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The Impact of Customer Engagement and Selected Higher Order Marketing Constructs on Customer Loyalty: An Empirical Investigation of the Indonesian Airline Industry

A thesis submitted in partial fulfilment of the requirements for the Degree of Doctor of Philosophy in Marketing

at Lincoln University by Raditha D.V. Hapsari

Lincoln University 2015
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by
Raditha D.V. Hapsari

The extant literature illustrates that loyal customers lead to an increase in retention rates, lower customer acquisition costs and higher profits. Therefore, several academics have investigated customer loyalty in the services sector. Studies on the global airline industry have also investigated various aspects of customer loyalty and its antecedents, such as perceived value, brand image, customer satisfaction and service quality. However, to date, no scholars on the airline industry have investigated all the interrelationships between these important constructs using a comprehensive modelling approach. In addition to the recognized customer loyalty antecedents, the construct of customer engagement is also attracting the attention of scholars. However, only limited studies have empirically assessed and focused on the direct relationship between customer engagement and behavioural intentions.

This current study aims to satisfy three research objectives: (1) to analyse the determinant of airline passenger loyalty in the Indonesian airline industry; (2) to analyse the interrelationships among the service quality, perceived value, brand image, customer satisfaction, customer engagement and customer loyalty constructs; and (3) to explore the moderating role of gender on the interrelationships among the aforementioned constructs.

The sample used in this study was based on the perceptions of 250 Indonesian airline passengers in Surabaya and Malang. The data set was analysed using Confirmatory Factor
Analysis (CFA), Structural Equation Modelling (SEM) and a multi-group comparison, to satisfy the three research objectives of this study.

The results show that customer engagement has the most influential effect on passenger loyalty, followed by customer satisfaction. The empirical results of this current study also demonstrate that customer satisfaction has the largest direct effect on customer engagement. In addition to the direct relationships among the investigated constructs, this current study also found that service quality, perceived value and customer satisfaction also indirectly affect customer loyalty through the mediating variables. Moreover, gender has been identified as an important variable that moderates the interrelationships among: brand image, customer satisfaction and customer engagement constructs.

The results of this study provide a comprehensive theoretical model for predicting passenger loyalty in the context of the airline industry including the direct and indirect interrelationships among the investigated constructs. In addition, this study also contributes to the marketing literature by proving the importance of customer engagement in the services sector, especially in the airline industry. The findings of this current study may also assist airline practitioners to design effective marketing strategies and allocate their resources efficiently.

**Keywords**: Service Quality, Perceived Value, Brand Image, Customer Satisfaction, Customer Engagement, Customer Loyalty, Gender, Indonesian Airline Industry, Structural Equation Modelling.
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Chapter 1
Introduction

1.1 Background of the Study

The largest paradigm shift in the marketing discipline is the movement from transactional marketing to relationship marketing (Alrubaiee & Al-Nazer, 2010; Grönroos, 1994; Narteh, Agbemabiese, Kodua, & Braimah, 2013). Transactional marketing focuses on the marketing mix (product, place, promotion and price) and is considered no longer sufficient for developing suitable marketing strategies in today’s rapidly changing environment (Sheth, Parvatiyar, & Sinha, 2012). In this ever-increasing competitive era, business organizations can no longer rely on mass production and mass marketing as customers demand more personalized goods and services. There is also demand for a mutually profitable integration between customers, and goods and services providers in marketing activities (Ashley, Noble, Donthu, & Lemon, 2011; Sheth & Parvatiyar, 1995; van der Aa, Bloemer, & Henseler, 2013). Several scholars recommend adopting relationship marketing as a method for meeting these changing demands (Baker, Buttery, & Richter-Buttery, 1998; Grönroos, 1994; Harker & Egan, 2006). One of the main differences between transactional and relationship marketing is how firms deal with perceived customer value. In transactional marketing, the role of a business organization is the distribution of value through mass marketing, while relationship marketing focuses on facilitating customers in co-creating value through interactions between the customer and the organization (Grönroos, 2011; Harker & Egan, 2006).

Academics agree that successful customer relationship marketing results in long-term customer profitability that can be achieved through increased customer loyalty (Alrubaiee & Al-Nazer, 2010; Berry, 1995; Narteh et al., 2013). Marketing scholars note that creating loyalty provides tangible benefits for business organizations (Andreassen & Lindestad, 1998; Reichheld, Markey Jr, & Hopton, 2000). Specifically, Oliver (2010) claims that a company can enhance its profits by having loyal customers, because it does not need to devote substantial money and resources to attracting new customers. Similarly, Yang and Peterson (2004) contend that loyal customers bring in essential revenue and demand less time and attention from the companies they patronize. In addition, highly loyal customers tend to be more lenient towards customer-service mishaps, exhibit reduced sensitivity towards price, and
spread positive word-of-mouth messages about the company to others (Brunner, Stöcklin, & Opwis, 2008).

Providing an excellent quality of service has been identified as a method for retaining customers, as customers have become critical in evaluating the quality of the service they experience (Chen & Hu, 2013; Kandampully, 1998; Siddiqi, 2011). Several researchers claim that a better quality of service results in an increased level of customer loyalty (Caruana, 2002; Kheng, Mahamad, Ramayah, & Mosahab, 2010; Santouridis & Trivellas, 2010). Moreover, the value of services as perceived by customers, is also acknowledged to have a marked effect on customer loyalty. Hunt and Morgan (1995) and Li, Li, and Kambele (2012) contend that perceived value is associated with worth that individuals in a market segment, or in the mass market, place on the result of using a good or service. Studies in the area of the marketing have found that perceived value plays an important role in influencing loyalty. The more positively that value is perceived, then the greater will be customer loyalty to the business (Cronin, Brady, & Hult, 2000; Kim, Park, Kim, & Ryu, 2013; Yang & Peterson, 2004).

Satisfying customers is a cornerstone of the marketing discipline and is recognized widely by both scholars and practitioners (Hoffman & Bateson, 2001; Kotler & Armstrong, 2010). If customers feel that the value they receive is what they expect or is higher/better than what they expect, then they are satisfied. However, if their expectations of value are higher than what they receive, then they are dissatisfied (Kotler & Armstrong, 2010). In terms of dealing with a business organisation, customers tend to choose an organisation that has a positive image (Lee, Lee, & Wu, 2011). Customer satisfaction and image of a service organisation plays an essential role in positively or negatively affecting customer loyalty (Howat & Assaker, 2013; Ryu, Han, & Kim, 2008; Wu, Yeh, & Hsiao, 2011).

In addition to the well-developed loyalty predictors, the notion of engagement is also recognized as a determinant of customer loyalty. Originally, the idea of engagement was proposed in the context of human resource management (Schaufeli, Salanova, González-Romá, & Bakker, 2002). However, since this construct is also applicable in the area of marketing, scholars have been exploring the importance of this construct, especially in predicting customer loyalty (Brodie, Ilic, Juric, & Hollebeek, 2013; L.D. Hollebeek, 2011; Van Doorn et al., 2010; Verhoef, Reinartz, & Krafft, 2010). However, to date only a few studies have explained the link between customer engagement and customer loyalty (Bowden,
2009; Brodie, Hollebeek, Jurić, & Ilić, 2011; Van Doorn et al., 2010). Brodie, Whittome, and Brush (2009) and Prahalad and Ramaswamy (2004) suggest that customer engagement should be considered as vital in boosting loyalty, since more knowledgeable customers coupled with the rapid growth of information technology make the interaction between customers and businesses essential in creating value. Customer engagement has become part of the extended domain in relationship marketing that shows customers’ psychological connections with a brand. This idea has lead to the prediction that the more a customer is engaged with a particular brand, the more loyal they are towards that brand (Vivek, Beatty, & Morgan, 2012).

As discussed previously, service quality, perceived value, customer satisfaction, brand image, and customer engagement have been acknowledged as the essential predictors of customer loyalty. While these constructs are recognized as important predictors of customer loyalty, scholars also argue that there are interrelationships among these constructs (Clemes, Shu, & Gan, 2014; Clemes, Gan, Kao, & Choon, 2008; Clemes, Wu, Hu, & Gan, 2009; Park, Robertson, & Wu, 2006; Zins, 2001). Thus, this current study will provide a comprehensive insight into how services marketing constructs affect customer loyalty and will also discuss the interrelationships among the constructs. Furthermore, the integration of customer engagement as new a construct strengthens the value of the comprehensive model of customer loyalty and contributes to the marketing literature.

The services sector plays an important role in most economies (Lee, Ribeiro, Olson, & Roig, 2007; Tam, 2004) and comprises a number of industries, of which transportation contributes in a significant portion (Group, 2005). Recently, there has been an increased focus on managing and marketing the services provided by the airline industry. The airline industry is very competitive and passenger air miles continue to increase ("Air Passenger Market Analysis," 2014; Chen & Hu, 2013; Curry & Gao, 2012; Meyer-Waarden, 2013; Novani & Kijima, 2012). For example, the number of passengers travelling by aeroplane in Asia and the Pacific was about 207 million in 2012 and the figure increased by 7% in 2013 (So, 2013).

In addition to the fast growth characteristics and as with other service organizations, airline companies are involved in fierce competition. The airline industry requires a continuous people-intensive interaction process, and therefore a relationship marketing approach is highly appropriate, especially in retaining loyal customers in the face of tough competition.
(Gallarza, Gil-Saura, & Holbrook, 2012). The formation of airline passenger loyalty schemes have attracted the attention of a number of academics. The issue of passenger loyalty cannot be neglected in the domain of the airline industry, if an airline company intends to have repeat customers (An & Noh, 2009; Chen & Hu, 2013; Curry & Gao, 2012; Meyer-Waarden, 2013; Nadiri, Hussain, Ekiz, & Erdogan, 2008; Novani & Kijima, 2012; Pakdil & Aydin, 2007; Park, 2010; Saha & Theingi, 2009; Yang, Hsieh, Li, & Yang, 2011).

In addition to the higher order constructs investigated in this current study, gender has also been recognized as an important moderating variable in several studies (Karatepe, 2011; Ndubisi, 2006). The significant moderating role of gender means that the resulting behaviour-related marketing is different for male customers and female customers (Jin, Line, & Goh, 2013; Mittal & Kamakura, 2001). Similar to other business sectors, there is also a need to understand the importance of gender as a moderating variable in the airline industry (Westwood, Pritchard, & Morgan, 2000).

The literature identifies the important role that the airline industry plays in the service sector. However, to ensure long-term customer profitability, customer loyalty and its predictors still need to be empirically analysed. Furthermore, the discussion on the moderating effect of gender on the interrelationships among the constructs will instigate a deeper understanding of these relationships in the Indonesian airline industry. An overview of the Indonesian airline industry will be discussed in the next section.

### 1.2 Overview of the Indonesian Airline Industry

Because of the country’s geographical dispersion, air transportation plays an important role in Indonesia’s transportation system. According to the Indonesian Ministry of Transportation, by October 2014, there were 17 regular commercial airlines serving Indonesian passengers, nationally. However, the figure of 17 does not include some local air charter services. The 17 airline companies serve a population of about 250 million people through 74 airports ("Daftar Maskapai," 2014).

Even though air transport has an important role to play in the Indonesian transportation system, the track record of the Indonesian airline industry has not always been good. Indonesian airlines were banned from the European Union between 2007 and 2009 for safety reasons, there having been a large number of accidents over that period. At the
beginning of 2007, 102 people on an Indonesian Adam Air flight were killed when the plane crashed into the sea in Majene Strait, Indonesia. In March 2007 a Garuda Indonesia Boeing 737 strayed from the runway killing 21 people. The Indonesian airline statistic of 3.7% fatal accidents for every million take-offs was considerably higher than the 0.25% global average (Gelling, 2009).

After The European Union lifted the ban on Indonesian airlines in 2009, Indonesian airline officials continued to work hard to overcome safety problems, one outcome of which was the creation of the National Transportation Safety Commission (NTSC) which continued to improve Indonesian airline safety ("Aviation Safety," 2000). Gelling (2009) was able to report that the Garuda Indonesia Airline was in receipt of an air safety certification from the International Air Travel Association (IATA) which is regarded as the world’s strictest airline association.

Because of the improvements in both service and safety performance, as well as the improvements in infrastructure made by the Government, the Indonesian airline industry began to regain the public’s trust (Rosarian & Chandra, 2011). In addition, Rosarian and Chandra (2011) reported that the Indonesian Airline industry’s growth was predicted to reach 10% per year during the period 2010-2014. The number of Indonesian domestic flights were projected to be in the top ten of the world’s market, and were projected to rank sixth in the world in terms of growth of airline destinations by 2014. This estimate was supported by data from the "Statistik Angkutan Udara" 2014), which noted that there was a positive trend in the number of scheduled airline passengers between 2009 and 2013 (see Table 1.1). Table 1.1 shows passenger numbers from 2009 to 2014 for both international and domestic airlines.
Table 1.1  Indonesian Scheduled Airline Passengers 2009 - 2014

<table>
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<tr>
<th></th>
<th>2009</th>
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<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>Part of 2014</th>
</tr>
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<tr>
<td>Domestic</td>
<td>33,356,493</td>
<td>42,690,966</td>
<td>53,311,102</td>
<td>56,912,912</td>
<td>56,318,775</td>
<td>8,877,356</td>
</tr>
<tr>
<td>International</td>
<td>6,558,790</td>
<td>9,241,204</td>
<td>10,247,650</td>
<td>11,665,681</td>
<td>9,176,030</td>
<td>414,904</td>
</tr>
<tr>
<td>Total</td>
<td>39,915,283</td>
<td>51,932,170</td>
<td>63,558,752</td>
<td>68,578,593</td>
<td>65,494,805</td>
<td>9,292,260</td>
</tr>
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Source: ("Statistik Angkutan Udara," 2014)

The IATA (2015) has predicted that by 2035, the Indonesian airline industry will be in the sixth largest market of air travel in the world. In a prediction similar to the IATA’s, New Zealand Trade Enterprises ("Indonesia," 2015) forecast that the Asia-Pacific region’s fleet’s growth would be considerable (around 6.6%) over the following 10 years.

While high growth has been predicted for the Indonesian airline industry, several problems such as shortages of crew and aeroplanes, inadequacy of airport facilities and safety, and technology and maintenance issues (Schonhardt, 2012) need to be resolved by the airlines as well as by the government. The many different ways these problems can be perceived by passengers can affect their trust in, and loyalty towards Indonesian airlines (IATA, 2015).

In addition, the Association of South East Asian Nations (ASEAN) is preparing to apply an open skies policy in 2015. When this policy is fully operationalized, the competition within the South East Asian airline industry will increase (Forsyth, King, & Rodolfo, 2006). The single aviation market will allow the airline companies from the ASEAN countries (Brunei Darussalam, Cambodia, Indonesia, Laos People’s Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam) to fly freely across the member country borders. This policy is designed to enhance tourism and trade between the countries. Alternatively, the policy will increase competition, and Indonesia is projected to face the most competition. Indonesia is the biggest and most populated country in South East Asia, consisting of five big islands and more than 17,000 small islands with around 250 million population. As a result, Indonesia is considered to be the biggest airline market in South East Asia (Abeyratne, 2014). In order to increase the competitive advantages that will lead to
success in the new ASEAN airline environment, the Indonesian airline industry will need to build their customer base and retain their existing customers ("Garuda Incar 10 Juta Penumpang ASEAN," 2015).

Thus, the Indonesian airline industry should concentrate on the factors influencing customer loyalty. This current research has identified four research gaps in the literature. Closing these research gaps will contribute to the services marketing literature and aid airline marketing practitioners in developing and implementing their marketing strategies. The four research gaps will be discussed in the next section, followed by the research objectives and the projected implications resulting from this study.

1.3 Research Gaps

The first research gap is a need to investigate the determinants of customer loyalty in the Indonesian airline industry. The second research gap is a need to analyse the interrelationships among the higher constructs, in the Indonesian airline industry. The third gap is a need to investigate the moderating effects of gender on customer loyalty and its antecedents in the Indonesian airline industry.

1.3.1 The Need to Investigate the Determinants of Customer Loyalty in the Indonesian Airline Industry.

Service quality, perceived value, customer satisfaction, and brand image are recognized as important variables that affect customer loyalty. Several studies have documented the significant effect of these constructs on customer loyalty in various industries: for example, Suhartanto, Clemes, and Dean (2013) in the hotel industry; Clemes et al. (2014) in telecommunication services; Ryu et al. (2008) in the restaurant industry; and Brown and Mazzarol (2009) and Clemes, Cohen, and Wang (2013) in the education industry.

To understand the nature of customer loyalty in the service sector, there is a need to comprehensively investigate the interrelationships among these constructs (Edward & Sahadev, 2011). To date, some studies have assessed the relationships among these constructs in the service sector. However, the exact interrelationships among the constructs remains equivocal (Brady & Robertson, 2001; Edward & Sahadev, 2011). For example, Kandampully, Juwaheer, and Hu (2011) show that service quality is a robust determinant of image. However, Andreassen and Lindestad (1998), Clemes et al. (2014) and Saleem and
Raja (2014) claim that corporate and brand image significantly influence an individual’s perception of the quality of the service offered.

In addition to the debatable relationships between brand image and service quality, previous studies also show an unclear relationship between the other constructs under investigation in this current study (Brodie et al., 2011; Brodie et al., 2009; Clemes et al., 2009; Kandampully et al., 2011). Zins (2001), Amin, Isa, and Fontaine (2013) and Jani and Han (2014) contend that customer satisfaction does have a significant effect on brand image. However, other researchers have identified an inverse relationship where brand image is affected by customer satisfaction (Andreassen & Lindestad, 1998; Castro, Martín Armario, & Martín Ruiz, 2007; Clemes et al., 2014). Similar to the relationship between brand image and customer satisfaction, the interrelationships among service quality, customer satisfaction and customer loyalty are also contestable (Brodie et al., 2009; Edward & Sahadev, 2011). Therefore, there is a need to investigate the interrelationships among these important constructs in the context of the airline industry.

In addition to the issues surrounding the ambiguous relationships between customer loyalty and its antecedents, Oh and Parks (1997) and Han, Lee, and Lee (2011) suggest that introducing new variables and/or modifying the existing frameworks may enhance the predictive power of subsequent models. Thus, integrating a new construct into an existing model should improve the comprehensiveness of the model and the analysis (So, King, Sparks, & Wang, 2014).

Recently, the construct of engagement has also been recognized as an antecedent of customer loyalty (Bowden, 2009b; Brodie et al., 2011). Drawing from the notion of employee engagement, marketing scholars have been developing the dimensions of customer engagement (Brodie et al., 2011; L.D. Hollebeek, 2011; Hollebeek, Glynn, & Brodie, 2014; So, King, & Sparks, 2012). While some studies have oriented their investigations towards the dimensions and measurements of this construct, a few studies have used this construct to predict customer loyalty, and to investigate the interrelationships between this construct with other important constructs, such as service quality, perceived value, customer satisfaction, and brand image (Hollebeek et al., 2014; So et al., 2012; So et al., 2014). Scholars suggest that a further integration of the customer
engagement construct within the complex framework of comprehensive models will contribute to both theory and practice (Hollebeek et al., 2014; Wei, Miao, & Huang, 2013).

Furthermore, most of the studies examining the relationships between customer loyalty and its antecedents, including service quality, perceived value, customer satisfaction, and brand image are based on the perceptions of North American customers of various service industries (Han, Kwortnik, & Wang, 2008). Dabholkar et al. (1996) and Grove et al. (2003) recommend that international studies involving different cultures are required. In accordance with these views, studies measuring the influence of service quality, perceived value, customer satisfaction, brand image, and customer engagement on customer loyalty in the Indonesian airline industry are therefore essential as marketing studies on the Indonesian airline industry are sparse.

1.3.2 The Need to Analyse the Interrelationships Among the Higher Order Constructs, in the Indonesian Airlines Industry.

Some studies in the service area illustrate that service quality, perceived value, brand image, and customer satisfaction are important constructs due to their influence on customer loyalty (Clemes et al., 2013; Lai, 2014; Ryu et al., 2008). Empirically, researchers have found a significant direct effect of these constructs on customer loyalty (Brunner et al., 2008; Dagger, Sweeney, & Johnson, 2007; Howat & Assaker, 2013; Taylor & Baker, 1994). Additional studies in the domain of the global airline industry have also found a significant direct effect of these constructs on customer loyalty (Cronin et al., 2000; Kuo, Chang, Cheng, & Lai, 2013; Patterson & Spreng, 1997).

With respect to the development of multivariate techniques in business and management, today it is possible for scholars to investigate both the direct and indirect effects between constructs (Preacher & Hayes, 2004). An investigation into the indirect effects between constructs will provide better insight into the relationships among the investigated constructs. Although scholars have acknowledged the importance of determining the indirect relationships among constructs generally, to date, in the domain of the global airline industry, most research has only investigated the direct relationships (Curry & Gao, 2012; Hussain, Al Nasser, & Hussain, 2015; Park, Robertson, & Wu, 2004).
As well as the direct effects on customer loyalty, previous studies on various services show that service quality, perceived value, customer satisfaction and brand image have indirect effects on customer loyalty through the intervening variables (Bontis, Booker, & Serenko, 2007; Cronin et al., 2000; Kuo et al., 2013). As well as their role as antecedents of customer loyalty, these constructs (i.e. customer satisfaction, brand image, and customer engagement) may also play a role as intervening variables (Bontis et al., 2007; Cronin et al., 2000; Kuo et al., 2013; Van Doorn et al., 2010). Thus, there is a need to investigate the role of customer satisfaction, brand image, and customer engagement as mediating variables in the relationships among the constructs.

### 1.3.3 The Need to Investigate the Moderating Effects of Gender on Customer Loyalty and its Antecedents in Indonesian Airline Industry.

The third research gap relates to a need to explore the moderating effects of gender on customer loyalty, and its determinants in the airline industry. Several studies on the differences in behaviour between male and female customers have been conducted on various service industries (Jin et al., 2013; Kwun, 2011; Ladhari & Leclerc, 2013). However, several studies examining the differences between the behaviour of male and female customers’ are mostly based on qualitative or descriptive analysis that do not comprehensively explain the differences in path models (Meyers-Levy & Maheswaran, 1991; Mittal & Kamakura, 2001). Only a few empirical published studies have been done that have investigated the moderating effect of gender on the interrelationships among the constructs under investigation in this current study in an airline context (Homburg & Giering, 2001; Jin et al., 2013; Kwun, 2011). Thus, there is a need to empirically assess the moderating effect of gender in the context of the Indonesian airline industry.

This study aims to fill the three research gaps by satisfying three research objectives as discussed in the next section.

### 1.4 Research Objectives

An integrated conceptual research model is developed in this current research in order to examine the potential interrelationships between all of the service marketing constructs identified in this study. This study has three specific research objectives:
1. To analyze the determinants of customer loyalty in the Indonesian airline industry.

2. To explore the interrelationships among the higher order constructs in the Indonesian airline industry.

3. To explore the moderating effects of gender on customer loyalty and its antecedents, in the Indonesian airline industry.

Satisfying the three research objectives will provide a theoretical and practical contribution to the marketing literature as discussed in the next sections.

1.5 Contributions of this Study

From a theoretical standpoint, this study will make several contributions. On one level, this current study will add to the marketing literature by providing important information about the interrelationships between loyalty and its antecedents (service quality, perceived value, customer satisfaction, brand image, and customer engagement). This analysis will be beneficial as few studies have addressed these relationships comprehensively in the context of the global airline industry (Lai & Chen, 2011; Mikulić & Prebežac, 2011; Park et al., 2006). Furthermore, the integration of the customer engagement construct in the conceptual research model will help academics to determine the role of customer engagement in enhancing customer loyalty in a direct manner, and in an indirect manner, through mediation.

This research will also contribute to understanding the theoretical aspects between male and female passengers’ perceptions of perceived value, customer satisfaction, brand image, customer engagement and customer loyalty, in an Indonesian airline context.

Overall, this study will fill a research gap in the marketing literature as the global airline industry has been the subject of very few empirical studies (M. D. Clemes et al., 2008; Martínez-Garcia, Ferrer-Rosell, & Coenders, 2011; Ringle, Sarstedt, & Zimmermann, 2011; Surovitskikh & Lubbe, 2008). In particular, published empirical studies on the Indonesian airline industry are sparse.
This study also makes two major managerial contributions. Firstly, knowing the relationships between the constructs that create customer loyalty means that Indonesian airline industry managers and marketing personnel can allocate their resources efficiently in order to enhance customer loyalty. Secondly, marketing personnel can use their knowledge of the differences between male and female passengers’ perceptions of service quality, perceived value, customer satisfaction, brand image, customer engagement and customer loyalty, to develop marketing strategies that will optimize profitability through higher customer retention levels.

1.6 Structure of the Thesis

This current study consists of six chapters.

Chapter 1 begins with the background of the study, followed by a description of the Indonesian airline industry, research gaps, and the contributions of the study.

Chapter 2 reviews the literature related to relationship marketing, customer loyalty, service quality, perceived value, brand image, customer satisfaction and customer engagement. A discussion of the literature pertaining to gender as a moderating variable is also presented in chapter 2.

Chapter 3 shows the conceptual model, followed by a description of the theoretical framework used in this study to formulate the 21 hypotheses.

Chapter 4 discusses the research method and consists of the research instrument development procedure, the data collection procedure, and finally the data analysis procedures: Confirmatory Factor Analysis (CFA), Structural Equation Modelling (SEM), the mediation test, and the multi group moderating test.

Chapter 5 presents the results of the data analysis and begins with a description of the demographic characteristics of the sample, followed by the preliminary data analysis, CFA, and the results of the hypotheses tests (direct effect, mediating effect, and moderating effect).

Chapter 6 presents a discussion of the research findings. The chapter begins with a discussion of the results pertaining to the customer loyalty antecedents, followed by a discussion of the mediation effects between the constructs. The moderating role of gender
between the constructs under investigation in this current study are also discussed. The theoretical and managerial implications of the results are discussed and the limitations of this study are identified. The directions for future research are also noted and discussed in this chapter.
Chapter 2

Literature Review

2.1 Introduction

This chapter provides a review of the literature regarding the nature of services and services marketing. The nature of services and how the service sector assesses the value of its customers, and the approach used in maintaining relationships between firms and customers, are discussed. This is followed by a discussion on customer loyalty, as an outcome of a relationship marketing approach, and a review of the major antecedents of customer loyalty (service quality, perceived value, customer satisfaction, brand image and customer engagement). The customer loyalty antecedents will be discussed following a chronological path of how the antecedents have been developed in the literature, beginning with service quality as the original loyalty antecedent through to customer engagement as the latest development in the area. While the discussions of service quality, perceived value, customer satisfaction, brand image, and customer loyalty were drawn primarily from the marketing literature, the customer engagement discussion has also been drawn from human resources literature. In addition, gender as a moderating variable is also discussed based on points of view obtained from the psychology and marketing literature. Each sub-section will define the constructs and discuss their importance, as well as the interrelationships among all of the constructs included in this study. Thus, this chapter will establish a theoretical basis for satisfying the research objectives and for providing the operationalization of the constructs used in this study.

2.2 The Nature of Services

The characteristics of services differ from the characteristics of physical goods. Generally, marketing academics define products as goods, services or ideas (Pride & Ferrell, 2010). Such products can be characterised as tangible, intangible or conceptual. Products are also classified into goods and services since goods and services have different characteristics. A ‘good’ is defined as a tangible product that can be seen and held by customers and which has ownership rights which can contribute to people’s wealth (Lovelock & Wirtz, 2011; Pride & Ferrell, 2010). On the other hand, a ‘service’ is defined as an intangible product resulting from human or mechanical efforts or activities which will have benefits but not ownership
rights (Kotler & Armstrong, 2010; Pride & Ferrell, 2010). Furthermore, Kotler and Armstrong (2010), Pride and Ferrell (2010), and Clemes and Brush (2005), describe the characteristics of a service as intangibility, inseparability, variability, perishability and ownerships as follows:

1. Service intangibility refers to the nature of a service that cannot be seen or touched before the service is bought or before the customers have experienced it.
2. Service inseparability means that the service provider and the service itself cannot be separated. When customers buy a service from a company, the employee and the technology to support the delivery of the service is a part of what the customer buys. Furthermore, service inseparability also means that the time to produce and consume the service cannot be separated. Its consumption will occur in the same time as its production.
3. Service variability means that the quality of service can be various, depending on who, when, where and how the service is delivered, as the nature of human behavior makes it difficult to deliver an exact same quality of service for every customer.
4. Service perishability means that the service cannot be stored for later consumption.
5. Ownership for many services is not possible as customers often only have access or use of a facility or service.

Academics and practitioners agree that in optimizing a marketing strategy for manufactured goods, the 4-Ps (product, price, place/distribution and promotion), also known as the marketing mix, are essential ingredients. The marketing mix is important in services marketing (Wirtz, Chew, & Lovelock, 2012). However, the services marketing literature agrees that in the service sector the traditional marketing mix is not sufficient because of the fundamental differences between goods and services (Lovelock & Wirtz, 2011; Wirtz et al., 2012). To address these differences, another three P’s have been added to better manage the customer interface. The 7-Ps in services marketing have been summarized by Wirtz et al. (2012) as:

1. Product. A product is an essential focal point that creates customer value for services and goods. If a service firm is to satisfy the needs and wants of customers, the core service needs to be supported by other service elements such as the competence and courtesy of service personnel.
2. Place and time. In goods and service products, place refers to the distribution channel. In services marketing, Wirtz et al. (2012) link the place element with the time element since place and time are both considered important elements that can be evaluated by customers concurrently. The convenience of place and prompt service delivery are essential to a service marketing strategy.

3. Price. Price is often associated with the value that is offered by the service and what the customer is willing to spend to get the service.

4. Promotion. This element refers to the communication to or with customers about a service. Wirtz et al. (2012) assert that promotion elements play three important roles: to inform and advise customers relating to how to use the service; to persuade customers to buy the service; and to encourage customers to take specific action relating to the service. In services marketing, promotion is also usually linked with educating customers about other marketing mix elements, such as benefits, where to get the service and how to get the best results from the service.

5. Process. The process element of service is related to the benefit of the service for customers and how the service will be delivered. One aspect of services is the variability. Thus, standardized procedures are needed to minimize the inconsistency of service outcomes.

6. People. Service personnel are one of the key elements of a service firm, alongside technology and procedures. It is important for a service organization to have skillful, competent and loyal employees.

7. Physical evidence. Even though a service is an intangible product, the design of the building, the interior and the rest of the physical environment needs to be carefully considered. Wirtz et al. (2012) claim that physical evidence is an important factor affecting customer satisfaction.

When customers patronize services, the interaction between customers and service personnel is also essential. The service encounter, which is the time during which customers interact with service personnel, can be classified into three levels: low-interaction, medium-interaction and high-interaction. A low-interaction service involves only a small interaction between customers and service personnel and it is usually a highly standardized quality of service. Examples of low-interaction service encounters include cable TV, internet banking and online shopping (Lovelock, Patterson, & Wirtz, 2011).
Repair shops and movie theatres are examples of medium-interaction service encounters. For these services, the interaction between customers and service personnel is more than the low-interaction service but is still limited. However, the service personnel sometimes will have a chance to involve customers in the process of service delivery (Lovelock et al., 2011).

The next level of the service encounter range is high-interaction service. This level can be considered as a pure service, because there is an intense interaction between the service personnel and customers (Lovelock et al., 2011). Hotels, airlines and restaurants are examples of high-interaction service encounters. The level of service interaction is also needed to be considered when a company formulates its marketing strategy.

Services can also be classified into three types based on the service processes: (1) Professional services, for organizations that provide highly customized services with long interaction between customers and service personnel (doctors, consultants, architects); (2) Mass services, for organizations that provide services with minimal customizations, little time interaction between customers and service personnel and involve many customers in the service delivery (airlines, restaurants); (3) service shops, for organizations that fall between professional services and mass services, with medium levels of customization and medium time interaction between customers and service personnel (retail banks, hotels) (Clemes, Mollenkopf, & Burn, 2000; Silvestro, Fitzgerald, Johnston, & Voss, 1992)

In conclusion, services are different from goods and their special characteristics need to be addressed by the types of marketing strategies that can be effectively employed (Pride & Ferrell, 2010; Wirtz et al., 2012). Furthermore, the focus and approach used in marketing activities including the level of service interaction, also need to be considered for meeting the service organizations’ objectives. Marketing services strategically is, and should be different from manufactured goods marketing. The intangibility of services means that customers are a very important part of the service consumption process. As such, building a strong relationship with customers is very important for services organizations (Hoffman & Bateson, 2001). There are two major marketing approaches that can be applied by business organizations and these approaches will be discussed in the next section.
2.3 Transactional and Relationship Marketing

As the nature of goods and services are different, it is understandable that organisations have developed different ways of marketing goods and services in order to achieve the organization’s goals. As the interaction between the producer and the customer is much higher in the service sector than in the manufactured goods’ sector, services organizations need to focus on reaching their goals based on maximising customer profitability (Kumar, Dalla Pozza, Petersen, & Shah, 2009; Lovelock & Wirtz, 2011). This discussion follows two approaches that companies can use to increase profits: (1) sales volume, known as transactional marketing, and (2) customer profitability, known as relationship marketing. Furthermore, the characteristics of relationship marketing that are the best approach for gaining sustainable customer profitability are also discussed.

For decades, companies have focused on the quantity of sales (unit) in order to get the greatest profit through mass production, but for many firms today the mass production method is no longer appropriate. Grönroos (1999) and Peck, Christopher, Clark, and Payne (2013) claim that in the modern era of high technology and global competition, products and services are becoming less-standardized and customers are demanding more personalized products and services. Furthermore, technological and communication advances make one-to-one exchange and interactive dialogue between buyer and seller possible (Baker et al., 1998).

In general, there are two opposing marketing approaches that can be applied by a business organization: transactional marketing and relationship marketing. The transactional marketing approach focuses on maximizing the number of sales, while the relationship marketing approach focuses on building a relationship between a company and its stakeholders. Relationship marketing is progressing because scholars see that mass marketing does not fit customer needs anymore, especially in the services industry (Baker et al., 1998; Christopher, Payne, & Ballantyne, 2013; O’Malley & Tynan, 2008). The ultimate goal of relationship marketing is to enhance customer equity by acquiring new customers and taking care of existing customers (Kotler & Armstrong, 2010).

While there is no consensus regarding a precise definition for relationship marketing, scholars tend to describe the concept with similar key ideas (Alrubaiee & Al-Nazer, 2010). The first definition of relationship marketing by Berry (1983) as cited in Morgan and Hunt
(1994), described relationship marketing as the activities of organisations to appeal, maintain and improve their connections with customers. Grönroos (1996a) defines relationship marketing as the presence of a relationship between a company and its environment, such as customers, distributors, suppliers, and other partners. Similarly, Gummesson (1994) divides relationship marketing into three concepts: relationship, network, and interaction. Gummesson (1994) further explains that relationship marketing begins as a relationship between two parties which can grow into a network where it includes complex interactions. In addition to these definitions, Peck and Wiggins (2006) maintain that the objective of relationship marketing is to mutually enhance connections between sellers and buyers in order to create more satisfying exchanges and value.

Regarding the relationship between a company and its customers, Rafiq, Fulford, and Lu (2013) believe that a company will gain more net benefits from the retention of a loyal customer than in the attraction of a new customer. By applying relationship marketing, the connection between the customers and the company will last longer since relationship marketing will create a personal bond between them.

Concern, trust and commitment are the characteristics of relationship marketing (Buttle, 1996a). The concern of relationship marketing is customer satisfaction by providing positive quality of service and building interpersonal communication with the customers (Grönroos, 2000). When a firm builds interrelationships with customers, then customer trust and commitment will be enhanced. However, in services marketing, the establishment of loyalty including trust and commitment is challenging, due to the special characteristics of services, such as the intangible and inseparable characteristics.

In summary, relationship marketing today is considered to be a fully developed concept, and is a strategy well suited to services marketing, when the development and management of long-term customer-company relationships is important. Services companies need to focus on the criteria of customer loyalty as part of their effort to build a strong relationship with its customers. By applying customer relationship marketing, a business organization will obtain long-term customer profitability through customer loyalty (Buttle, 1996a; Kotler & Armstrong, 2010; Peck & Wiggins, 2006). Customer loyalty as one of the customer relationship objectives, will be discussed in the next section.
2.4 Customer Loyalty

Nowadays, businesses are aware of the importance of retaining their customers, as part of an effective business strategy for achieving customer relationship goals (Heskett, 2002; McMullan & Gilmore, 2008). In order to gain a thorough understanding of customer loyalty, the following discussion will examine its importance, the evolution of its definition, and its antecedents.

The benefit of retaining loyal customers has been widely discussed by academics (Bennett & Rundle-Thiele, 2002; Chen & Hu, 2010; Dagger & David, 2012; Dick & Basu, 1994; Liu, Guo, & Lee, 2011). Academics note that customer loyalty can boost profitability through sales (Hallowell, 1996; Heskett, 2002). In addition, the activity involved in retaining loyal customers is cheaper than the activity involved in attracting new customers (Reichheld et al., 2000; Rundle-Thiele, 2005). As a consequence, there have been numerous studies on customer loyalty (Chaudhuri & Holbrook, 2001; Dick & Basu, 1994; Fullerton, 2014; Parasuraman & Grewal, 2000; Srinivasan, Anderson, & Ponnavolu, 2002; Verhoef, 2003).

However, there is no academic consensus regarding how loyalty may be shown and what exactly builds loyalty (Bandyopadhyay & Martell, 2007; Li & Petrick, 2008). Earlier studies defined loyalty as re-purchasing behaviour or the relative volume of the same brand purchased (Tellis, 1988; Tucker, 1964). Interestingly, more recent studies claim that the term loyalty not only refers to repeat purchases, but it also can refer to preference, commitment, retention, allegiance and willingness to recommend the brand to other people (Bennett & Rundle-Thiele, 2002; Li & Petrick, 2008; Reichheld et al., 2000).

Most of the early studies on loyalty defined loyalty as behavioural manifestations, including re-patronizing or re-buying products/services (Jacoby & Kyner, 1973; Tellis, 1988). The study of customer loyalty is becoming more comprehensive by adding attitudinal loyalty as a psychological facet (Chiou & Droge, 2006; Gounaris & Stathakopoulos, 2004; Huddleston, Whipple, & VanAuen, 2004). The concept of attitudinal loyalty was first noted by Jacoby and Chestnut (1978) who distinguished behavioural loyalty from psychological/attitudinal loyalty definitions.

The notion of attitudinal loyalty emerged because ways of measuring customer loyalty were inadequate. Where loyalty is assessed solely by counting re-purchasing behaviour, by
situational pressures, or without being accompanied by attitudinal influences, it can be also called “spurious loyalty” (Dick & Basu, 1994). Thus, attitudinal loyalty becomes important in order to define more accurately customer loyalty (Bandyopadhyay & Martell, 2007; Suhartanto et al., 2013).

There is a process for becoming a loyal customer according to Oliver (1999). The first phase is called cognitive loyalty, namely, a consumer’s belief about a brand. Consumers may acquire information from previous knowledge or from information-based experiences. The next phase, affective loyalty, refers to cumulative satisfaction leading to the brand forming a commitment in a consumer’s minds. The third phase of loyalty development is conative loyalty, also called behavioural intention. Conative loyalty is formed by a positive effect towards the brand, influencing the commitment to re-purchase. Attitudinal loyalty consists of three gradual stages beginning with the cognitive, then the affective, and then the conative as the highest stage of attitudinal loyalty. Oliver (1999) also proposes four stages of loyalty: cognitive loyalty, affective loyalty, conative loyalty, and action loyalty. Action loyalty, or behavioural loyalty will be discussed further in the next part of this literature review.

Some academics argue that measuring loyalty from a behavioural point of view is the best way to evaluate a brand’s position among others, and to predict purchase probabilities, as well as to reduce promotion costs (DuWors & Haines, 1990; O’Malley, 1998; Oppermann, 2000; Prayag, 2012). However, exclusive reliance on behavioural loyalty to assess customer loyalty can disguise spurious loyalty, as re-purchasing or re-patronizing behaviour might be influenced by situational or cost considerations (Dick & Basu, 1994). Similarly, Odin, Odin, and Valette-Florence (2001) maintain that from a practical point of view, companies might have difficulty encouraging repeat purchase behaviour since they do not have enough information about the actual cause of behavioural loyalty.

In order to answer the critiques (Dick & Basu, 1994; Odin et al., 2001; Oppermann, 2000) of attitudinal-based and behavioural-based loyalty, Jacoby & Chestnut (1978; as cited in Oppermann (2000)), proposed that to be loyal, a customer must re-patronize the brand as well as have a positive attitude towards it. The tenet of composite loyalty adapted by some other academics (Dick & Basu, 1994; Oliver, 1999; Oppermann, 2000) presents a customer loyalty framework consisting of both attitudinal and behavioural aspects. In accordance with other studies on composite loyalty, Oliver (2010) reports that loyalty is built through four
stages: i.e. cognitive loyalty or customers’ basic knowledge about the brand; followed by affective loyalty which includes emotional preferences; to conative loyalty or commitment to re-purchase or re-patronize; and lastly action loyalty.

Conative loyalty can also be described as behavioural intentions, because in this stage customers are holding a commitment to re-purchase the service (Oliver, 1999). Attitudinal loyalty is essential in developing customer behavioural loyalty, because the knowledge of customers’ attitudes and customers’ re-patronizing intentions, is recognised as a robust antecedent of customer behavioural actions (Ajzen & Fishbein, 1980; Bennett & Rundle-Thiele, 2002).

The level of customer behavioural intentions as the proxy of customer loyalty is affected by various factors (Kandampully et al., 2011; Sirdeshmukh, Singh, & Sabol, 2002). However, Bennett and Rundle-Thiele (2002) note that the antecedents of customer loyalty depend on the characteristics of the industry. For the services sector, service quality, perceived value, customer satisfaction, and brand image have been extensively discussed as the antecedents of customer loyalty that can be used to build customer loyalty, in order to enhance long-term customer profitability (Baker et al., 1998; Kim & Lee, 2011; Lai, Griffin, & Babin, 2009; Lee, Lee, & Yoo, 2000; Ravald & Grönroos, 1996).

In addition to the widely acknowledged marketing constructs that have been reviewed, academics (Kotler & Armstrong, 2010) argue that adding a new construct to a model will enhance the predictive power of the model. Thus, customer engagement as a new developing construct is added to the model in this study and its integration is expected to provide a more thorough analysis (Brodie et al., 2013; Oh & Parks, 1997). Service quality, perceived value, customer satisfaction, brand image and customer engagement as customer loyalty antecedents, will be discussed in turn in the following sections. The discussion on customer loyalty antecedents will be based on how the construct has been developed in the literature. The discussion begins with service quality which is considered to be the earliest developed variable for measuring customer loyalty, through to customer engagement as an emerging construct in the service marketing literature.
2.5 Service Quality

Service quality has been widely accepted to be an important antecedent of customer loyalty. This discussion will begin with the importance of service quality, followed by the definition, then the method used for measuring service quality, and then finishing with service quality’s relationships with customer loyalty and other customer loyalty antecedents.

Service quality has been widely acknowledged as an important issue in many industries as it helps a company enhance its profits and also satisfy and retain customers. By providing excellent service quality, a business can create a competitive advantage to distinguish it from other organizations (Buttle, 1996b). Thus, research on the measurement and improvement of service quality, has become essential (Zeithaml & Parasuraman, 2003). However, despite a general acknowledgement of service quality’s importance, academics have yet to agree on how it should be measured in terms of instruments, dimensions and methods (Brady & Cronin, 2001).

Service quality has been defined as the gap between a customer’s expectations about a service and what the customer actually receives (Ueltschy & Krampf, 2001; Zeithaml & Parasuraman, 2003). Lovelock et al. (2011) view service quality from three different perspectives. First, quality is considered to be both innate excellence and a high level of achievement. Second, quality is recognized as a measurable objective variable and, third, quality is equated with maximum satisfaction meaning that every person has their own perception of quality as they have different wants and needs.

Despite the various definitions of service quality, initially the concept of service quality as treated in the literature is divided into two schools: the Nordic (Grönroos, 1984) and the American (Parasuraman, Zeithaml, & Berry, 1988) perspectives. Both points of view see service quality as a gap between a customer’s perceptions and the expectation of service provisions. In addition to the Nordic and American perspectives of service quality, academics identify several other methods for measuring and conceptualising service quality (Cronin & Taylor, 1994; Knutson, Stevens, Wullaert, Patton, & Yokoyama, 1990; Stevens, Knutson, & Patton, 1995).

Knowing and understanding the method used for measuring service quality is important as picking the right measurement approach for measuring service quality will enhance the
accuracy when predicting customer loyalty (Edward & Sahadev, 2011; Kim, 2011). Service quality perspectives and measurement approaches will be discussed in the next sub-section.

2.5.1 The Nordic Perspective of Service Quality

The Nordic school maintains that the measurement of service quality should be based on two aspects (Grönroos, 1984; Gummesson & Grönroos, 2012). The first aspect is customers’ perceptions of service quality, and the second focuses on the dimensions of service quality. Perceived service quality, based on the Nordic approach, is measured by the trade-off between expected service and perceived service. In other words, perceived service quality is the result of post-consumption evaluation (Brady & Cronin, 2001; Grönroos, 1984).

In order to evaluate perceived service quality, the Nordic school identifies two dimensions of service quality: technical quality and functional quality. Both qualities are believed to influence customers’ perceptions of a service. Technical quality refers to something that customers get from their interaction with a service organisation (Brady & Cronin, 2001; De Keyser & Lariviire, 2014). Grönroos (2000) also defines technical quality as something that is left with the customer when the interaction between customer and service employee is completed. Functional quality is defined as the interaction process of delivering the service to the customers, or in other words, how customers get the service (Brady & Cronin, 2001; De Keyser & Lariviire, 2014; Grönroos, 1984, 1993). In summary, the Nordic perspective of service quality sees that customers are not only concerned with what they receive when they consume the service but are also concerned with how the service is delivered.

2.5.2 The American Perspective of Service Quality

In the American perspective, service quality is seen to have multiple dimensions that have been developed from those first introduced by Parasuraman et al. (1988) in the measurement instrument known as SERVQUAL. The five dimensions in SERVQUAL are tangibles, reliability, responsiveness, assurance and empathy (Parasuraman et al., 1988). The meaning and characteristics of each dimension are as follows:

1. Tangibles refers to the physical appearance of service companies, including physical facilities, materials and personnel.
2. Reliability refers to the ability of companies to accurately and consistently deliver the service quality as promised.
3. Responsiveness refers to the willingness of service personnel to help customers and provide prompt service.

4. Assurance refers to the credibility, security, courtesy and competency of service providers.

5. Empathy refers to the ease of communication access, caring, and being able to provide individualized attention to customers (Parasuraman et al., 1988).

Currently, the SERVQUAL is used more widely in research rather than the Nordic approach (Akbaba, 2006; Johns & Pine, 2002; Saleh & Ryan, 1991; Yuan, Chang, & Tzeng, 2012). However, neither the Nordic approach nor the American approach are considered to be superior to the other (Wu, Tao, & Yang, 2012).

2.5.3 SERVPERF, LODGSERV, and DINESERV.

Some academics (Cronin & Taylor, 1992; Knutson et al., 1990; Stevens et al., 1995) argued that the Nordic and American perspectives of service quality needed further development in order to achieve a more robust measurement of service quality. However, current developments of service quality measurement models are usually based either on the Nordic or the American perspective, or a combination of both models. The nature of research in service quality is continuing to develop with new measures of service quality emerging. For example, SERVPERF was developed because SERVQUAL was deemed to be insufficient, especially in measuring actual performance for specific business organisations (Cronin & Taylor, 1992). SERVPERF only measures actual performance of service quality, and SERVQUAL measures the actual performance relative to customers’ expectations of service (Cronin & Taylor, 1992).

The measurement of service quality has also been tailored to specific services and industries. In the hotel industry, Lodging Quality Index (LQI) was developed in order to measure hotel service quality. LQI consists of five dimensions of service quality: (1) tangibility, (2) reliability (includes reliability and credibility), (3) responsiveness, (4) confidence (includes competence, courtesy, security and access) and (5) communication (includes communication and understanding (Getty & Getty, 2003). Another service quality scale for the hotel industry is LODGESERV which was developed by Knutson et al. (1990) based on the SERVQUAL scale. In restaurants, DINESERV is used for measuring customer perceptions of service quality.
through the five dimensions of SERVQUAL. DINESERV was developed by Stevens et al. (1995).

In summary, service quality measurement continues to develop with a number of derivations for specific service contexts and industries. Service quality measurements often consisted of: customers’ expectations (what will and what should happen) of service quality, and the actual service encounter (Getty & Getty, 2003; Knutson et al., 1990; Stevens et al., 1995). More recently, performance measures of service quality have been used in several studies on various services industry (Brady, Cronin, & Brand, 2002; Clemes, Gan, & Ren, 2011; Dagger et al., 2007).

2.5.4 Hierarchical Model of Service Quality

Further research into service quality suggests that the construct is not only multi-dimensional but also hierarchical in nature (Brady & Cronin, 2001; Dabholkar et al., 1996). Furthermore, Dabholkar et al. (1996) suggest the hierarchical model of service quality is the best way of capturing customers’ perceptions of service quality. In order to measure the quality of service, Brady and Cronin (2001) argue that the use of the multilevel dimensional structure is important since customers assess service quality on three different levels (overall, primary dimensions, and sub-dimensions) especially in retail stores. Dabholkar et al. (1996) note that there are five basic dimensions that form the overall customer perception of service quality. Those dimensions are physical aspects, reliability, personal interaction, problem solving, and policy.

In a study examining four service industries (fast food, photography, amusement parks and dry cleaning), Brady and Cronin (2001) argue that service quality consists of three primary dimensions: interaction quality, physical environment quality, and outcome quality. Each primary dimension consists of sub-dimensions which are proven to be determinants of service quality. Interaction quality comprises attitude, behaviour and the skills of the service personnel. Physical environment quality comprises ambient conditions, and design and social factors. Outcome quality comprises waiting time, tangibles and valance.

Hierarchical modelling service equality has been adapted by a number of researchers in different industries. For example, Dagger et al. (2007) applied hierarchical modelling to measure service quality in health care services; Clemes, Gan, and Kao (2008) in university education; Martinez Caro and Martinez Garcia (2008) in travel services; and Lu, Zhang, and
Wang (2009) and Clemes et al. (2014) in the telecommunications industry; Clemes, Brush, and Collins (2011) in professional sport experiences; and Suhartanto et al. (2013) in the hotel industry.

In conclusion, in addition to the Nordic and American perspectives of service quality, academics have also explored service quality measurement approaches; such as the three component model, SERPERV, and the hierarchical approach. Previous studies have also indicated that any service quality measurement approach is subject to the characteristics of the industry (Brady & Cronin, 2001). This current study applies a performance-based service quality measurement that is validated by focus group discussions and CFA (Brady & Cronin, 2001).

Apart from the various methods of measuring service quality, there are numerous studies on the relationship between service quality and customer loyalty. In addition to the direct relationship between these two constructs, service quality has also been shown to be the antecedent of other services marketing constructs such as perceived value, brand image and customer satisfaction (Chen, 2008; Chiou & Droge, 2006; Edward & Sahadev, 2011; Kandampully et al., 2011; Suhartanto et al., 2013). The effect of service quality on loyalty, and other constructs will be discussed next.

2.5.5 Service Quality and its Relationships with other Constructs

The analysis of service quality is not limited to its measurement items alone. The analysis of service quality is also about its relationships with the other services marketing constructs. This section will discuss the relationships that service quality has with perceived value, customer satisfaction, brand image, customer engagement and customer loyalty, that have been documented by other studies in various industries (M.D. Clemes et al., 2011; Clemes et al., 2009; Zeithaml & Parasuraman, 2003). Numerous studies of service quality and its consequences have been completed since service quality is a way to create a competitive advantage for a company (Ladhari, 2008; Suhartanto, 2011).

In the context of the relationship between service quality and brand image, Grönroos (1984) believes that service quality is the most important variable that influences customer perceptions of brand image. Furthermore, Gronroos (1984) claims that service quality can be differentiated into two aspects, namely technical quality and functional quality. Technical quality refers to the outcome that customers receive by patronizing a service, while
functional quality is about the interaction between customers and service providers. Furthermore, Grönroos (1984) argues that image can be a filter of the actual service quality. When customers evaluate the technical and functional service qualities, they will also consider the image of the service provider before they judge customers’ perceived service quality. Thus, image may play a role as a mediator between service quality and customer satisfaction.

Empirical studies about the relationship between service quality and brand image have been done by some academics in different industries. Saleem and Raja (2014) and Kandampully et al. (2011) investigated the interrelationships between service quality, customer satisfaction, customer loyalty and brand image in Pakistani hotels and Mauritius hotels respectively. They found that image is significantly influenced by customers’ perceptions of hotel service quality. In Pakistan, service quality in the hotel industry has a direct significant effect on loyalty, while in Mauritius the effect is indirect.

Pollack (2009) examined the relationships between service quality, customer satisfaction and loyalty based on the perception of hairdressers/barbers’ customers (people-based services); and the customers of local phone services (equipment-based services). The results show that the hierarchical model of service quality produced a good-fit model for both industries. Furthermore, overall service quality is proven to influence customer satisfaction, positive word-of-mouth and repurchase intentions. However, the importance of sub-dimensions differs between people-based services and equipment-based services.

In the health-care industry, Dagger et al. (2007) employed the hierarchical structure of the service quality construct to examine service quality’s relationships with customer satisfaction and behavioural intentions. Their findings support the hypothesis that service quality significantly influences customer satisfaction and behavioural intentions in respect of the healthcare industry.

In the air transport industry, studies of service quality and its antecedents have been completed by some academics. Okeudo and Chikwendu (2013) explored the effect of service quality in Nigeria on airline image and passenger loyalty. The service quality construct was measured using SERVQUAL, and the results show that there are significant effects of service quality on airline image and loyalty. Similar results showing the significant effect of airline service quality on passenger loyalty was also found by Chen and Hu (2013) who conducted a
study on Taiwan. An investigation by Yang et al. (2011) into the relationships between service quality, perceived value, brand image and behavioural intentions on low-frills airlines in Taiwan, indicates that the proposed constructs are significant with respect to behavioural intentions.

Similar to studies in other industries, the significant effect of service quality on brand image was also found in the airline industry. Zins (2001) and Park et al. (2006) investigated the relationship between perceived quality of service and airline image in Europe and Australia respectively, and found that the customers consider airline service quality an important factor before judging the image of a particular airline company.

Park et al. (2006) investigated the factors influencing future behavioural intentions including service quality, perceived price, perceived value, customer satisfaction and brand image in the Australian airline Industry. Without identifying the type of airline service, Park et al. (2006) reported that there is no direct relationship between service quality and behavioural intentions. However, service quality influences future behavioural intentions through passenger satisfaction and the airline brand image.

Previous studies (Brady & Cronin, 2001; Chen & Chen, 2010; Clemes et al., 2014; Michael D Clemes et al., 2011; Dagger et al., 2007; Okeudo & Chikwendu, 2013; Zins, 2001) have not only identified service quality measurements but have also investigated the consequences of service quality, especially the behavioural aspect. Service quality has been proven to be an essential variable for determining customer loyalty and service quality can be gauged in several ways depending on the characteristics of the industry (Hu, Kandampully, & Juwaheer, 2009). Despite the large number of studies of service quality, their findings are considered unconvincing (Brady & Cronin, 2001). Therefore, service quality still needs to be explored and examined with regard to the airline industry. Furthermore, in order to capture the determinants of customer loyalty, other constructs are believed to have an important effect on customer loyalty (Clemes et al., 2009; Lai et al., 2009; Park & Kim, 2000). The perceived value construct is expected to affect customer loyalty in this current study (Chen & Hu, 2010; Yang & Peterson, 2004).

The next section will discuss the perceived value construct.
2.6 Perceived Value

Similar to service quality, perceived value is also considered in the services marketing literature to be a well-developed construct. Customers’ perceptions of the value of service have been widely discussed in the literature as an important variable in predicting customer loyalty. This section will begin with a discussion on the importance of customer perceived value, followed by the definition of perceived value and its relationships with other services marketing constructs.

The notion of customer perceived value is important in marketing activities as marketing is a social exchange between parties (Gounaris, Tzempelikos, & Chatzipanagiotou, 2007). Bhattacharya and Singh (2008) suggest that achieving high customer perceived value is an essential strategy for companies in order to enhance their competitive advantage. As with service quality, perceived value is noted as an antecedent of customer loyalty. In addition, perceived value also has an impact on customer satisfaction and customer engagement (Brodie et al., 2011; M. D. Clemes et al., 2008; Jen & Hu, 2003). Petrick and Backman (2002) argue that companies may gain competitive success through perceived value as the construct can influence customer re-purchase behaviour. Furthermore, Gale and Wood (1994) contend that companies succeed when they provide customers with superior value, since customers will naturally choose a product or service which will provide higher value than the possible alternatives.

To date, there is only a moderate level of academic agreement regarding the definition of perceived value. Sinha and DeSarbo (1998) and Wirtz et al. (2012) define customer perceived value as a trade-off between price and quality. In a similar vein, Dodds, Monroe, and Grewal (1991) describe customer perceived value as a trade-off between perceived qualities and perceived psychological benefits, as well as a monetary sacrifice. In addition, Woodruff (1997, p. 4) defines customer perceived value as “a customer’s perceived preference for and evaluation of those product attributes, attribute performances and consequences arising from use that facilitates (or blocks) achieving the customer’s goals and purposes in use situations”. Zeithaml, Bitner, and Gremler (2006, p. 527) note that “the consumer’s overall assessment of the utility of a service based on perceptions of what is received and what is given”, and it serves as a common definition for research purposes.
Perceived value can be distinguished by its two parts: benefits and costs. The benefits are what customers receive after experiencing the service, while costs are related to what customers pay to receive the service. The cost of service can be divided into monetary and non-monetary costs. Non-monetary costs include: (1) time costs, (2) physical costs, (3) psychological costs, and (4) sensory costs. Time costs (1) relate to the time that customers spend waiting on non-valuable activities before receiving the service. Physical costs (2) are the uncomfortable feelings, as part of the process of receiving the service. Psychological costs (3) refer to mental efforts relating to fear, discomfort or insecure feelings when using a particular service. The last costs (4) are the sensory costs which relate to an unpleasant experience on any of the five senses (Assael, Pope, Brennan, & Voges, 2007; Solomon, Dann, Dann, & Rusell-Bennett, 2007).

The concept of customer perceived value is important for the marketing discipline. Gallarze and Saura (2006) suggest three reasons for rationalizing the significance of customer perceived value. First, the concept has arisen from the development of two fundamental dimensions of consumer behaviour, i.e. price and psychology. Second, the construct of perceived value is able to help explain different domains of consumer behaviour such as product choices, buying intentions and loyalty. Finally the construct of perceived value is inextricably linked to other essential customer behaviour constructs such as the perception of quality and the perception of satisfaction. For these reasons, Gallarza and Saura (2006) believe that companies should create high customer perceived value.

Several studies indicate that customer perceived value is a strong antecedent of customer satisfaction. In a Taiwanese study of behavioural intentions as to whether or not to use public transportation, Lai and Chen (2011) found that customer perceived value has a positive effect on customer satisfaction: the higher the perception of value offered, the higher is the satisfaction of public transport users, with the service provided. In a study on the Taiwanese motel industry, Clemes et al. (2009) found that guests’ satisfaction was significantly affected by their perception of the value offered. This also indicates that customer perceived value has a positive effect on customer satisfaction. Therefore, the higher that customers perceive the value of the service offered, the higher their satisfaction is. This was confirmed by a Chinese study of the telecommunications industry (Lai et al., 2009) indicating that as a robust antecedent of customer loyalty, customer satisfaction is significantly influenced by perceived value. As Lai et al. (2009) show that customer perceived
value positively influences customer satisfaction. Park et al. (2006) have also indicated the significant effect of perceived value on customer satisfaction in respect to the airline industry without mentioning the type of airline service.

As an antecedent of customer satisfaction, customer perceived value is also recognized as the antecedent of customer engagement. Several studies indicate that the higher the customer perception of the value of the service provided is, then the higher their likelihood is to engage with a particular firm (Brodie et al., 2011). In a study of online social media, Jahn and Kunz (2012) found that the social and brand interaction values positively influence customer engagement with those who have a social media fan page.

Regarding the relationship between perceived value and customer loyalty, Yang and Peterson (2004) found that perceived value is the driver of customer loyalty in e-commerce. Similarly, Chen and Hu (2010) found a strong effect of perceived value on customer loyalty in coffee outlets in Melbourne. In the telecommunications industry, a positive and significant effect of perceived value on customer loyalty has also been found (Edward & Sahadev, 2011; Karjaluoto, Jayawardhena, Leppäniemi, & Pihlström, 2012; Lai et al., 2009).

In the airline industry, perceived value is also considered to be an important factor in predicting customer satisfaction and customer loyalty. Chen (2008) found that perceived value not only has a direct effect on customer loyalty, but also has an indirect effect between customer satisfaction and customer loyalty. In addition, perceived value has also been proven to influence customer satisfaction. Zins (2001) notes that perceived value affects business class European Airlines’ passengers’ satisfaction. Among the supporting literature on the effects of perceived value on customer loyalty, Forgas, Moliner, Sánchez, and Palau (2010) found that perceived value only partially affects loyalty.

In summary, perceived value is not only seen as an essential factor in determining loyalty, but also an important aspect for when customers consider their satisfaction and engagement. Previous studies (Chen, 2008; Clemes et al., 2009; Edward & Sahadev, 2011; Lai et al., 2009; Park et al., 2006) have also noted that higher customer perceptions of the value of the service, will lead to higher satisfaction and loyalty. Thus, in this current study perceived value is included with other customer loyalty antecedents such as customer satisfaction. The next section will discuss customer satisfaction as another important customer loyalty antecedent.
2.7 Customer Satisfaction

Satisfaction is not only regarded as a customer’s goal to be obtained as a result of patronizing a service, but also as a firm’s goal as a way to make a profit. From the previous discussion, studies have found that customer perceived value is the antecedent of customer satisfaction and customer loyalty. Furthermore, customer satisfaction also tends to have interrelationships with other constructs which can be used together predict customer loyalty. Thus, in this section, customer satisfaction will be discussed further to capture its importance, define its definition, and describe its relationships with the other constructs used in this study.

Customer satisfaction is an important factor in service marketing theory as it is one of the goals of marketing activity (Holbrook, 1994). In accordance with Holbrook’s suggestion, Kotler and Armstrong (2004) explain that customer satisfaction is an essential element in marketing, and a fundamental concern (Brady & Robertson, 2001; Tam, 2004; Williams & Uysal, 2003), since it is important in fulfilling the needs and wants of customers (Churchill & Surprenant, 1982; Cronin et al., 2000; Han & Ryu, 2009; Kueh & Boo, 2007). The relationships between customer satisfaction, service quality and perceived value has gained attention from academics and practitioners, as customers are the principal source of most of the company’s profits (Bloemer, De Ruyter, & Peeters, 1998; McDougall & Levesque, 2000; Tam, 2004). Moreover, customer satisfaction is identified as a crucial factor affecting customer retention rates (Cronin et al., 2000; Jin, Lee, & Huffman, 2012).

While there is agreement that customer satisfaction is important, its definition varies even within the marketing discipline (Simpson, 2006). Churchill Jr and Surprenant (1982, p. 4) explain that “satisfaction is the result of purchase and use, which results from the buyer’s comparison of the reward and costs of the purchase, with regard to the anticipated results”. Likewise, Tse and Wilton (1988, p. 204) define customer satisfaction as “consumers’ response to the evaluation of the perceived discrepancy between prior expectation and the actual performance of the product as perceived after its consumption”. Rust and Oliver (1994, p. 2) see customer satisfaction as “a summary cognitive and affective reaction to a service incident that results from the comparison of customers’ perceptions of service quality with their expectations of service performance”.
In order to explain customer satisfaction, several theories such as the expectancy-disconfirmation theory, equity theory and comparison-level theory can be used (Skogland & Siguaw, 2004; Yi, 1990). Academics (Ekinci, Dawes, & Massey, 2008; Lovelock, Patterson, & Walker, 2001) contend that expectancy-disconfirmation theory is the most important theory and that it has been accepted widely. This theory covers four elements: expectation, performance, disconfirmation and satisfaction (Lewin, 1938). The expectation construct is a customer’s pre-consumption perception associated with goods and services (Barsky & Labagh, 1992) while performance is the foundation of the customer’s perception of goods and services (Sinha & DeSarbo, 1998). In the expectancy-disconfirmation paradigm, disconfirmation is a crucial intervening element since it occupies a central position (Gale & Wood, 1994). Disconfirmation results from the difference between prior expectation and the actual performance of the goods and services. Oliver (2010) grouped the disconfirmation scale into positive disconfirmation, negative disconfirmation and zero disconfirmation. Positive disconfirmation is where customers perceive that the quality of the product or service that they buy exceeds their wants, needs and expectations, and therefore their customer satisfaction will be high. On the other hand, if the quality of the products or services perceived by customers does not meet their wants, needs and expectations, then customer satisfaction will be low, resulting in negative disconfirmation. Zero disconfirmation is defined as a middle point between positive and negative disconfirmation (Oliver, 2010).

Customers who are satisfied with a product or service will tend to have a good perception of the brand (Nguyen & LeBlanc, 1998; Saleem & Raja, 2014). As discussed previously, brand image comes from a customer’s experiences with a company or a brand. Several studies have been done to support this statement. Amin et al. (2013) document a significant relationship between customer satisfaction and brand image in Islamic banking in Malaysia. The more customers are satisfied with the service, the better will be the customers’ perceptions of the bank image. In the hospitality industry, such as hotels and resorts, customer satisfaction also significantly affects brand image (Faullant, Matzler, & Füller, 2008; Hu et al., 2009; Saleem & Raja, 2014).

Several studies also indicate that customer satisfaction is a robust antecedent of customer engagement. Flynn (2012) contends that the customers who are satisfied with the service provided will be more likely to have a long, enhanced interaction with the company. Furthermore, once customers find that a company can meet their needs and satisfy them,
then they may experience pride and confidence in the brand, belief in its integrity, as well as passion towards the brand, all of which are psychological aspects of customer engagement (Brodie et al., 2011). Research on customer loyalty in the relational service sector (Sweeney & Swait, 2008) finds that customer satisfaction positively influences customers to share that satisfaction information with others, which supports of customer engagement.

Customer satisfaction has been widely acknowledged as an antecedent of customer loyalty in several service marketing studies. In the restaurant industry, Ryu et al. (2008) note that customer satisfaction leads to loyalty. Similarly, in the motel industry in New Zealand, Clemes et al. (2011) found that the loyalty of New Zealand motel customers is significantly influenced by their satisfaction with the service provided. A study of customer loyalty in the Indonesian hotel sector shows that customer satisfaction positively influences customer loyalty (Kandampully & Suhartanto, 2003). Several studies on the airline industry demonstrate that there is a significant positive relationship between passenger satisfaction and loyalty (Chen, 2008; Ostrowski, O’Brien, & Gordon, 1993; Zins, 2001).

In summary, customer satisfaction has an interrelationship with the other loyalty antecedents such as service quality and perceived value (Amin et al., 2013; Faullant et al., 2008; Ryu et al., 2008; Zins, 2001). Furthermore, customer satisfaction will also affect a customer’s psychological feelings about the brand, which can be seen from the customer’s perceptions of brand image and customer engagement. Certainly, enhancing customer satisfaction should benefit companies at least through the creation of loyalty. Brand image and customer engagement will be discussed in turn in the next sections.

2.8 Brand Image

Brands are valuable assets for businesses that must be carefully managed. Brands are considered to be a key component in marketing strategy (Cretu & Brodie, 2007). Brand image is also regarded as a major antecedent of customer satisfaction and customer loyalty, which capture customers’ attitudes towards brands. This discussion about brand image will cover the importance and definition of brand image. In addition, the relationships between brand image and other marketing variables will also be explained in this section.

Academics (De Chernatony, 2008; Keller, 2013) agree that brand is an important asset for companies. Thus, brand elements need to be carefully chosen by companies. The brand
element is the identity that supports service companies to enhance brand equity, which is regarded as one of the key components in managing customer relationship marketing (Elliot & Percy, 2007; Keller, 2013). Keller (2013), believes that there are six criteria for building meaningful brand identities which influence offensive and defensive marketing strategies. Those six brand elements’ criteria are: memorable, meaningful, likeable, transferable, adaptable, and protectable. The first three criteria are used in forming an offensive strategy, while the latter three are used in a defensive strategy.

A company that has a memorable image and/or name brand is likely to achieve high customer awareness. Gaining customer awareness is not enough however. Thus, a good brand identity should reflect the general information about the service and reflect the benefits of the brand. As well as memorability and meaningfulness, brand identity also needs to be visually and verbally attractive (Kotler, 2005). Keller (2013) argues that memorability, meaningfulness and likability are brand identity elements that will be used by the customer during buying the product/service decision-making process, especially when the information about the product/service is limited.

Transferability, adaptability and protectability are believed to play important roles in a defensive marketing strategy. The transferability element measures how easy the brand identity would be, to transfer across geographical boundaries, product lines and market segments. Furthermore, the ability of the brand identity to adapt to changes in customer values over time is also needed. The last brand identity element that marketers need to consider is protectability. A company needs to build legal brand elements to protect the brand from brand piracy and competition. A business organization that builds its brand identity based on the six elements should achieve high brand equity (Keller, 2013).

Once a firm has a brand identity, then the firm needs to build a positive brand image. Since the term “brand image” was introduced by Gardner & Levy (1955), building a brand image has become an important marketing activity (Bian & Moutinho, 2011). Brand image is expected to impact a customer’s decision to purchase a good or service since it will filter customers’ perceptions about a brand or a company. For example, a good image can have a positive effect on loyalty as it simplifies customers’ decision-rules through the customers’ attitudes and beliefs about the brand (Andreassen & Lindestad, 1998; Grönroos, 1993). In addition, the brand name can also be very important for particular customers since
purchasing a certain brand can be a part of self-expression. Furthermore, when the service attributes are difficult to evaluate, or when the choices regarding the quality of the service attributes are balanced, then brand image plays an important role in influencing customers’ choice of company (Andreassen & Lindestad, 1998).

To date, there is no solid definition of brand image (Bloemer & De Ruyter, 1998; Lee, James, & Kim, 2014). Hence, in the absence of a concrete definition (Dobni & Zinkhan, 1990), this construct has generally been defined in accordance with the focus of the particular study (Reynolds & Gutman, 1984). According to Keller (1993, p. 3) brand image is a “perception about a brand as reflected by the brand associations held in consumer memory”. Davies et al. (2003) suggest that anything can be a brand, for example, a company or a name.

Brand image has two key aspects, the functional aspect and the emotional aspect. The functional aspect is related to a tangible item that can be seen or measured, while the emotional aspect is about feelings that customers have relating to the brand name. Thus, brand image awareness is awakened after a customer compares both aspects of the brand with that of a competitor. In other words, brand image grows from a set of customers’ experiences (Kennedy, 1977).

For businesses, a brand is a valuable intangible asset which is difficult for other companies to copy (De Chernatony, 1999). For that reason, highly recognized well-known brand images are important for their role in communicating expectations, influencing perceptions, and affecting employees as well as customers (Gronroos, 2000). Furthermore, Martenson (2007) suggests that brand image is essential for maintaining superior financial performance. Aaker (2011) explains that a company benefits from a brand because it can provide a valuable proposition or develop a customer relationship based on organizational associations, which can generate customer perceived credibility (e.g. expertise, trustworthiness and liking) and allow companies to develop their organizational culture and values.

Since brand image is an important factor in marketing, several studies have investigated the relationship between brand image and socio-cognitive variables such as service quality (Andreassen & Lindestad, 1998), customer satisfaction (Kandampully & Suhartanto, 2000), customer engagement (Van Doorn et al., 2010) and customer loyalty (Mahasuweerachai & Qu, 2011). However, to date very few studies have addressed the importance of brand image in the commercial airline industry (Hussain et al., 2015; Park et al., 2004, 2006).
There have been several recent studies showing that brand image is a strong antecedent of customer loyalty. A study by Clemes et al. (2009) concerning customer loyalty towards Taiwanese hotels, found that there is a significant positive effect of image on behavioural intentions. The significance of brand image is also found in a coffee shop study (Tu, Wang, & Chang, 2012) where image was shown to significantly influence customer loyalty. Lai et al. (2009) document that brand image positively influences customer loyalty in the Chinese telecommunications industry. Hence, the more positive the customers’ perceptions of brand image are, then the higher the likelihood is that they will be loyal to the company (Clemes et al., 2009; Lai et al., 2009; Tu et al., 2012).

Even though some studies (Andreassen & Lindestad, 1998; Clemes et al., 2013; Clemes et al., 2009; Kandampully & Suhartanto, 2003; Lai et al., 2009; Mahasuweerachai & Qu, 2011) on various industries have found a significant effect of brand image on customer loyalty, Bloemer and De Ruyter (1998) did not find a direct and significant effect of brand image on customer loyalty. However, the authors found an indirect effect of brand image on store customer loyalty through store customer satisfaction in Switzerland. Similarly, Cretu and Brodie (2007) found an insignificant path between the brand image and customer loyalty constructs in the hair salon industry. The studies by Bloemer and De Ruyter (1998) and Cretu and Brodie (2007) show that when brand image does not have an effect on customer loyalty, it is because the research was conducted on an established markets, where customers tend to judge products based on quality, rather than the image of the brand.

In the transport industry, brand image has also been acknowledged as a robust antecedent of customer loyalty. Brunner et al. (2008) conducted a study on the interrelationships among customer satisfaction, brand image and customer loyalty based on night-train companies in Europe. The results reveal that brand image and customer satisfaction will affect customer loyalty in different ways. For new customers, brand image plays an important role in influencing customer loyalty, while for experienced customers satisfaction will be a key driver for loyalty. A study of elderly Taiwanese bus passengers indicates that brand image positively affects customer loyalty (Kuo & Tang, 2011). Likewise, a few loyalty studies of the airline industry also indicate the significant effect of brand image on behavioural intentions (Park et al., 2004, 2006). Therefore, in order to enhance passenger loyalty there is a need to provide a positive brand image.
The discussion on brand image as an antecedent of customer loyalty implies that brand image is recognised as an important aspect that needs to be well-managed in customer relationship marketing (Aaker, 1997). Even though the literature and previous studies have shown that brand image is a robust antecedent of customer loyalty, studies on the effect of brand image on airline passenger loyalty are very limited. Hence, there is a need to examine the impact of brand image on passenger loyalty as well as the relationship between brand image and the other passenger loyalty antecedents. The addition of new constructs can strengthen the predictive power of a model. This current study integrates customer engagement as a new developing construct, in order to provide a strong contribution towards predicting customer loyalty, especially from the customer psychological aspect (Bowden, 2009b). Since customer engagement has not been thoroughly explored, the next section will discuss the customer engagement construct as an expected antecedent of customer loyalty.

2.9 Customer Engagement

The customer engagement construct, which is a part of customer relationship marketing, is considered to be still developing (Vivek et al., 2012). However, academics believe that analysing customer engagement will enrich the discussion in the services marketing area, especially in the context of relationship marketing (Vivek et al., 2012). In this section, an examination of the origin of customer engagement, its definition, its importance, and the potential interrelationships with other constructs, will be discussed.

Today, customer engagement behaviour is an important way to achieve a competitive advantage as customer engagement can be a way to retain, sustain and nourish customers, by involving customers in providing referrals or taking part in new-product development (Brodie et al., 2009; Van Doorn et al., 2010). Furthermore, Vivek et al. (2012) argue that customer engagement together with the other constructs, are a part of relationship marketing, because customer engagement aims to enhance the business relationship with the customer.

The notion of engagement originally relates to employees’ psychological “presence”, as characterized by the tripartite model developed by Schaufeli et al. (2002), comprised of vigour, dedication and absorption. Other academics (Frank, Finnegan, & Taylor, 2004; Saks, 2006) define engagement in the context of employees, as the degree of attention and
absorption when an employee is playing his/her role as an employee, and it comprises behavioural and attitudinal components. The attitudinal components include pride and the sense of belonging; while the behavioural element of employee engagement includes the willingness to make an extra effort to finish a piece of work.

In the educational psychology area, Fredricks, Blumenfeld, and Paris (2004), highlight multidimensional student engagement, which comprises students’ willingness to master particular skills (cognitive), students’ reactions to the teacher (emotional), and students’ participation in intra/extracurricular activities (behavioural). The findings of this study are supported by Lewis, Huebner, Malone, and Valois (2011) and Wang, Willett, and Eccles (2011). These two studies also divide students’ engagement into cognitive, emotional and behavioural dimensions.

In this ever increasing technological and networked society, the idea of employee engagement has been adapted by marketing researchers to focus on the idea of engagement from the buyer’s perspective. Marketing academics are split regarding the dimensions of customer engagement. The notion of engagement is emerging and attracting academics to further classify the term engagement into more specific concepts with fewer dimensions (L.D. Hollebeek, 2011; Patterson, Yu, & De Ruyter, 2006).

Algesheimer, Dholakia, and Hermann (2004) focused on brand community engagement, which is defined as the customers’ intrinsic motivation to interact with community members as a result of positive brand community identification. Brand community engagement is divided into three dimensions: utilitarian, hedonic and social. Algesheimer et al. (2004) conclude that brand community identification, membership continuance, community recommendation, and community participation intention, are the antecedents of customer brand engagement.

Calder, Malthouse, and Schaedel (2009) discuss a type of engagement which occurs via customers’ experiences with online media. Calder et al. (2009) identify two types of engagement: personal engagement and social interactive engagement. Personal engagement is described as customers’ personal experience when they interact with newspapers, magazines or websites. With personal engagement, people try to find stimulation and inspiration from the site as a source for interacting with other people, and as a results, people find the website/magazine/newspaper useful. While social interactive
engagement is more related to the website and customers’ contribution in website interactivity.

Patterson et al. (2006) describe customer engagement as customers’ participation and emotional presence in their relationship with a brand. Patterson et al. (2006) also suggest four dimensions of customer engagement: (1) cognitive dimension/absorption, (2) emotional dimension/dedication, (3) mental resilience in interacting with the engagement object/vigour, and (4) the level of customer excitement towards the engagement of object/enthusiasm.

Van Doorn et al. (2010, p. 3) define customer engagement as “a customer’s behavioural manifestation that has a brand or firm focus beyond purchase, resulting from motivational drivers”. Five dimensions are identified in the study: valence, form, scope, nature, and customer goals.

Two conceptual studies by Brodie et al. (2011) and L.D. Hollebeek (2011) comprise multidimensional customer engagement concepts: cognitive, emotional, and behavioural dimensions. In addition, both studies define customer engagement as a motivational state which occurs as a consequence of customer-brand interaction. These conceptual studies were then empirically validated by Hollebeek et al. (2014) by exploring three dimensions of customer brand engagement: cognitive procession, affection, and activation. Hollebeek et al. (2014) also confirmed customer involvement as a customer brand engagement’s antecedent, and self-brand connection and brand usage intent as the consequences.

Some studies identify a theoretical relationship between customer engagement and customer loyalty; customer loyalty being the consequence of customer engagement (Bowden, 2009a; Brodie et al., 2011; Van Doorn et al., 2010). In the retail wine industry, Hollebeek (2010) posited a conceptual relationship between customer engagement and customer loyalty. Empirically, Srinivasan et al. (2002) identified eight Cs (customization, contact interactivity, cultivated, care, community, choice, convenience, and character) that affect loyalty in an online Business-to-Consumer (B2C) context. Even though the authors did not explicitly mention customer engagement, the measurement of contact interactivity and community are similar to features of customer engagement (Srinivasan et al., 2002).
There are a few empirical studies on customer engagement and its antecedents and consequences. Sprott, Czellar, and Spangenberg (2009) measured how customers of physical goods view brands as parts of their self-concept. Sprott et al. (2009) used multiple regression analysis and determined that customers with high brand engagement in self-concept have a higher memory of the brand. In addition, highly engaged customers pay more attention to the brand exposure, and are more likely to be loyal to the brand (Sprott et al., 2009).

Vivek, Beatty, Dalela, and Morgan (2014) conceptualize the customer engagement construct as three dimensions: conscious attention, enthused participation and social connection. Vivek et al. (2014) surveyed the customers of the Apple brand and an unnamed retail brand. The data were analysed using CFA to validate the customer engagement measurement scale, and correlation analysis was used to assess the nomological validity between customer engagement and its potential consequences. Vivek et al. (2014) report that highly engaged customers potentially correlate with high-value perceptions, high benevolence perceptions, high re-patronizing intentions and high affective commitment to the brand. However, Vivek et al. (2014) did not thoroughly examine the interrelationships between customer engagement and other constructs (e.g., service quality, customer satisfaction brand image and perceived value) as the authors conducted a CFA and correlation analysis only. Thus, a more comprehensive study integrating customer engagement with the other constructs is required in order to confirm the antecedents and consequences of customer engagement (Brodie et al., 2011; So et al., 2012; Van Doorn et al., 2010).

So et al. (2012) in an empirical study using SEM, combined Australian hotel customers and airline travellers and found that customer engagement (comprising five dimensions) significantly affects customer intention to recommend the brand to other people and re-patronise the service. The five dimensions of customer engagement in So et al.’s (2012) study are: (1) the level of a consumer’s perceived unanimity with or sense of belonging to the brand (identification); (2) the level of attention which focuses and links with the brand (attention); (3) the level of passion and interest with the brand (enthusiasm); (4) a pleasurable condition for being very rigorous, happy, and deeply absorbed when playing the role of customer of the brand (absorption); and (5) the various levels of participation that a customer has with the brand (interaction). So et al. (2012), while combining hotels customers and airlines travellers, provided a scale as a basis to measure customer engagement.
engagement. The five dimensions identified by So et al. (2012) were used in this current study to represent customer engagement. However, the measurement items that were adapted from So et al. (2012) and used in this current study on the airline industry, were modified based on the literature review and focus group discussions. CFA and Cronbach’s alpha were then used to validate the measurement items.

So et al. (2014) conducted a further study on customer engagement, once again combining hotels customers and airlines travellers and integrated brand trust and service brand evaluation into their model. So et al. (2014) emphasise that customer engagement directly affects customer brand evaluation and customer loyalty. The service brand evaluation construct was represented by service quality, perceived value and customer satisfaction as a set of dimensions. So et al. (2012) and So et al.’s (2014) studies were conducted by combining the customers from the hotel and airline industries. However, these industries have different characteristics based on the type of service delivery process. Hotels are normally categorized as a “service shop” as hotel customers tend to have a long interaction with the service personnel. Airlines are normally categorized as a “mass service” as the service is less customized and the interaction between passengers and service personnel is shorter (Clemes et al., 2000). Van Doorn et al. (2010) recommend that a further study on customer engagement would be beneficial if it concentrated on a specific research setting. A study of this nature would allow a further analysis of the role that customer engagement plays in enhancing customer loyalty.

Hollebeek et al. (2014) completed a study in social media customer conception, scale and measurement of dimensionality, and scale refinement of customer engagement. The study used the customer brand engagement concept, and divided the customer brand engagement concept into three separate dimensions: cognitive processing, affection, and activation.

The discussions regarding customer engagement are not only about the nexus of its antecedents and consequences, but also about the level of engagement and the effect on loyalty. Studies have identified the consequences of customer engagement and include trust, commitment, emotional connection, empowerment, and loyalty (Bowden, 2009a, 2009b; Brodie et al., 2013; L.D. Hollebeek, 2011). Hollebeek (2011) challenges the studies of Bowden (2009b) and Patterson et al. (2006) by emphasizing the idea that customer
engagement will enhance customer loyalty up to a particular point, but that an excessive customer engagement level may be detrimental to customer loyalty for further engagement or for particular segments.

Based on these arguments, (Bowden (2009a, 2009b); Brodie et al. (2013); L.D. Hollebeek (2011); Van Doorn et al. (2010)) suggest that customer engagement can capture cognitive, emotional and behavioural dimensions which results in strong connections between customers and the brand. Thus, it is necessary to examine the effect of customer engagement on customer loyalty and the relationships between the other antecedents of customer loyalty. Furthermore, in addition to the antecedents of customer loyalty, a moderator variable is included in the model in the current study to test the model sensitivity. In marketing studies, demographic variables such as gender, age, income, and the travel purpose, have been used to test model sensitivity (Floh & Treiblmaier, 2006; Homburg & Giering, 2001). Gender is one possible moderating variable found in consumer behaviour research (Assael et al., 2007; Mattila, 2000) and will be discussed in the next section.

2.10 Gender and Personality Theory

Gender is an important demographic variable that is likely to moderate the relationship effect among the marketing constructs. Interrelationships among the constructs in the model are expected to be different between the male and female respondents, as gender is proposed to moderate consumer behaviour. The differences between male and female personalities from the perspective of psychology will be outlined in the ensuing discussion, followed by gender studies that have been done in the psychology and marketing areas.

The differences in personality between males and females has been widely discussed by academics, especially in the domains of psychology and sociology (Ridgeway & Correll, 2004; Stewart & McDermott, 2004; Van der Graaff et al., 2014). The literature discusses the differences between males and females, not only from the perspective of biology, but also from the perspective of the interaction and attitude differences between both genders, and on how a male sees an object differently from a female, and how the two genders act to solve a problem (Eagly, 1997; Mitchell & Walsh, 2004). The most popular theory that is used to explain the differences between the male and female roles is Social Role Theory (Eagly, Wood, & Diekman, 2000). Social role theory describes how males and females have different stereotypes, take different roles and behave differently under particular circumstances. The
different attitudes and behaviour between males and females arises particularly because of
the different expectations and pressures from the various communities.

In addition to societal pressure, cultural aspects also affect the male and female roles
(Ndubisi, 2006). Furthermore, Eagly (1997) maintains that different social positions, values,
and beliefs that occur between males and females is also because of the different
socialization processes during their childhoods. Parents tend to teach boys and girls in
different ways and it affects their adulthood attitudes and behaviour. In short, the
differences between males and females is determined by the stereotyping that occurs in
society.

In society, males are usually expected to follow agentic goals which are emphasized through
assertion, independence and mastery (Karatepe, 2011). In addition, males are usually
associated with power and working outside the home. Mattila (2007) maintains that males
usually process information based on a few details and that they tend to emphasize positive
information. In addition, males are considered faster in making decisions and tend to rely on
simple and single sources of information (Karatepe, 2011; Kim, Lehto, & Morrison, 2007).

Alternatively, females are associated with low power, and domestic tasks, and are expected
to follow communal goals. Furthermore, females tend to pay more attention to maintaining
relationships (Mattila, 2007). Regarding the way of processing information, females tend to
focus on more detailed information and over-weigh negative information. In addition,
females are also inclined to refer to multiple sources of information before making decisions
(Babakus & Yavas, 2008; Karatepe, 2011).

Research about gender differences has been conducted in abundance in the areas of
entrepreneurship, nursing, education, hospitality, communication, leadership, and some
other fields (Ndubisi, 2006). Thébaud (2010) conducted a study about gender and its effect
on self-assessed entrepreneurial ability and found that men are more likely to be
entrepreneurial than women. The motivation for being entrepreneurial is different for men
and women (Humbert & Drew, 2010).

In leadership studies, gender has been widely discussed as a factor affecting leadership style
and effectiveness. Based on social role theory, leadership style is also affected by gender.
Even though male and female leaders tend to practice the same style of leadership, Burke
and Collins (2001) found that female leaders tend to be more effective in applying the transformational leadership style compared to male leaders.

In marketing studies (Assael et al., 2007; Han & Ryu, 2007; Mattila, 2000), gender has been recognized as a component influencing consumer behaviour. Gender differences are likely to influence male and female buying preferences, not only as a result of gender socialization but also because of the changes in lifestyle and changes in gender purchasing roles (Assael et al., 2007). Regarding empirical investigations into the differences between male and female levels of satisfaction and loyalty, some studies conclude that the influence of service quality on satisfaction is higher in females than in males because of the differences in the processing of information and the reactions to the stimuli from service quality dimensions (Meyers-Levy & Maheswaran, 1991; Shao, Baker, & Wagner, 2004). However, Ladhari and Leclerc (2013) argue that the role of gender on loyalty is still debatable.

In the hospitality industry, some studies have been conducted to determine if males and females use different criteria when choosing a hospitality service. The study concludes that male and female travellers have different perceptions and expectations of service quality, which lead to different perceived values, and behavioural intentions (Han & Ryu, 2007; Kwun, 2011). In addition, male and female travellers also use different criteria in hospitality service selection (Mattila, 2000; Oh, Parks, & Demicco, 2002).

In tourism behaviour, males and females are reported to have different characteristics. Specifically, Collins and Tisdell (2002) found that gender is the key influence in travel demand. The study reveals that male and female Australian travellers have different travel life cycles, since males are more likely to travel for business purposes and females are more likely to travel for leisure purposes. In addition, Collins and Tisdell (2002) found that female travellers have higher expectations on tourist destinations and decide a destination based on different attributes compared to males (Collins & Tisdell, 2002).

From the discussion about the differences in male and female behaviour, gender is projected to moderate the interrelationships among the constructs. Based on psychology theory (Eagly, 1997), males and females exhibit different behaviour which will surface when they play their roles as a customer. Even though the moderating effect of gender has been discussed widely in marketing studies (Assael et al., 2007; Han & Ryu, 2007; Mattila, 2000), the moderating effect has not been fully explored in services and relationship marketing.
Thus, there is a need to explore the differences between males and females in affecting the paths among the services marketing constructs.

2.11 Chapter Summary

This chapter has discussed the scope of this study based on the literature. This chapter has considered three main points. First, this chapter discussed the nature of services and how services differ from manufactured goods. The discussion shows that services organizations need to maintain their relationships with their customers, as the delivery of the service cannot be separated from the customer. For that reason, relationship marketing is regarded as the most appropriate approach in order to build long-term profitability through customer loyalty. Second, the five antecedents of customer loyalty (service quality, perceived value, customer satisfaction, brand image and customer engagement) have been discussed, including the definitions of the five antecedents and their importance. Previous studies have also been discussed including the potential interrelationships among the constructs. Lastly, this chapter has conducted a discussion about gender as the moderating construct, from the psychology and marketing points of view.
Chapter 3
Model and Hypothesis Development

3.1 Introduction

This chapter reviews the services marketing research that is instrumental in the overall model development and examines the potential interrelationships among the constructs under investigation. The conceptual research model and the proposed interrelationships are introduced. The three research objectives are stated and each of the proposed 21 hypotheses are introduced and discussed in turn.

3.2 Model Development

Relationship marketing has been widely discussed by academicians but is still considered an emerging and important topic (Nwakanma, Jackson, & Burkhalter, 2011). Grönroos (1999) notes that relationship marketing is a root of trade and commerce, connecting customers with a particular brand or firm. Relationship marketing has shifted the marketing orientation from the activity oriented marketing which concentrates on the activities necessary to attract new customers to customer and micro-oriented marketing which focuses on taking care of existing customer’s and the firm’s micro-environment (Christopher et al., 2013; Gilbert, 1996; Raval & Grönroos, 1996).

Previous studies on various service industries have established that numerous interrelationships exist between important marketing constructs such as service quality, brand image, perceived value, customer satisfaction and customer loyalty, and that these constructs underpin relationship marketing (Howat & Assaker, 2013; Lai et al., 2009; McDougall & Levesque, 2000; Saha & Theingi, 2009; Tam, 2004; Yang et al., 2011; Yu et al., 2014).

Customer engagement is considered as an extended construct in relationship marketing that shows a psychological connection between customers and a brand (Vivek et al., 2014). In addition, customer engagement reflects customers’ behavioural response as a result of customer-company relationships (Van Doorn et al., 2010). Customer engagement is also expected to be interrelated to satisfaction, brand image and customer loyalty (Brodie et al., 2011; So et al., 2012; Wirtz et al., 2013).
The conceptual model in this study (see Figure 3.1) is drawn primarily from customer relationship marketing theory (Grönroos, 1996a, 1996b) as a relationship marketing approach is used to strengthen customer-company relationships in order to reinforce customer equity and enhance firm’s profitability (Buttle, 1996a; Kotler & Armstrong, 2010). The conceptual model of this current study contains 6 constructs: service quality, perceived value, brand image, customer satisfaction, customer engagement and customer loyalty.

The six constructs were chosen for this study to empirically analyse the interrelationships among them in an airline industry context. Customer engagement is included in the conceptual research model. The inclusion of the customer engagement construct makes a theoretical and practical contribution, as there is a lack of published studies in the services marketing literature that have empirically examined the relationship of customer engagement with the other five constructs.

Specifically, the conceptual research model in this study illustrates several potential interrelationships among service quality, brand image, perceived value, customer satisfaction, customer engagement and customer loyalty. Service quality is expected to be an antecedent of perceived value, brand image, customer satisfaction, and customer loyalty (Bloemer et al., 1998; Brodie et al., 2009; Kuo et al., 2013; Lai, 2014; Tam, 2004). Furthermore, brand image, perceived value, and customer satisfaction is proposed to influence customer engagement, and customer engagement is expected to drive customer loyalty (Brodie et al., 2011; L.D. Hollebeek, 2011; So et al., 2012; Van Doorn et al., 2010).

This study focuses on the Indonesian airline industry which serves customers from a variety of demographic backgrounds. Academics agree that demographic characteristics such as age, gender, educational attainment and occupation will also influence customer perceptions, attitudes and behaviour related to the service they bought (Assael et al., 2007; Han, Hsu, & Lee, 2009; Patterson, 2007). Based on the social role theory, males and females play different roles in society as a result of social expectation and pressure from society (Eagly & Wood, 1999; Eagly et al., 2000).

Gender differences specifically have been widely accepted as a moderating variable in marketing and consumer behaviour (Jin et al., 2013; Ladhari & Leclerc, 2013; Ndubisi, 2006; Yelkur & Chakrabarty, 2006). Therefore, gender (male and female passengers) has been included in the model as a moderating variable which may influence the relationships among
some of the marketing constructs (Ariffin & Maghzi, 2012; Karatepe, 2011; Ladhari & Leclerc, 2013).

For example, Westwood et al. (2000) conducted qualitative research on businesswomen airline travellers in the UK and found that this segment are more sensitive to the ignorant behaviour of flight crews than businessmen travellers. In addition, even though women and men business travellers have different opinions about flight facilities, the women travellers also want to be treated equally like men travellers. Apart from Westwood et al.’s (2000) study, there are no empirically published studies on the airline industry that examine the moderating effect of gender on the higher order marketing constructs.

In summary, this study uses the conceptual model on page 51 (Figure 3.1.) as a framework to examine the interrelationships among service quality, perceived value, customer satisfaction, brand image, customer engagement and customer loyalty, including the indirect effects that occur among them. Furthermore, the conceptual model also includes the possible moderating effects of gender to explain the different interrelationships among the constructs.
Figure 3.1 Proposed Research Model

The interrelationships between service quality, perceived value, brand image and customer satisfaction have been widely discussed in the literature and tested by a number of academics (Bloemer et al., 1998; Hu et al., 2009; Tam, 2004).

3.3.1 Service Quality

Previous studies (Howat & Assaker, 2013; Tam, 2004; Yu et al., 2014) conclude that service quality drives customers’ perceived value. If the quality of the service they receive has more value compared to the money, time and energy that customers spent in order to get the service, then the customers will have a high perceived value of service. In other words, the better the service quality, the higher the customers’ perceived value (Howat & Assaker, 2013; Tam, 2004; Yu et al., 2014).

Service quality is also identified as a robust antecedent of customer satisfaction. The expectancy disconfirmation theory defined by Oliver (1980) describes that customer behavioural loyalty is triggered when a customer buys a product or service he/she needs and the quality exceeds his/her expectations. Customers who have experienced a particular quality of service will decide whether they are satisfied or not (Bloemer et al., 1998; Howat & Assaker, 2013). Further, service quality can enhance customers’ perceptions of brand image and boost their loyalty (Carrillat, Jaramillo, & Mulki, 2009; Hu et al., 2009; Lai et al., 2009; Saha & Theangi, 2009). Once customers experience superior service quality, their perception of that brand increase and they normally consider re-purchasing the service and recommending it to others.

Thus, the following hypotheses are formulated:

H1: There is a direct significant positive relationship between service quality and perceived value.

H2: There is a direct significant positive relationship between service quality and brand image.

H3: There is a direct significant positive relationship between service quality and customer satisfaction.
H4: There is a direct significant positive relationship between service quality and customer loyalty.

3.3.2 Perceived value

Perceived value is noted as one of the triggers of customer satisfaction, customer engagement and loyalty. Tam (2004) suggests that if customers perceive that the value or quality of a service exceeds the costs of gaining that service, it will result in high satisfaction and consequently will affect loyalty. Following Tam (2004), other studies also suggest that more attention should be paid to perceived value since it can impact on customer satisfaction and loyalty (Lai et al., 2009; Yang et al., 2011; Yang & Peterson, 2004).

Yang and Peterson (2004) posit that perceived value is a vital result of marketing activity and a fundamental concept motivating customers to repeat patronage. Regarding the relationship between perceived value and customer satisfaction, Gill et al. (2007) and Ryu et al. (2008) note that perceived value has a significant, positive effect on customer satisfaction. Moreover, McDougall & Levesque (2000) and Chen and Chen (2010) find that perceived value is the strongest antecedent of customer satisfaction in restaurants, the auto industry, hairstyling, dental services, and heritage tourism. In the airline industry, perceived value is also noted as a significant antecedent of passenger loyalty (Park et al., 2006).

Previous studies indicate that perceived value also has a strong potential to drive customer engagement (Brodie et al., 2011; Van Doorn et al., 2010). Once customers perceive great value from a service provider, they may be motivated to greater engagement with the service company, either to get more value or for psychological reasons (Brodie et al., 2011).

Thus, the following hypotheses are formulated:

H5: There is a direct significant positive relationship between perceived value and customer satisfaction.

H6: There is a direct significant positive relationship between perceived value and customer loyalty.

H7: There is a direct significant positive relationship between perceived value and customer engagement.
### 3.3.3 Customer Satisfaction

Customer satisfaction provides benefits for customers and organisations. For an organisation, obtaining customer satisfaction is proven to raise company profitability. Thus, achieving a high level of customer satisfaction is considered to be an important goal for many firms (Oliver, 2010; Yu et al., 2014). Satisfied customers are proposed to influence brand image, because brand image results from customer’s experiences and attitudes towards the company. Higher customer satisfaction levels lead to higher perceptions of brand reputation and image (Amin et al., 2013; Hu et al., 2009; Park et al., 2006; Zins, 2001).

Satisfied customers are more likely to have a long interaction with a service organisation and this may result in more highly engaged customer (Flynn, 2012; Van Doorn et al., 2010). Furthermore, once customers find that a company can satisfy their needs, they may experience increased pride and confidence in the brand, believe in its integrity and become passionate about it. Such feelings are the psychological aspects of customer engagement (Brodie et al., 2011).

Customer satisfaction is claimed to have an essential role in the formation of customer loyalty. Hu et al. (2009) and Jen et al. (2011) observed that satisfied customers tend to be loyal, as measured by behavioural intentions. Ha and Park (2013), Jaiswal & Niraj (2011), Yuksel (2010) and Shankar et al. (2003) explain that customer satisfaction is a construct that significantly and positively affects customer loyalty.

Thus, the following hypotheses are formulated:

- **H8**: There is a direct significant relationship between customer satisfaction and brand image.
- **H9**: There is a direct significant relationship between customer satisfaction and customer engagement.
- **H10**: There is a direct significant relationship between customer satisfaction and customer loyalty.

### 3.3.4 Brand Image

A good brand image is regarded as important in order to maintain a company’s position in the market (Bloemer et al., 1998). In addition, previous studies have identified brand image as an antecedent of customer satisfaction and customer loyalty in different industries such
as hotels (Jani & Han, 2014; Kandampully et al., 2011), education (Brown & Mazzarol, 2009), retail (Bloemer & De Ruyter, 1998) and telecommunications (Aydin & Özer, 2005). In the airline industry specifically, Yang et al. (2011), Park et al. (2006) and Zins (2001) identified airline image as having a significant positive influence on loyalty, which is reflected in the behavioural intentions of air travellers. Customers tend to choose a service company with a good brand image to serve their needs because that might help assure a high quality service and greater customer perceived value (Yang et al., 2011).

Conceptually, brand image also has a positive relationship with customer engagement (Van Doorn et al., 2010). According to de Matos and Rossi (2008) and Keller (2013), the higher a brand’s reputation, the more likely customers will engage with the brand in positive ways. In the context of the airline industry, brand image can also be considered an important factor in engendering customer engagement (Van Doorn et al., 2010).

Therefore, the following hypotheses are formulated:

H11: There is a direct significant relationship between brand image and customer loyalty.

H12: There is a direct significant relationship between brand image and customer engagement.

3.3.5 Customer Engagement

Bowden (2009a), Brodie et al. (2011) and Van Doorn et al. (2010) report that customer engagement enhances customer loyalty, as the greater their engagement, then the more customers experience cognitive complacency (Bowden, 2009b; Brodie et al., 2011; Van Doorn et al., 2010). In addition, a customers’ actual engagement can be considered as a behaviour that comes from rational and emotional senses that can entrench customer loyalty to a service company (Bowden, 2009b; Brodie et al., 2013).

Thus, the following hypothesis is formulated:

H13: There is a significant relationship between customer engagement and customer loyalty.
3.4 Hypotheses Related to Research Objective Two: The Mediating Effects among the Constructs

Previous studies have shown that customer loyalty is affected by other constructs in both direct and indirect manners. As discussed in Section 3.3.1, service quality is proposed to have a direct effect on customer loyalty. However, service quality is also reported to have an indirect effect on customer loyalty (Caruana, 2002; Cronin et al., 2000; Kuo et al., 2013). Several studies also note that customer satisfaction plays a mediating role between service quality and customer loyalty (Bloemer et al., 1998; Caruana, 2002; Kuo et al., 2013).

Thus, the following three hypotheses are formulated as:

H14a: Perceived value mediates the effect of service quality on customer loyalty.

H14b: Brand image mediates the effect of service quality on customer loyalty.

H14c: Customer satisfaction mediates the effect of service quality on customer loyalty.

The theory of reasoned action by Ajzen and Fishbein (1980) shows that an affective variable plays a mediating role between a cognitive and conative variable. Perceived value, as a determinant of customer loyalty, not only has a direct effect but also has an indirect effect on customer loyalty (Eggert & Ulaga, 2002; Lam, Shankar, Erramilli, & Murthy, 2004; Lin & Wang, 2006). Patterson and Spreng (1997) demonstrate that the effect of perceived value on loyalty is mediated by customer satisfaction. The finding of the mediating role of customer satisfaction on the relationship between perceived value and customer loyalty is also supported in studies by Eggert and Ulaga (2002), Lam et al. (2004) and Lin & Wang (2006).

In this current study, perceived value (a cognitive variable) is proposed to be mediated by customer satisfaction (an affective variable) in order to affect customer loyalty (a conative variable).

Thus, the following two hypothesis are formulated:

H15a: Customer satisfaction mediates the effect of perceived value on customer loyalty.

H15b: Customer engagement mediates the effect of perceived value on customer loyalty.
The next two hypotheses refer to direct relationships proposed between customer satisfaction, brand image, and customer loyalty. There is some evidence that customer engagement performs a mediating role in the relationship between customer satisfaction and customer loyalty (Bowden, 2009b; Brodie et al., 2013; Brodie et al., 2011; Flynn, 2012; Van Doorn et al., 2010).

Thus, there is a potential for customer engagement to have a mediating role on the relationship between brand image and customer loyalty.

Therefore, the next hypotheses are formulated:

H16: There is an indirect significant relationship between customer satisfaction and customer loyalty.

H17: There is an indirect significant relationship between brand image and customer loyalty.

3.5 Hypotheses Related to Research Objective Three: The Moderating Effect of Gender

The differences between male and female behaviour have been proven by former researchers, especially in the psychology discipline. Based on Social Role Theory (Eagly et al., 2000), it is believed that males and females will react differently to a particular situation. For example, males usually concentrate on positive information, while women are inclined to put more weight on negative information. In addition, women tend to have lower expectations when it comes to products or services and usually are more eager to share their thoughts and interact with other people. In contrast, males tend to have higher expectations of a product or service and are less likely to share their thoughts (Ariffin & Maghzi, 2012; Mattila, 2000)

Several marketing studies have also illustrated that gender influences consumer expectations, purchasing behaviour, customer share of wallet, and product evaluation (Ariffin & Maghzi, 2012; Karatepe, 2011; Mattila, 2000; Meyers-Levy & Maheswaran, 1991; Shao et al., 2004; Yeh, Kuo-Lun, & Wei-Ning, 2012). Several studies have verified the role of gender as a moderating variable between customer satisfaction and loyalty (Homburg & Giering, 2001; Ladhari & Leclerc, 2013; Walsh, Evanschitzky, & Wunderlich, 2008).

Thus, the hypotheses relating to Research Objective 3 are formulated:
H18: Gender moderates the relationship between perceived value and customer satisfaction.

H19: Gender moderates the relationship between customer satisfaction and brand image.

H20: Gender moderates the relationship between brand image and customer engagement.

H21: Gender moderates the relationship between customer engagement and customer loyalty.

### 3.5.1 Chapter Summary

The proposed interrelationships identified in the literature among service quality, perceived value, brand image, customer satisfaction, customer engagement and customer loyalty have been discussed in this chapter. The 21 hypotheses formulated to satisfy the three research objectives have also been stated and discussed. The next chapter will discuss the research methodology to test the hypothesis.
Chapter 4
Research Method

4.1 Introduction

This chapter introduces the research design and methods employed to achieve the proposed research objectives. Specifically, Section 4.2 explains the sample derivation. Section 4.3 discusses the sample size. Section 4.4 explains the process of developing the survey instrument and construct operationalization. The method of collecting data is discussed in Section 4.5. The preliminary data analysis is explained in Section 4.6 and data analysis procedure including CFA, SEM and multi-group analysis are discussed in Section 4.7.

4.2 Sample Derivation

The sample for this study was drawn from the population of Indonesian high-frills airline passengers, specifically the 5-star airline passengers. Five-star Indonesian airline passengers were sampled as this current study aims to capture passengers’ perceptions of a world-class, high-frills airline. An airline with a 5-star ranking normally focuses on building a positive brand image by providing a high quality of services (Al-Rousan & Mohamed, 2010).

An official 5-star airline ranking is granted by Skytrax, an independent research consultancy firm serving the global airline industry. The rating criteria is based on customers’ experiences, such as the check-in and boarding service, in-flight entertainment, in-flight meals, in-flight amenities and cabin staff services. Airlines that receive a 5-star ranking are guaranteed to have a high quality standard of services (Skytrax, 2014). Furthermore, a 5-star ranking is awarded to airlines that maintain a fatality-free record for the previous 10 years and that meet the International Civil Aviation Organization (ICAO) safety standards (Thomas, 2015).

Primary data was collected from the Indonesian cities of Surabaya and Malang between April 15th and June 17th, 2013. There are several reasons that support the choice of these cities. Surabaya, the capital of East Java province, is a city of business and industry with a big domestic and international airport through which many travellers pass. Malang, which is also located in East Java Province, is the second largest city in the province. Malang is a gateway
airport and was chosen because it is a centre for education and tourism and it also has a domestic airport.

### 4.3 Sample Size

This study employs three data analysis techniques: Confirmatory Factor Analysis (CFA), Structural Equation Modelling (SEM) and a multi-group comparison analysis. One data set is required to perform all three analyses. However, SEM requires a big sample size to produce a reliable result. Five issues are generally considered when determining the minimum and maximum sample size for structural equation modelling analysis: (1) multivariate distribution, (2) estimation technique, (3) model complexity, (4) amount of missing data and (5) the average error variance of the indicators (Hair, Black, Babin, Anderson, & Tatham, 2010; Tabachnick & Fidell, 2007). Hair et al. (2010) suggest that if the model contains fewer than three constructs and the communalities are modest, then at least 200 completed questionnaires are required. Since this study contains more than five constructs with modest communalities, the sample size should be more than 200. However, Tabachnick and Fidell (2007) suggest that a large sample size (>500) tends to be more sensitive and makes goodness-of-fit measures suggest a poor fit. Thus, the sample size for this study preferably is between 200 and 400 observations in order to meet the adequate requirements of SEM analysis. Furthermore, to test the third research objective regarding the moderating effect of gender, the sample must be divided fairly evenly into two groups (male and female passengers).

### 4.4 Survey Instrument Development

The model employed in this study includes six latent/unobserved variables. In order to measure those variables, the researcher needed to operationalize the constructs. Hair et al., (2010) maintain that researchers should review the extant literature to find and adopt the individual constructs that have performed well in prior research. If no measurement items or scales are found, the measurements for new constructs must be developed based on the construct conceptualizations and definitions found in the literature (Hollebeek et al., 2014). In addition, a focus group discussion can be conducted as an exploratory stage in the development of the measurement items (Grey, 2014).

The following steps were taken to operationalize the constructs in this study. First, the literature review produced scales for perceived value, brand image, passenger satisfaction
and passenger loyalty constructs, as these constructs have been widely applied in marketing research (Brodie et al., 2009; Chen & Chang, 2008; M. D. Clemes et al., 2008; Park et al., 2006; So et al., 2012; So et al., 2014).

However, Indonesia may have unique customer and cultural characteristics that could influence customers’ perceptions of service quality, and a literature review could not be solely relied upon to operationalize the service quality construct (Grey, 2014). Thus, focus group discussions were also held to facilitate the development of the service quality measurement items, as suggested by several researchers (Clemes et al., 2014; Lu et al., 2009; Zeithaml, Parasuraman, & Malhotra, 2002).

Customer engagement is a construct more recently introduced in service marketing research (Bowden, 2009b; Brodie et al., 2011; Hollebeek et al., 2014; Verhoef et al., 2010; Vivek et al., 2012). Accordingly, a broad literature review uncovered a recent scale for customer engagement by So et al. (2012), which was adapted for this research and used with the information obtained from the focus group discussions and the pre-test of the questionnaire.

4.4.1 Construct Operationalization

A literature review was carried out to operationalize and measure the constructs in this study. As well as reviewing the literature, focus group discussions were also conducted to identify items relating to service quality and customer engagement. Edmuns (1999) and Grey (2014) note that focus groups can provide a deeper understanding of customer perspectives, feelings, attitudes and motivations, so that appropriate measurement scales can be generated.

Focus group discussions were conducted two times and in small groups, in order to make each group as homogeneous as possible. Edmuns (1999) and Liamputtong (2011) maintain that small focus group discussions improve the participants ability to concentrate on the topic and therefore allow greater observational opportunities. The first focus group discussion was attended by seven people: three male and four female participants. The second group was attended by ten people: five male and five female participants. In total, there were 17 people who took part in focus group discussions in this study. The participants were all Indonesian and above 18 years-old and had experienced flying with a high-frills Indonesian airline service.
The focus group discussions began when the researcher informed the participants about the main objectives of the discussion and the domain of the constructs. Participants were asked to list the factors that make up their perceptions of Indonesian airline service quality. In the next step, participants were asked to evaluate their experience flying with Indonesian airlines. This step was conducted to ensure that no important factors were omitted from the discussions.

Next, the same steps were followed to generate valid measurement items for the customer engagement construct. First, the domain of the customer engagement construct was explained to the participants. They then were asked to list any kind of behaviour or attitude that relates to a personal connection with a brand. The final step was designed to generate a discussion about participants’ opinions on the measurement of the other operationalized constructs that were generated from the literature review. The items used for perceived value, brand image, customer satisfaction and customer loyalty were presented and participants were asked for their opinions of the items. A discussion followed as to whether the questions were clearly written and easily understood.

4.4.2 The Customer Loyalty Scale

In this study, customer loyalty is defined as an intended loyalty behaviour, including word-of-mouth messages and re-patronage intentions. The items for the customer loyalty scale were drawn from Brodie et al. (2009), Chen and Chang (2008), Hu et al. (2009), Nadiri et al. (2008), Saha and Theingi (2009), and So et al. (2012). The focus group discussions, the pretest and the CFA confirmed the suitability of the items and scales adapted from these studies. The items are listed in Table 4.1.
Table 4.1 Customer Loyalty Measurement Items

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I intend to say positive things about this airline to other people.</td>
<td>Brodie et al. (2009)</td>
</tr>
<tr>
<td>2.</td>
<td>I intend to fly with this airline again in the future.</td>
<td>Chen and Chang (2008)</td>
</tr>
<tr>
<td>3.</td>
<td>I intend to encourage relatives and friends to fly with this airline.</td>
<td>Hu et al. (2009)</td>
</tr>
<tr>
<td>4.</td>
<td>I intend to recommend this airline to other people.</td>
<td>Nadiri et al. (2008)</td>
</tr>
<tr>
<td>5.</td>
<td>Overall, given the other choices of airline companies, I will remain flying with this airline.</td>
<td>Saha and Theingi (2009)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>So et al. (2012)</td>
</tr>
</tbody>
</table>

4.4.3 The Service Quality Scale

Service quality scales in quantitative research have been validated and used by numerous scholars (Brady & Robertson, 2001; Clemes et al., 2014; Cronin & Taylor, 1994; Dlačić, Arslanagić, Kadić-Maglajlić, Marković, & Raspor, 2014; Edward & Sahadev, 2011; Gilbert & Wong, 2003). Despite widespread acknowledgement of the importance of service quality, academics do not always agree on how to measure the construct in terms of instruments, dimensions and methods, since a scale of service quality developed for a particular culture may not be applicable to another culture.

The initial items for the service quality construct used in this current study were adapted from scales employed by Teye and Leclerc (1998), Gilbert and Wong (2003), Chen and Chang (2005) and Saha and Theingi (2009). The adaption of Teye and Leclerc (1998), Gilbert and Wong (2003), Chen and Chang (2005), and Saha and Theingi’s (2009) scales was appropriate because the authors explored perceived value based on the perceptions of airline and cruise passengers in a similar vein to this current study. The same steps as discussed in Section 4.4.2 were employed to confirm the suitability of the measurement items of the service quality construct. This is an important step in the research process as there are few studies.
measuring airline service quality, especially in the context of Indonesian airline passengers (Natalisa & Subroto, 2003). The items used to measure the service quality construct are listed in Table 4.2.

### Table 4.2 Perceived Service Quality Measurement Items

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The staff of this airline deliver superior services.</td>
<td>Chen and Chang (2005)</td>
</tr>
<tr>
<td>2</td>
<td>Overall, the in-flight facilities of this airline are excellent.</td>
<td>Gilbert and Wong (2003)</td>
</tr>
<tr>
<td>3</td>
<td>This airline has a convenient flight schedule.</td>
<td>Saha and Theingi (2009)</td>
</tr>
<tr>
<td>4</td>
<td>This airline has convenient reservation and ticketing systems.</td>
<td>Teye and Leclerc (1998)</td>
</tr>
<tr>
<td>5</td>
<td>This airline offers an excellent security system.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I feel safe when I fly with this airline.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>This airline offers excellent baggage handling services.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Overall, this airline provides excellent service quality.</td>
<td></td>
</tr>
</tbody>
</table>

#### 4.4.4 The Perceived Value Scale

Sinha and DeSarbo (1998) and Lovelock et al. (2011) define customer perceived value as a trade-off between price and quality. In terms of operationalizing perceived value, this study follows the trade-off concept which sees a value based on the trade-off between give and get, or benefit and sacrifice (Zeithaml, 1988; Zeithaml, Bitner, & Gremler, 2013). Overall value, as perceived by the passengers, is best captured using the trade-off concept as suggested by Boksberger and Melsen (2011). The key values that are used to measure the cost to passengers of airline travel include money, time, energy and effort (Clemes et al., 2014; Lovelock et al., 2011; Tam, 2004). This research uses five items to measure perceived value that were adapted from previous research (Brodie et al., 2009; Chen, 2008; Cronin et
al., 2000; Patterson & Spreng, 1997; Ryu et al., 2008) and follows the same procedures as discussed in Section 4.4.2. The measurement items are listed in Table 4.3.

### Table 4.3 Perceived Value Measurement Items

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>The ticket price of this airline is reasonable.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Compared to what I have given up (including money, energy, time, and effort), the overall service of this airline is excellent.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Overall, this airline offers good value for money.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Overall, this airline’s services and goods are valuable</td>
<td></td>
</tr>
</tbody>
</table>

#### 4.4.5 The Brand Image Scale

To date, there is no universally accepted definition of brand image (Cho, Fiore, & Russell, 2015; Srivastava & Sharma, 2013). Hence, in the absence of a concrete definition, this construct is generally defined in accordance with the focus of the study (Bian & Moutinho, 2011; Dobni & Zinkhan, 1990). In this study, the item scale for measuring brand image is based on a “holistic” dimension which captures the whole feeling and impression of a brand (Da Silva & Alwi, 2008; Echtner & Ritchie, 1991). Five items are used as the scale for brand image. The items are generated from previous studies (Echtner & Ritchie, 1991; Kandampully & Suhartanto, 2003; Low & Lamb Jr, 2000) and the same steps were followed as described in Section 4.4.2 to validate the items. The brand image scale items used in this study are listed in Table 4.4.
Table 4.4 Brand Image Measurement Items

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I believe that this airline has a better image than its competitors.</td>
<td>Echtner and Ritchie (1991)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kandampully and Suhartanto (2003)</td>
</tr>
<tr>
<td>2</td>
<td>This airline has a good reputation for safety</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I have always had a good impression of this airline.</td>
<td>Low and Lamb Jr (2000)</td>
</tr>
<tr>
<td>4</td>
<td>I continue to be impressed by the brand image of this airline</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Overall, I consider that this airline has a positive image in the marketplace</td>
<td></td>
</tr>
</tbody>
</table>

4.4.6 The Customer Satisfaction Scale

Satisfying customers is one of the focal points of services marketing (Hu et al., 2009). Customer satisfaction is a consumer's emotional judgment that arises from a comparison between perceived and expected service performance. In this study, the measurement items for customer satisfaction were based on those developed in studies by Brodie et al. (2009), Chen and Chang (2008), Cronin et al. (2000), and McCollough, Berry, and Yadav (2000). To validate the items, the steps used in Section 4.4.2 were followed. The items of the customer satisfaction scale are listed in Table 4.5.

Table 4.5 Customer Satisfaction Measurement Items

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I had a satisfying experience flying with this airline.</td>
<td>Brodie et al. (2009)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chen (2008)</td>
</tr>
<tr>
<td>2.</td>
<td>I did the right thing when I chose to fly with this airline.</td>
<td>Cronin et al. (2000)</td>
</tr>
<tr>
<td>3.</td>
<td>I normally have a pleasant flight with this airline.</td>
<td>McCollough et al. (2000)</td>
</tr>
<tr>
<td>4.</td>
<td>Overall, I am satisfied with my decision to fly with this airline.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Overall, this airline provides a very satisfying experience.</td>
<td></td>
</tr>
</tbody>
</table>
4.4.7 The Customer Engagement Scale

The customer engagement construct in this current study is uni-dimensionally measured. The initial measurement items of customer engagement in this current study were adapted from So et al. (2012) study that was based on Australian airlines and hotels. To date, So et al. (2012) and So et al.’s (2014) study are the only studies that have empirically measured customer engagement in airline travel. The customer engagement scale used in So et al. (2012) study has been developed, validated and confirmed as a robust scale. The scale is considered to be an accurate measurement of customer engagement as it has been refined by using Exploratory Factor Analysis (EFA) and achieves satisfactory validity and reliability results (So et al., 2012).

According to So et al. (2012), customer engagement encompasses the affective, cognitive and behavioural manifestations of a consumer’s connection to a brand. As the measurement items for customer engagement used in this research were adapted from the scale employed by So et al. (2012), the operationalization and suitability of items were validated using focus group discussions, the pre-test, and the CFA. The measurement items for the customer engagement construct are listed in Table 4.6.
Table 4.6 Customer Engagement Measurement Items

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I am proud of this airline’s success.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>When someone praises this airline, it feels like a personal compliment.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I am passionate about this airline.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I feel excited about this airline.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>I pay a lot of attention to any information about this airline.</td>
<td>So et al. (2012)</td>
</tr>
<tr>
<td>6.</td>
<td>Publicity related to this airline attracts my attention.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>When interacting with this airline, it is difficult to detach myself.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>I am immersed in my interaction with this airline.</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I am someone who enjoys interacting with like-minded others who fly with this airline.</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>In general, I thoroughly enjoy exchanging ideas with other people who fly with this airline.</td>
<td></td>
</tr>
</tbody>
</table>

Pre-testing the data for this study was conducted to avoid problems with the instructions, questionnaire design and scale validation (Zikmund, Ward, Lowie, Winzar, & Babin, 2011). Fowler (1992) and Grey (2014) maintain that an unclear survey instrument can affect the results of the survey. Pre-testing can also be used as a pilot test for statistical data i.e. descriptive statistics, reliability and validity (Zikmund & Babin, 2010). Thus, pre-testing is considered to be an important step in marketing research to ensure the survey instrument will produce a satisfactory result (van Teijlingen & Hundley, 2002).

The first step in the pre-test procedure was the face validity test to ensure that the items selected for this study not only capture the empirical issues but also include the theoretical and practical considerations. Face validity should be ensured before any data analysis is
undertaken. In addition, a face validity test is not only required for a study that uses new scales, but also for a study using existing scales from published studies (Bryman, 2008; Grey, 2014; Hair et al., 2010; Hardesty & Bearden, 2004; Zikmund & Babin, 2010).

In order to satisfy face validity, the questionnaire was exposed to a panel of experts (Grey, 2014; Kline, 2005). The panel consisted of two marketing experts and two airline industry experts who were asked to provide comments on the questionnaire, and in particular, on the scale items used for the constructs. The next step of the pre-test was conducting a small scale data collection where 30 people were invited to complete the questionnaire and were encouraged to make notes on questions they thought were confusing or could be improved. Based on this pre-testing feedback, only minor grammatical changes were made to the questionnaire, indicating that the participants understood the survey instruments.

Statistical tests were also carried out to measure the initial reliability of the scales used in the questionnaire that was pre-tested. The most widely used measurement to assess the consistency of an entire scale is Cronbach’s Alpha (Blunch, 2008). If the Cronbach’s alpha values are greater than 0.70, the items are a reliable measure of the construct (Hair et al., 2010).

**4.4.8 Design of Final Survey Instrument**

The final questionnaire consisted of two sections (see Appendix A). The first section identified all of the of the constructs to be measured and consisted of positively worded items on service quality, perceived value, brand image, customer satisfaction, customer engagement, attitudinal loyalty and behavioural loyalty, using a 7 point Likert scale where 1 represents ‘strongly disagree’ and 7 represents ‘strongly agree’. A Likert scale is the most common scale used in marketing research and it is considered to be the simplest scale for measuring consumers’ attitudes (Zikmund et al., 2011). The second section contained demographic information regarding age, gender, education level, nationality, ethnicity, purpose of the flight and frequent flyer membership status. The responses in this section were measured using nominal and ordinal scales with fixed choice options.

The original version of the questionnaire was developed in English. Then, the questionnaire was then translated into Bahasa Indonesia using a back translation method. This process ensured that the target sample of Indonesian passengers would be able to read and
understand the questionnaire in their local language (Willgerodt, Kataoka-Yahiro, Kim, & Ceria, 2005).

### 4.5 Method of Collecting Data

Non-probability sampling was deemed appropriate for this research because the total population of Indonesian airline passengers is difficult to quantify, and there is also a lack of accuracy in public data (Reynolds, Simintiras, & Diamantopoulos, 2003; Zikmund et al., 2011). A number of conditions made it necessary to employ convenience sampling. First, as important component of this thesis, testing theory on the interrelationship between six important marketing constructs, convenience sampling was deemed as an appropriate method. In addition, convenience sampling is also regarded as a simple technique for limited budgets and time periods especially when the population data is unavailable (Zikmund & Babin, 2010). The survey was distributed in airports where the target population were represented in very high proportions. Both airports were located in the East Java province, Indonesia.

In order to ensure an acceptable response rate, a non-monetary incentive (a small pencil case) was given to respondents. According to Willimack et al. (1995) and Boulianne (2012) there is no evidence of measurement error as a result of giving respondents a non-monetary incentive.

### 4.6 Preliminary Data Analysis

Prior to the hypothesis testing, the data was subjected to editing, coding, cleaning and treating for missing values. Parasuraman (1991) and Osborne (2013) noted that following the correct raw data handling procedures will help ensure a rigorous analytical result. The next steps involved a preliminary statistical analyses including checking the data for non-response bias, normality, outliers and multicollinearity (Field, 2009; Hair et al., 2010; Kline, 2005; Schumacker & Lomax, 2004).

#### 4.6.1 Missing Data Treatment

Scholars mention that missing data is a common problem in survey research since it presents in a large number of samples (Raaijmakers, 1999; Tsikriktsis, 2005). Before taking any action regarding missing values, the researcher needs to identify the cause underlying the missing data. Missing data normally occurs in the data collection process. A respondent may refuse
to answer a question due to a lack of knowledge, or because the questions are unclear. The missing data problem should be addressed in the questionnaire development and data collection processes. However, despite every precaution missing values do occur when questionnaires are distributed to a large number of respondents. In order to ensure that missing data is not caused by procedural factors such as tabulation errors, the researcher should check these values against the raw data, or the original survey instrument (Osborne, 2013; Tsikriktsis, 2005).

Missing values can be solved in several ways. There are three rule-of-thumbs in remedying missing values. First, if the missing value of an individual case is considered low (<10%), then it can be resolved by applying any method of data imputation (Hair et al., 2010). Second, if the missing value is moderate (>15%), then the case/observation can be deleted. List-wise deletion involves the removal of the entire record of a respondent prior to analysis. This method is strongly recommended if the record is missing more than 15% of the data (Hair et al., 2010; Osborne, 2013; Roth, Switzer, & Switzer, 1999). The list-wise deletion of missing values is acceptable, as an adequate sample size can be provided by the number of completed questionnaires (Enders & Bandalos, 2001; Hair et al., 2010; Sekaran, 2006).

Third, if the missing value is considered high (between 20 and 30%), then the data can be deleted, or remedied (Enders & Bandalos, 2001). However, for a high number of missing values, the diagnostic test for the level of randomness should be performed before selecting the imputation method (Hair et al., 2010; Osborne, 2013; Roth et al., 1999).

If the missing values occur in a random pattern throughout the questionnaire and account for no more than 15% then the mean value substitution method may be applied. There are two methods that can be used in order to remedy missing data using the mean substitution approach: mean substitution across individual data, and mean substitution across items. Since mean substitution across items introduces less bias, this method was applied in this current study (Raaijmakers, 1999; Roth et al., 1999).

4.6.2 Outliers Detection

Data outliers represent an often individual but radically different data score for a particular variable or set of variables (Byrne, 2009; Selvanathan, Selvanathan, & Keller, 2014). Data outliers can be caused by several factors; typographical errors, respondent deceptive behaviour, instrumental errors or natural deviation in the sample (Hodge & Austin, 2004).
Outliers can be detected using a standardized value (Z). For a large sample, an observation can be categorized as an outlier if the Z value is more than +4 or less than -4 (Hair et al., 2010).

The researcher may delete outliers if the presence of outliers could distort the robustness of the study (Osborne & Overbay, 2004). The decision to delete the outliers can be based on certain justifications. If the outlier is not important in the analysis, or the variable is highly correlated with other variables, then the outlier can be deleted and the deletion will not affect the result of the study. However, if the outlier is considered as part of the sample, then retaining the outlier is the best option (Tabachnick & Fidell, 2007).

4.6.3 Normality

A test for normality is considered to be an important step in multivariate analysis and is one of the basic assumptions in SEM (Blunch, 2008; Schreiber, Nora, Stage, Barlow, & King, 2006; Tabachnick & Fidell, 2007). Data normality can be assessed through two components of normality, namely skewness and kurtosis. Kurtosis refers to the ‘flatness’ of the data distribution, while skewness refers to the balance between the right and left sides of the data distribution. A normal data distribution will have skewness and kurtosis absolute values of less than three and eight respectively (Kline, 2005).

4.7 Data Analysis Techniques

In this current study, the data tabulation and preliminary analysis in the study were conducted using SPSS 20 software. The hypothesis testing was divided into three parts. The first part involved CFA, the second part involved SEM, and the third part involved a multi-group analysis. Structural equation software (AMOS version 22) was used to analyse the data.

4.7.1 Structural Equation Modelling

Structural Equation Modelling (SEM) is a powerful statistical technique that can simultaneously analyse a complex relationship model. Scholars also claim that SEM is an appropriate tool for theory testing, especially in behavioural contexts (Byrne, 2010; Curran, West, & Finch, 1996; Hooper, Coughlan, & Mullen, 2008; Savalei & Bentler, 2010; Schreiber et al., 2006). This current research is using six marketing constructs to test the existing
theory relating to relationship marketing. Thus, SEM is suitable to satisfy the research objectives stated in Chapter 1.

4.7.1.1 Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) is used for the first step when the researcher has at least one of the following purposes: (1) evaluating psychometric measurement, (2) validating constructs, (3) testing method effect, (4) testing construct invariance and (5) testing a specific model based on theory (Awang, 2012; Hair et al., 2010; Harrington, 2008; Jackson, Gillaspy Jr, & Purc-Stephenson, 2009). CFA is applied to test if the model specification fits and matches the actual condition or sample (Awang, 2012; Harrington, 2008; Hurley et al., 1997).

Prior to conducting CFA, the issues of validity, reliability and uni-dimensionality of the model should be assessed. Before analysing the relationships among the constructs, the researcher should ensure that the measurement model passes the criteria of validity, reliability and uni-dimensionality (Schumacker & Lomax, 2004).

CFA can be performed in order to measure individual constructs, or the interrelationships between groups of constructs. In this current study, six individual constructs (service quality, perceived value, brand image, customer engagement, customer satisfaction and customer loyalty) were analysed using a path model. Thus, CFA is the appropriate measurement method for this study (Awang, 2012).

4.7.1.1.1 Model Identification

Before proceeding with a CFA, model identification has to be checked to ensure that the model has a unique value to be estimated as required by CFA and SEM. There are three types of models that can be evaluated by comparing the amount of information (variance and covariance) to the parameter estimated. The under-identified model occurs when the variance and covariance in the model are less than the parameter estimated. The just-identified model is when the numbers of variance and covariance are equal to the parameter estimated. The over-identified model is when the numbers of variance and covariance in the model are more than the parameter estimated (Byrne, 2009; Hair et al., 2010).

The formula used to calculate the amount of information in a model is:
s = \frac{i(i + 1)}{2}

Where:

s is the number of pieces of information in the model

i is the number of items in the model

In order to analyse a model using SEM, an over-identified model with a positive degree of freedom is required (Blunch, 2008; Byrne, 2009; Hair et al., 2010; Kline, 2005).

4.7.1.1.2 Validity and Reliability

Scholars agree that statistical tests should be used to measure the validity of a measurement instrument (Anderson & Gerbing, 1991; Pallant, 2010; Sitzia, 1999). Construct validity is a measurement to evaluate the extent to which items appropriately reflect a construct. Construct validity consists of convergent validity and discriminant validity and these need to be assessed.

Convergent validity can be evaluated through factor loadings and the Average Variance Extracted (AVE) value. A factor loading reflects a degree to which the items or indicators of a construct share a high proportion of its variance. Factor loadings of less than 0.5 reflect that the measurement item failed to show a good convergent validity (Anderson & Gerbing, 1988; Hair et al., 2010; Reisinger & Mavondo, 2007). Convergent validity can also be evaluated through the AVE. The AVE values more than or equal to 0.5 indicates that construct validity has been achieved (Fornell & Larcker, 1981; Hair et al., 2010). An AVE can be calculated using the formula below:

\[
\text{AVE} = \frac{\sum_{i=1}^{N} \lambda_i^2}{n}
\]

Where:

\(\lambda\) is the standardized factor loading

\(i\) is the number of items

\(n\) is the total number of items
Discriminant validity ensures that a construct is different from others. Discriminant validity is assessed through a construct’s correlation. If the correlation between two constructs is more than 0.85, then discriminant validity has not been achieved (Hair et al., 2010).

After assessing construct validity, the researcher also needs to evaluate the degree of instrument consistency which is called reliability (Kline, 2005). There are several ways to assess reliability. To satisfy internal reliability, Cronbach’s Alpha values should be 0.7 or higher. Cronbach’s Alpha values can be calculated using SPSS software. When using CFA, the reliability of the measurement model can be evaluated through construct reliability (CR) and variance extracted (VE) values (Bagozzi & Yi, 1988; Fornell & Larcker, 1981; Hair et al., 2010).

Construct Reliability is calculated using the following equation:

$$\rho = \frac{\sum \lambda}{\left(\sum \lambda + \sum \theta\right)}$$

Where:

- $\rho$ is the construct reliability.
- $\lambda$ are the indicator loadings.
- $\theta$ are the indicator error variances.
- $\sum$ is the summation over the indicators of the latent variable.

### 4.7.1.2 Evaluating the Model Fit Indices

An over-identified model does not necessarily fit the data. Therefore, evaluation of a fit model is conducted to measure how well the model fits the data and captures the covariance among the items (Byrne, 2010; Schumacker & Lomax, 2004). There are a number of indices that can be used to assess the fitness of the proposed model. Three fit indices are used in this study: parsimonious, absolute, and incremental fit indices, to judge the goodness of fit of the model (Awang, 2012; Byrne, 2010; Hair et al., 2010; Meyers, Gamst, & Guarino, 2013). Table 4.7 lists the model fit indices and the recommended thresholds.
Table 4.7 Model Fit Indices and Recommended Thresholds

<table>
<thead>
<tr>
<th>Model Fit Indices</th>
<th>Recommended Thresholds</th>
<th>Note</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parsimonious Fit Indices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\chi^2_{/df}$</td>
<td>$\leq 3$</td>
<td>Smaller value indicating a better model fit.</td>
<td>Iacobucci (2010), Kline (2005), Blunch (2008), Schumacker and Lomax (2004).</td>
</tr>
<tr>
<td>PGFI</td>
<td>$\geq 0.6$</td>
<td>Higher value indicating a better model fit.</td>
<td></td>
</tr>
<tr>
<td>Absolute Fit Indices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>Insignificant p values, or $\Delta \chi^2 \geq \chi^2$ table</td>
<td>Insignificant p value indicates a fit model.</td>
<td>Hu and Bentler (1999), Hair et al. (2010), Kline (2005), Tabachnick and Fidell (2007).</td>
</tr>
<tr>
<td>GFI</td>
<td>$\geq 0.9$</td>
<td>GFI range between 0 and 1. Higher value indicating a better model fit.</td>
<td></td>
</tr>
<tr>
<td>RSMEA</td>
<td>$\leq 0.06$</td>
<td>Smaller value indicating a better model fit.</td>
<td>Tabachnick &amp; Fidell (2007).</td>
</tr>
<tr>
<td>SRMR</td>
<td>$\leq 0.5$</td>
<td>Smaller value indicating a better model fit.</td>
<td></td>
</tr>
<tr>
<td>Incremental Fit Indices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NFI</td>
<td>$\geq 0.9$</td>
<td>NFI range between 0 and 1. Higher value indicating a better model fit.</td>
<td>Hair et al. (2010), Byrne (2010).</td>
</tr>
<tr>
<td>CFI</td>
<td>$\geq 0.9$</td>
<td>CFI range between 0 and 1. Higher value indicating a better model fit.</td>
<td></td>
</tr>
</tbody>
</table>

Parsimony Fit Indices provide information for the researcher to evaluate the fitness of the proposed model, as the indices relate model fit to model complexity. The normed chi square ($\chi^2_{/df}$) is the only robust statistical-based measurement in SEM (Hair et al., 2010). Tabachnick & Fidell (2007) note that a good model can be initially indicated by the ratio of
the $x^2$ to the degrees of freedom (df). If $x^2/\text{df}$ value is less than 3, it shows a good model fit. In this study, $x^2/\text{df}$ value is reported.

The Parsimonious Goodness-of-Fit Index (PGFI) is also reported in this study in order to determine the model fit. The cut-off value for PGFI is 0.6 as suggested by Byrne (2010), Blunch (2008), and Ferdinand (2006) means that a PGFI value of more than 0.6 is associated with a well-fitted model.

Chi-squared ($x^2$) is one of the absolute fit indices that is used to measure the differences between the observed and the estimated covariance matrices. Even though the $x^2$ is the only index measuring the difference between matrices, the evaluation of the $x^2$ to estimate the goodness-of-fit model is not suitable to be applied in every case due to the $x^2$’s sensitivity to sample size, the number of observed variables, and the degree of freedom value. For a model with up to 12 observed variables, an insignificant chi-squared is preferred. An insignificant $x^2$ indicates that the two covariance matrices are not different and therefore indicate a fit model. However, the higher the sample size, the more difficult it is to get an insignificant chi-square (Awang, 2012; Byrne, 2009; Hair et al., 2010; Meyers et al., 2013; Tabachnick & Fidell, 2007). In order to reduce the $x^2$ sensitivity to sample size, the researcher can perform chi-square difference test after model modification, and evaluate the normed chi-square value (Iacobucci, 2010; Kline, 2005). The normed chi-squared value is under the parsimonious fit indices listed in Table 4.7.

The chi-square comparison test, which is also known as a nested model comparison, is noted as a powerful test to conclude if a model performed better than other similar models (Bagozzi & Yi, 1989; Bentler, 1990; Hair et al., 2010). The nested model comparison test can be done by using the following equation:

$$
\Delta x^2 (\Delta \text{df}) = x^2 \text{df (B)} - x^2 \text{df (A)} \quad \text{and} \quad \Delta \text{df} = df (B) - df (A)
$$

Where:

$\Delta x^2 (\Delta \text{df})$ is the difference between the chi-square value of original and modified model.

$x^2 \text{df (B)}$ is the chi-square value of the modified model.

$x^2 \text{df (A)}$ is the chi-square value of the original model.
\( \Delta df \) is the difference between degree of freedom of original and modified model.

\( df (B) \) is the degree of freedom of modified model.

\( df (A) \) is the degree of freedom of original model.

Researchers can use the chi-square table of distribution to evaluate if the chi square value between a modified and original model is statistically significant. If the \( \Delta x^2 \) value is greater than the chi-square table value (5% confidence level), then the modified model is judged to provide a better fit (Bentler, 1990; Hair et al., 2010; Iacobucci & Churchill, 2009).

The goodness-of-fit index (GFI) is another parameter which reflects the relative amount of variance and covariance in the model. The GFI usually ranges from 0 to 1 with the higher value indicating a better fit. Some scholars suggest that the GFI should be more than 0.9 to ensure model fit (Agusty Ferdinand, 2006; Hair et al., 2010; Hu & Bentler, 1999; Kline, 2005). However, several researchers discourage the use of the GFI index since there is evidence of over-sensitivity to sample size, and insensitivity in detecting a miss-specified model (Bentler, 1990; Hooper et al., 2008; McDonald & Marsh, 1990; Sharma, Mukherjee, Kumar, & Dillon, 2005).

The Root Mean Square Error of Approximation (RMSEA) is also one of the absolute fit indices that has been used widely (Byrne, 2010; Augusty Ferdinand, 2006; Hu & Bentler, 1999; Kline, 2005). The RMSEA is claimed to be one of the most informative measurements to determine how well the model fits the population covariance matrix (Byrne, 2009; Agusty Ferdinand, 2006). Even though the RMSEA is considered sensitive to model complexity (the number of parameter in the model), Hu and Bentler (1999) and Blunch (2008) recommend the use of RMSEA to distinguish a good model from poor ones. Furthermore, the RMSEA is suitable for evaluating the model fit for a large sample size because it is usually over-rejected in a small sample size. A RMSEA value between 0.08 and 0.1 indicates a moderate fit, while a value less than 0.06 indicates a good fit. To conclude, in order that the proposed model fits the actual data, the value of this index should be less than 0.06 and a lower RMSEA value indicate a better fit (Byrne, 2009; Hair et al., 2010; Hu & Bentler, 1999; Kline, 2005).

The other indices that are used to evaluate model fit are: the Standardized Root Means Square Residual (SRMR). SRMR is a residual-based fit index which is useful for comparing the fit across models. SRMR values range between 0 and 1, and a small value indicates a better
model fit (Hooper et al., 2008; Kline, 2005; Mulaik et al., 1989). Specifically, Byrne (2009) maintains that an SRMR value less than 0.5 reflects a well-fitting model. Based on these arguments, the $\chi^2$, GFI, RMSEA, and SRMR are the absolute fit indices reported in this study.

Other indices are also used to measure the goodness-of-fit model are the incremental fit indices. Incremental fit indices evaluate how well the proposed model fits relative to other baseline models. The most widely used index is the Normed Fit Index (NFI). This index ranges from 0 to 1 where the higher value means a better model fit. In addition to the original incremental fit index (NFI), the Comparative Fit Index (CFI) is also used in SEM. The CFI is judged to be a better version of NFI, since the CFI is insensitive to model complexity. CFI values also ranges between 0 and 1, with a value greater than 0.90 being associated with a good model fit (Hair et al., 2010; Schreiber et al., 2006). Thus, the NFI and CFI are reported in this study.

Academics argue that multiple fit indices should be evaluated to assess the model’s goodness-of-fit, and researchers should report a group of indices that includes: parsimonious fit indices, absolute fit indices, and incremental fit indices (Awang, 2012; Meyer-Waarden, 2013). Multiple fit indices are reported in this study.

4.7.2 The Mediation Test

In order to test the mediation effects proposed in Hypotheses 14, 15, 16 and 17, this study applied Baron & Kenny’s (1986) original method. The first step is to check if there is a mediating effect that occurs in a path model. If the path from the predictor variable (X) to the mediator variable (M) is statistically significant, and the path from the mediator variable (M) to the criterion variable (Y) is also statistically significant, then mediation is present (Baron & Kenny, 1986; Hair et al., 2010; Iacobucci, 2010).

The next step is evaluating the type of mediation effect. There are three types of mediation effects. Partial mediation occurs when variable X is significantly related to M, and M is also significantly related to Y, but the magnitude of the direct effect from X to Y is diminished by adding M into the relationship. The second type of mediation effect is full mediation which occurs when the direct relationship between variable X and Y turn out to be insignificant when variable M is entered into the relationship. The last type of mediation happens when
the presence of variable M in the relationship does not change the significance and magnitude of the relationship between variable X and Y (Awang, 2012; Meyers et al., 2013).

4.7.3 Multi-group Moderation

A moderating variable is defined as a variable that moderates the magnitude of the relationship between variable X and Y. In SEM, multi-group moderation analysis requires a non-metric moderating variable (Hair et al., 2010). Gender (male and female) is the moderating variable used in this study.

In order to verify that a moderating variable does moderate the effect between variable X and Y, the $\chi^2$ difference test needs to be conducted. The first step in conducting a $\chi^2$ difference test is to build an identical path model for each group. The next step is to build two separate models. One model contains constrained parameters and the other one contains un-constrained parameters. Each group is then estimated separately, and then the chi square value, the model fit statistics, and the path estimates from each group are compared and evaluated. When the models show satisfactory fit indices and the $\Delta\chi^2$ is significant (more than 3.84), then it can be concluded that variable M does play a moderating role (Awang, 2012; Hair et al., 2010; Homburg & Giering, 2001; Mittal & Kamakura, 2001; Tabachnick & Fidell, 2007).

After the moderating effect has been proven to be in the proposed model, the last step is analysing the parameter estimates for each path for each model. In order to see if the parameter estimates and the $p$ values are significantly different between the two groups, $z$ scores are calculated and $p$ values are evaluated (Hair et al., 2010).

4.8. Chapter Summary

This chapter discusses the procedures used to conduct the survey and analyse the data. The sample derivation was discussed and this was followed by a discussion about the items used to measure the constructs. The procedures used to test the hypothesis; pre-testing the questionnaire, CFA, SEM, mediating test, and multi-group moderation test, were also discussed in detail. The results of the data analysis and the hypothesis tests will be discussed in the Chapter 5.
Chapter 5
Result

5.1 Introduction
This chapter presents the results of the hypothesis testing by the use of CFA, SEM and multi-group analysis as presented in Chapter 4. The discussion begins with an explanation of the sample and the response rate (Section 5.2). The next section contains the results of the non-response bias test (Section 5.3), and the results of the preliminary data analysis (Section 5.4). Section 5.5 contains the descriptive analysis and followed by a discussion of CFA in Section 5.6. Section 5.7 discussed the hypothesis testing and the results which will be explained and be divided into three sections: the results pertaining to Research Objective one (Hypotheses 1 to 13), the results pertaining to Research Objective two (Hypotheses 14 to 17), and the results pertaining to Research Objective three (Hypothesis 18 to 21).

5.2 Sample and Response Rate
Three hundred questionnaires were distributed to potential respondents for this current study. Potential participants were told that they could withdraw from the study at any time. 29 participants took this option and did not complete the questionnaire. The incomplete questionnaires were not used. The most common reason cited for withdrawing from the survey was a need to leave the airport.

Not all of the questions were answered in the questionnaire by all respondents. Incomplete responses of more than 20% in one observation were listwise deleted or excluded from the analysis following the process suggested by Enders & Bandalos (2001), Roth et al. (1999) and Sekaran (2006) suggestion. Thus, twenty one questionnaires were excluded from the analysis, which resulted in 250 usable questionnaires, yielding a response rate of 83%. This rate is a similar response rate to prior research in airline passenger surveys (between 70% and 85 %) (Aksoy, Atilgan, & Akinci, 2003; Bruning, Kovacic, & Oberdick, 1985; Chen, 2008; M. D. Clemes et al., 2008). The useable sample was also above the minimum required sample (200) for CFA and SEM as noted by Anderson & Gerbing (1984), and Hair et al. (2010). Thus, 250 observations were considered sufficient for this research.
The useable questionnaires were cleaned to remedy any missing values. Since missing values were few and were random, the mean substitution method was used to replace all missing values (Hair et al., 2010; Osborne, 2013). The observations used in this study were organized in an SPSS sheet and the data frequencies were checked to ensure that the data were within their range. Any data that were out of range were reconciled with the original questionnaire. This method ensured that any tabulation errors were minimised (Grey, 2014).

Table 5.1 reports the demographic characteristics of the respondents.

**Table 5.1 Demographic Characteristics of the Respondents**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>146</td>
<td>58.4</td>
</tr>
<tr>
<td>Female</td>
<td>104</td>
<td>41.6</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-25 years</td>
<td>65</td>
<td>26</td>
</tr>
<tr>
<td>26-35 years</td>
<td>119</td>
<td>47.6</td>
</tr>
<tr>
<td>36-45 years</td>
<td>31</td>
<td>12.4</td>
</tr>
<tr>
<td>46-55 years</td>
<td>27</td>
<td>10.8</td>
</tr>
<tr>
<td>Over 55 years</td>
<td>8</td>
<td>3.2</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>75</td>
<td>30</td>
</tr>
<tr>
<td>Diploma</td>
<td>37</td>
<td>14.8</td>
</tr>
<tr>
<td>Bachelor Degree</td>
<td>100</td>
<td>40.0</td>
</tr>
<tr>
<td>Master Degree</td>
<td>31</td>
<td>12.4</td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td>7</td>
<td>2.8</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>49</td>
<td>19.6</td>
</tr>
<tr>
<td>Student</td>
<td>27</td>
<td>10.8</td>
</tr>
<tr>
<td>Retired</td>
<td>3</td>
<td>1.2</td>
</tr>
<tr>
<td>Housewife</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>Business Owner</td>
<td>50</td>
<td>20</td>
</tr>
<tr>
<td>Government Officer</td>
<td>97</td>
<td>38.8</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Loyalty Program</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Member</td>
<td>119</td>
<td>47.6</td>
</tr>
<tr>
<td>Non-member</td>
<td>131</td>
<td>52.4</td>
</tr>
<tr>
<td><strong>Travel Purpose</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>137</td>
<td>54.8</td>
</tr>
<tr>
<td>Leisure</td>
<td>113</td>
<td>45.2</td>
</tr>
</tbody>
</table>
Table 5.1 shows that a majority of the respondents were male passengers. The male passengers accounted for 58.4% of the sample, whilst the female passengers accounted for 41.6%. The greatest number of respondents were in the age group between 26 and 35 years (47.6%). The dominance of this age group is similar to previous studies on the airline industry (An & Noh, 2009; Koufteros, Babbar, & Kaighobadi, 2009; Saha & Theingi, 2009). Those respondents over 56 years old (3.2%) made up the smallest proportion of the sample. Table 5.1 also shows that most of the respondents are well-educated, with 65.2% having completed an undergraduate or post-graduate degree and the rest (44.8%) having completed high school and diploma. Government officer, business owner and professional made up the biggest proportion of the sample’s professions, accounting for 38.8%, 20% and 19.6% respectively. Only 119 (47.6%) of the respondents held a frequent flyer membership, and 131 respondents (52.4%) were not a member of the airline loyalty programme. More than half of the respondents (54.8%) travelled for business reasons while the rest (45.2%) travelled for leisure.

5.3 Non-Response Bias

In order to ensure that the data set was free of early-late bias response, Levene’s test for equality of variances and t-test for equality of means were adopted and were conducted (Armstrong & Overton, 1977). Based on the collecting time, the responses were divided into two groups; the early response group consisted of collected questionnaires from 15th April 2013 to 18th May 2013, and the late response group consisted of collected questionnaires from 19th May 2013 to 17th June 2013. The two groups contain 129 and 121 questionnaires respectively. The Independence sample t-test was conducted to compare the mean of the constructs in both groups. The mean of both samples is projected to be the same based on Levene's test for equality of variances and the t-test for equality of means (Armstrong & Overton, 1977).

Table 5.2 shows that the variances between the early and late group were not different. Thus, there was no indicator of response bias for the data and the responses between the early and the late respondents are similar.
Table 5.2 Non-response Bias Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>SQ</td>
<td>0.044</td>
<td>0.834</td>
</tr>
<tr>
<td>PV</td>
<td>0.007</td>
<td>0.934</td>
</tr>
<tr>
<td>BI</td>
<td>1.913</td>
<td>0.168</td>
</tr>
<tr>
<td>CE</td>
<td>0.371</td>
<td>0.543</td>
</tr>
<tr>
<td>CS</td>
<td>0.009</td>
<td>0.926</td>
</tr>
<tr>
<td>CL</td>
<td>0.153</td>
<td>0.696</td>
</tr>
</tbody>
</table>

5.4 Preliminary Data Analysis

5.4.1 Outliers

In this study, the outliers were checked by using the standardized values of the variables. Since the sample is considered large, the threshold value for standardized scores ($z$) is 4. When the value of the standardised score is greater than 4, it can be categorized as a potential outlier (Hair et al., 2010). There are methods for dealing with data outliers (Hodge & Austin, 2004; Osborne, 2013). Kline (2005) suggests to delete or transform the outliers, especially when the data is non-normal. However, the deletion of outliers will reduce the response rate, while transforming the data can also affect the results of the analysis (Osborne, 2013).

There were only a few outliers and they were scattered randomly throughout the sample. In order to ensure that the data had been entered accurately, the researcher referred to the original data/questionnaire as suggested by Tabachnick & Fidell (2007). In this study, the outliers were retained to ensure the generalizability of the population as suggested by Tabachnick and Fidell (2007).
5.4.2 Normality Test

A skewness and kurtosis test was conducted to test the data normality. The results show that the skewness values were below three and the kurtosis values below eight (Kline, 2005). This suggests that the data is normally distributed. For the service quality construct, the value of skewness ranged from between -1.864 and -0.870 while the kurtosis value ranged from between 1.827 and 7.990 (see Appendix B).

5.5 Descriptive Analysis

The following sections provide information about the means and standard deviations of the constructs. The means and standard deviations were calculated to reflect the average perceptions of the customers (Selvanathan et al., 2014).

5.5.1 Customer Loyalty

The grand mean of the customer loyalty items is 5.866. This result indicates that the respondents, in general, are loyal to the airline company. The respondents tend to make positive comments about the airline, recommend the airline to other people, and remain flying with the airline. Table 5.3 shows the means and standard deviations of the five customer loyalty items.

Table 5.3 The Means and Standard Deviations of Customer Loyalty

<table>
<thead>
<tr>
<th>Code</th>
<th>Item</th>
<th>Std. Deviation</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL1</td>
<td>I intend to say positive thing about this airline to other people</td>
<td>0.854</td>
<td>5.984</td>
</tr>
<tr>
<td>CL2</td>
<td>I intend to fly with this airline again in the future</td>
<td>0.869</td>
<td>5.756</td>
</tr>
<tr>
<td>CL3</td>
<td>I intend to encourage relatives and friends to fly with this airline</td>
<td>0.872</td>
<td>5.828</td>
</tr>
<tr>
<td>CL4</td>
<td>I intend to recommend this airline to other people</td>
<td>0.901</td>
<td>5.848</td>
</tr>
<tr>
<td>CL5</td>
<td>Overall, given the other choices of airline company, I will remain flying with this airline</td>
<td>0.869</td>
<td>5.912</td>
</tr>
</tbody>
</table>
5.5.2 Service Quality

Table 5.4 shows the means and standard deviations of the service quality construct. The grand mean (5.867) was above the mid-point of the scale; indicating respondents make positive statements about the airline company’s service quality. The means of the eight service quality items range from 5.664 to 6.104, while the standard deviations range from 0.8744 to 1.1009.

Table 5.4 The Means and Standard Deviations of Service Quality

<table>
<thead>
<tr>
<th>Code</th>
<th>Item</th>
<th>Std. Deviation</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ1</td>
<td>The staff of this airline deliver superior services.</td>
<td>0.899</td>
<td>5.960</td>
</tr>
<tr>
<td>SQ2</td>
<td>Overall the in-flight facilities in this airline are excellent</td>
<td>0.920</td>
<td>5.980</td>
</tr>
<tr>
<td>SQ3</td>
<td>This airline has a convenient flight schedule</td>
<td>0.9330</td>
<td>5.676</td>
</tr>
<tr>
<td>SQ4</td>
<td>This airline has convenient reservation and ticketing systems.</td>
<td>1.100</td>
<td>5.664</td>
</tr>
<tr>
<td>SQ5</td>
<td>This airline offers an excellent security system</td>
<td>0.950</td>
<td>5.876</td>
</tr>
<tr>
<td>SQ6</td>
<td>I feel safe when I fly with this airline</td>
<td>0.956</td>
<td>5.600</td>
</tr>
<tr>
<td>SQ7</td>
<td>This airline offers excellent baggage handling services</td>
<td>0.912</td>
<td>6.104</td>
</tr>
<tr>
<td>SQ8</td>
<td>Overall, this airline provides excellent service quality</td>
<td>0.874</td>
<td>6.080</td>
</tr>
</tbody>
</table>

5.5.3 Perceived Value

The results of the descriptive statistics for perceived value show that respondents generally agree that the airline company provides good value. This result is reflected by the grand mean (5.518) and also the individual means of the five items all being greater than 5.0. Table 5.5 shows the means and standard deviations of the perceived value construct.
Table 5.5 The Means and Standard Deviation of Perceived Value

<table>
<thead>
<tr>
<th>Code</th>
<th>Item</th>
<th>Std. Deviation</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV1</td>
<td>Considering the ticket price I paid for the airline, I believe that the airline offers excellent services</td>
<td>1.063</td>
<td>5.728</td>
</tr>
<tr>
<td>PV2</td>
<td>The ticket price of this airline is reasonable</td>
<td>1.121</td>
<td>5.092</td>
</tr>
<tr>
<td>PV3</td>
<td>Compared to what I have given up (including money, energy, time, and effort), the overall service of this airline is excellent</td>
<td>1.060</td>
<td>5.600</td>
</tr>
<tr>
<td>PV4</td>
<td>Overall, this airline offers good value for money</td>
<td>1.087</td>
<td>5.588</td>
</tr>
<tr>
<td>PV5</td>
<td>Overall, this airline’s services and goods are valuable</td>
<td>0.991</td>
<td>5.580</td>
</tr>
</tbody>
</table>

5.5.4 Customer Satisfaction

The mean values for each item for the customer loyalty construct range from 5.568 to 5.684 and all are above the mid-point (4) level. The grand mean is 5.653 and its standard deviation is 0.945. The mean values of the customer satisfaction items indicate that the respondents are satisfied with the flight and the in-flight experience as well as with their decision to fly on the Indonesian 5-star airline. Table 5.6 lists the means and standard deviations for the customer satisfaction construct.
Table 5.6 The Means and Standard Deviations of Customer Satisfaction

<table>
<thead>
<tr>
<th>Code</th>
<th>Item</th>
<th>Std. Deviation</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS1</td>
<td>I normally have a pleasant flight with this airline.</td>
<td>0.872</td>
<td>5.640</td>
</tr>
<tr>
<td>CS2</td>
<td>I did the right thing when I chose to fly with this airline</td>
<td>1.005</td>
<td>5.568</td>
</tr>
<tr>
<td>CS3</td>
<td>I had a satisfactory experience flying with this airline</td>
<td>0.927</td>
<td>5.684</td>
</tr>
<tr>
<td>CS4</td>
<td>Overall, I am satisfied with my decision to fly with this airline</td>
<td>0.925</td>
<td>5.732</td>
</tr>
<tr>
<td>CS5</td>
<td>Overall, this airline provides a very satisfactory experience</td>
<td>0.997</td>
<td>5.640</td>
</tr>
</tbody>
</table>

5.5.5 Brand Image

Table 5.7 presents the results for the five items reflecting the brand image construct. All of the mean values are above the midpoint (4), ranging from 4.96 to 5.41 (grand mean = 5.01) and standard deviations range from 1.09 to 1.28 (average standard deviation = 1.18). The grand mean suggests that the respondents perceive that the airline company has a good brand image.

Table 5.7 The Means and Standard Deviations of Brand Image

<table>
<thead>
<tr>
<th>Code</th>
<th>Item</th>
<th>Std. Deviation</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI1</td>
<td>I believe that this airline has a better image than its competitors</td>
<td>1.093</td>
<td>4.968</td>
</tr>
<tr>
<td>BI2</td>
<td>This airline has a good reputation for safety</td>
<td>1.198</td>
<td>5.148</td>
</tr>
<tr>
<td>BI3</td>
<td>I have always had a good impression of this airline</td>
<td>1.129</td>
<td>4.968</td>
</tr>
<tr>
<td>BI4</td>
<td>I continue to be impressed by the brand image of this airline</td>
<td>1.282</td>
<td>4.960</td>
</tr>
<tr>
<td>BI5</td>
<td>Overall, I consider that this airline has a positive image in the marketplace</td>
<td>1.200</td>
<td>5.412</td>
</tr>
</tbody>
</table>
5.5.6 Customer Engagement

The grand mean value for customer engagement construct is above the mid-point (5.874), revealing that the respondents are likely to engage with the airline company. The respondents tend to be proud of the airline’s success since the mean value of this item is 6.056, the highest mean value of all engagement items. The lowest mean value is 5.772 which measured the respondents’ level of attention to any publicity related to the airline company. The lowest mean (5.772) was larger than the mid point (4) indicating that a majority of the respondents appear to be highly engaged with the airline brand. Table 5.8 shows the means and standard deviations of the customer engagement construct.

Table 5.8 The Means and Standard Deviations of Customer Engagement

<table>
<thead>
<tr>
<th>Code</th>
<th>Item</th>
<th>Std. Deviation</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE1</td>
<td>I am proud of this airline’s success</td>
<td>0.871</td>
<td>6.056</td>
</tr>
<tr>
<td>CE2</td>
<td>When someone praises this airline, it feels like a personal compliment</td>
<td>0.881</td>
<td>5.852</td>
</tr>
<tr>
<td>CE3</td>
<td>I am passionate about this airline</td>
<td>0.889</td>
<td>5.856</td>
</tr>
<tr>
<td>CE4</td>
<td>I feel excited about this airline</td>
<td>0.908</td>
<td>5.776</td>
</tr>
<tr>
<td>CE5</td>
<td>I pay a lot of attention to any information about this airline</td>
<td>0.924</td>
<td>5.796</td>
</tr>
<tr>
<td>CE6</td>
<td>Publicity related to this airline attracts my attention</td>
<td>0.887</td>
<td>5.772</td>
</tr>
<tr>
<td>CE7</td>
<td>When interacting with this airline, it is difficult to detach myself</td>
<td>0.884</td>
<td>5.856</td>
</tr>
<tr>
<td>CE8</td>
<td>I am immersed in my interaction with this airline</td>
<td>0.910</td>
<td>5.824</td>
</tr>
<tr>
<td>CE9</td>
<td>I am someone who enjoys interacting with like-minded others who fly with this airline</td>
<td>0.856</td>
<td>5.900</td>
</tr>
<tr>
<td>CE10</td>
<td>In general, I thoroughly enjoy exchanging ideas with other people who fly with this airline</td>
<td>0.919</td>
<td>6.052</td>
</tr>
</tbody>
</table>

5.6 Confirmatory Factor Analysis

In this study, confirmatory factor analysis was achieved by including the constructs and items and by performing the initial CFA. The preliminary CFA model indicates that the model
was over-identified with a degree of freedom equal to 650. The model has 38 items, 741 pieces of information (38[38+1]/2 = 741) and 91 parameters (Byrne, 2010; Kline, 2005).

Figure 5.1 illustrates the original measurement model that was tested using CFA.

\[ x^2/d_f = 1.597; \]  
\[ \text{PGFI} = 0.725; \]  
\[ \text{GFI} = 0.826; \]  
\[ \text{RMSEA} = 0.049; \]  
\[ \text{SRMR} = 0.039 \]

\[ \text{NFI} = 0.858; \]  
\[ \text{CFI} = 0.941 \]

**Figure 5.1. The original measurement model**
Customer Loyalty

The uni-dimensionality for the customer loyalty construct was achieved since the factor loadings ranged between 0.713 and 0.818. The scores of factor loading are shown in Table 5.9.

Table 5.9 Factor Loadings for Customer Loyalty

<table>
<thead>
<tr>
<th>Item</th>
<th>CL1</th>
<th>CL2</th>
<th>CL3</th>
<th>CL4</th>
<th>CL5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor Loading</td>
<td>0.804</td>
<td>0.731</td>
<td>0.827</td>
<td>0.792</td>
<td>0.779</td>
</tr>
</tbody>
</table>

Service Quality

For the service quality construct, the factor loadings range from between 0.737 and 0.842. All factor loadings are above the cut-off value (Anderson & Gerbing, 1984; Reisinger & Mavondo, 2007). Thus, there was no need to delete or modify items of service quality as a result of these scores. Table 5.10 lists the factor loadings for service quality.

Table 5.10. Factor Loadings for Service Quality

<table>
<thead>
<tr>
<th>Item</th>
<th>SQ1</th>
<th>SQ2</th>
<th>SQ3</th>
<th>SQ4</th>
<th>SQ5</th>
<th>SQ6</th>
<th>SQ7</th>
<th>SQ8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor Loading</td>
<td>0.805</td>
<td>0.744</td>
<td>0.843</td>
<td>0.737</td>
<td>0.766</td>
<td>0.800</td>
<td>0.777</td>
<td>0.836</td>
</tr>
</tbody>
</table>

Perceived Value

Table 5.11 shows that factor loadings for the perceived value construct were satisfactory. The scores range from 0.749 to 0.855, and there was no reason to delete any items from the perceived value construct based on the factor loading scores (Anderson & Gerbing, 1988; Fornell & Larcker, 1981; Hair et al., 2010; Reisinger & Mavondo, 2007).

Table 5.11. Factor Loadings for Perceived Value

<table>
<thead>
<tr>
<th>Item</th>
<th>PV1</th>
<th>PV2</th>
<th>PV3</th>
<th>PV4</th>
<th>PV5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor Loading</td>
<td>0.850</td>
<td>0.750</td>
<td>0.854</td>
<td>0.849</td>
<td>0.801</td>
</tr>
</tbody>
</table>
Customer Satisfaction

There is no problem evident with the uni-dimensionality of customer satisfaction, since the factor loadings of the constructs are above 0.6. The factor loadings of the customer satisfaction construct range from 0.744 to 0.832. Table 5.12 shows the factor loading for customer satisfaction construct.

Table 5.12 Factor Loadings for Customer Satisfaction

<table>
<thead>
<tr>
<th>Item</th>
<th>CS1</th>
<th>CS2</th>
<th>CS3</th>
<th>CS4</th>
<th>CS5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor Loading</td>
<td>0.821</td>
<td>0.817</td>
<td>0.803</td>
<td>0.834</td>
<td>0.722</td>
</tr>
</tbody>
</table>

Brand Image

Uni-dimensionality for the brand image construct is achieved by examining the factor loading scores. The lowest score is 0.773 which is above the cut-off value (0.6). There were no items that needed to be deleted due to uni-dimensionality problems (Anderson & Gerbing, 1988; Hair et al., 2010; Reisinger & Mavondo, 2007). Table 5.13 lists the factor loadings for brand image.

Table 5.13 Factor Loadings for Brand Image

<table>
<thead>
<tr>
<th>Item</th>
<th>BI1</th>
<th>BI2</th>
<th>BI3</th>
<th>BI4</th>
<th>BI5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor Loading</td>
<td>0.868</td>
<td>0.806</td>
<td>0.846</td>
<td>0.773</td>
<td>0.807</td>
</tr>
</tbody>
</table>

Customer Engagement

The lowest factor loading for the customer engagement construct is 0.665 which is acceptable for the uni-dimensionality test as the rest of the values were above 0.6. Therefore, the customer engagement construct meet the uni-dimensionality test requirement (Anderson & Gerbing, 1988; Hair et al., 2010; Reisinger & Mavondo, 2007). Table 5.14 lists the factor loadings for the customer engagement construct.
In summary, the standardized factor loadings are all above the cut-off value (0.6) for customer engagement. The factor loadings range from 0.679 to 0.868. Accordingly, uni-dimensionality has been achieved for the model (Anderson & Gerbing, 1988; Hair et al., 2010; Reisinger & Mavondo, 2007).

Even though the uni-dimensionality values of the model are satisfactory, the goodness of fit indices ($\chi^2/df = 1.597$; PGFI = 0.725; GFI = 0.826; RMSEA = 0.049; SRMR = 0.039 NFI = 0.858; CFI = 0.941) are not in the acceptable range, except the normed chi square (1.597) and RMSEA (0.049). In addition, the correlation between customer engagement and customer loyalty is high (0.867) showing that there may be redundancy items in customer engagement and customer loyalty. Model modification was therefore needed in order to improve the model fit indices (Byrne, 2010; Augusty Ferdinand, 2006; Schumacker & Lomax, 2004).

The first step taken to modify the model was to evaluate the standardized residual covariance to identify any redundant items (Hair et al., 2010). The standardized residual covariance value indicated no redundant items, as all values were below 2.5. However, the modification indices show some high modification index (MI) values (more than 4) (Byrne, 2010; Hair et al., 2010). Based on the MI values, some modifications were done to improve the goodness-of-fit indices. Table 5.15 shows the modification process which resulted in the deletion of some items.
Table 5.15 The Deleted Items

<table>
<thead>
<tr>
<th>Code</th>
<th>Item</th>
<th>Reason for Deletion</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE4</td>
<td>I feel excited about this airline</td>
<td>MI: 12.206</td>
</tr>
<tr>
<td>CE6</td>
<td>Publicity related to this airline attracts my attention</td>
<td>MI: 8.302</td>
</tr>
<tr>
<td>PV2</td>
<td>The ticket price of this airline is reasonable</td>
<td>MI: 5.205</td>
</tr>
<tr>
<td>BI4</td>
<td>I continue to be impressed by the brand image of this airline</td>
<td>MI: 4.676</td>
</tr>
<tr>
<td>SQ8</td>
<td>Overall, this airline provides excellent service quality</td>
<td>MI: 4.634</td>
</tr>
<tr>
<td>CS4</td>
<td>Overall, I am satisfied with my decision to fly with this airline</td>
<td>MI: 5.689</td>
</tr>
<tr>
<td>CL4</td>
<td>I intend to recommend this airline to other people.</td>
<td>MI: 5.728</td>
</tr>
</tbody>
</table>

The original model was re-specified via the following steps. The first step was to delete CE4 because of the high MI value (12.206). The second step was to delete CE6 (MI 8.302). The deletion of the two items for customer engagement made a little improvement to the goodness-of-fit indices ($\chi^2$/df: 1.490; PGFI = 0.730; GFI: 0.839; RMSEA = 0.044; SRMR = 0.039; NFI = 0.874; CFI = 0.954). The next steps involved deleting PV2, BI4, SQ8 and CS4 based on the modification index values, which moved the goodness-of-fit indices into acceptable ranges ($\chi^2$/df = 1.397; PGFI = 0.736; GFI = 0.868; RMSEA = 0.040; SRMR = 0.038; NFI = 0.893; CFI = 0.966). The final step was to delete CL4, because of the high modification index (5.728). The deletion of CL4 improved the GFI (0.868), NFI (0.893), and CFI (0.967) values. The modified model was then judged as a fit model (Hu & Bentler, 1999; Kline, 2005). In addition, the modified model is also considered an over-identified model with 419 degrees of freedom, containing 496 pieces of information and 77 parameters (Blunch, 2008; Byrne, 2010; Kline, 2005).

A further minor modification involved deleting seven items: 2 items from the customer engagement construct, and one item each from the service quality, perceived value, customer satisfaction, brand image and customer loyalty constructs. The deletion of the
seven items was still in the acceptable range since the maximum deletion was 20% or less of the total items for each construct (Hair et al., 2010).

In order to prove that the modified model provided a better fit compared to the original model, this current study conducted the nested model test. The nested model, or chi-square difference test, is a test comparing the original model with the modified model (Green & Babyak, 1997). The test was done by subtracting the chi-square value of the modified model \(\chi^2(449) = 586.660\) from the chi-square value of the original model \(\chi^2(650) = 1037.760\), which yielded the difference of \(\chi^2(201) = 451.100\). To determine if the improvement of the modified model is statistically significant, the critical value of \(\Delta \chi^2(201)\) is compared to the value of \(\chi^2\) table (with a 95% confident level). Since the \(\Delta \chi^2(201) = 451.100\) is significant and greater than \(\chi^2(201, \alpha: 0.05) = 235.080\), then the improvement in the modified model is significant and it is deemed to provide a better model fit (Bagozzi & Yi, 1988; Hair et al., 2010; Iacobucci, 2010).

Table 5.16 The Goodness-of-Fit Indices Improvements

<table>
<thead>
<tr>
<th>Model</th>
<th>(\chi^2/df)</th>
<th>PGFI</th>
<th>GFI</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>NFI</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Model</td>
<td>1.597</td>
<td>0.725</td>
<td>0.826</td>
<td>0.049</td>
<td>0.039</td>
<td>0.858</td>
<td>0.942</td>
</tr>
<tr>
<td>Deleting CE4 and CE6</td>
<td>1.490</td>
<td>0.730</td>
<td>0.839</td>
<td>0.044</td>
<td>0.039</td>
<td>0.874</td>
<td>0.954</td>
</tr>
<tr>
<td>Deleting PV2</td>
<td>1.473</td>
<td>0.730</td>
<td>0.844</td>
<td>0.044</td>
<td>0.037</td>
<td>0.878</td>
<td>0.957</td>
</tr>
<tr>
<td>Deleting BI4</td>
<td>1.461</td>
<td>0.729</td>
<td>0.847</td>
<td>0.044</td>
<td>0.037</td>
<td>0.881</td>
<td>0.958</td>
</tr>
<tr>
<td>Deleting SQ8</td>
<td>1.441</td>
<td>0.734</td>
<td>0.858</td>
<td>0.042</td>
<td>0.037</td>
<td>0.886</td>
<td>0.962</td>
</tr>
<tr>
<td>Deleting CS4</td>
<td>1.397</td>
<td>0.736</td>
<td>0.865</td>
<td>0.040</td>
<td>0.037</td>
<td>0.890</td>
<td>0.966</td>
</tr>
<tr>
<td>Deleting CL4</td>
<td>1.400</td>
<td>0.734</td>
<td>0.868</td>
<td>0.040</td>
<td>0.038</td>
<td>0.893</td>
<td>0.967</td>
</tr>
</tbody>
</table>

Table 5.16 shows that in the original model the normed chi square (\(\chi^2/df\)), standardized root mean square residual (SRMR) and root means square error of approximation (RMSEA) were beyond the cut-off value (Awang, 2012; Kline, 2005). The values of \(\chi^2/df\), SRMR and RSMEA were 1.597, 0.041 and 0.049 respectively. After the deletion of CE4, CE6 and PV2, some indices were improved but some others were still below the acceptable range. When BI4 and SQ8 were deleted, the comparative fit index (CFI) improved above to the cut-off value
(0.968). However, the others were only slightly improved (TLI = 0.958; GFI = 0.867; AGFI = 0.843; NFI = 0.891).

Although the GFI and NFI indices were below the cut-off value after deleting CS4 and CL4, the modified model was considered an acceptable model, and construct validity (factor loadings, CRs, AVEs and Cronbach’s Alphas) had been achieved (Hooper et al., 2008; Sharma et al., 2005; Tasmin & Woods, 2008).

In addition, Sharma et al. (2005) suggest that GFI should not be used, since this index is not very sensitive in the detection of miss-specified models and is also affected by sample size. Thus, even though the GFI (0.868) and NFI (0.893) indices are only marginally adequate, the modified model is considered to be fit since the GFI and NFI indices are close to the recommended threshold and the other fit indices are satisfactory (Byrne, 2010; Kline, 2005; Sharma et al., 2005).

The correlations between the exogenous constructs in the modified model are all below 0.85 reflecting good discriminant validity (Hair et al., 2010; Kline, 2005). The verification of convergent validity was tested by measuring the average variance extracted (AVE), evaluating the factor loading, and evaluating the significance of the items in the model (Hair et al., 2010). Since all AVE values are greater than 0.5, the factor loadings are greater than 0.5, and all items are significant at p = 0.001, convergent validity measurement was achieved for the modified model (Fornell & Larcker, 1981; Hair et al., 2010). Table 5.17 below shows the correlation values between the constructs.
Table 5.17 Correlation Estimates

| Service Quality ↔ Perceived Value | 0.821 |
| Service Quality ↔ Customer Loyalty | 0.456 |
| Service Quality ↔ Customer Satisfaction | 0.610 |
| Service Quality ↔ Customer Engagement | 0.467 |
| Service Quality ↔ Brand Image | 0.318 |
| Perceived Value ↔ Customer Loyalty | 0.462 |
| Perceived Value ↔ Customer Engagement | 0.495 |
| Perceived Value ↔ Brand Image | 0.335 |
| Perceived Value ↔ Customer Satisfaction | 0.643 |
| Brand Image ↔ Customer Engagement | 0.296 |
| Brand Image ↔ Customer Satisfaction | 0.314 |
| Brand Image ↔ Customer Loyalty | 0.253 |
| Customer Engagement ↔ Customer Satisfaction | 0.826 |
| Customer Engagement ↔ Customer Loyalty | 0.848 |
| Customer Loyalty ↔ Customer Satisfaction | 0.775 |

Table 5.18 shows that the value of the factor loadings, CR, AVE and Cronbach’s Alpha are satisfactory for the modified model (Fornell & Larcker, 1981; Kline, 2005). All factor loadings are still above the recommended cut-off value (0.6) (Hair et al., 2010). Reliability and construct reliability (CR) were also achieved since the Cronbach’s Alpha values and CR values were higher than the cut-off values (Anderson & Gerbing, 1988; Bagozzi & Yi, 1988; Byrne, 2010). Table 5-18 provides information about the scores of the factor loadings, CR, AVE and Cronbach’s Alpha for the modified model.

Table 5.18 The Validity and Reliability Measurements for all Constructs

<table>
<thead>
<tr>
<th>Construct</th>
<th>Factor Loading</th>
<th>CR</th>
<th>AVE</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality</td>
<td>SQ1</td>
<td>0.790</td>
<td>0.919</td>
<td>0.619</td>
</tr>
<tr>
<td></td>
<td>SQ2</td>
<td>0.726</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SQ3</td>
<td>0.864</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SQ4</td>
<td>0.749</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SQ5</td>
<td>0.782</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SQ6</td>
<td>0.818</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SQ7</td>
<td>0.769</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Value</td>
<td>PV1</td>
<td>0.846</td>
<td>0.902</td>
<td>0.697</td>
</tr>
<tr>
<td></td>
<td>PV3</td>
<td>0.853</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PV4</td>
<td>0.845</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PV5</td>
<td>0.796</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand Image</td>
<td>BI1</td>
<td>0.860</td>
<td>0.894</td>
<td>0.679</td>
</tr>
<tr>
<td></td>
<td>BI2</td>
<td>0.824</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BI3</td>
<td>0.826</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BI5</td>
<td>0.822</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Engagement</td>
<td>CE1</td>
<td>0.679</td>
<td>0.890</td>
<td>0.504</td>
</tr>
<tr>
<td></td>
<td>CE2</td>
<td>0.676</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CE3</td>
<td>0.720</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CE5</td>
<td>0.715</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CE7</td>
<td>0.676</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CE8</td>
<td>0.766</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CE9</td>
<td>0.709</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CE10</td>
<td>0.734</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>CS1</td>
<td>0.826</td>
<td>0.881</td>
<td>0.650</td>
</tr>
<tr>
<td></td>
<td>CS2</td>
<td>0.823</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CS3</td>
<td>0.798</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CS5</td>
<td>0.778</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>CL1</td>
<td>0.791</td>
<td>0.891</td>
<td>0.622</td>
</tr>
<tr>
<td></td>
<td>CL2</td>
<td>0.747</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CL3</td>
<td>0.820</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CL5</td>
<td>0.796</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.2 shows the modified model. The items in this model were used to test the hypotheses. There are seven items for service quality; four items each for perceived value, brand image and customer satisfaction; eight items for customer engagement and five items for customer loyalty.
5.7 Hypotheses Testing

The hypotheses were tested after the validity, reliability and goodness-of-fit-model were deemed suitable. There are 21 hypothesis in this study tested by structural equation modelling (SEM) using AMOS 22 software.

5.7.1 Hypotheses Tests Relating to Research Objective One

The first research objective is to evaluate the relationships among the constructs in the proposed model. The model contains an exogenous construct, service quality; and five
endogenous constructs: perceived value, brand image, customer satisfaction, customer engagement and customer loyalty.

The research model is an over-identified model since the number of observed variance and covariance are more than the number of the estimated parameters (Byrne, 2010). The modified model has 31 items with 496 points of information \((31 (31+1)/2 = 496)\) and 75 estimated parameters.

There was no requirement to conduct any further modification of the model, as the fit-indices are adequately acceptable (Hair et al., 2010; Kline, 2005; Sharma et al., 2005). The goodness-of-fit indices for the model are shown in Table 5.19 below.

**Table 5.19 The Goodness-of-Fit Indices**

<table>
<thead>
<tr>
<th>The Goodness-of-fit Indices</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\chi^2/df)</td>
<td>1.331</td>
</tr>
<tr>
<td>PGFI</td>
<td>0.741</td>
</tr>
<tr>
<td>GFI</td>
<td>0.873</td>
</tr>
<tr>
<td>RSMEA</td>
<td>0.036</td>
</tr>
<tr>
<td>SRMR</td>
<td>0.037</td>
</tr>
<tr>
<td>NFI</td>
<td>0.897</td>
</tr>
<tr>
<td>CFI</td>
<td>0.972</td>
</tr>
</tbody>
</table>

The path model is shown in Figure 5.3.
H1: Hypothesis 1 proposed that there is a positive significant direct effect of service quality on perceived value. The model shows a positive path (t = 11.866; β = 0.822), therefore Hypothesis 1 is supported. The positive relationship between these two constructs suggests that higher service quality leads to higher value as perceived by airline customers.

H2: Hypothesis 2 proposed that service quality has a significant effect on brand image. The result indicates that service quality has a positive significant effect on brand image (t = 2.222; β = 0.196). This finding demonstrates that airline customers perceive a higher brand image when they perceive they have received a high level of service quality.
H3: Hypothesis 3 proposed a significant effect of service quality on customer satisfaction. Testing this relationship yielded a t-statistic value of 2.090 (p < 0.05) as the path coefficient has a positive slope (β = 0.241). Thus, a positive effect was found for the relationship between service quality and customer satisfaction. This finding supports Hypothesis 3.

H4: A positive significant relationship of service quality on customer loyalty was proposed in this study (Hypothesis 4). Based on the hypothesis test, the significant effect of service quality on customer loyalty cannot be proven. The t-statistic value of 0.579 and the p value of 0.563 are not significant and do not provide support for Hypothesis 4.

H5: A significant effect of perceived value on customer satisfaction was proposed by Hypothesis 5. The result of the hypothesis test shows a significant effect of perceived value on satisfaction (t = 3.764, β = 0.447, p < 0.001). The path coefficient indicate a positive relationship between these constructs supporting Hypothesis 5.

H6: A significant effect of perceived value on customer loyalty was proposed by Hypothesis 6. However, hypothesis testing shows that perceived value does not significantly influence customer loyalty (t = -0.541, p > 0.05). As a result, Hypothesis 6 was not supported.

H7: Hypothesis 7 posited that perceived value positively influences customer engagement. Similar to its effect on customer loyalty, this study did not find that perceived value had a positive effect on customer engagement (t = -1.069, p > 0.05). Thus, Hypothesis 7 is not supported.

H8: A positive and significant effect of customer satisfaction on brand image is posited for Hypothesis 8. The t-statistic value is 2.070 (p < 0.05) suggesting that customer satisfaction does influence passenger perceptions of brand image, supporting Hypothesis 8. Given that the value of the path coefficient indicates a positive direction (β = 0.187), the higher the level of customer satisfaction, then the more positive is the image of the brand.

H9: Hypothesis 9 proposed that customer engagement would be affected by customer satisfaction. Based on the hypothesis testing, the hypothesis is supported (t = 8.376, p < 0.001, β = 0.861). This positive relationship means customers may be more likely to engage with the airline when they are satisfied with the service provided.
H10: Hypothesis 10 proposed that there is a positive and significant effect of customer satisfaction on customer loyalty. There is a positive significant relationship between customer satisfaction and customer loyalty ($t = 1.998, p < 0.05, \beta = 0.243$), supporting Hypothesis 10. Support for Hypothesis 10 can be interpreted as, the higher the satisfaction of customers, the higher their loyalty toward the airline company.

H11: Hypothesis 11 proposed a positive significant effect of brand image on customer loyalty. Hypothesis testing did not determine a positive relationship between service quality and passenger loyalty ($t = -0.707, p > 0.05$). Therefore, Hypothesis 11 is not supported.

H12: Hypothesis 12 proposed a significant effect of brand image on customer engagement. However, this current study did not find a significant effect of brand image on customer engagement ($t = 0.815, p > 0.05$). Hence, Hypothesis 12 is not supported.

H13: Hypothesis 13 proposed that there is a significant effect of customer engagement on customer loyalty. The result of hypothesis testing shows that customer loyalty is significantly affected by customer engagement ($t = 5.629, p < 0.001, \beta = 0.659$) which supports Hypothesis 13. Given that the path coefficient indicates a positive sign, higher customer engagement results in higher customer loyalty to the airline.
Table 5.20 The Relationship Path among the Constructs.

<table>
<thead>
<tr>
<th>Hypothesized Paths</th>
<th>Estimate</th>
<th>C.R.</th>
<th>P</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Service Quality → Perceived value</td>
<td>0.822</td>
<td>11.866</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H2: Service Quality → Brand Image</td>
<td>0.196</td>
<td>2.222</td>
<td>0.027</td>
<td>Supported</td>
</tr>
<tr>
<td>H3: Service Quality → Customer Satisfaction</td>
<td>0.241</td>
<td>2.090</td>
<td>0.037</td>
<td>Supported</td>
</tr>
<tr>
<td>H4: Service Quality → Customer Loyalty</td>
<td>0.054</td>
<td>0.579</td>
<td>0.563</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H5: Perceived value → Customer Satisfaction</td>
<td>0.447</td>
<td>3.764</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H6: Perceived value → Customer Loyalty</td>
<td>-0.054</td>
<td>-0.541</td>
<td>0.588</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H7: Perceived value → Customer Engagement</td>
<td>-0.075</td>
<td>-1.069</td>
<td>0.285</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H8: Customer Satisfaction → Brand Image</td>
<td>0.187</td>
<td>2.070</td>
<td>0.038</td>
<td>Supported</td>
</tr>
<tr>
<td>H9: Customer Satisfaction → Customer Engagement</td>
<td>0.861</td>
<td>8.376</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H10: Customer Satisfaction → Customer Loyalty</td>
<td>0.243</td>
<td>1.998</td>
<td>0.046</td>
<td>Supported</td>
</tr>
<tr>
<td>H11: Brand Image → Customer Loyalty</td>
<td>-0.035</td>
<td>-0.707</td>
<td>0.480</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H12: Brand Image → Customer Engagement</td>
<td>0.043</td>
<td>0.815</td>
<td>0.415</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H13: Customer Engagement → Customer Loyalty</td>
<td>0.659</td>
<td>5.629</td>
<td>***</td>
<td>Supported</td>
</tr>
</tbody>
</table>

*** Statistically significant at the 0.001 level (t > 3.291)

There are 5 insignificant paths from the 13 direct paths hypothesized. Table 5.20 shows that the standardized estimated value for the path between service quality and customer loyalty ($\beta = 0.054$, $t = 0.579$, $p = 0.563$), perceived value and customer loyalty ($\beta = -0.054$, $t = 0.541$, $p = 0.588$), perceived value and customer engagement ($\beta = -0.075$, $t = -1.069$, $p = 0.285$),
brand image and customer loyalty ($\beta = -0.035$, $t = -0.707$, $p = 0.480$), and brand image and
customer engagement ($\beta = 0.043$, $t = 0.815$, $p = 0.415$), are not significant. Thus, Hypotheses
4, 6, 7, 11, and 12 are not supported. Figure 5.3 displays the path relationships among the
constructs.

5.7.2 The Hypotheses Relating to Research Objective Two

The second research objective was to test the mediating effects among the constructs. There
are several potential mediation effects that have been hypothesized in this study. The
constructs that may mediate the relationship between service quality and customer loyalty,
are brand image, perceived value and customer satisfaction (Hypotheses 14a, 14b and 14c)
(Bloemer & De Ruyter, 1998; Caruana, 2002; Cronin et al., 2000; Kuo et al., 2013). The
customer satisfaction and customer engagement constructs mediate the relationship
between perceived value and customer loyalty (Hypotheses 15a and 15b) (Eggert & Ulaga,
2002; Lam et al., 2004; Lin & Wang, 2006). The brand image and customer engagement
constructs mediates the relationship between customer satisfaction and customer loyalty
(Hypotheses 16a and 16b) (Brodie et al., 2013; Brodie et al., 2011). Customer engagement
mediates the relationship between brand image and customer loyalty (Hypothesis 17)
(Greve, 2014).

H14: This current study follows Baron and Kenny’s (1986) method for testing the mediating
effects. An indirect effect between service quality and customer loyalty was proposed in
Hypothesis 14. Perceived value and customer satisfaction mediate the relationship between
service quality and customer loyalty therefore Hypotheses 14a and 14b are supported.

Testing the direct relationship between service quality and customer loyalty determined a
significant relationship between the constructs ($\beta = 0.45$) at the 0.001 level (see Figure 5.4).
Figure 5.4. The Direct Effect of Service Quality on Customer Loyalty

Figure 5.5 shows the mediating effect of perceived value on the relationship between service quality and customer loyalty. The goodness-of-fit indices of the model are acceptable and indicate that the model is fit (Byrne, 2010; Hair et al., 2010; Tabachnick & Fidell, 2007). The relationship between service quality and perceived value shows a significant path ($\beta = 0.82$), likewise the relationship between perceived value and customer loyalty is ($\beta = 0.27$). However, the relationship between service quality and customer loyalty became insignificant when perceived value was inserted in the model (see figure 5.5 and Table 5.21). Thus, perceived value has fully mediated the effect of service quality on customer loyalty.
The other construct that is proposed to mediate the relationship between service quality and customer loyalty is brand image. When the brand image construct is included in the model, the goodness-of-fit indices of the model are acceptable and indicate that the model is fit (Byrne, 2010; Hair et al., 2010; Tabachnick & Fidell, 2007). However, the relationship between service quality and brand image shows an insignificant path: brand image does not play a mediating role of the effect of service quality on customer loyalty (see Table 5.21).

Figure 5.6 displays a mediating role of customer satisfaction on the relationship between service quality and customer loyalty. The goodness-of-fit indices indicate that the model is fit (Byrne, 2010; Hair et al., 2010; Tabachnick & Fidell, 2007). The effect of service quality on customer satisfaction is significant ($\beta = 0.60$), likewise the relationship between customer satisfaction and customer loyalty is significant ($\beta = 0.79$). However, the relationship between service quality and customer loyalty became insignificant when customer satisfaction is inserted in the model. Therefore, the effect of service quality on customer loyalty is fully mediated by customer satisfaction (see Figure 5.6 and Table 5.21).
Based on the results of the hypothesis testing that have been discussed, Hypotheses 14a and 14b are supported, while Hypothesis 14c is not supported.

**Figure 5.6 The Mediating Role of Customer Satisfaction on the Effect of Service Quality on Customer Loyalty.**

**Table 5.21 The Indirect Effect of Service Quality on Customer Loyalty**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Paths</th>
<th>Direct Causal Path (SQ → CL)</th>
<th>Indirect Causal Path with Mediating Variable</th>
<th>Mediation</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H14a</td>
<td>SQ → PV → CL</td>
<td>β = 0.451 (*** )</td>
<td>β = 0.234 (0.073)</td>
<td>Fully Mediated</td>
<td>Supported</td>
</tr>
<tr>
<td>H14b</td>
<td>SQ → BI → CL</td>
<td>β = 0.451 (*** )</td>
<td>-</td>
<td>Not mediated</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H14c</td>
<td>SQ → CS → CL</td>
<td>β = 0.451 (*** )</td>
<td>β = -0.026 (0.707)</td>
<td>Fully Mediated</td>
<td>Supported</td>
</tr>
</tbody>
</table>

() t-value  
*** Statistically significant at the 0.001 level (t > 3.291)

\[ \frac{x^2}{df} = 1.404; \text{PGFI} = 0.678; \text{GFI} = 0.935; \text{RMSEA} = 0.040; \text{SRMR} = 0.032; \text{NFI} = 0.950; \text{CFI} = 0.985 \]
H15: Hypothesis 15a and 15b propose that the influence of perceived value on customer loyalty is mediated by other constructs. In this current study, customer satisfaction (H15a) and customer engagement (H15b) are proposed to mediate the effect of perceived value on customer loyalty. Testing the direct effect of perceived value on customer loyalty resulted in a significant direct relationship between both constructs ($\beta = 0.461$, ) at the 0.001 level (see Figure 5.7 and Table 5.22).

![Diagram](image.png)

**Figure 5.7 The Direct Effect of Perceived Value on Customer Loyalty.**

Figure 5.8 presents the mediating role of customer satisfaction on the relationship between perceived value and customer loyalty. The goodness-of-fit indices for the model are all acceptable, so it can be considered a fit model (Byrne, 2010; Hair et al., 2010; Tabachnick & Fidell, 2007). The effect of perceived value on customer satisfaction is significant ($\beta = 0.641$), as well as the effect of customer satisfaction on customer loyalty ($\beta = 0.815$). However, the inclusion of the customer satisfaction construct as a mediating construct, results in an insignificant effect of perceived value on customer loyalty (see Figure 5.8 and Table 5.22). The results show that customer satisfaction fully mediates the relationship between perceived value and customer loyalty.
Customer engagement is the other construct that is proposed to mediate the effect of perceived value on customer loyalty (see Figure 5.9). The goodness-of-fit indices in the model indicate that the model is fit (Byrne, 2010; Hair et al., 2010; Tabachnick & Fidell, 2007). A significant path also occurs in the relationship between perceived value and customer engagement, and between customer engagement and customer loyalty. The regression weights are 0.49 and 0.82 for those paths respectively. When customer engagement was integrated in the model, the relationship between perceived value and customer loyalty became insignificant (see Table 5.22). This result shows that customer engagement fully mediates the relationship between perceived value and customer loyalty. Thus, the result for Hypotheses 15a and 15b are supported.
Figure 5.9 The Mediating Role of Customer Engagement on the Effect of Perceived Value on Customer Loyalty.

Table 5.22 The Indirect Effect of Perceived Value on Customer Loyalty

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Paths</th>
<th>Direct Causal Path PV → CL</th>
<th>Indirect Causal Path With mediating variable</th>
<th>Mediation</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H15a</td>
<td>PV → CS → CL</td>
<td>( \beta = 0.461 ) (***</td>
<td>( \beta = -0.062 ) (0.405)</td>
<td>Fully mediated</td>
<td>Supported</td>
</tr>
<tr>
<td>H15b</td>
<td>PV → CE → CL</td>
<td>( \beta = 0.461 ) (***</td>
<td>( \beta = 0.056 ) (0.319)</td>
<td>Fully mediated</td>
<td>Supported</td>
</tr>
</tbody>
</table>

( ) t-value

*** Statistically significant at the 0.001 level (t > 3.291)

H16: Hypothesis 16 proposes a mediating role of customer engagement on the relationship between customer satisfaction and customer loyalty. The initial test of the effect of customer satisfaction on customer loyalty shows a direct significant relationship between those two constructs (see figure 5.10 and table 5.23).
The mediating test was conducted by putting the customer engagement construct into the model. Figure 5.11 shows a mediating role of customer engagement on the effect of customer satisfaction on customer loyalty. The goodness-of-fit indices of the model are all satisfying, means that the model is fit (Byrne, 2010; Hair et al., 2010; Tabachnick & Fidell, 2007). The result of the hypothesis testing shows that there is a significant relationship between both customer satisfaction and customer engagement ($\beta = 0.826$); and between customer engagement and customer loyalty ($\beta = 0.654$). When customer engagement is added in the model, the effect of customer satisfaction on customer loyalty remains significant but the regression weight is decreased from 0.776 to 0.235, which means that there is a partial mediation role of customer engagement on the relationship between customer satisfaction and customer loyalty (see Figure 5.11 and Table 5.23). Thus, Hypothesis 16 is supported.

$\chi^2/df = 0.947$; PGFI = 0.518; GFI = 0.982; RSMEA = 0.000; SRMR = 0.016; NFI = 0.984; CFI = 1.000

**Figure 5.10 The Direct Effect of Customer Satisfaction on Customer Loyalty**
Figure 5.11 The Mediating Role of Customer Engagement on the Effect of Customer Satisfaction on Customer Loyalty

Table 5.23 The Indirect Effect of Customer Satisfaction on Customer Loyalty

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Paths</th>
<th>Direct Causal Path CS → CL</th>
<th>Indirect Causal Path With mediating variable</th>
<th>Mediation</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H16</td>
<td>CS → CE → CL</td>
<td>β = 0.776 (***))</td>
<td>β = 0.235 (0.021)</td>
<td>Partially mediated</td>
<td>Supported</td>
</tr>
</tbody>
</table>

( ) t-value

*** Statistically significant at the 0.001 level (t > 3.291)

H17: Hypothesis 17 proposes a mediating effect in the path between brand image and customer loyalty. The result of testing the effect of brand image on customer loyalty shows a direct significant effect (see Figure 5.12 and Table 5.24).
Figure 5.12 The Direct Effect of Brand Image on Customer Loyalty

Figure 5-13 shows the mediating role of customer engagement on the relationship between brand image and customer loyalty. The model is considered as a fit model, because the goodness-of-fit model is acceptable (Byrne, 2010; Hair et al., 2010; Tabachnick & Fidell, 2007). The effect of brand image on customer engagement is significant ($\beta = 0.296$), as well as the effect of customer engagement on customer loyalty ($\beta = 0.848$). The inclusion of the customer engagement construct in the model made the effect of brand image on customer loyalty become insignificant. Thus, the customer engagement construct fully mediates the relationship between brand image and customer loyalty (see Figure 5.13 and Table 5.24). Hypothesis 17 is supported.

Figure 5.13 The Mediating Role of Customer Engagement on the Effect of Brand Image on Customer Loyalty

$\chi^2/df = 2.878$; PGFI = 0.499; GFI = 0.946; RMSEA = 0.087; SRMR = 0.045; NFI = 0.952; CFI = 0.968

$\chi^2/df = 1.737$; PGFI = 0.685; GFI = 0.922; RMSEA = 0.054; SRMR = 0.036; NFI = 0.924; CFI = 0.966
Table 5.24 The Mediating Role of Customer Engagement on the Effect of Brand Image on Customer Loyalty

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Paths</th>
<th>Direct Causal Path BI → CL</th>
<th>Indirect Causal Path With mediating variable</th>
<th>Mediation</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H15</td>
<td>BI → CE → CL</td>
<td>β = 0.254 (***)</td>
<td>β = 0.003 (0.960)</td>
<td>Fully mediated</td>
<td>Supported</td>
</tr>
</tbody>
</table>

() t-value

*** Statistically significant at the 0.001 level (t > 3.291)

5.7.3 The Direct and Indirect Effect of the Variables

The effects of the variable antecedents on endogenous variables can be differentiated into three types of effects. A direct effect is established by testing a single path without any mediator variable, whilst an indirect effect is the effect of one variable which is mediated by at least another variable (Tabachnick & Fidell, 2007). In addition to the direct and indirect effects, it is also important to examine the total effects of an antecedent variable on an endogenous variable (Miller, 1994; Preacher & Hayes, 2008). When the direct and indirect effects are added, it is termed a total effect (Miller, 1994; Preacher & Hayes, 2008). Table 5.25 shows a direct, indirect and total effects.
Table 5.25 The Direct, Indirect and Total Effect

<table>
<thead>
<tr>
<th>Antecedent Variables</th>
<th>Effect</th>
<th>Endogenous Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Perceived Value</td>
</tr>
<tr>
<td>Service Quality</td>
<td>Direct</td>
<td>0.822</td>
</tr>
<tr>
<td></td>
<td>Indirect</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>0.822</td>
</tr>
<tr>
<td>Perceived Value</td>
<td>Direct</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Indirect</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>-</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>Direct</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Indirect</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>-</td>
</tr>
<tr>
<td>Brand Image</td>
<td>Direct</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Indirect</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>-</td>
</tr>
<tr>
<td>Customer Engagement</td>
<td>Direct</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Indirect</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 5.25 presents the direct and indirect effects of the variables and illustrates the important results of the analysis. The service quality construct is an important construct as it has an impact on a number of other constructs in the model. The total effects of service quality on the other constructs range from between 0.822 and 0.310. Service quality is also the only construct with a direct effect on perceived value.

Even though there is no direct effect from perceived value to customer engagement and customer loyalty, perceived value has an indirect effect on the relationship between both constructs. The total effect of perceived value on customer engagement and customer loyalty is 0.338 and 0.312 respectively.
Table 5.25 also shows that customer satisfaction is the most powerful determinant of customer engagement and customer loyalty, with a total effect of 0.869 and 0.809 respectively.

5.7.4 The Hypotheses Relating to Research Objective Three

In order to test Hypotheses 18, 19, 20 and 21, a multigroup moderating analysis was conducted by using gender as the moderating variable. The data set was split across male and female respondents and separately analyzed using AMOS 22 software to calculate chi-square difference tests. The goodness-of-fit indices and model differences of the constrained and unconstrained models are displayed in Table 5.26.

Table 5.26 The Constrained and Unconstrained Goodness-of-Fit Indices

<table>
<thead>
<tr>
<th>Model Fit Indices</th>
<th>Unconstrained (Male and Female) Model</th>
<th>Constrained Model</th>
<th>Model Differences</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square</td>
<td>1128.98</td>
<td>1185.025</td>
<td>56.045</td>
<td>0.019</td>
</tr>
<tr>
<td>Degree of Freedom</td>
<td>848</td>
<td>885</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>$\chi^2/df$</td>
<td>1.330</td>
<td>1.339</td>
<td>0.009</td>
<td></td>
</tr>
<tr>
<td>CFI</td>
<td>0.946</td>
<td>0.942</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.036</td>
<td>0.037</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Chi-square difference test shows that the male path model is different from the female path model, because the p value is less than 0.05 (p = 0.015). Thus, there is justification for evaluating the path differences between the groups (Hair et al., 2010). In order to assess path differences, multigroup comparison test were conducted and the results are shown in Table 5.27.
Table 5.27 Multigroup Comparison Test

<table>
<thead>
<tr>
<th>Path</th>
<th>Male</th>
<th>Female</th>
<th>z-score</th>
<th>P Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
<td>P</td>
<td>Estimate</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>H18</td>
<td>0.354</td>
<td>0.012</td>
<td>0.386</td>
<td>0.011</td>
<td>0.068</td>
</tr>
<tr>
<td>PV → CS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H19</td>
<td>0.132</td>
<td>0.334</td>
<td>0.770</td>
<td>0.025</td>
<td>1.726*</td>
</tr>
<tr>
<td>CS → BI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H20</td>
<td>0.080</td>
<td>0.032</td>
<td>-0.069</td>
<td>0.134</td>
<td>-2.518**</td>
</tr>
<tr>
<td>BI → CE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H21</td>
<td>0.082</td>
<td>0.459</td>
<td>0.549</td>
<td>0.112</td>
<td>1.280</td>
</tr>
<tr>
<td>CS → CL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Statistically significant at the p value < 0.05
* Statistically significant at the p value < 0.1

H18 proposed that the relationship between perceived value and customer satisfaction is moderated by gender. The multigroup comparison test indicates that the relationship between perceived value and customer satisfaction is significant for both male and female passengers with path coefficients of 0.354 and 0.386 respectively. However, no differences were indicated by the p value (p value = 0.473). Therefore, Hypothesis 18 is not supported and gender was not found to moderate the relationship between perceived value and customer satisfaction.

H19: The path relationship between perceived value and customer satisfaction was proposed to be different between genders. For the male respondents, the effect of customer satisfaction on brand image is not significant. However, for female respondents, the relationship between customer satisfaction and brand image is proven to be significant (β = 0.770). The p value (p value = 0.042) for the relationship between customer satisfaction and brand image is significant, suggesting that the path between customer satisfaction and brand image in male respondents is different from the path of the female respondents, thus Hypothesis 19 is supported.

H20: In the case of the relationship between brand image and customer engagement, the p value indicates a difference between male and female respondents (p value = 0.006). For
male respondents, brand image has a positive and significant relationship toward customer engagement with a p value below 0.005 (p = 0.032, β = 0.080). However, for female respondents, brand image does not significantly affect customer engagement, with a p value greater than 0.005 (p= 0.134). The results demonstrate that gender does moderate the relationship between brand image and customer engagement, as shown by the significant z score (-2.518), supporting Hypothesis 20.

H21: No statistical differences between male and female respondents in the relationship between customer satisfaction and customer loyalty were determined. The path coefficients for male respondents are significant, and insignificant for female respondents. However, the p value (p value = 0.100) indicates that there is no significant moderating effect of gender on the constructs. As such, Hypothesis 21 is not supported.

5.8 Chapter Summary

This chapter discussed the preliminary data analyses and the CFA used to confirm the fit measurement model used to test the hypotheses. The results of the hypotheses tests (H1 to H13) show eight significant direct paths (H1, H2, H3, H5, H8, H9, H10, H13) out of the 13 proposed direct paths established to satisfy Research Objective One.

H14, H15, H16 and H17 were formulated to satisfy Research Objective Two. There is partial support for H14 while H15, H16, and H17 are supported.

The moderating effects were proposed to satisfy Research Objective Three. Hypothesis 18 and 21 are not supported, while Hypotheses 19 and 20 are supported.
Chapter 6
Discussion

6.1 The Antecedents of Customer Loyalty

The results of the SEM analysis reveal that 74% of the variability in customer loyalty is explained by service quality, perceived value, customer satisfaction, brand image, and customer engagement. This finding demonstrates that service quality, perceived value, customer satisfaction, brand image, and customer engagement are important antecedents of customer loyalty.


The significant effect of customer engagement on customer loyalty is the most important and influential finding in this study. This is the first empirical study on services that integrate customer engagement with the other higher order marketing constructs (service quality, perceived value, customer satisfaction and brand image) in a measurement model. The seminal results substantiate that, of all of the measured constructs, customer engagement has the most significant effect on customer loyalty.

The results of this study demonstrate that psychological processes and the psychological connection between a customer and a particular brand drive a behavioural intention to re-patronize an airline service. An engaged customer actively shares their experiences and is involved in the activities that support the brand. Engaged customers normally have an intensive interaction with the brand and with other customers who use the brand. The interaction between customers and service providers are more likely to be even more intensive when coupled with the current levels of high technology and immediate communication. The high technology in communications also encourages customers to show their emotional and behavioural aspects of engagement, and this helps to trigger customers’ behavioural intentions toward the brand.

Specifically in the airline industry, airline passengers using technology not only find it easy to follow the information and publicity surrounding a particular airline brand by browsing an
airline company’s website, but they can also easily share their post-experience thoughts with other like-minded customers. If these types of cognitive and affective processes of engagement continue, a customer’s psychological connection with the airline brand is enhanced. Moreover, the emotional aspect of engagement is also important in enhancing customer loyalty. Engaged customers may be proud of the airline’s success, and when customers hear a compliment about “their” airline, it can act like a compliment for themselves, further strengthening a strong psychological connection with the particular airline brand. These types of connections make it more likely that customers will have a sustained relationship with the brand and this will motivate them to recommend and re-patronize the airline service. Thus, engaged customers are more likely to have a higher behavioural intention to re-patronizing the service and recommend the brand to other people than non-engaged customers.

Indonesian airlines need to strengthen their customers’ engagement in order to retain more loyal passengers and improve their competitiveness. There are several methods to enhance customer engagement in the airline industry. Creating customers’ excitement and passion for an airline’s brand can enhance customer engagement. Customers’ excitement and passion towards a particular brand can be created by enhancing brand prestige and customers’ social recognition (Bizman & Yinon, 2002). Five-star airlines can usually create customer excitement and passion without great difficulty as 5-star airlines normally have a stable and positive brand image.

Two other important drivers of customer engagement are customers’ attention and absorption towards an airline brand (Brodie et al., 2011; L.D. Hollebeek, 2011; Vivek et al., 2014). In order to support customers’ brand attention and absorption, airline management needs to ensure that positive information, news, and publicity related to the airline can be easily accessed by customers. Building a user friendly web-site, and participating in corporate social responsibility (CSR) programmes are two ways to gain the attention of customers (Kandampully, Zhang, & Bilgihan, 2015).

Airline companies also need to build a strong brand community to further facilitate customers’ interactions as another driver of customer engagement. The engaged customers enjoy sharing their experiences with other like-minded customers. Thus, airline companies can organize a social event that will encourage their customers to meet each other and
share their airline service experiences. This strategy should help to keep customers engaged with the airline.

Measuring the effect of customer engagement on customer loyalty in a more comprehensive model is an important development for the airline industry. Customer engagement has only been empirically measured in a few studies. Empirical studies on customer engagement have been conducted on physical goods (Sprott et al., 2009; Vivek et al., 2014); social media (Hollebeek et al., 2014); a combination of the hotel and airline industries (So et al., 2012; So et al., 2014); and online websites and social media (Calder et al., 2009; Hollebeek et al., 2014). In addition, studies on customer engagement have been conducted using qualitative research methods (Brodie et al., 2013; L.D. Hollebeek, 2011).

As customer engagement has been proven as an important construct affecting customer loyalty, there is a heightened need to know what aspects enhancing customer engagement. Based on the SEM analysis, customer satisfaction is an important construct affecting customer engagement. The relationship between customer satisfaction and customer engagement is positive and significant ($\beta = 0.861$, $t = 8.376$), illustrating that highly satisfied customers are more likely to engage with the brand.

Customers’ emotions are important components of the linkage between customer satisfaction and customer engagement. Oliver (2010) explains that emotion is one consequence of a customer satisfaction. After a customer evaluates his/her satisfaction with the service provided, the evaluation results in emotion that is formed by a customer’s appraisal of the service consumption. Their level of satisfaction determines whether they will have positive or negative emotions. Higher customer satisfaction levels will drive the customer to the higher levels of positive emotion. Emotion in this context is associated with customer engagement; as Oliver (2010) indicates the positive emotional labels such as attention, feelings of success, joy, affiliation, happiness, and pride can increase the level of engagement are associated with engagement.

When customers perceive a satisfying experience after patronizing a service, the positive emotion can lead to their identification, enthusiasm, attention, absorption, and interaction with the brand. When reinforced, satisfied customers can take the compliments and criticisms for the company as a compliment or criticism for themselves. Furthermore, highly satisfied customers will also have a strong enthusiasm and attention to a brand. For
example, a satisfied customer may spend their time following anything related to the brand. In addition, the emotional connections built through customer satisfaction that result in absorption and interaction behaviour are seen as manifestations of engagement. As such, satisfied customers are more likely to enjoy interaction with the brand and other like-minded customers, and find it difficult to detach themselves when they are interacting with the brand.

The finding of the effect of customer satisfaction on customer engagement supports the theoretical development by Van Doorn et al. (2010) which state that customer satisfaction is likely to increase customer engagement. In addition, the significant effect of customer satisfaction on customer engagement is also in accordance with an empirical and qualitative study in the customer engagement area which was conducted by Brodie et al. (2013) in virtual online communities.

In the airline industry, the finding of the effect of customer satisfaction on customer loyalty is essential to confirm that satisfied flying experiences will result in highly engaged customers. For example, a customer who is satisfied with an airline’s ground services (ticket booking, baggage handling), and also satisfied with an airline’s in-flight service (in-flight entertainment, meals, employee courtesy) is more likely to be engaged with the airline. Thus, satisfied customers are more likely to spend more time and pay more attention to an airline’s publicity, have more willingness to interact and share their experiences with other people, and become more enthusiastic in their future interactions with the airline.

The role of customer engagement is not limited to the direct relationship with customer satisfaction and customer loyalty, but customer engagement also plays mediating roles in the relationship among perceived value, customer satisfaction, brand image and customer loyalty, that will be discussed in the next section.

6.1.2 The Mediating Role of Customer Engagement

Few studies have identified the antecedents and consequences of customer engagement. This current study not only found a direct relationship between customer engagement and other marketing constructs, but also examined the mediating role of customer engagement. An interesting finding in this current study is the mediating effect of customer engagement on the relationship between perceived value and customer loyalty.
Perceived value was found to indirectly affect loyalty through customer engagement, although customer perceived value does not directly affect customer loyalty. Thus, it is important to ensure that customers perceive a high value of service in order to create customer loyalty. If an airline can create value that exceeds passengers’ expectation, then this value can emotionally impact the passengers. The emotional attachment between an airline brand and the passengers should lead to engagement and trigger customers’ willingness to re-buy the service and recommend the service to others.

In the airline industry, passenger will evaluate the value of service based on the functional benefits (value for money, utility) and emotional benefits (personal recognition, empathy). For example, a passenger who values the convenience associated with the booking facilities and flight schedules, feels safe when flying with the airline, and receives a good personalized service, will have a positive emotional connection with the airline brand and will be more likely to choose the same airline next time. This is especially the case for full-service airlines, where passengers are willing to spend more money in order to get a high quality of service. Hence, in order to gain passenger loyalty, airline companies should be able to create a high value of service through delivering functional and emotional benefits in order to enhance passenger engagement and loyalty.

The other important role of customer engagement that is shown in this current study is the mediating effect on the relationship between brand image and customer loyalty (Hypothesis 17). The significant mediating effect of customer engagement on the relationship between brand image and customer loyalty not only provides insights about the importance of customer engagement, but also indicates that brand image is still needed in building loyal customer behavioural intentions.

In the context of the airline industry, especially in full-service airlines, brand image is an important aspect that customers consider when they choose an airline brand. Airline brand image can be seen through two aspects; the tangible aspect and the emotional aspect. Passengers are aware that when they choose a full-service or 5-star airline, they will receive a better service, compared to low cost carriers or lower-ranked airlines. In addition, choosing a brand with a good image could increase their pride, which could motivate them to be more engaged with the airline brand. A passenger who sees a positive image of an airline company
and who is engaged with the airline, is more likely to voluntarily recommend other people to fly with the airline and be a repeat customer.

In addition to the mediating effect of customer engagement on the effect of perceived value and brand image on customer loyalty, customer engagement was also proposed to play a mediating role in the relationship between customer satisfaction and customer loyalty (Hypothesis 16). Following the mediating test proposed by Baron and Kenny (1986), customer engagement only has a partial mediating effect, as the insertion of the customer engagement construct between the customer satisfaction and the customer loyalty path resulted in a decrease in the path coefficient between customer satisfaction and customer loyalty.

This finding documents that customer engagement influences the effect of customer satisfaction on customer loyalty, meaning that when a customer has a satisfying experience with an airline, and if the satisfaction is the only construct used to consider the intention to rebuy the service, then it will affect customer loyalty up to the certain level. However, when customers also consider customer engagement as the antecedent of customer loyalty, then it diminishes the direct effect of customer satisfaction on customer loyalty. In addition, when a customer engages with a particular brand, the customer will be more likely to be loyal.

This current study not only demonstrates the importance of customer engagement as an emerging construct affecting customer loyalty, but also examines other marketing constructs (perceived value, customer satisfaction and brand image) and the interrelationships among them. The interrelationships among the marketing constructs inspected in this current study will be discussed in the next section.

6.2 Enhancing Passenger Loyalty in the Indonesian Airline Industry

Customer loyalty is regarded by any business organisation as the ultimate goal that is essential for enhancing profitability (Reichheld et al., 2000). Similar to other industries, the airline industry also needs to retain their loyal customers in order to compete with other businesses and to enhance profitability (Chen, 2008). In the last 10 years, some scholars have examined the factors that may affect passenger loyalty in the airline industry (Chen, 2008; Forgas et al., 2010; Park et al., 2006; Saha & Theingi, 2009; Yang et al., 2011). However, the results of this current study differ in some respects to the results of the
previous studies. This section discusses the differences and the similarities between the results of this current study and the results of other studies on the airline industry.

Some findings of this current study are consistent with those of five prior studies on airline passenger loyalty (Chen, 2008; Forgas et al., 2010; Park, 2010; Park et al., 2006; Yang et al., 2011). The context and conceptual research model of the five prior studies have some similarities with this current study. The prior studies were conducted on the airline industry and examined the antecedents of customer loyalty and the interrelationships among the other services marketing constructs. Thus, a clearer image of the determinants of airlines passenger loyalty can be drawn by comparing the findings of this current study with those of the five previous studies.

Chen (2008) conducted a study on the international airline passenger industry in Taiwan and found that perceived value and passenger satisfaction directly affect customer loyalty. Furthermore, Chen (2008) also found that perceived value indirectly affects customer loyalty through customer satisfaction.

Park et al.’s (2006) study is one of the most comprehensive assessment of the higher order constructs on the airline industry since 2006. Park et al. (2006) examined the interrelationship between service quality, perceived price, perceived value, brand image and customer satisfaction and airline passengers’ behavioural intention in one comprehensive model without indicating the type of airline service. The results of Structural Equation Modelling analysis in Park et al.’s (2006) study shows that brand image, perceived value and customer satisfaction have all direct impacts on customer loyalty.

Chen (2008) and Park et al. (2006) did not specifically mention the type of airline, however, three studies have been conducted on low-frills airlines (Forgas et al., 2010; Saha & Theingi, 2009; Yang et al., 2011). While Forgas et al. (2010) and Saha and Theingi (2009) investigated the constructs affecting passenger loyalty in low-frills airlines, Yang et al. (2011) investigated the constructs on two low-frills and a high-frills airlines, and then compared the results.

Forgas et al. (2010) conducted a study in London, England and examined a set of factors affecting passenger loyalty. The authors found that perceived value and customer satisfaction directly affected customer loyalty. Saha and Theingi (2009) conducted a study in Thailand and found that customer satisfaction directly affected passenger behavioural
intentions. Yang et al. (2011) conducted a study on the Taiwanese airline industry, and divided customer value into six different variables (airport installation, aircraft installation, professionalism of personnel, emotional value, social value and monetary cost). However, only three variables (social value, emotional value and monetary cost) are consistent with the definition and construct operationalization used in this current study. Yang et al. (2011) found that service quality and the three variables used to define value directly affected customer loyalty in both low-frills and high-frills airlines in Taiwan.

A comparison of the analysis in this current research with the models and results of the five previous studies on the airline industry, reveal that there is a major difference between the conceptual research model in this current study and the ones developed in the five previous studies, specifically in the role of customer satisfaction and customer engagement. Analysing the major difference between this current study and the previous studies is essential in order to make a comprehensive assessment of all of the major factors affecting customer loyalty in the airline industry. A discussion on the relationship between customer engagement and customer loyalty was presented in Section 6.1. This section discusses the interrelationship between customer satisfaction and the other higher order constructs found in this current study and compares the results with those of the previous studies.

The SEM results for this current study show that service quality and perceived value indirectly affect customer loyalty through customer satisfaction. Therefore, customer satisfaction plays a mediating role between the two paths: (1) the effect of service quality on customer loyalty, and (2) the effect of perceived value on customer loyalty. However, four out of the five studies conducted over the last 10 years on the airline industry found different results when compared to the results of this current study. Chen (2008), Forgas et al. (2010), Park et al. (2006) found that perceived value had a direct and significant effect on customer loyalty. In addition, Yang et al. (2011) found that perceived value had a direct and indirect effects on loyalty through customer satisfaction. Furthermore, Yang et al. (2011) and (Park et al., 2006) also found that service quality and brand image had direct effect on customer loyalty.

The differences in the results between this current study and the previous studies may be attributed to the differences in the research setting. Two out of the four previous studies that found the direct effect of perceived value on the passenger loyalty construct were
conducted on the low-frills airlines (Forgas et al., 2010; Yang et al., 2011), while the other studies did not identify the classification of the airlines used in their research (Chen, 2008; Park et al., 2006). This current study sampled passengers travelling on a high-frills (5-star) airlines. High frills airlines normally offer a higher level of service and price when compared to low-frills airlines, especially regarding the airline facilities.

The results of this current study illustrate that for the high-frills airline passengers, achieving a high level of perceived value is not always enough motivation to create passenger loyalty. Customers tend to trade the value they received with other recognized motivational aspects of loyalty, such as customer satisfaction Diller (2001). This current study found that customers with high perceptions of value will only display a loyal behaviour intention when they perceive a high quality of flying experiences overall, and those experiences have fulfilled their needs and wants.

A customer will perceive a high value of service, when the benefits of the service they received is higher than all of the costs incurred. In order to evaluate perceived value, the customer not only compares the money they spent with the core service they received, but the customer also compares other costs such as time and energy in order to receive the core service and other benefits from the service provider. The high-frills airline passengers normally spend more money on their flights when compared to the low-frills airline passengers. Even though the customers spend more money on high-frills flights, they normally receive a higher standard of service and more facilities on high-frills flights. In addition, Garrow, Jones, and Parker (2007) maintain when a brand has a strong positive brand association, their customers are likely to be less price-sensitive. High-frills airlines are assumed to have a positive image in the mind of customers, as high-frills airlines normally provide a higher standard of facilities and quality of service when compared to low-frills airlines. Thus, the high-frills customers who perceive the costs (money, time and energy) they spent are higher than the benefits they received tend to feel satisfied with the airline company. The level of customer satisfaction may also motivate customers to re-patronize the service, spread positive comments about the airline, and recommend the airline to other people.

The results of this current study also found similarities with previous studies done on the global airline industry. The results illustrate that customer satisfaction is an important
construct in forming passenger loyalty. The positive, significant effect of satisfaction on loyalty confirms that satisfied customers are more likely to have the intention of re-patronizing the airline service. This result implies that an emotional reaction (satisfaction) leads to the behavioural intention (customer loyalty). When a customer is satisfied with the service provided, then the service they bought has fulfilled their needs and wants.

When the customer is satisfied with their flight experience and satisfied with the decision to fly with a particular airline company, then they are more likely to say positive things about the airline to other people. In addition, satisfied airline passengers tend to choose the same airline over the other airline companies. Hence, it is essential for an airline company to satisfy its customers since its loyal customers benefit them in many aspects, especially in enhancing the firm’s profitability (Reichheld et al., 2000). Thus, ensuring that passengers are satisfied after patronizing an airline service is essential for the airline companies.

The results of this study and the literature illustrate that the customer satisfaction construct plays an important role in enhancing customer loyalty in the airline industry. The findings of this current study are consistent with the findings of four out of five of the previous studies on the global airline industry that found that customer satisfaction significantly affects customer loyalty (Chen, 2008; Forgas et al., 2010; Saha & Theingi, 2009; Yang et al., 2011). In addition, the findings of this current study are consistent with the findings of three out of five previous studies on the effects of perceived value on customer satisfaction (Chen, 2008; Forgas et al., 2010; Yang et al., 2011). Thus a clearer picture of the effect of customer satisfaction on customer loyalty in the airline industry has been drawn from a comparison of the findings of this current study and those of the five previous studies.

In addition to customer satisfaction, there are other constructs that an airline company needs to address in order to enhance its level of passenger loyalty. The results of this study demonstrate that brand image directly affects customer engagement and indirectly affects customer loyalty. Thus, investigating the antecedents of brand image (service quality, customer satisfaction) is also important contribution of this study. A discussion on the constructs that affect brand image is discussed in the next section.
6.3 The Antecedents of Brand Image on the Indonesian Airline Industry

In this current study, brand image has been proven to have a direct effect on customer engagement, and an indirect effect on customer loyalty. Thus, given the importance of brand image, examining the antecedents of brand image is beneficial when examining the brand image construct.

This current study found that service quality and customer satisfaction are the antecedents of brand image. However, only one out of the five previous studies on the airline industry proposed and found the same effect of service quality on brand image (Park et al., 2006).

Service quality as a potential antecedent of brand image can be differentiated into functional quality and technical quality dimensions, and both dimensions are important aspects that customers consider when judging the perceived service quality of a service (Grönroos, 1993). Theoretically, the brand image construct plays two roles; as a mediating construct between the expected quality and perceived quality; and brand image can also be a consequence of customers’ perception of service quality (Grönroos, 1984; Park et al., 2004). This current study proposed and found that service quality is an antecedent of brand image. When customers fly with a particular airline company and they arrive safely in their destination (technical quality), then their perception of the image of the brand will increase. In addition, when functional quality (on-ground and in-flight customer service and facilities) of the airline is beyond customers’ expectations, then the image of the brand will also be positively affected. In summary, when passengers perceive better service quality, then they will perceive a more positive brand image.

The second construct that affects brand image is customer satisfaction. The positive effect of customer satisfaction on brand image revealed in this study is also supported in previous studies on the global airline industry (Park, 2010; Saha & Theingi, 2009; Yang et al., 2011). Although the path between customer satisfaction and brand image on the global airline industries is debated (Amin et al., 2013; Andreassen & Lindestad, 1998; Jani & Han, 2014; Martenson, 2007). The finding in this current study shows that in an Indonesian Airline context, customer satisfaction affects the airline’s image.

Brand image can be categorized as a post-experience attitude (Oliver, 1980), which is a result of a customer’s experience with a company. In other words, brand image is regarded
as a result of a customer’s disconfirmation of a service. When customers experience positive disconfirmation (satisfied with the service rendered) then customers will have a more positive attitude towards the brand (positive brand image).

The result illustrating that customer satisfaction is an antecedent of brand image also supports the view that brand image is the image of the brand in customers’ memories that is interpreted from the rationality of customers (Lin, 2011; Opoku & Akorli, 2009). Furthermore, this finding also strengthens the notion that there are two components of image; functional and emotional components (Martínez, Pérez, & del Bosque, 2014; Nguyen & Leclerc, 2011). The functional component of image builds a brand image based on what customers feel about the service. Thus, if a customer perceives a high level of satisfaction, then it means that the customer also perceives a high level of functional components of image, which is more likely to lead to a more positive brand image. In addition, customer satisfaction also contributes to the emotional component of image. A customer who is satisfied with an airline service, might have an emotional bonding with the airline brand which creates a positive image of the brand in customer’s memory. Thus, in order to create a positive brand image, an airline company needs to ensure it delivers a superior service quality, and also ensure that whenever possible, the service it delivers exceeds its customers’ expectations.

This current study also proposes that the factors influence male customers are different from those that influence female customers. Therefore, the interrelationships among the constructs investigated may be moderated by gender. The discussion on the moderating role of gender on the interrelationships among the investigated constructs will be presented in the next section.

6.4 The Moderating Role of Gender

In the global services sector, gender is recognized as a moderating variable (Han & Ryu, 2007; Mittal & Kamakura, 2001). While the moderating effect of gender has been tested in some studies (Han & Ryu, 2007; Mattila, 2000; Walsh et al., 2008), published studies on the moderating effect of gender in the airline industry are sparse. This current study tests the moderating effects of gender to obtain a more thorough understanding about the interrelationships among the constructs affecting customer loyalty.
Social role theory illustrates that males and females exhibit different behaviour as the result of cultural stereotypes (Eagly et al., 2000). Thus, gender is proposed to have moderating effects in the relationships between some constructs. The results of the original measurement model shows that brand image does not have a significant effect on customer engagement. However, when a multi-group analysis is performed, the results show that for the male group, there is a very small, yet significant relationship between brand image and customer engagement (β = 0.080; p = 0.032), while in the female group, the relationship is not significant (p = 0.134). This finding is logical, as males and females psychologically have different attitudes and points of view which lead to different behaviours (Eagly et al., 2000; Meyers-Levy & Maheswaran, 1991).

Males tend to base their decisions on a single source of information and process the information based on highly available cues (Oh et al., 2002; Putrevu, 2001; Richard, Chebat, Yang, & Putrevu, 2010). The image of a brand can be formed by the reputation of a brand that has been established among consumers. The customers can judge the brand reputation from the information gathered from publicity, advertising, and endorsements in the media. Publicity and other types of marketing communication that can be easily accessed are readily available sources of information. These types of communication are usually used by the male airline passengers to evaluate the image of a particular airline brand. Furthermore, when male passengers perceive a positive image of an airline brand then they are more likely to show engagement behaviours, such as searching for more information about the airline, and sharing their thoughts and experiences with other customers of the airline.

In addition, the elaboration likelihood model by Petty and Cacioppo (1986) explains that low involvement customers change their attitude through the peripheral route. The peripheral route allows customers to focus on outside stimulation, such as brand image and reputation. Furthermore, low involvement customers often rely on brand endorsements and general impressions of the brand. As males tend to rely on a single source of information, male airline passengers can be classified as lower involvement customers. Therefore, the image of a brand as an external stimulation is considered essential for males to change their attitude toward engagement.

Dittmar, Beattie, and Friese (1995) note that males’ attitudes and behaviour are often based on the functional aspect and activity-related focus. For example, when a male airline
passenger perceives that an airline company has a good safety reputation, and also has a better image when compared to other airline companies, then it might be considered as a functional aspect of airline service. Males may perceive that the core service of an airline is to safely transport people from one place to another. Thus, a positive brand image based on safety may also help reinforce customer engagement from a male perspective.

The result of the moderating test on the effect of brand image on customer engagement shows that there is no significant effect of brand image on customer engagement amongst females. For female passengers, a favourable brand image may not lead them to be highly engaged with a particular airline company, as female passengers base their attitude and behaviour on emotional aspects. The other rationale of this finding is that females tend to use multiple sources of information before they act or respond (Koc, 2002). Thus, a female Indonesian airline passenger may also consider other constructs such as customer satisfaction, service quality and perceived value, before deciding to engage with a particular airline.

The customer satisfaction construct effect on brand image is proposed to be moderated by gender. Thus the effect of customer satisfaction on brand image is projected to be different between male and female customers (Hypothesis 19). This current study found that gender significantly moderated the effect of customer satisfaction on brand image ($p=0.04$). The multi-group comparison test shows that the path coefficient between customer satisfaction and brand image for male customers is not significant ($p = 0.334$), while the path coefficient for female customers is significant ($\beta = 0.770; p = 0.025$).

Kwun (2011) asserts that in decision-making, females normally use all available cues to evaluate the information and are more attuned at the emotional level of feelings. Thus, when female passengers receive a satisfying experience with an airline service, then it can be a reason for increasing the image of the brand from the female passenger’s point of view. On the other hand, males tend to base their judgement on the information that is more noticeable and more important, based on their own point of view (Meyers-Levy & Maheswaran, 1991; Oh et al., 2002). Customer satisfaction is regarded as an emotional response (Cronin et al., 2000), and males normally focus less on emotional feeling and more on tangible elements of the service (Dubé & Morgan, 1998; Kwun, 2011; Oh et al., 2002).
Therefore, males may tend to pay less attention to their level of satisfaction when they evaluate the image of a particular brand.

6.5 Theoretical Contribution

This study makes five major contributions to the extant literature on the services, in particular, the literature on the airline service industry. The first and most significant theoretical contribution provided by this study is its contribution to the body of knowledge that focuses on comprehensive modelling the higher order marketing constructs. The model in this current study explains the interrelationships among important constructs in the services sector: service quality, perceived value, customer satisfaction, brand image, customer engagement and customer loyalty. This current study not only empirically examines the direct relationships, but also the indirect relationships among the constructs. The comprehensive model explaining the interrelationships among the constructs is essential for the enrichment of the body of knowledge for the services sector and in particular the high-frills airline industry. The role of gender in the interrelationship among the investigated constructs is included in the model to provide a more thorough analysis of airline travel.

The second theoretical contribution provided by this study is the inclusion of the customer engagement construct. The engagement construct has been investigated in human resources management (Crawford, LePine, & Rich, 2010; Harter, Schmidt, & Hayes, 2002; Saks, 2006). However, customer engagement has only recently attracted the attention of marketing scholars as they begin to investigate the constructs importance in a marketing context. (Brodie et al., 2011; L.D. Hollebeek, 2011; Vivek et al., 2012). This current study validates the customer engagement measurement items and proves that customer engagement is an important antecedent of customer loyalty. In addition, this study illustrates that customer engagement mediates the effect of customer satisfaction on customer loyalty. These findings indicate that customer engagement is an important construct for the high-frills airline industry.

The third theoretical contribution is that this current study challenges and validates the results of previous studies that have investigated the direct relationships among the important marketing constructs: service quality, perceived value, customer satisfaction, brand image, customer engagement, and customer loyalty.
This current study is supported by earlier studies that explained the importance of the service quality construct to the services sector, especially the airline industry (An & Noh, 2009; Baker, 2013; Chen & Hu, 2010). Empirically, this study found that service quality has an important role in shaping perceived value, customer satisfaction and brand image. Furthermore, this current study is supported by other studies (Amin et al., 2013; Brodie et al., 2011; Clemes et al., 2009; Hu et al., 2009) that explain the importance of customer satisfaction in affecting the constructs of brand image, and customer loyalty. In addition, by uncovering the significant effect of customer engagement on loyalty, this study confirms and validates the important role of customer engagement in affecting customer loyalty, as proposed by several scholars (Brodie et al., 2013; Brodie et al., 2011; Hollebeek, 2013; So et al., 2014).

On the other hand, this results of this current study do not coincide with those of prior studies on the global airline industry, which found that customer satisfaction and perceived value directly affect customer loyalty (Chen, 2008; Forgas et al., 2010; Park et al., 2006; Saha & Theingi, 2009). This current study found that the customer satisfaction construct not only directly affects customer loyalty, but also plays a mediating role on the effect of service quality on customer loyalty. Furthermore, instead of finding a direct effect of perceived value on customer loyalty, this current study determined that perceived value only indirectly affects customer loyalty through customer satisfaction.

The fourth contribution is that this current study is that the results add empirical support to the body of knowledge on the mediating role of customer satisfaction and customer engagement on the construct affecting customer loyalty. Prior studies (Brady & Robertson, 2001; Chen & Chen, 2010; Howat & Assaker, 2013; Hu et al., 2009; Lai, 2014) have only determined the direct effects of service quality, perceived value and customer satisfaction on customer loyalty. However, this current study demonstrates that, in addition to the direct relationships, service quality, perceived value and customer loyalty also have indirect effects on customer loyalty through the mediating variables: perceived value, customer satisfaction and customer engagement. This current study found that customer satisfaction mediates the relationship between service quality and customer loyalty and the relationship between perceived value and customer loyalty. In addition, customer engagement mediates the effect between perceived value and customer loyalty and mediates the effect between customer satisfaction and customer loyalty. The indirect effects discovered in this current
study have not been fully explored in other studies. Therefore, they are beneficial as they provide new insights into the interrelationships among these constructs for the high-frills airline industry.

The fifth contribution of this study is the empirical results provide an insight into the role of gender in the high-frills airline industry. Theoretically, gender has been proposed as playing an important role in a services (Mitchell & Walsh, 2004). This current study strengthens this contention as suggested in prior studies (Ladhari & Leclerc, 2013; Mattila, 2000; Mittal & Kamakura, 2001; Walsh et al., 2008). The results show the importance of gender in moderating the effect of customer satisfaction on brand image, and the effect of brand image on customer engagement. This finding indicates that gender, as a demographic variable, is an important factor that moderates the interrelationships among the investigated constructs, as noted in empirical studies on various service industries. (Brady & Robertson, 2001; Chen & Chen, 2010; Howat & Assaker, 2013; Hu et al., 2009; Lai, 2014)

### 6.6 Practical Implications

The most important practical implication from the findings of this study is integrating customer engagement in the conceptual model and identifying its effect on the customer loyalty construct. This current study found that customer engagement is an antecedent of customer loyalty. The customer engagement construct has not gained much attention from airline practitioners, as it is a relatively new construct in a marketing context. This current study confirms that engaged customers are more likely to be loyal customers. Thus, in order to gain a competitive advantage over other airlines, practitioners should improve their airline passengers’ engagement.

The empirical results of this study illustrate that high customer engagement results in high customer loyalty. For example, in order to make the customers have an engaged attitude towards the airline brand, the airline practitioners need to create a positive impression in the minds of their customers by delivering a service that exceeds the customers’ expectations. In addition, airline practitioners also need to nurture the customers who are behaviourally engaged with the brand. For example, building an online forum on a user-friendly website will help and encourage highly engaged customer to share their flying experiences with other people. Furthermore, creating effective and accurate marketing communication will also help existing customers follow all of the activities of the airline.
company and help create loyal behavioural intentions. For example, public activities such as sponsorships, charity works, social campaigns, or other Corporate Social Responsibility (CSR) activities may promote customer engagement and favourable behaviour intentions towards the airline brand as well as increase customer loyalty.

In order to get customers to engage with the brand, airline practitioners should know the most influential variables driving customer engagement. This study found that customer satisfaction is the most important variable in forming customer engagement and loyalty, as customer satisfaction has the largest positive effect on customer engagement and customer loyalty. Airline practitioners can use the information provided in the path model to design their marketing strategies and allocate their resources more effectively.

This current study provides valuable information regarding the interrelationships among the investigated constructs that is beneficial for airline practitioners to use to develop a well-suited marketing strategy for high-frills airlines. For example, this current study finds that high-frills airline passengers do not place a strong emphasis on perceived value when they elect form a loyalty to the airline brand. However, high-frills airline passengers are more concerned about service quality and customer satisfaction before they decide to re-patronize the airline service. Thus, airline practitioners should focus on delivering a superior quality of service and that fulfils customer expectation focus on lowering the price for their services.

The findings of this study also provide important information about how the gender effects on the interrelationships among the services marketing constructs. The moderating role of gender means that an action or incentive that is provided or offered by an airline company to its customers will have different effect level of importance depending on the gender of the passengers. Thus, airline practitioners can use this information to segment their customers based on gender and allocate their resource effectively in order to design a well-suited marketing strategy. For example, even though customer satisfaction is proven to affect customer engagement for male and female passengers, the result of the multi-group moderating test found that male passenger will be more engaged when they perceived a positive brand image. In order to attract more male passengers to engage with an airline brand, the airline practitioners should put more emphasize on building a positive brand image.
Furthermore, building a favourable brand image for male and female passengers can be done in different ways. The multi-group analysis results demonstrate that females will perceive a positive brand image when they feel satisfied with the service provided. For male passenger, a positive brand image can be gained through endorsements or other marketing communication that can be easily accessed by the airline passengers.

6.7 Limitations of the Study

In addition to its theoretical contributions and the practical implications, this current study also has limitations. The results of this study are based on a convince sample and the perceptions of a relatively large sample (n = 250) (Tabachnick & Fidell, 2007). However, respondents were the passengers of a 5-star airline company in Indonesia, recruited during a brief time span, from airports in Malang and Surabaya, Indonesia. In addition, because of the convenience sampling method employed by this research, the sample does not represent the population of all Indonesian airline passengers. Hence, these results must be generalized with caution to non-star airline passengers or low-frills airline passengers in Indonesia or other countries.

In addition, this current study used a self-administered questionnaire to collect the data. The use of a self-administered approach can create a situation where the respondents give expected answers (social response bias) or patterned responses to questions. While these limitations cannot totally be avoided, some steps were taken to reduce this problem. Following the study of Podsakoff, MacKenzie, Lee, and Podsakoff (2003) in reducing the common method bias, this study endeavoured to protect the anonymity of respondents, and guarantee to them that there was no correct or false answer. In addition, this study endeavoured to make the questions simple, specific and concise.

The third limitation is about the measurement of customer loyalty. In this study, loyalty is measured based on behavioural intentions. This study did not measure actual loyalty, as the intention is considered as an accurate predictor of actual behaviour (Ajzen & Fishbein, 1980). However, a loyal behavioural intention might not translated into the actual behaviour if customers face any obstacles to loyalty, such as an unavailable product, switching incentives and customer idiosyncrasies (Oliver, 1999).
The last limitation relates to the translation of the questionnaire. In this current study, the questionnaire was designed in English. However, since the study was undertaken and completed in Indonesia, the questionnaire was back translated to Bahasa Indonesia. The process of translation for a language into another can potentially cause distortions in exact meaning since there are differences in the meanings of words, syntactical contexts and the cultural context of the readers. To minimize this problem, the researcher requested two Bahasa Indonesia native speakers fluent in English to back translate the questionnaire.

Directions for future research are suggested in the next section.

6.8 Directions for Future Study

To gain a better knowledge of the notion of customer engagement in an airline industry context, future studies should integrate this construct with other constructs such as trust and commitment. Prior studies indicate that customer engagement has a strong relationship with trust and commitment (Brodie et al., 2013; So et al., 2014).

A deeper understanding of the customer engagement construct, especially in the area of the airline industry, may be gained by an exploratory study. To date, there is no consensus among scholars about the exact measures of customer engagement. Some scholars (Sprott et al., 2009) consider that customer engagement is a single construct, while other scholars suggest that customer engagement is a multi-dimensional construct (Bowden, 2009b; Patterson et al., 2006; So et al., 2012). An exploratory study should provide new insights into the dimensions and the structure of the customer engagement construct.

Future research could replicate the conceptual research model used in this study and apply it to predict loyalty in other service industries and in other countries. A replication of this framework used in this study to other industrial settings will enhance the understanding of the factors affecting customer loyalty, especially in the domain of customer relationship management.

The limitation with regard to the sample that the results of this study were based on provides opportunities for future study. De Wulf, Odekerken-Schröder, and Iacobucci (2001) suggest that there is a need to certify research models in one setting with examinations in other settings. Hence, it is essential to investigate further whether the theoretical
relationships identified in this study can be generalized to all airline passengers, both star and non-star airline passengers, and even to the low-frills airline passengers.
Appendix A

Questionnaire

Invitation for participating in research

Dear Sir/Madam

I am a PhD candidate in the Faculty of Commerce at Lincoln University, New Zealand. The questionnaire attached is part of my thesis research project, designed to study the experience of Indonesian airline passengers.

I invite you to fill the questionnaire enclosed. Your participation is voluntary. However, if you choose to complete the survey, it will be understood that you have consented to participate in the research project and to publication of the results of the research project. This research project has been reviewed and approved by the Lincoln University Human Ethics Committee.

The questionnaire is anonymous. The results of this study will be published as part of my PhD thesis and will be made available to marketers and airline practitioners. However, those publications and results for the practitioners will not lead to participant identification. In order to be eligible to participate in this research, you must be 18 years or older. Completing the questionnaire should not require more than 12 minutes of your time.

Please hand the questionnaire back to the researcher when you have completed it. Upon completion of the survey you will be given a small souvenir as an appreciation of your time. If you have any questions or concerns, please do not hesitate to contact me at +62341 482829 or email me at Raditha.Hapsari@lincolnuni.ac.nz. You can also contact my research supervisors, Mr Michael Clemes: Michael.Clemes@lincoln.ac.nz and Dr David Dean: David.Dean@lincoln.ac.nz.

As the information that you provide is very important for the success of this research, I request you to respond frankly and honestly. Thank you for your time and cooperation; I greatly appreciate your help in furthering this research endeavour.

Best Regards,

Raditha Hapsari
PhD Candidate
Faculty of Agribusiness and Commerce
A SURVEY OF AIRLINE PASSENGERS’ EXPERIENCES

This questionnaire contains 3 sections. Please answer all of the questions in each section. There are no right or wrong answers. Your spontaneous and honest response is important to the success of this research.

SECTION 1:
Please tick (✓) one box only
Your MAIN travel purpose:
☐ Business
☐ Leisure
☐ Other, please specify: ……………………………………………………………………………………………

SECTION 2:
The following statements are designed to obtain your opinion about your experience flying with Garuda Indonesia. Please indicate the extent to which you agree or disagree with each statement by circling the appropriate number on the 7 point scale. If you strongly agree with the statement, please circle 7. If you strongly disagree with the statement, please circle 1.

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Considering the ticket price I paid for the airline, I believe that the airline offers excellent services.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>The ticket price of this airline is reasonable.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Compared to what I have given up (including money, energy, time, and effort), the overall service of this airline is excellent.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Overall, this airline offers good value for money.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Overall, this airline’s services and goods are valuable.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The staff of this airline deliver superior services.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Overall, the in-flight facilities in this airline are excellent.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>This airline has a convenient flight schedule.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>This airline has convenient reservation and ticketing systems.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>This airline offers an excellent security system.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>I feel safe when I fly with this airline.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>This airline offers excellent baggage handling services.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Overall, this airline provides excellent service quality.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I believe that this airline has a better image than its competitors.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>This airline has a good reputation for safety.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I have always had a good impression of this airline.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I continue to be impressed by the brand image of this airline.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Overall, I believe that this airline has a positive image in the marketplace.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
### No. Statement

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I am proud of this airline’s success.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>When someone praises this airline, it feels like a personal compliment.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I am passionate about this airline.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I feel excited about this airline.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>I pay a lot of attention to any information about this airline.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Publicity related to this airline attracts my attention.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>When interacting with this airline, it is difficult to detach myself.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>I am immersed in my interaction with this airline.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I am someone who enjoys interacting with like-minded others who fly with this airline.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>In general, I thoroughly enjoy exchanging ideas with other people who fly with this airline.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

### No. Statement

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I had a satisfying experience flying with this airline.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I did the right thing when I chose to fly with this airline.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I normally have a pleasant flight with this airline.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Overall, I am satisfied with my decision to fly with this airline.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Overall, this airline provides a very satisfying experience.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

### No. Statement

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I intend to say positive thing about this airline to other people.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I intend to fly with this airline again in the future.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I intend to encourage relatives and friends to fly with this airline.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I intend to recommend this airline to other people.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Overall, given the other choices of airline companies, I will remain flying with this airline.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
SECTION 3: DEMOGRAPHIC INFORMATION

Please tick (✓) one box only for each question

1. Your gender : □ Male □ Female
2. Your age group : □ 18 – 25 □ 26 – 35 □ 36 – 45 □ 46 – 55 □ 56 and over
3. Your highest education level:
   □ High School
   □ Bachelor Degree
   □ PhD Degree
4. Your occupation:
   □ Professional
   □ Retired
   □ Business Owner
   □ Others
   □ Student
   □ Housewife
   □ Government Officer
5. Your monthly income range
   □ < Rp 1.000.000
   □ Rp 1.000.000 – Rp 5.000.000
   □ Rp 5.000.000 – Rp 10.000.000
   □ > Rp 10.000.000
6. Are you member of frequent flyer/loyalty programme?
   □ Yes
   □ No

-Thank You-
Appendix B
Assessment for Normality

<table>
<thead>
<tr>
<th>Variable</th>
<th>min</th>
<th>max</th>
<th>skewness</th>
<th>c.r.</th>
<th>kurtosis</th>
<th>c.r.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ1</td>
<td>1.000</td>
<td>7.000</td>
<td>-1.579</td>
<td>-10.190</td>
<td>6.217</td>
<td>20.064</td>
</tr>
<tr>
<td>SQ2</td>
<td>2.000</td>
<td>7.000</td>
<td>-1.091</td>
<td>-7.042</td>
<td>1.767</td>
<td>5.704</td>
</tr>
<tr>
<td>SQ3</td>
<td>1.000</td>
<td>7.000</td>
<td>-1.129</td>
<td>-7.286</td>
<td>3.324</td>
<td>10.728</td>
</tr>
<tr>
<td>SQ4</td>
<td>1.000</td>
<td>7.000</td>
<td>-1.678</td>
<td>-10.831</td>
<td>4.606</td>
<td>14.866</td>
</tr>
<tr>
<td>SQ5</td>
<td>1.000</td>
<td>7.000</td>
<td>-1.183</td>
<td>-7.636</td>
<td>2.557</td>
<td>8.252</td>
</tr>
<tr>
<td>SQ6</td>
<td>1.000</td>
<td>7.000</td>
<td>-0.865</td>
<td>-5.585</td>
<td>2.508</td>
<td>8.094</td>
</tr>
<tr>
<td>SQ7</td>
<td>1.000</td>
<td>7.000</td>
<td>-1.637</td>
<td>-10.565</td>
<td>4.965</td>
<td>16.024</td>
</tr>
<tr>
<td>PV1</td>
<td>1.000</td>
<td>7.000</td>
<td>-1.270</td>
<td>-8.196</td>
<td>2.871</td>
<td>9.267</td>
</tr>
<tr>
<td>PV3</td>
<td>1.000</td>
<td>7.000</td>
<td>-1.012</td>
<td>-6.535</td>
<td>2.041</td>
<td>6.587</td>
</tr>
<tr>
<td>PV4</td>
<td>1.000</td>
<td>7.000</td>
<td>-0.987</td>
<td>-6.368</td>
<td>1.846</td>
<td>5.958</td>
</tr>
<tr>
<td>PV5</td>
<td>1.000</td>
<td>7.000</td>
<td>-0.965</td>
<td>-6.229</td>
<td>2.156</td>
<td>6.960</td>
</tr>
<tr>
<td>BI1</td>
<td>1.000</td>
<td>7.000</td>
<td>-0.232</td>
<td>-1.498</td>
<td>0.312</td>
<td>1.008</td>
</tr>
<tr>
<td>BI2</td>
<td>2.000</td>
<td>7.000</td>
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