPV for Exora.  
Asian Auto - VCA Auto Industry Awards 2009  
- Best Local Assembly Sports Car for Satria Neo CPS. |
| 2010 | Frost & Sullivan Malaysia Excellence Awards 2010  
- Best Passenger Car Model of the Year for Proton Saga.  
Frost & Sullivan Malaysia Excellence Awards 2010  
- Best Automotive Debut Model of the Year for Exora  
CIMB Autoworld Car of the Year Awards 2010  
- Best MPV - Overall Value-for-Money for Exora. |
<table>
<thead>
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<tbody>
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<td>2010</td>
<td>Labour Day Achievement Award for the category Competitive Employer Award (Big Corporations)</td>
<td>in conjunction with 2010 Workers’ Day Celebrations</td>
</tr>
<tr>
<td></td>
<td>MITI Industry Excellence Award for the category Quality Management Excellence Award</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>Reader’s Digest Trusted Brand 2011 Gold Award for Car Category</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Frost &amp; Sullivan Malaysia Excellence Awards 2011</td>
<td>- Value-for-Money Car of the Year (1.3L and above) for the Proton Persona.</td>
</tr>
<tr>
<td></td>
<td>Indonesian Otomotif Awards</td>
<td>- “Best Budget MPV in Indonesia” for the Exora.</td>
</tr>
<tr>
<td></td>
<td>Asian Auto – Auto Industry Awards 2011</td>
<td>- “Best People’s Car” for the Saga FL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- “Best Value-for-Money Family Car” for the Inspira</td>
</tr>
</tbody>
</table>

Source: PROTON’s Annual Report from 2004 to 2011

From the above table, we can see that PROTON began to win various product design awards since recent 4 years (2008 – 2011).