THE DETERMINANTS OF BRAND EQUITY IN HANDICRAFT SMALL AND MEDIUM ENTERPRISE IN THAILAND

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ABSTRAK

Industri kraftangan di Thailand adalah satu kurniaan unik yang melambangkan warisan kebudayaan kebangsaan dan tradisi seni halus yang menakjubkan. Walaubagaimanapun, promosi setempat untuk produk ini tidak dijalankan secara meluas untuk mencerminkan budaya Thailand melalui ekuiti jenama yang terbaik. Hanya 23% daripada industri kecil dan sederhana (IKS) yang mempunyai jenama sendiri sedangkan 77% yang lain tidak. Kesetiaan jenama telah disifatkan sebagai penengah dalam kajian ini kerana peranan penengah masih belum ketahui di dalam industri kraftangan. Oleh itu, tujuan penyelidikan ini adalah untuk mengesahkan secara empirikal penentu ekuiti jenama untuk IKS kraftangan dari perspektif pengguna di Thailand. Objektif spesifik kajian ini adalah tiga: (1) untuk memeriksa peramal ekuiti jenama, (2) untuk menentukan peramal kesetiaan jenama, dan (3) untuk menyelidik kesan penengah kesetiaan jenama. Instrumen kajiselidik terdiri daripada 15 pembolehubah terpendam dan 70 item. Melalui kajiselidik kuantitatif, 500 soalselidik telah diedarkan kepada pelanggan yang datang ke outlet pengeluar di lima daerah di Thailand. Soalselidik dikembalikan adalah 419 mewakili 84 peratus kadar sambutan. Data dianalisis menggunakan kaedah analisis model persamaan struktur yang menghasilkan empat perhubungan signifikan: (1) kesetiaan jenama adalah berhubung positif dengan ekuiti jenama, (2) kepuasan adalah berhubung positif dengan ekuiti jenama, (3) kelebihan daya saing berhubung secara positif dengan kesetiaan jenama dan (4) kesetiaan jenama adalah penengah penuh diantara hubungan kelebihan daya saing dengan ekuiti jenama. Adalah mustahak pelanggan kraftangan menjadi setia kepada satu-satu jenama apabila mereka mengetahui tentang jenama (kesedaran jenama), imej jenama, melihat tawaran sebagai produk berkualiti, ada perkaitan jenama dan akhirnya membangunkan kesetiaan jenama. Kraftangan Thai mesti mewujudkan imej jenama, melaksanakan kempen kesedaran jenama berterusan, supaya pelanggan seluruh dunia akan membina kepercayaan kepada produk kraftangan Thai.

Katakunci: Ekuiti jenama, kesetiaan jenama, kraftangan, kelebihan daya saing, Thailand.

ABSTRACT

The handicraft industry in Thailand is uniquely endowed with fascinating cultural national heritage and fine artistic traditions. However, local promotions of these products are not rigorously conducted to reflect Thailand's culture through proper brand equity. Only 23% of them have their own brand name whereas the other 77% do not. Brand loyalty is treated as a mediator in this study since its mediating role is unknown in the handicraft industry. Hence, this study aims to empirically verify the determinants of brand equity for SME handicrafts and to examine the mediating role of brand loyalty as perceived by customers in Thailand. The specific objectives of the study are three-folds: (1) to examine the predictors of brand equity (2) to determine the predictors of brand loyalty and (3) to investigate the mediating effect of brand loyalty. The survey instrument consists of 15 latent variables and 70 items. Through quantitative survey, 500 questionnaires were distributed to customers of handicraft at producers' outlets in five regions in Thailand. The returned questionnaires were 419 representing 84 percent response rate. The data were analyzed using structural equation modeling analysis method which produces four significant relationships: (1) brand loyalty is positively related to brand equity (H1); (2) satisfaction is positively related to brand equity (H2); (3) competitive advantage is positively related to brand loyalty (H6); and (4) brand loyalty mediates fully the relationship between competitive advantage and brand equity (H9). It is imperative that handicraft consumers are loyal to a brand once they know about the brand (brand awareness), capture brand image, perceived the offering as quality product, have brand association and finally develop brand trust. The Thai handicraft product must establish its brand image, performed continuous brand awareness campaign, so that customers around the world will build their trust in Thai handicraft products.

Keywords: Brand equity, brand loyalty, handicraft, competitive advantage, Thailand.

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CHAPTER ONE

INTRODUCTION

1.0 Preface

The chapter discusses brand equity issues to provide the background to the study. The chapter then narrows down to the problem statement, research questions, research objectives, justification of research, new contribution, scope of the study and definition of key variables. Finally, this chapter ends with presentation of organization of the chapters.

1.1 Background of Study

Handicraft industry is a lucrative business in Thailand, which generates a total income of USD 1,866, representing 2.7% of the national Gross domestic product-GDP (Sriprasert, 2015). Despite the valuable contribution of handicraft industry to Thailand's economy (GDP), brand equity of handicraft products is still non-existent. Only about 30 percent of handicraft market players such as handicraft producers and resellers have brand equity.

Thailand's handicraft industry has two main players: the producers and the reseller markets. Handicrafts are first produced by the small and medium enterprises (SME) in the suburbs, hereafter is called producers. Produced handicrafts are then sold to resellers or wholesalers or direct to tourists. Based on information from Thailand handicraft producers, there are approximately

8,300 handicrafts producers (SMEs) in Thailand. There are 3,276 handicraft producers in the Northeast, 1,797 in the North, 1,402 and 1,148 in the Central Part and Bangkok, and 687 in the South. The North-East of Thailand accounts for a very large portion (40%) of the population engaged in the manufacture of handicrafts, while only about 8% of the handicraft entrepreneurs are in Southern Thailand (Marangkun & Nik Mat, 2011). However, the following statement given by the Department of Industrial Promotion (2012) reflects the issue of brand equity of handicraft producers:

"The main current issue of marketing is that 23% of handicraft SMEs lack branding, brand awareness and brand equity to be advertised in competition with domestic and foreign rivals" (Department of Industrial Promotion, 2012, p.12).

The issue of lack of brand equity of handicraft products could also be substantiated by the lack of brand equity in the reseller market. Out of the 1,569 handicraft wholesaler and retailer companies, only 22.7 % have their own brand name while the other 77.3% do not (Department of Industry and Trading Promotion -DITP, 2012). Without brand name, the SME may not create brand awareness, which may hinder the formation of brand equity.

Moreover, handicraft SMEs in Thailand are not aware of the need of entrepreneurs and concerned government agencies to change their way of branding and labeling handicraft products to suit the international market. In its

statement to handicraft producers about the brand equity of handicraft, the Department of Industrial Promotion has announced that:

"About 23% of handicraft SMEs lacked market positioning, new markets, branded product qualities, and their own brand names" (Department of Industrial Promotion, 2012, p.21).

Branding has a very important role in a marketplace because most customers consider not only a product itself but also its brand before buying it. Without brand, other marketing variables of a product, such as its design, pricing, distribution and availability can be imitated or replaced by a product or a business of competitors (Schultz, Tannenbaum, & Lauterbom, 1994). A brand differentiates its product from another according to quality and status (Isen, 1992). Srivastava and Shocker (1991), states that "A product is produced from a factory whereas a brand is what a customer considers before buying a product. A product can be counterfeited, but a brand is a unique identity. A product becomes obsolete whereas a successful brand name is lasting." It is obvious that investment to support a brand identity positively affects its organization and products in the long run (Aaker, 1991, p.32).

There is a common consensus that brand equity plays an important role for business organizations since marketers can gain competitive advantages through strong brands (Aaker, 1998; Keller, 1993, 2000). Specifically, brand equity is described as "a set of brand assets and liabilities linked to a brand, its

name and symbol that adds to or detracts from the value provided by a product or service to a firm and to the firms' customers". Brand equity comprises of four components: brand awareness, brand association, perceived quality and brand loyalty (Aaker, 1991). Acquiring brand equity becomes a vital marketing strategy for businesses to succeed in the regional as well as in the global market (Wang, Wei, & Yu, 2008). Brand equity also gives value to the firm by enhancing efficiency and effectiveness of marketing programs. At the same time, brand equity improves profit through premium pricing strategy, brand extensions, trade leverage and competitive advantage (Keller, 1993).

In the light of the above discussion, very little is known regarding the brand equity of handicrafts produced by OTOP SMEs in Thailand. Brand equity is becoming a major issue amongst handicraft SMEs. Furthermore, the branding of handicrafts for the international market is still at its infancy as substantiated by the following statement by Office of Small and Medium Enterprises Promotion:

"Our main concern is to create Thailand's branding for Thai handicrafts by developing potential markets and brand equity" (Office of Small and Medium Enterprises Promotion, 2012, p.8).

In addition, the concept of a geographical indication which encompasses appellations of origin, achievement of product quality, highlighting brand identity and preserving cultural traditions which add value to products is not

properly understood by players in the handicraft industry, as highlighted by the following similar statement:

"Even when handicraft serves as an important supplementary source of rural employment and income and handicraft products generally meet quality standards, SME handicraft manufacturers may be oblivious of the value of the uniqueness of their products."(Department of Industrial Promotion, 2012, p.45).

An empirical study on the use of brand trust to measure brand equity indicates that handicraft SMEs also encounters a lack of brand trust. Aaker (1991) mentions that brand trust can affect brand equity: "Creating a brand node in customer's memory, provides a sense of familiarity of the brand in the consumer's mind, that acting of trust in brand." p.12.

On the other hand, the empirical evidence pointing to brand equity research in the literature indicates a paucity of its investigation since 1998 (Montameni and Shahroki, 1998). This is especially the case with the application of Aaker model to brand equity developed in 1991. Most previous studies have proposed the applicability of Aaker's model to brand equity but are based on only a superficial concept. The few recent empirical studies on this topic have been fragmented and done in isolation (Aaker, 1998).

Of late, marketing efficiency of Thai handicrafts has been enhanced by the collaboration between the government and the private sector, which has somehow increased the export value and volume of Thai handicraft products. However, handicrafts SME are still confronting with marketing management problems which can cause major impacts and therefore deserve top priority. More intense competition also means more market instability and more stringent requirements, probably leading to product disqualification.

In view of the above-described situation, this study will investigate handicraft SMEs based on empirical evidence from the perspective of customers perception of handicraft brand equity. It also examines the role played by brand loyalty of customers in the handicraft market. Hence, this study intends to examine the factors that may influence brand equity in the handicraft industry of Thailand. The next section provides a statement of problems commonly encountered in the Thai handicraft industry.

1.2 Problem Statement

This study elaborates on the following research problems:

1. **Existing handicraft brand equity has low value and also fails to engender customer loyalty.**

The failure of local handicraft products to maintain the effectiveness of their brand which affects brand awareness could be due to the fact that the brand is not competitive and cannot retain customer loyalty (Office of Industrial

Promotion, 2015). Furthermore, only 20 percent of most souvenir products were branded to increase value and to maintain acceptable public image. Souvenir products could be branded in collaboration with government organizations, community enterprises, and handicraft industrial clusters to build brand image and to conduct sustainable business in the future (Kasikornthai Research Center, 2010). The center reports that there is a significant relationship between brand creation and souvenir sales performance. Additionally, the performance of souvenir sales was unstable during 2011 (483.52 Baht) and dropped to 461.02 Baht in 2012 (TOT 2016). This could be attributable to the lack of branding of handicrafts.

2. Poor brand equity management

Even though there are rapid changes in the global market and high competition among handicraft products, apparently the concept of brand management is not applied or brand equity seemingly not well managed (OSMEP, 2012). Evidence shows that only 23% of handicraft producers have their own brand name whereas the other 77% of handicraft products do not care to acquire one (Department of International Trade Promotion, Ministry of Commerce, 2012). The handicraft producers seem to be unsuccessful in maintaining brand effectiveness, thus leading to a change of customers' perception of the brand. One of the reasons is that the brands fail to attract customer's attention and hence the brands has no impact on the market. Even though Thailand handicraft industry was earning an annual turnover of approximately USD

7,400, with an annual export value of USD 400, ranking fairly high in the third world, most handicraft producers are still poor and have a low quality of life.

Even with their role as producers cum exporters, they do not realize the importance of brand name and equity. Most handicraft makers live in villages and produce traditional handicrafts. They do not have new ideas for innovative design even though some of them try to apply contemporary crafts to fit the modern lifestyle. However, it is difficult for the handicraft makers to establish "brand equity" because: (1) There is a lack of international brand name for SME handicrafts; thus brand equity making should become a major issue amongst handicraft SMEs. (2) There is a lack of brand positioning due to little brand awareness, association, quality and loyalty. (3) The competitive advantage of handicrafts is not proactively made known to improve brand equity of SME handicrafts. (4) The value of handicraft products is not properly understood by players in the handicraft industry. (5) There is a lack of brand trust among handicraft SME players (Phumchai, 2014).

This lack of brand equity in SME industry is further identified by The Department of International Trade Promotion, Ministry of Commerce Thailand, who reiterates that handicraft entrepreneurs should adhere to the following advice:

"By supervising market growth, building strong international brand recognition in target markets and growing sophistication in using market

intelligence to fine-tune and to deepen clusters offerings in the marketplace, broader strategic partner forums provide more sophisticated community inputs, support to cluster and creation of value in brand equity of Thai handicraft." (Jearakul, 2014, p.27).

Most handicrafts are not branded or provided with an official warrant of origin or authenticity such as verification by a concerned government agency that they are hand-made. Developing countries are facing product design and quality problems because traditional artisans lack innovative design despite their attempt to make changes to suit the modern lifestyle. They also accept that they have some difficulty in meeting the high standards required to market handicrafts product (Jearakul, 2014).

3. Lack of commitment and equivocal role of brand loyalty as mediator

Brand loyalty is defined as commitment, value and satisfaction, perceived quality and trust (1997). For local tourists, there could still be lack of trust in the local handicraft due to low standards or quality as evidenced by Jearakul, 2014.

Furthermore, the role of brand loyalty as a mediator has been studied in several previous studies, but with no consensus (Buil, Chernatony & Martínez 2013; Yoo, Donthu & Lee, 2000; Delgado-Ballester & Munuera-Aleman 2005; Liao, 2015; Kumar, Dash & Purvar, 2013; Severi and Ling, 2013). The problem

could be that the findings regarding the mediating role of brand loyalty are rather equivocal.

For example, brand loyalty has been included as mediator in previous framework, but the mediation was not tested empirically (Buil, Chernatony & Martínez 2013; Yoo, Donthu & Lee, 2000; Delgado-Ballester & Munuera-Aleman 2005). This empirical gap gives room for testing the mediating effect of brand loyalty between specific linkages in this research. Other justification for including brand loyalty as mediator is because no consensus has been reached with regards to the mediating role of brand loyalty (Kumar, Dash & Purvar, 2013; Severi and Ling, 2013;Liao, 2015). Whilst brand loyalty has been found to be a partial mediator in several studies (Liao, 2015; Kumar, Dash & Purvar, 2013; Severi and Ling, 2013), others has found full mediation (Torres & Tribo, 2011). Furthermore, brand loyalty has also been studied as moderator (Ha, 2009). Hence, due to this empirical gap, this study includes brand loyalty as a mediator between the specified linkages and brand equity.

4. Inconsistent findings in brand equity predictors.

There have been inconsistent findings about predictor variables and brand equity in past studies. Kumar *et al.,* (2013), for instance, examined perceived quality and found a significant linkage with brand equity. However in another study, Severi and Ling (2013) found insignificant linkages between these

variables. The inconsistent findings mean that further studies on this relationship are needed.

5. Poor marketing mix strategy

SME manufacturers are also confronted with problems such as lack of skills, brand equity and marketing expertise. Handicraft manufacturers cannot expand the market due to lack of distribution centers for handicraft products in Thai and foreign cities (Tinnaluck, 2007). Handicraft entrepreneurs do not have adequate marketing mix strategies and distribution centers for handicraft products in Thai and foreign cities probably because:

"Excessive dependence of SME handicrafts on government support inflates the manufacturers' expectations for orders from the government instead of encouraging them to break into new markets by themselves or to create their own brands." (Office of Small and Medium Enterprises, Promotion, 2012, p.18).

Additionally, the handicraft industry often involves procedures for producing unique art objects whereby a maker gives priority to product model and design and ignores the issues of international labeling, packaging and branding for different target markets (Department of Industrial Promotion, 2012). Findings from Thailand SMEs Assistance Program indicate that groups of handicraft manufacturers are facing price-cutting as products are available in larger quantities and at low prices on Thailand's markets. Thus, the manufacturers are

encouraged and supported by the government to establish their own brands (Gaysornboow, 2015). Handcraft manufacturers with their own brand should maintain close and long-lasting relationship with their customers to keep brand trust among handicraft SME players (Rungruangpool, 2011).

6. Lack of customer satisfaction with handicraft products

Most of the handicraft products are not presented in a proper package except Thai silk products which are packed as souvenirs in an elegant manner. At present, packages of handicraft products do not give an attractive appearance and also lack in story-telling information that can affect customer perception and can influence the value of products (Rojanasang & Kamolsukudom, 2010). The package could impress the customer even without involving physical contact with the actual product.

7. Competitive Advantage

Handicraft producers face critical challenges due to the lack of monetary safety net to absorb the impact of short-term fluctuations. These arduous processes have created a need to gain a competitive advantage on the global market, thus resulting in numerous changes for survival. The producers of fast moving handicraft products are aware that a company's leading role in the market is ensured through strong, established brands and loyal customers (Department of Industrial Promotion, 2012).

1.3 Research Questions

The research was undertaken in an attempt to provide answers to the following three questions:

1. What is the direct effect of specified factors (brand loyalty, satisfaction, competitive advantage and marketing mix) on brand equity of handicraft SME?
2. What is the direct effect of the specified factors (satisfaction, competitive advantage and marketing mix) on brand loyalty for handicraft SME?
3. How does brand loyalty mediate the specified linkages (satisfaction, competitive advantage and marketing mix) and brand equity?

1.4 Research Objectives

The research purpose of this study is to empirically verify the determinants of brand equity for SME handicrafts as perceived by customers in Thailand. The aim is to investigate the relationship between specified exogenous factors and endogenous variables (brand loyalty and brand equity) using a structural path modeling analysis method. The specific research objectives are as follows:

Specific Research Objectives

1. To examine the direct predictors of brand equity as follows:
    1.1: to examine the direct effect of brand loyalty on brand equity.
    1.2: to determine the direct effect of satisfaction on brand equity.
    1.3: to verify the direct effect of competitive advantage on brand equity.

1.4: to investigate the direct effect of marketing mix on brand equity.

2. To determine the direct predictors of brand loyalty as follows :

    2.1: to determine the direct effect of satisfaction on brand loyalty.

    2.2: to examine the direct effect of competitive advantage on brand loyalty.

    2.3: to investigate the direct effect of marketing mix on brand loyalty.

3. To investigate the mediating effect of brand loyalty as follows :

    3.1: to investigate the mediating effect of brand loyalty on the linkage between satisfaction and brand equity.

    3.2: to determine the mediating effects of brand loyalty on the linkage between competitive advantage and brand equity

    3.3: to examine the mediating effects of brand loyalty on the linkage between marketing mix and brand equity.

1.5 Significance of the Study

This study deals with brand equity for improvement of marketing strategies in the handicraft industry. The first contribution is towards the advancement of the theoretical knowledge or academic field. Secondly, this study makes a very important contribution to practitioners and players in the handicraft industry.

This study makes two theoretical contributions, which are firstly the usage of brand equity model in the handicraft industry and secondly the inclusion of brand loyalty as a mediator. This is justified in the following paragraphs.

Firstly, this study incorporates the brand equity model as an underlying theoretical construct. It utilizes the brand equity model to investigate handicraft branding, which has not been studied before. Most studies on brand equity are concerned with retailing, hotel firms, and food industry (Pappu and Quester, 2008, Arnett et al.,2003, Kim and Oh, 2004).

Secondly, according to the brand equity theory, Keller and Aaker model (1992) had tested the linkage between trust and brand extension but not brand equity. Brand trust is part of the brand association system which affects brand equity. This study incorporates brand loyalty as mediator , which has not been empirically tested in past studies.

The second contribution of this study is towards the practitioners especially handicraft entrepreneurs in their business practice. Firstly, this study helps entrepreneurs develop effective brand equity while having a balanced view and taking into account all marketing factors associated with handicraft products. Secondly, this study provides access to a body of knowledge in handicraft branding, which can be used to improve marketing strategies.

1.6 Scope of Study

This study intends to investigate the impact of specified factors (brand loyalty, satisfaction, competitive advantage and marketing mix) on brand equity of handicraft products. This study is conducted on consumers who patronize

handicraft centers in the whole Kingdom of Thailand. Statistics show that there are about 8,000 SME handicraft producers in the five main regions of Thailand, namely: (1) Bangkok and the Surrounding Area; (2) the Central Part; (3) the North; (4) the Northeast; and (5) the South. A total of 100 handicraft producers are selected as a sample in this survey to collect information from 500 domestic tourists.

1.7 Definition of key terms

The definitions of terms used in this study are as given as follows:

Table 1.1
Definition of key terms

Key terms	Definition
Thai handicraft	Refers to products from village communities of Thailand, who have their own practices and principles which can affect variety, quality control, unique design and originality. Objectives are to generate a fair income for producers in the village, to help keep alive the diverse craft traditions of Thailand, and to promote fair trade (Highland Research and Development Institute: Public Organization, Royal Project Foundation, 2012)
Brand equity	Refers to the value premium that a firm realizes from a product with a recognizable name as compared to its generic equivalents. Manufacturers can create brand equity for their products by making them memorable and easily recognizable through brand awareness, brand association, perceived quality, brand trust and brand image (Aaker, 1991).
Brand loyalty	Refers to a deeply held commitment to rebuy or re-patronizc a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior (Oliver, 1997).

Key terms	Definition
Satisfaction	Refers to the act of satisfying or gratification of desire. It is also a term most often used to measure a customer's perception of a firm's products and services. By measuring customer satisfaction must it acts on the information gathered and closes the "gaps" between the customers' perception of products and services provided (Chenal al., 2009).
Competitive advantage	Refers to how a firm can really create and sustain a competitive advantage in a handicraft industry or how it can devise the broad generic strategies. Thus, competitive advantage means having low costs, differentiation advantage by unique design or a successful focus on originality strategy (Porter, 1985).
Low Cost	Refers to pricing strategy as a situation in which a firm offers a moderately low price to stimulate demand and gain market share (Espallardo et al., 2008)
Originality	Refers to the originality of a product as related to the mean uniqueness of a firm with a domain. Originality products of handicrafts are determined by their absolute uniqueness as well as by the uniqueness of the firms they can have (Wang et al., 2009).
Unique Design	Refers to the goal to create the best quality image in the market place. The product must represent the producer and conform to the same quality standards and be backed by an equally high quality of warranty (Olson al., 2006).
Marketing mix	Refers to the combination of elements such as product handicraft, distribution factors, packaging & labeling and display. These elements are brought together to achieve customer satisfaction.
Product	A product is a measure that best explains brand equity at individual level such as marketing mix. In term of customer, comparing brands from completely different product classes, the service becomes an illogical dimension for Thai handicraft (Rior et al., 2008).
Distribution factors	Refers to determinant of satisfaction with distribution channels, the degree of discrepancy of the prior expectations of intended specified channel structure and marketing operation performance when using the actual channel structures, which can be presented as a framework for determining the degree of satisfaction with the channel for Thai handicraft (Pappu et al., 2008).

Key terms	Definition
Packaging	Refers of the packaging to create an identity for consumers to consider. There is a need to understand perceptual processes of packaging design and ethical, issues which is point of contact with Thai handicraft (Vazquez *et al.,* 2003).
Labeling	In providing details and explanation about the product, it is necessary to understand the perceptual processes of the user. The label might carry only the brand name or a great deal of information about Thai handicraft (Silayoi *et al.,* 2007).
Display	Refers to the combination of promotional methods such as point of sales, selling, use of retail displays, exhibition and merchandising for the sale of Thai handicrafts (Rajh *et. al.,* 2005).

1.8 Organization of the thesis

The thesis is divided into six chapters; The first chapter provides the background to the study and describes problems related to this study as well as research questions, objectives, justifications, significance, and scope of the study and the definition of key terms. Lastly, it presents the organization of this research.

Chapter Two is a literature review of previous studies. It also addresses the underpinning theory which has been used in brand equity setting. It covers dimensions of brand equity from past studies, the antecedents of brand equity and brand loyalty. This section further reviews each relationship proposed in research framework such as brand loyalty, satisfaction, competitive advantage and marketing mix with brand equity. It also deliberates on each direct and

mediating linkage between the main factors of brand equity. This chapter links the literature review to the hypotheses formulation of the study. Finally, the chapter offers a brief introduction to the background of Thailand. It then discusses the contribution of the SME handicraft industry to the economy of Thailand. It also presents a Thai handicraft market for tourist in Thailand.

Chapter Three presents the framework and states the hypotheses of the study. This chapter describes the research methodology and justifies the methods used in this study. This is followed by a discussion of the research design including population, sample, data collection and the development of the instrument. It also covers methods used for data analysis management. The procedure for using SEM analysis method through the Analysis of Moment Structures (AMOS) software is discussed.

Chapter Four reviews the findings based on the analysis of data within the research framework. The overall response rate, the characteristics of respondents and the screening criteria are described in this chapter. It further presents the main empirical findings based on the generated fit structural model to accept or reject the hypotheses.

Chapter Five focuses on the discussion and conclusion. It discusses the major findings of the study, including the research contributions and implications. This is followed by the conclusion.

CHAPTER TWO

LITERATURE REVIEW

2.0 Preface

This chapter provides a comprehensive review of the problem as well as the marketing mix and the branding of products in handicraft industry. It also covers brand equity and its determinants, which include brand loyalty, satisfaction, competitive advantage and marketing mix. Subsequently, the chapter critically discusses the underpinning theories related to brand equity and brand loyalty. It also deliberates on each direct and mediating linkage between the main factors of brand equity. Finally, the chapter links the literature review to the hypotheses formulation of the study.

2.1 Contribution of Thai Handicraft to the Economy

Farmers represent 70% of Thailand's labour force and the contribution of the agricultural sector has boosted the country's GDP by 12%. Handicraft represents 39%, of the industrial sector and employs 6% of the total labour force (National Statistical office of Thailand, 2005). Based on this background, the Thai government has introduced the One Tambon One Product (OTOP) projects.

Products from Thailand's handicraft industry were initially carried on at home by rural family members. However, with the introduction of the OTOP project, participants are provided with modern equipment and new technology to

support the production in order to make standard quality products and to increase the market demands (The Office of Development Family Industry and Handicraft, 2012). In this way, they ensure the uniqueness of Thai handicraft products especially for the export market. Another purpose of this project is to improve local community products by enhancing their quality for export potential. Prize-winning products were selected from annual OTOP contests at provincial and national levels. Since the inception, more than 25,000 products have been identified through OTOP and have achieved global recognition. This has taken the traditional wisdom to new heights, thus helping the villagers to earn higher income. Handicraft has recorded a sale volume of up to USD 575 million during the period from October 2010 to June 2011 (Research Department of Ayuthaya Bank, 2012).

Thailand has vast natural resources as well as skilled manpower to make handicraft products. Main handicrafts products from the Thailand are fabrics and clothes, wickerwork, pottery, leather and other articles. Both the government and private sectors assist entrepreneurs in increasing productivity so that they can sell their products to domestic and international markets.

In view of the capacity of handicraft industry in Thailand, the main objective of this study is to investigate the potential of SME handicraft industry in Thailand by reviewing of handicraft products and markets. Secondly, this study endeavors to identify some of the problems in handicraft branding and to

analyze methods of supporting and promoting the handicraft industry in Thailand.

2.1.1 The potential of SME handicraft by region

Table 2.1 presents the number of handicraft manufacturers by region. The highest proportion of handicraft manufacturers (3,276 firms), that is, almost 40 percent of such manufacturers in the country, are from the Northeastern region, while North region has 1,797 handicraft manufacturers, representing almost 22%, and the Middle region has 1,402 manufacturers, representing almost 17%. Bangkok and the surrounding area have 1,148 manufacturers, accounting for 14%, and the South has 687 manufacturers, accounting for about 8% (see Table 2.1).

Table 2.1
Handicraft manufacturers

Geographical Region	Number	Percent
Bangkok and Surrounding Area	1,148	13.82%
Middle	1,402	16.87%
North	1,797	21.62%
Northeastern	3,276	39.42%
South	687	8.27%
Total	**8,310**	**100.00%**

Source: *Community Development Department (2012)*

2.1.2 SME Contribution to GDP

Even though the contribution of SME to the GDP shows a declining pattern, the amount of contribution of SME to the GDP is substantially high (40%) within the five-year period from 2007-2011 (see Table 2.2). Thailand economy has seen an increase in spite of political instability. For instance, in 2011, Thailand GDP grew to USD 76 billion, from USD 70 billion in 2011, as shown in Table 2.2.

Table 2.2
Contribution of SME to GDP in Thailand

YEAR	GDP (USD billion)	SME Contribution (%)	Expenditure (%)
2007	56,211.80	41.30	4.10
2008	56,211.80	39.80	4.60
2009	64,508.40	39.80	7.60
2010	69,760.30	39.40	4.80
2011	76,047.40	38.90	4.80

Source: *Office of small and medium enterprises promotion (2012)*

2.1.3 Contribution of SME to Employment

Between the periods of 2009-2011, SME employment accounted for 30-40% of employment in the manufacturing and service sectors. Handicraft industry is one of the main contributors in manufacturing and services sectors (see Table 2.3).

Table 2.3
SME Contribution to Employment

Type of industry	Employees					
	2009	**SME employment %**	**2010**	**SME employment %**	**2011**	**SME employment %**
Manufacturing	3,431,553	41.10	3,459,096	40.90	3,496,202	39.40
Trading & Maintenance	2,331,196	27.90	2,358,189	27.90	2,443,414	27.60
Service	2,593,370	31.00	2,639,440	31.20	2,923,338	33.00
Not specified	1,374	0.00	1,435	0.00	380	0.00
Total	**8,357,493**	**100.00**	**8,458,160**	**100.00**	**8,863,334**	**100.00**

Source: *The Ministry of Industry, Thailand (2012)*

The largest contributor to handicraft SME employment was from Bangkok and the surrounding area (51%); second largest contributor to employment is from the North-Eastern region of Thailand, which approximately accounts for 15% of SME employment while the South represented 6.8% of the SME employment, ranking as the fifth largest contributor to employment in the handicraft industry (see Table 2.4).

Table 2.4
Contribution of SME to Employment by Region

Geographical Area of SME	Employees	Percent
Bangkok and Surrounding Area	4,504,931	50.80
Middle	377,537	4.20
Eastern	711,591	8.00
North Eastern	1,358,426	15.30
South	601,413	6.80
North	979,614	11.10
Western	328,104	3.70
Not specified	1,718	0.01
Total	**8,863,334**	**100.00**

Source: *The Ministry of Industry, Thailand* (2012).

2.2 Types of Thai Handicraft Industry

SME handicraft industry could be categorized into seven groups: wood craft, ceramics, flower craft, art craft, jewelry craft, fabric and giftware. Such activities are capital intensive and labor intensive. The handicraft industry mostly requires artistic skill to make such local products, which are unique and derived from locally available raw materials. The handicraft industry in the South mainly involves the use of fabric, wickerwork, fiber, decorative objects, leather, wood, coconut shells, and other items (Table 2.5). Major handicraft products are wicker work (30%), clothes (22%); fiber (14%); art objects (12%). Other products represent less than 10% each, that is, leather product (7.5%), wood (4.5%) and coconut shell (3.8%), as shown in Table 2.5.

Table 2.5
Types of Handicraft in Thailand

Types of Handicraft	Number	Total (%)
Fabric	1,803	21.70
Wicker work	2,452	29.50
Fiber	1,172	14.10
Wood	344	4.50
Leather	623	7.50
Art objects	997	12.00
Coconut shell items	316	3.80
Others	573	6.90
Total	**8,310**	**100.00**

Source: *Community Development Department (2012)*

2.3 The Market for Handicraft Products

Handicraft products have both local and international demand. The domestic market is generally the local customers who buy the product for daily life usage, collectors' items, personal interior decorators, group of domestic tourists and foreign tourists visiting Thailand.

Market for handicraft products of domestic tourists was described by The SUPPORT Arts and Crafts International Centre of Thailand (Public Organization) in 2013 as the domestic tourists regularly purchase 6 kinds of Thai handicrafts such as textile product, weave product/wood carving product, metalware/ non-gold jewelry, goldware, earthenware/ceramic, and souvenir. The purchasing value of handicraft is around 5,200 million Baht and average value is 2,320 Baht per person. The most favorite handicrafts that the tourists commonly purchase are textile, souvenir, and wood weaving and wood carving product. The top 3 key factors influenced to decision making of domestic tourists to purchase handicrafts are design, trademark, and product quality and exquisiteness. Top 3 shopping destinations that domestic tourists often visit are tourist destination, exhibitions, and walking streets.

2.4 Marketing mix of handicraft industries

2.4.1 Products

Handicraft products made from natural materials with an antique type finish are still popular in the US. Environmental friendly products per-se

do not sell as well in the US as they do in Europe, but if the products are of interest to the consumer and are also advertised as environmental-friendly, they have an advantage.

Trends in 'Wellness Spas' have expanded the demand in both the US and the EU for health related and stress relieving product. These include items such as herbal products, scented candles and aromatherapy, products for the bath, products related to yoga and nature- inspired designs.

In the, UK textiles continue to be the dominant, locally produced handicraft type followed by ceramics, jewelry, wood, metals, glass and furniture. Out of the crafters surveyed in 2003, 63% classified their products as contemporary, 18% as traditional and the remainder as a mixture of both.

2.4.2 Prices

Markets for handicrafts in the US are affected by the economic situation (at the time of writing) and local sales is dropping. People tend to spend less on art when they feel that their lives and world are threatened and this influences purchasers who attend the handicraft shows and price points. But crafters and retailers consider that competent merchandising can be used to compensate this situation.

Artists can benefit from some considerable repeat business depending on the artist's experience and exposure, but concern is being expressed for the growing amount of mass produced work creeping into handmade sections of wholesale shows which diminishes its distinctive appeal.

At the global level, it would appear that the equitable market for handicrafts has not grown, while that of foods is expanding. The result of the continuing expansion of the operations of global players-who exercise some control over world marketing, is that large orders for handicraft products are coming from many countries. These quantities are then distributed amongst the 1,000-2,000 stores in the industrialized and middle-income countries.

2.4.3 Distribution

In local handicraft marketing, there are three groups of customers: 1) general customers including Thai tourists and people interested in handicrafts. The purposes of their purchase are for consumption or as souvenirs. 2) Middle traders or distributors consisting of gift shops, agents and wholesalers. Their purpose of making a purchase or order is for retailing. 3) Foreign customers and tourists who buy handicrafts as souvenirs and also importers or exporters of the handicrafts who act as wholesalers in their home countries.

Local handicraft industry also generates extra jobs for villagers. However, some handicraft makers lack knowledge about marketing and manufacturing products of new style and high standard quality as demanded by the middle traders. Producers generally have to sell the handicrafts at the manufacturing sites, send them to agents or distributors, participate in craft or trade fairs or promotional campaigns organized by government and private sectors (Industrial Promotion Department, 2012).

The export of handicraft to the Japanese market is in a quite difficult situation due to fierce competition particularly from Asian countries such as China, India, Vietnam and the Philippines. Exported products must therefore meet quality standards to serve the needs of Japanese consumers, with an understanding of Japanese social background, culture and history. The most important aspect needed to be considered is the branding of products to indicate the origin of goods (Industrial Promotion Department: June 11, 2012).

Crafts network is an organization established to provide marketing and promotion activities for crafts in Asia and Europe by displaying products on websites. The counterfeiting of branded products, price cutting and the use of unbranded products are main problems because handicraft manufacturers in Asia turn out products in high quantities, which are destined for export. Thus, they have to face many tough competitors, which may result in a decrease in profit. Moreover; trading via internet is not compatible with many handicraft

producers, who generally live in a rural area, have little income and do not own a computer. This leads to inability to set up own webpage. Thus, producers or OTOP producers to be more precise, have no choice but to wait for an order from the customers (ASEAN Handicraft Promotion and Development Association: AHPADA, 2011).

The Thai Ambassador to Canada, during his speech to the entrepreneurs of SMEs and OTOP titled "Business Opportunities in Cooperation for Thais with Caribbean and Canada Groups", mentioned the promotion to make SMEs and OTOP widely known to this market group and to specifically launch Thailand branding campaign for Thai handicrafts so as to develop potential markets, investment and brand equity (Office Small and Medium Enterprises Promotion, 2012).

The Office of Small and Medium Enterprises Promotion has drawn up the second SME Master Plan for the years 2007-2011, providing strategies to promote SMEs by re-organizing Original Equipment Manufacturing (OEM) which is paid labour with wages to Original Brand Manufacturing (OBM) that focuses on creating product brand for brand equity and increasing product prices. Value chain and supply chain are also created to develop a network potential of OTOP in the global marketing (Office Small and Medium Enterprises, 2012).

Due to high competition in handicrafts industry from China, Indonesia, and Vietnam, the Office of Development of Domestic Industry and Handicrafts Industrial Promotion Department, initiated formation of a cluster of handicraft producer groups in Bangkok and the surrounding area under a designed logo. In addition, these countries are able to manufacture products in large quantities and at low cost while facing price crisis and higher interest rates, which lead to an increase in production cost. Problem solutions and development of handcraft potential are needed in the competition to enable the manufacturers to adjust to changes, sustain the market growth and invent their own product brands (Office Small and Medium Enterprises, 2012).

Department of Intellectual Property and concerned agencies have cooperated with other developing countries in setting international standards for local wisdom protection. Therefore, the problem of imitation of local handicrafts was discussed at trade conferences such as those organized by World Trade Organization (WHO), World Intellectual Property Organization (WIPO) including bilateral meetings of member countries. Hence, the associated countries can benefit from Thailand’s wisdom under an international obligation and has the right of access to Thailand's local wisdom (Department of Intellectual Property, 2011).

Princess Srinagarindra, President of Mae Fah Luang Foundation has tremendously helped the people by providing hill-tribes with opportunities for

regular jobs and steady income including life quality development with all requisites of life under opium crop substitution projects. Currently, the income of 470 million baht of Mae Fah Luang Foundation mainly comes from handicraft products, coffee and tourism attended to by 1,745 project employees.

Table 2.6
The top ten of Thai handicraft brand

1. Royal Thai Silk : Royal Peacock Logo Upholding Traditional Thai Silk (Silk and Fiber)	
2. DoiTung Lifestyle : Mae Fah Luang Foundation Under Royal Patronage (Home decoration and Earthenware)	
3. Pratana Thai Fabric under Queen Sirikit. (Cotton, Silk and Fiber)	
4. PatPat : The Chaipattana Foundation Under Royal Patronage (Cotton, basketry and Gift set)	
5. Narai Phand : Narai Phand Co., Ltd., (Celadon, Ceramic, Grass, Lacquer ware, Porcelain and Pewter)	
6. ThaiCraft : ThaiCraft Association of Volunteers (Basket set, Recycled paper, Cotton and Heritage Craft	
7. ebannok: The Mirror Foundation. (Sculpture, Bags, Purses and Accessories)	

8. topcraftsthai : Thailand Top Crafts Co., Ltd., (Home decoration and Wood craft)	
9. Y Development Cooperation Co.,Ltd., : YMCA Foundation (Card, Candle and Ceramic)	
10. Thai Folk Shop : The knowledge of Thai lifestyle (Bags, Shoes and Clothing)	

2.4.4 Promotion

The policies of the Industrial Promotion Department on promoting and supporting Handicrafts Industry are as follows:

To promote marketing outlets by holding Handicrafts Product Exhibitions annually e.g. Home & Crafts Fair, Décor & Souvenir Sourcing Fair.

To set up a group of development projects and form industrial clusters of the related business groups and institutes in nearby areas; to provide a cooperation for service business, trade associations, educational and training institutions, research and development institutes including concerned government agencies to promote and provide marketing opportunity for cluster members mainly focusing the entrepreneurs of hotels, resorts, house design and decoration firms, travel agencies, hotels associations and tourism associations.

To promote handicraft products by encouraging Thai handicraft manufacturers and exporters to participate in international product exhibitions; to head Thai trade delegations in making trade negotiations overseas and invite the foreign trade delegates to meet the Thai handicraft manufacturers and exporters for trade negotiations in Thailand.

To provide training assistance by inviting recognized foreign experts to give training in technical production and design to the Thai exporters.

To provide financial support in form of working capital and to promote domestic industry careers in Thai handicrafts in particular. Since 1982, poor handicraft manufacturers in need of capital have been given assistance to increase their family income in the industry.

To provide support in the form of raw materials, tools, production equipment and workforce for manufacturing and processing as well as purchase of finished products.

Marketing Promotion under the Royal Patronage of H.M. Queen Sirikit

Along with handicraft marketing promotion by the government agencies, H.M. Queen Sirikit significantly stands out by promoting of handicraft products of Thailand for recognition in domestic and international markets. To preserve

and promote handicraft products of Thailand, H.M. Queen Sirikit is not only the leader in the patronage of local art handicraft of Thailand but also the proponent and presenter of products of Bangsai Arts and Crafts Center in Thailand and overseas through the following activities:

1. The opening of the first Jitralada Shop for sale of the Arts & Crafts products at the Oriental Hotel on 20 December 1977 and the second Jitralada Shop in the Royal Palace in 1978 followed by the other 7 Jitralada Shops at tourist sites e.g. the Rose Gardens in both Pattaya and Chiengmai.

2. Annual Art and Craft Products Exhibition to make handicraft products widely known to foreigners.

3. Encouraging International Arts and Crafts Centers and International Member Centers to participate in business matching activities and helping the Trade Chamber of Thailand to promote domestic and international trading activities including the research and development of raw materials, products, human resources and organizations.

4. Strongly and steadily encouraging Thais to preserve and pass down the Thai silk traditions on a sustained basis. Accordingly, H.M. Queen Sirikit kindly presents a Peacock Logo as a quality guaranteed brand of the Thai silk products to solve the domestic and international problems of imitation

of Thai silk products as well as to assure the Thais and foreigners the genuine quality of the products with the following slogan "Thai Silk: The Queen of Textile".

However, this study is concerned with all the factors and applies the model to assess brand equity for handicraft. The work involves empirical investigation of the literature to build a theoretical framework in next paragraph.

2.5 Brand Equity

Brand equity is defined in many ways. Some of the earliest definitions were provided by some eminent marketing scholars such as Farquhar (1989), Aaker (1991), Srivastava and Shocker (1991), De Chernatony and MacDonald (1992) and Keller (1993). Each of the definitions is presented and discussed next.

Brand equity is "value as an asset to reflect in superior finance performance so it leads to higher margins." Farquhar (1989, p.24)

"A set of brand assets and liabilities linked to a brand, its name and symbol that adds to or detracts from the value provided by a product or service to a firm and/or to the firm's customers." Aaker (1991, p. 15)

"A set of associations and behaviors on the part of a brand's consumers, channel members and parent corporations that enables a brand to earn greater volume or greater margins than it could without the brand name

and, in addition, provides a strong, sustainable and differential advantage." Srivastava and Shocker (1991, p.91)

"Brand equity adds value for customers, helps to create defensible competitive positions takes time to develop, is inherently complex, and cannot be easily transferred to other organizations." DeChernatony and MacDonald (1992, p.31)

"Perceptions about a brand as reflected by the brand associations held in consumer memory." Keller (1993, p.1).

Based on the five definitions reviewed, it can be summarized that all authors agree that brand equity is a brand asset which adds value to a company's product or service, creates a competitive advantage, and is mirrored in the brand association which the consumer holds in memory. Thus, the significance of brand equity cannot be denied. For this study, Aaker' (1991) definition is selected since it has been used widely in brand equity literature. Furthermore, it is appropriate because it has a model suitable for the quantitative research approach.

Nowadays, many companies have embarked on branding their products and services from the start of their business in the hope of gaining value for their brands. The top ten global brands in 2015 with high brand value equivalent to

brand equity were Coca Cola, Colgate, Maggi, Lifebuoy, Nescafe, Pepsi, Lays, Knorr, Dove and Tide (http://cn_kantar.com/business/brands/2015/global brands-footprint report, retrieved on 10 Feb 2016).

Good brand names or brand equity in the handicraft industry are undeniably scarce. Looking at the success of branding and the enormous benefits of gaining brand equity, it is therefore imperative that handicraft companies in Thailand should follow their footsteps.

2.6 Underpinning theory of brand equity

Brand equity is underpinned by the famous brand equity theory developed by Aaker (1991). The extensive review of literature indicates that most brand equity studies, both old and new, point to the use of Aaker (1991) brand equity model as the basic theory.

2.6.1 Aaker (1991) Model

Aaker (1991) opines that brand equity is a set of brand properties with five dimensions: brand loyalty, brand awareness, perceived quality, brand associations and other propriety brand assets. In conceptualizing the traditional brand equity model, the first four dimensions are analyzed in consumer-based brand equity, the fifth dimension i.e. other proprietary brand asset is related to patents, distribution channels of the company, trade mark and other factors directly related to consumers (Aaker, 1991) (Figure 2.1).

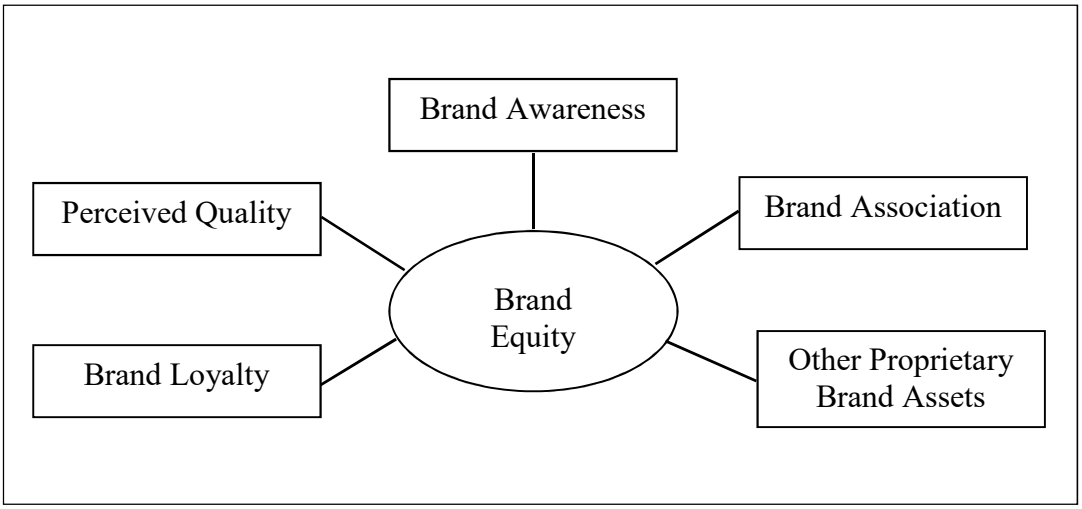

Figure 2.1
A conceptual framework for brand equity

Brand Awareness

The first technique of building brand equity is by creating brand awareness. This has been defined as the extent to which the public know the brand; it is the capability of a prospective buyer to identify or recollect that a brand is a member of a certain product category" (Aaker, 1991). Brand awareness could lead to brand equity in four different ways: by creating a brand node in consumer's memory, providing a sense of familiarity of the brand in the consumer's mind, acting as trust in the brand and bring enough reason for the consumer to consider the brand in his consideration set.

In another stance, Keller (1993) posits that brand awareness comprises of two sub-dimensions: brand recall and recognition. A part from the recognition of brand, the first step in the task of brand communication, whereby a firm communicates the product's attributes until a brand name is established with which to associate them. Also, brand awareness provides quality and commitment, familiarity of consumers with a brand, can recall and help them to consider it at the point of purchase (Aaker, 1991).

From the above discussion, this study considers brand awareness as a dimension of brand equity (reflective). This decision is based on the work of several past studies (Mongkol, 2014; Buil *et al.,* 2013).

Brand Association

Brand association is "anything linked in memory to a brand", which represents the brand to the consumer (Aaker, 1991). Again, Keller (1998) noted that brand associations can affect consumers' purchasing decisions depending on the recall of brand information. This dimension is most closely interrelated to brand awareness, since both dimensions arise from the consumer-brand contact (Aaker, 1991; Fournier, 1998).

Brand has the ability to create, reinforce or modify the individual's associations based on experience (Keller, 2003). There are different categorizations in relation to product features; both tangible and intangible, consumer type and

lifestyle, etc. (Aaker, 1991; Biel, 1992; Keller, 1993; Park & Srinivasan, 1994). Nevertheless, associations have to be favorable, distinctive, and resilient for it to have a positive effect on brand equity (Keller, 20003).

Other scholars posited that brand associations may block consumer's quest for other types of information on purchase decision. These may include product category, usage situation, product attribute, and customer benefits (Osselaer & Alba, 2000; Farquhar & Herr, 1993). It is believed to contain the meaning of the brand for consumers. Brand association can be seen in all forms and may depict the features of the product or aspects independent of the product itself (Chen, 2001).

Brand associations usually organized in some meaningful way forms a brand image. It creates value for the company and invariably for the consumers because it helps to process information, differentiate brand, create positive attitudes or feelings which could present the reason to purchase and provide a basis for continuous patronage of the product (Aaker, 1991).

Keller (1993) asserted that associations with brand can be categorized into three main classes of increasing scope; they are attributes, profits, and outlooks. He further points out that attributes are descriptive features that refer to characteristics of product or service. Portraying what the consumer thinks

the product or service is and what purchasing or consumption of the entails, such as price, usage imagery, or brand personality and user.

Based on Biel' (1992) argument, brand association (brand image) could result from corporate image, product image and user image. Each of these three factors about brand association (images) can be provided with two types of brand association. One is the perception of utilitarian and functional attributes (speed or ease to operate). The other is related to emotional attributes, (like as providing fantasy or being exciting, innovative, or trustworthy). These two types of brand association are significant to customer brand equity.

Similarly, brand associations for customer towards retailers are known to vary in importance from one store category to another. Brand associations such as product variety, store decoration, convenience and variety of services are more important for supermarkets whereas consumers attach more importance towards associations such as speed of purchase, opening hours and product display for hypermarkets. This study also suggests that brand association draw varying levels of intensity from different types of retailers that affect brand equity (Dominguez, 2007).

Moreover, Alba and Hutchinson (1987) offered that knowledge has two sub-dimensions of experience and familiarity. The special effects of know-how and familiarity on consumers' brand equity perceptions take place at two levels:

Brand association and Product category. While knowledge about a brand may directly influence brand equity associated with a particular brand, the knowledge about a product category will influence the brand equity associated with all brands in the product category (Krishnan & Hartline, 2001).

All these associations (e.g. product variety, customer service, after sales service, convenient facilities, and store atmosphere) are the retailer brand associations (Pappu & Quester, 2008). They believe consumers' associations towards these two categories of retailers vary such that consumer would have more favorable associations towards department stores compared to specialty stores.

Hence, based on the prior discussion, brand association is considered as another measurement of brand equity. It is included as the second dimension of brand equity.

Perceived Quality

This component of brand equity is perceived quality and is viewed as how brand is considered to provide good quality products (Aaker, 1991). Quality product has five criteria which includes (1) the reason for buying a product is due to the quality offered, (2) the product possess uniqueness or product differentiation as compared to immediate competitors (3) consumers tend to take price as the indicator for quality (4) the products are easily available at

different sales channels (5) product with more lines or brand extension will be much preferred to indicate quality (Aaker, 1991).

Besides brand associations, there are several factors such as reliability, durability, appearance, performance, serviceability, etc. to consider before analyzing and measuring perceived quality (Parasuraman *et. al.,* 1985; Cronin & Taylor, 1992; Brucks *et al*., 2000).

According to Aaker (1996) perceived quality is an association that is typically central to brand equity. Perceived quality is considered as "the consumer judgment about a product's overall excellence or superiority" (Zeithaml, 1988, p.17). Furthermore, perceived quality involves a competitor reference to alternative brands, such as high quality, average quality, or inferior quality (Motameni & Shahrokhi, 1998). Thus, consumers perceive brand quality through their direct experiences with the brand and the information obtained in the environmental factors (Grönroos, 1984; Yoo *et al.,* 2000).

The best way for a brand to increase its quality is by improving the actual goal, quality, influence on customer in long term business performance and provide a long-term corporate brand strategy. Moreover, communication is one of the factors that measure the perceived quality of brands through quality in marketing actions (Gil *et al.,* 2007; Schoenbachler *et al.,* 2004).

Brand Trust

Morgan and Hunt (1994) uphold that trust is vital in creating confident and satisfactory attitude, which results in an attachment to a particular brand. This in turn improves brand equity of the product whereby it reflects the maximum expression of a successful relationship between the consumer and the brand.

In addition, another consequence of brand trust is that it attributes to the good reputation and satisfied customer due to the commitment to the brand. Hence trust is a crucial factor to develop an everlasting relationship in the long run (Morgan and Hunt, 1994; Garbarino and Johnson, 1999).

Similarly, brand trust acts as the acknowledgment of a brand which creates and develop the performance of company brands. (Aaker,1996; Lasser *et al.,* 1995). Viewing the brand as the consumer's partner in a long-term relationship implies that brand equity is one of the important factors to foster existing relationship between the consumer and the product.

From the above discussion, this study demonstrates that brand trust could be an important variable associated with brand equity. This study examines the importance of brand trust as a dimension of brand equity within the scope of handicraft industry.

Brand Image

One significant concept in marketing for decades is the brand image (Gardner & Levy, 1955), but like many other branding constructs, it does not have one unified definition. In general, brand image is the brand's current set of associations or how the brand is seen by consumers (Aaker & Joachimsthaler, 2000; Aaker, 1996; Park, Jaworski & MacInnis, 1986; Raggio & Leone, 2005). Nonetheless, Keller (1993) offers one definition of brand image which describes it as "perceptions about the brand as mirrored by the brand associations held in consumer memory" (p.3).

The brand image, while being perceptions held by consumers, is not simply an accumulation of marketing messages; brand image is derived from the totality of all brand- related activities by the firm, as well as word-of-mouth, direct experience, and the brand's link to other entities (e.g. people like endorsers and employees; things like events and cause; places such as country of origin and distribution channels; and other brands, such as brand extensions, the company, ingredients, and alliances). "Any potential encounter with a brand–marketing initiates or not–has the opportunity to change the mental representation of the brand and the kinds of information that can appear in consumer memory" (Keller, 2003, p.597).

Viewing this concept from Park, Jaworski, and MacInnis (1986) standpoint, they claim that brand image can have a major impact on brand's market

performance by helping to establish the brand's position and also by isolating the brand from competition. A stable brand image is crucial to building successful brands (Aaker, 1996; Farquhar, 1989). Consistency of the brand image is part of managing the relationship between the consumer and the brand" and permits the consumer to solidify the image (Farquhar, 1989, p.29). The longer the image is retained, the harder it can be to change. The consumer-brand relationship is extremely important to successful brands. Some consumers actually develop emotional attachments to the brand (Thomson, MacInnis, & Park, 2005). If a brand image is not consistent, strong emotional attachments cannot be develop because the consumer is less sure of what the brand is and what he or she will get from it.

An organization's brand image should be consistent, strong, favorable, and unique in order to distinguish its brand in a crowded market place, regardless of product or service category. Every brand image is made up of consumers' associations with the brand.

Hence, due to its vital role as the input to brand equity, brand image is selected as the measurement dimension of brand equity.

Brand Loyalty

This component of brand equity which is brand loyalty is explained as the how people are loyal to a brand (Aaker, 1991). He further iterates that brand loyalty

is more beneficial by hanging to existing customers as compared to attracting new customers. Loyal customers need to be enticed regularly to avoid switching to competitors.

Brand loyalty is described as "*a deeply held commitment to rebuy or repatronize a preferred product /service consistently in the future, thereby causing repetitive same-brand or same-brand set purchasing despite situational influences and marketing efforts having the potential to cause switching behavior"* (Oliver, 1997, p.14). This dimension is formed by two different components: attitudinal and behavioral (Dick & Basu, 1994; Taylor *et al*., 2004).

Both components explain the formation of brand loyalty. On one hand, the attitudinal component indicates that loyalty formation stems from a positive bond or commitment between consumer and brand, and this attitude in turn, arises from the coincidence between the brand attributes and the consumer's preferences. Although the majority of brand loyalty also included the behavior component, loyalty formation is explained by the consumer's prior purchases which result in a certain purchase habit (Dick & Basu, 1994).

Even though brand loyalty is treated as one of the dimensions of brand equity, most studies treated all the five dimensions as formative (arrow pointing to brand equity) and not reflective (arrow pointing outwards designating

dimensions of brand equity). Due to this, in this study, brand loyalty is treated as a mediator. Although, mediating role of brand loyalty has been found in several past study models (Oliver, 1997; Buil, Martinez & Chernatony, 2013; Kumar *et al.,* 2013), but the setting were in hospitals and general shopping. Thus, the mediating role of brand loyalty in the handicraft industry is practically unknown. Hence, the inclusion of brand loyalty as a mediator is timely and a justified preposition.

Summary of Studies using the Aaker (1991) underpinning Theory

Table 2.7 summarizes studies that have used Aaker (1991, 1996) model as the underpinning theory. Most brand equity studies have been based on Aaker, (1991) underpinning theory (Phumisak *et al.*, 2012; Sanyal & Datta, 2011; Gil, Andres & Salinas, 2007; Che-Ha & Hashim, 2007; Delgado-Ballester & Munuers-Alemán, 2005; Atilgan, Aksoy & Akinci, 2005), Aaker (1996) theory (Buil *et al.*, 2013; Jahanzeb, Fatima & Butt, 2013; Chen & Su, 2012); Keller, 1993 theory (Villarejo-Ramos & Sanchez-Franco, 2005).

Table 2.7
Summary of studies using brand equity underpinning theory

Author	Country	Industry	Respondent	Method	Underpinning Theory
Buil, Martinez & Chernatony (2013)	UK and Spain	Sportswear (Adidas and Nike) Consumer electronics (Sony and Panasonic) Cars (BMW and Volkswagen)	615 consumers' responses	SEM	Aaker, 1996
Jahanzeb, Fatima & Butt (2013)	Pakistan	Local and foreign banks in the Islamabad and Rawalpindi regions of Pakistan	302 responses	SEM	Aaker, 1996
Chen & Su (2012)	Taiwan	Foreign international buyers of Taiwanese fasteners	102 industrial buyers	SEM	Aaker, 1996
Phumisak *et. al.,* (2012)	Thailand	SMS (Short Message Service) mobile advertising	400 users	SEM	Aaker, 1991
Sanyal & Datta (2011)	India	Medical hospital (state-run or corporate) or clinics (personal or general)	200 responses	Regression	Aaker, 1991
Gil, Andres & Salinas (2007)	Spain	Convenience products (milk, toothpaste and olive oil)	360 young adults (18-35 age)	SEM	Aaker, 1991 & Yoo *et.al.,* 2000
Che-Ha & Hashim (2007)	Malaysia	Bank	259 MBA student's	Regression	Aaker, 1996
Delgado-Ballester & Munuers-Alemán (2005)	Spain	Shampoo and Beer	271 respondents (134 for shampoo and 137 for beer)	SEM	Aaker, 1991
Atilgan, Aksoy & Akinci, (2005)	Turkey	Beverage	255 usable (20-30 age segment in the market)	SEM	Aaker, 1991
Villarejo-Ramos & Sanchez-Franco (2005)	Spain	Shampoo and beer	271personal questionnaire (134 for shampoo and 137 for beer)	SEM	Keller 1993
Rajh (2005)	Croatia	Product (non-alcoholic carbonated beverages, chocolate and entertainment electronics) from which 10 brand names (Coca-Cola, Cockta, Pepsi, Fanta, Dorina, Milka, Toblerone, Philips, Samsung and Sony)	424 responders (undergraduate student)	SEM	Yoo *et.al.,* 2000

2.6.2 Previous Models of Brand Equity

This study evaluates numerous brand equity research models found from extensive literature to justify the discussion that leads to the selection of predictors for this study. These research models show how fragmented they were and varied from simple to complex models. For example, the most current research model developed by Sasmita and Suki (2015) examines four predictors of brand equity namely; brand association, brand loyalty, brand awareness and brand image (Figure 2.2). This model imitates exactly Aaker (1991) underpinning theory by suggesting that the four dimensions consisting of brand image, association, brand loyalty and brand awareness have direct impacts on brand equity.

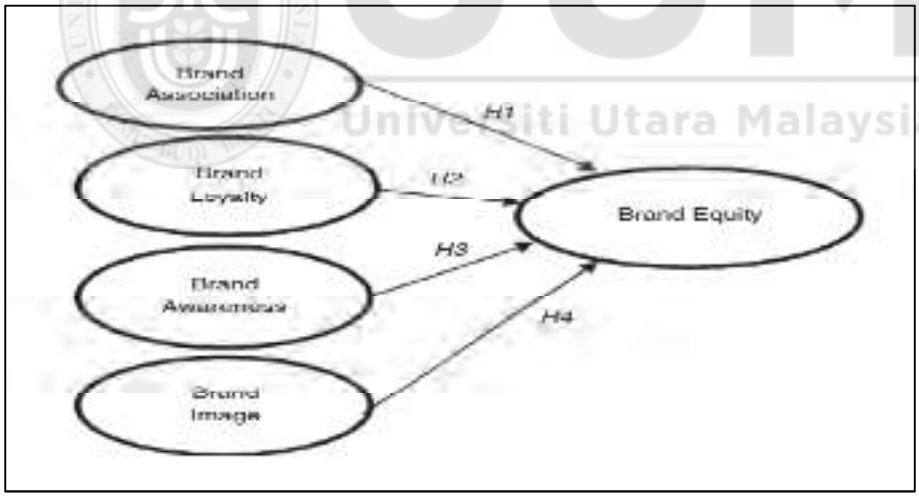

Figure 2.2
Brand Equity Model 1. "Young consumers' insights on brand equity Effects of brand association, brand loyalty, brand awareness, and brand image."
Source: Sasmita & Suki (2015).

Similarly, brand image, brand loyalty and perceived quality are hypothesized as direct predictors of brand equity in model 2 in Figure 2.3 (Chahal & Bala, 2012).

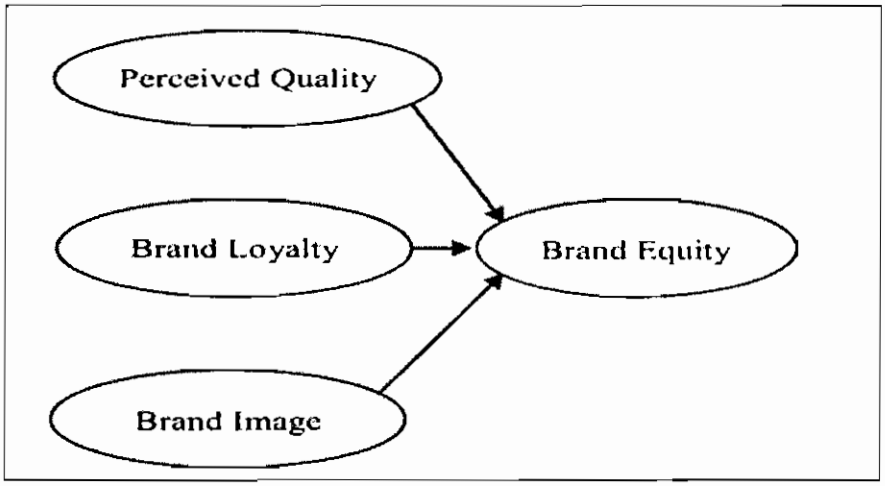

Figure 2.3
Brand Equity Model 2: Direct effect of perceived quality, brand loyalty and brand image on brand equity. "Significant components of service brand equity in healthcare sector."
Source: Chahal & Bala (2012).

In a similar vein, Wang and Finn (2013) postulate that customer founded brand equity (CBBE) is predicted directly by eight independent variables, four of which are similar to the first model discussed above which are past brand loyalty, current brand awareness, current brand associations, current perceived quality, current perceived value for the cost, uniqueness and brand emotions (Figure 2.4). Uniqueness is a component of competitive advantage whereas brand emotion is similar to brand image. In their study, brand equity serves as a mediator which subsequently predicted future brand loyalty and future price premium.

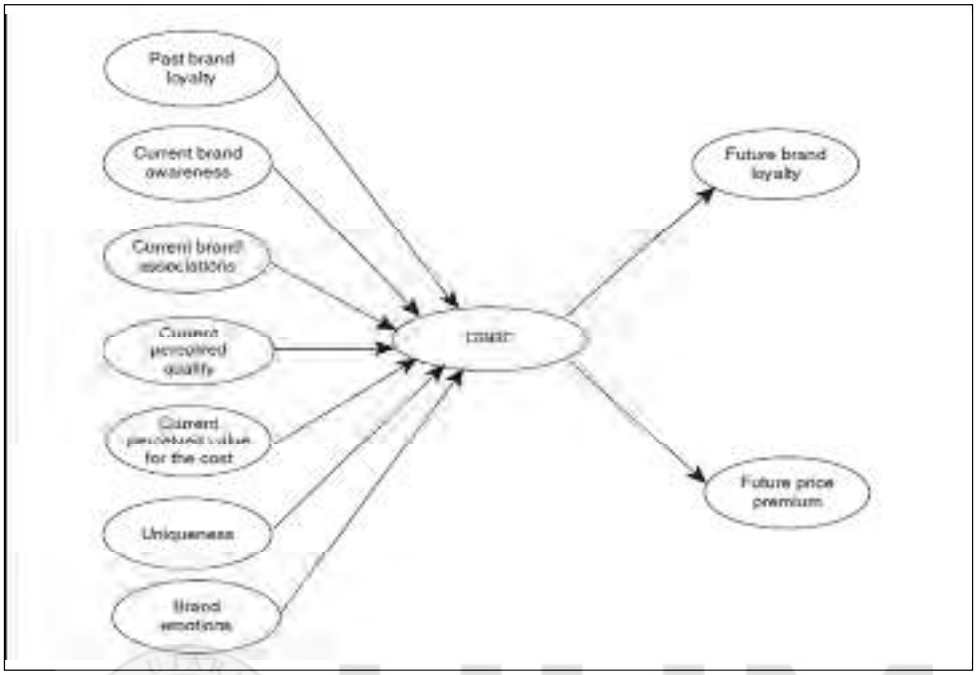

Figure 2.4
Brand Equity Model 3. "Heterogeneous sources of customer-based brand equity within a product category."
Source: Wang and Finn (2013).

In contrast, brand equity model developed by Buil, Martinez & Chernatony (2013), show three predictors of brand equity: brand loyalty, brand association and perceived quality. Brand loyalty is predicted by perceived quality and brand associations while brand awareness predicted both perceived quality and brand associations (Figure 2.5). Brand equity then predicts price premium, brand extension, brand preference and purchase intention. This model shows another role of brand equity as a mediator.

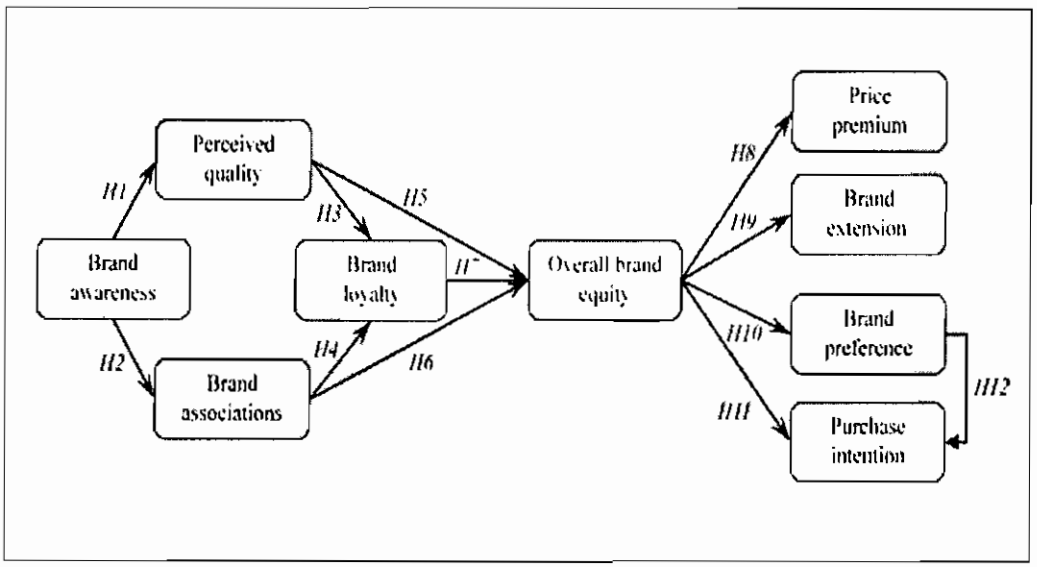

Figure 2.5
Brand Equity Model 4. "The influence of brand equity on consumer responses". Source: Buil, Martinez & Chernatony (2013).

The above four models illustrate the diverse factors that directly affect brand equity. The common predictors of brand equity used are brand associations, perceived quality, brand awareness and brand loyalty in which these four dimensions serve as direct predictors of brand equity in two studies (Sasmita & Suki, 2015; Wang & Finn, 2013).

On the other hand, Mongkol (2014) describes that brand equity is predicted by eight (8) integrated marketing communications (IMC) variables (Figure 2.6). The brand equity dimensions are also the common factors discussed above, which are: brand awareness, brand perceived quality, consumer association and brand loyalty, only that they are treated as dependent variables.

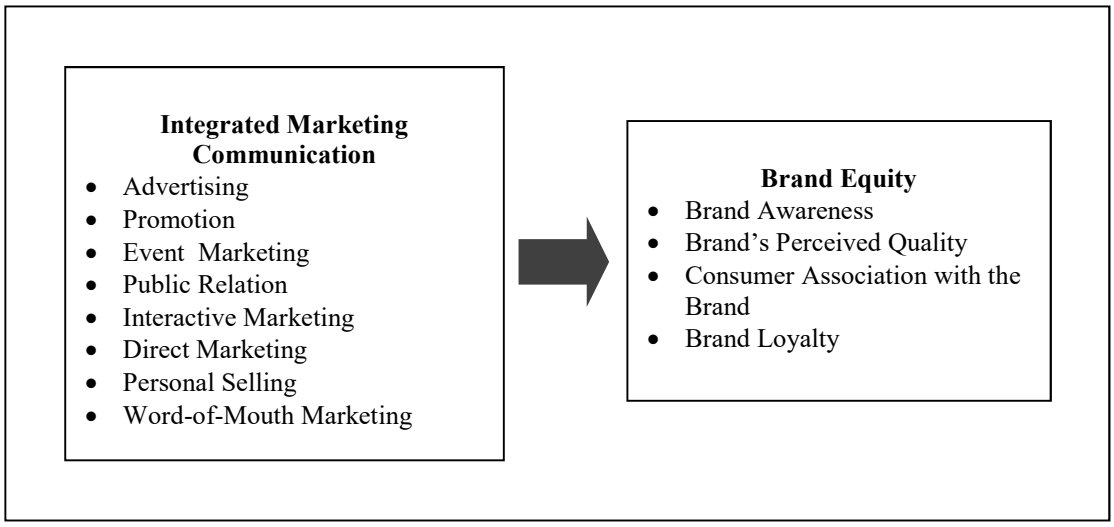

Figure 2.6
Brand Equity Model 5. "Integrated Marketing Communication to Increase Brand Equity: The Case of a Thai Beverage Company".
Source: Mongkol (2014).

Subsequently, Kumar (2013) proposes a much more complex customer based brand equity model with the dimensions of brand equity (brand awareness, brand association, perceived quality, brand trust and brand loyalty) positioned as intervening variables or mediators (Figure 2.7). The independent variables consist of four types of experience ranging from sensory, affective, behavioral and intellectual brand experience. Hence, the variations and fragmentation of brand equity models are seemingly supported.

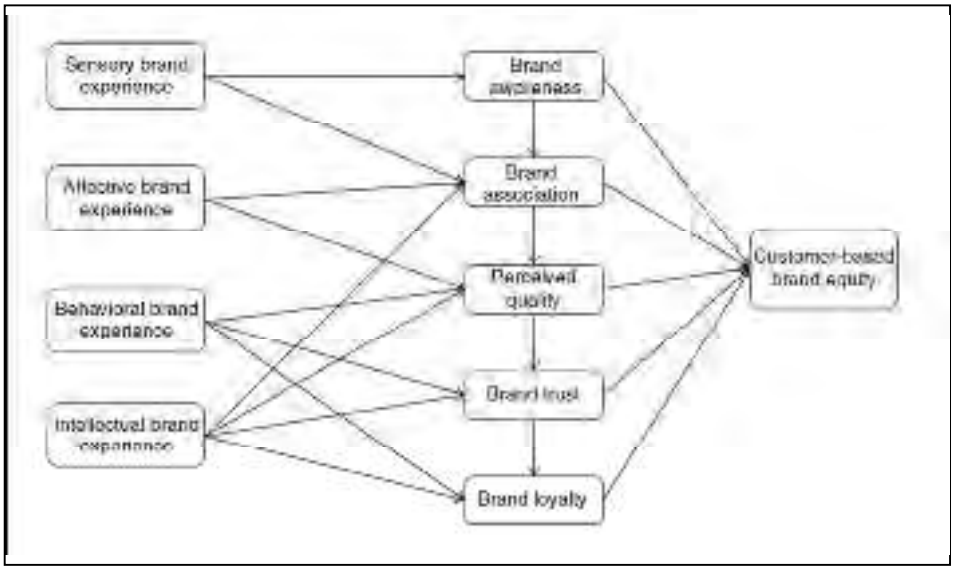

Figure 2.7
Brand equity Model 6: "Conceptual framework linking brand experience to brand equity: The nature and determinants of brand equity and its dimensions".
Source: Kumar et al. (2013).

Consequently, some models reiterate the importance of service to brand equity. (Joseph-Mathews & Voorhees, 2013; Jahanzeb, Fatima & Butt, 2013). While the former tested the interaction of service quality and e-service quality and its effect on brand equity as a moderator, the later examines the intervening role of credibility, perceived value and corporate (Figures 2.8 & 2.9).

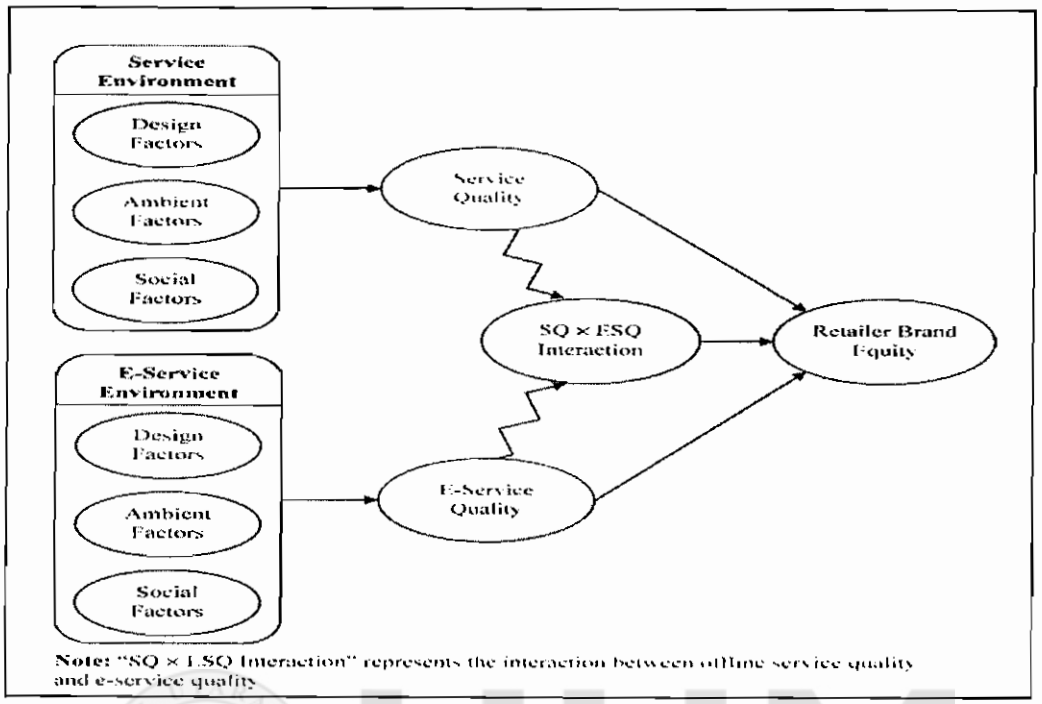

Figure 2.8
Brand Equity Model 7. "The effects of service on multichannel retailers' brand equity".
Source: White, Joseph-Mathews & Voorhees (2013).

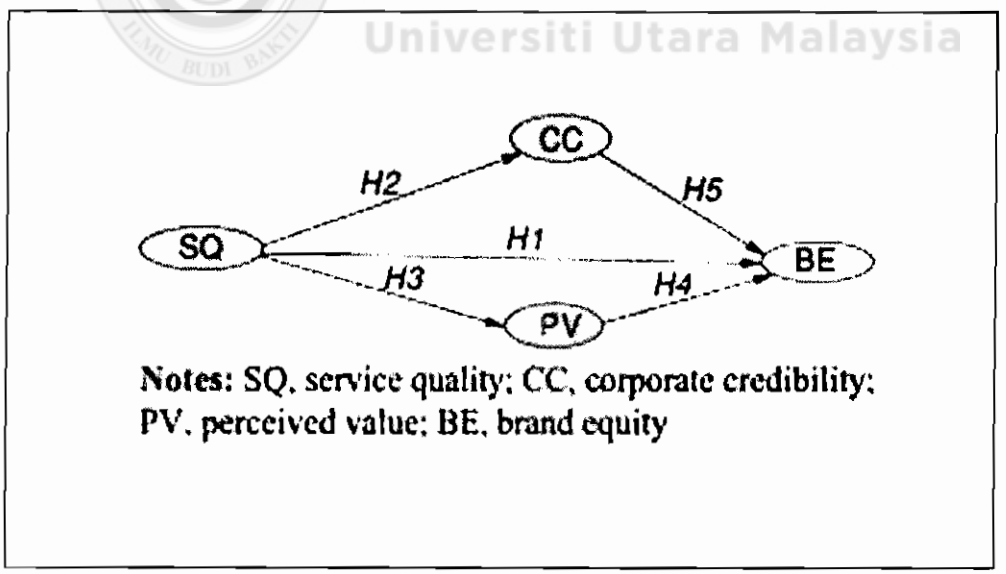

Figure 2.9
Brand Equity Model 8. "How service quality influences brand equity: The dual mediating role of perceived value and corporate credibility".
Source: Jahanzeb, Fatima & Butt (2013).

The model indicates the relationship between satisfaction and brand equity is portrayed in Figure 2.10 (Wang, Hsu & Fang, 2009). Other direct predictors of brand equity are trust, service encounter (service staff, services cape, customer similarity and customer interaction). Satisfaction and trust are part of relationship quality while brand equity is examined with brand associations and brand loyalty representing the dependent variables. In model nine (9), brand equity is proposed to predict customer based brand equity

Since studies which reveal the relationship between satisfaction and brand equity is rather limited, model 10 (Figure 2.11) shows that satisfaction predicts behavior intentions (Huang, 2011). In this model, brand equity is positioned as a moderator.

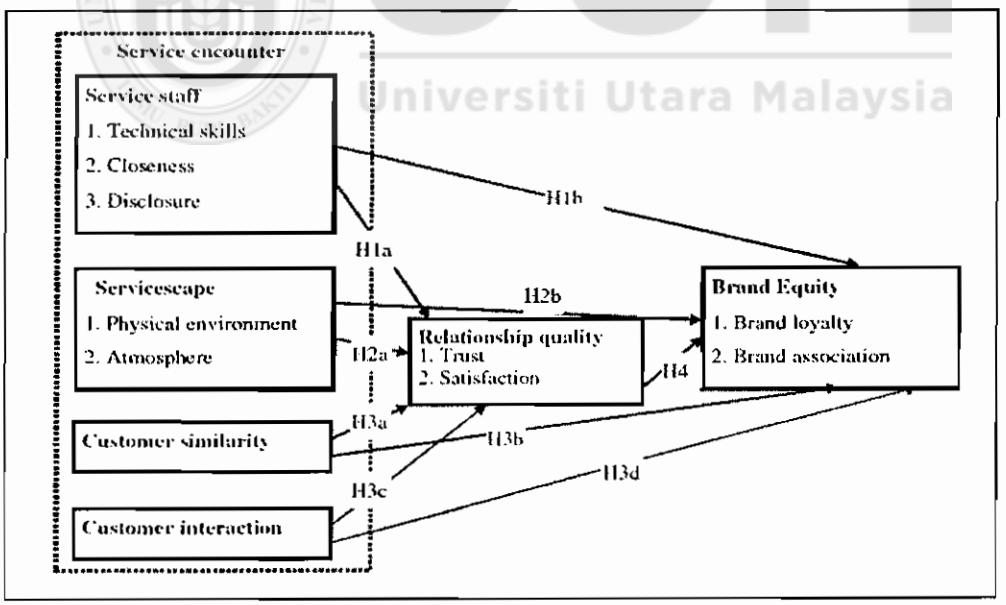

Figure 2.10
Brand Equity Model 9 "Constructing a relationship-based brand equity model". Source: Wang, Hsu & Fang (2009), Springer-Verlag (https. www. Published online).

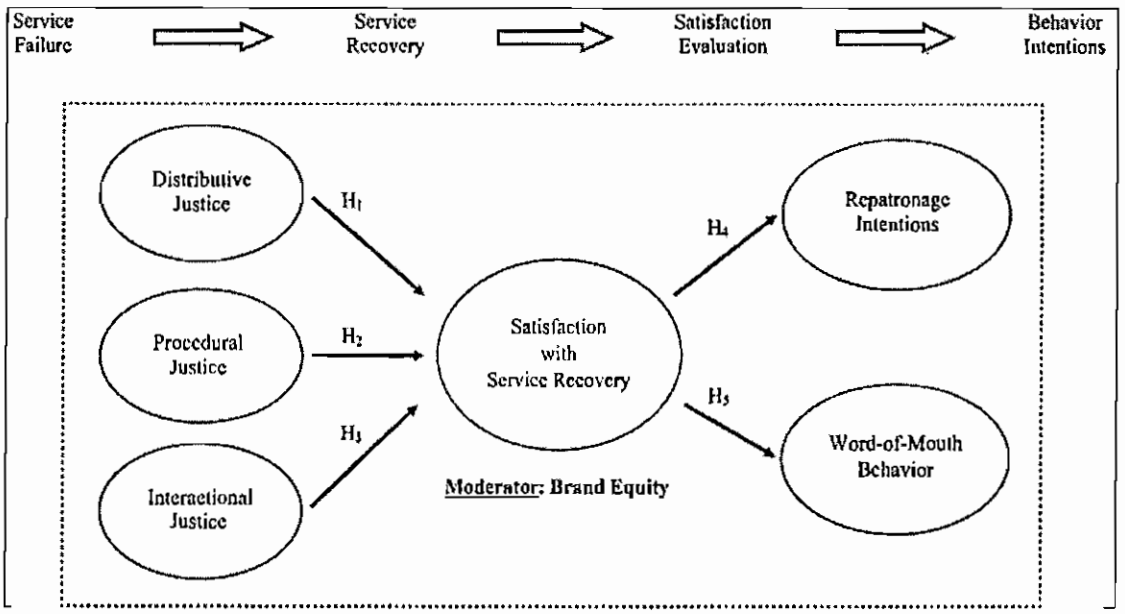

Figure 2.11
Brand Equity Model 10"Re-examining the effect of service recovery: the moderating role of brand equity".
Source: Huang (2011). Journal of Service Marketing.

In model 11 (Figure 2.12), brand equity represents a predictor variable that predicts customer built brand equity (CBBE) and FB brand equity (FBBE). Thus, brand equity is positioned as the predictor. CBBE subsequently predicts direct approach and indirect approach (Christodoulides & De Chernatony (2010). This is yet another way of how brand equity is positioned, making it rather inconsistent and mixed perception theoretically.

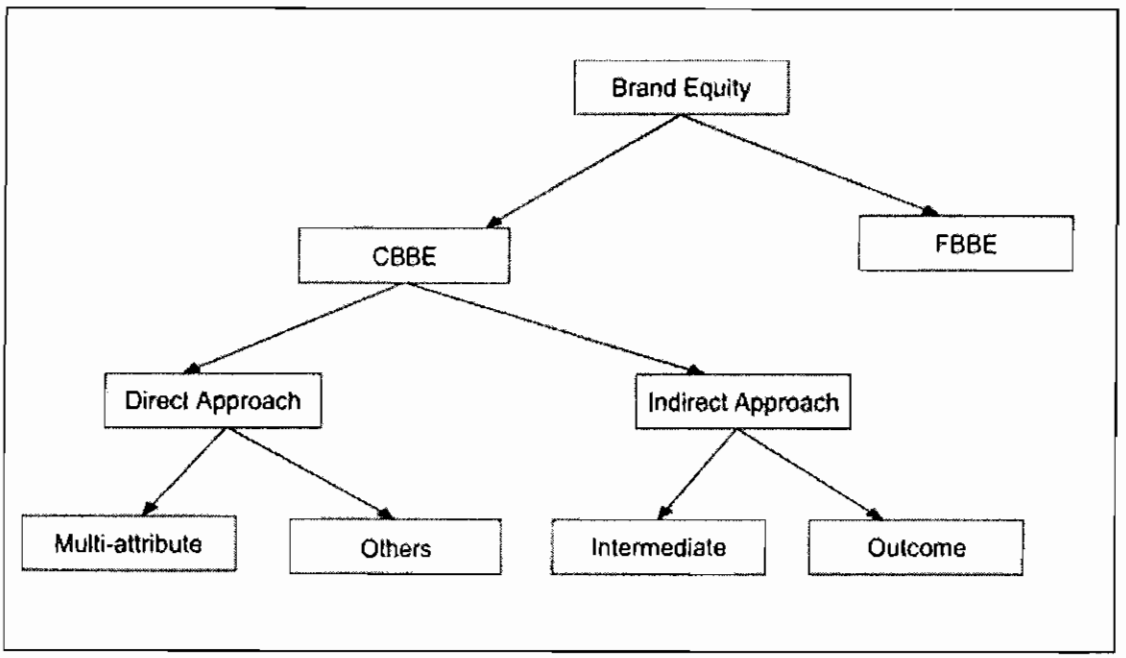

Figure 2.12
Brand Equity Model 11: 'Can after sale service generate brand equity?".
Source: Christodoulides & de Chernatony (2010). Marketing Intelligence & Planning

Figure 2.13 again depicts that brand equity dimensions are mediators while promotion factors are independent variables (Bruhn, Schoemueller & Schäfer, 2012). The discussion seems to confirm the fragmentation and variations in the factors used; the variations in the positioning of brand equity and other factors and also complexity of research models. Hence, these gaps warrant more research to be conducted on brand equity and its determinants.

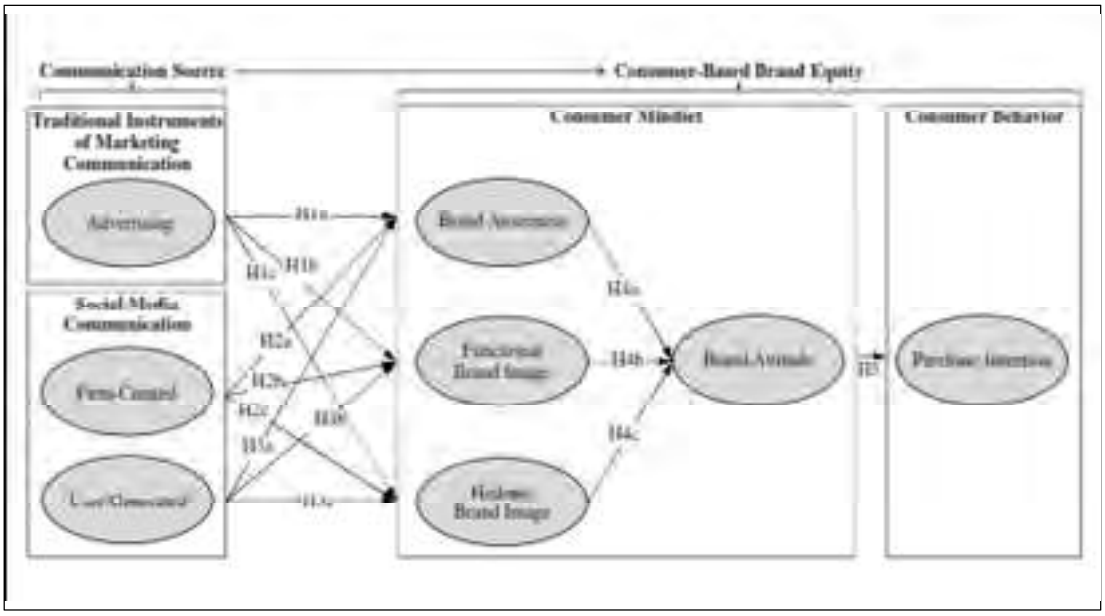

Figure 2.13
Brand Equity Model 12: "Are social media replacing traditional media in terms of brand equity creation?"
Source: Bruhn, Schoemueller & Schafer (2012), Management Research Review

These models discussed so far indicate the interchangeable role of brand equity either as predictor, mediator or dependent variable role. Similarly, the dimensions of brand equity had also been studied as diverse roles. Thus, this positioning dilemma of brand equity and its dimensions indicate the fragmentation and gaps of the brand equity in previous brand equity models which prompt further research needed in this area.

2.7 Determinants of Brand Equity

Extensive current literature on brand equity has been conducted in diverse setting of the consumer markets, but very few studies have been conducted in handicraft setting (Table 2.8). These multiple and diverse determinants of brand equity had been studied previously ranging from **brand loyalty** (Sasmita

& Suki, 2015; Alhaddad, 2014; Buil *et al.,* 2013; Wang & Finn, 2013; Kumar *et al.*, 2013; Severi & Ling, 2013; Moradi & Zarei, 2012; Wang & Li, 2012; Chahal & Bala, 2012; Lee, Lee & Wu, 2011; Ahmad & Butt, 2012; Pappu & Quester, 2008; Anselmsson, Johansson & Persson, 2007; Taylor, Celuch & Goodwin, 2004); **satisfaction** (Esmaeili Far & Rezaei, 2015; Torres & Tribo, 2011; Azizi, Ghytasivand & Fakharmanesh, 2012; Ha, 2009; Beerli, Martin & Quintana (2004); **competitive advantage** (Wang & Finn, 2013; Navarro & Delgado-Ballester, 2009; Kerr & Gladden, 2008; Anselmsson *et al.,* 2007; Collins-Dodd & Lindley, 2003); **uniqueness** (Wang & Finn, 2013; Anselmsson *et al.*, 2007); **marketing mix** (Thanasuta & Metharom, 2015; Davcik, 2013; Nguyen, Barrett & Miller, 2011); **promotion mix** (Thanasuta & Metharom, 2015; Alhaddad, 2015; Mongkol, 2014; Smutkupt, Krairit & Khang, 2012; Vallette-Florence, Guizani & Merunka, 2011; Nguyen, Barrett & Miller, 2011; Petburikul, 2009); **perceived quality** (Buil *et al.,* 2013; Wang & Finn, 2013; Kumar, 2013; White, Joseph-Mathews & Voorhees, 2013; Chahal & Bala, 2012; Lee, Lee & Wu, 2011;Wang, Hsu& Fang, 2009; Anselmsson *et al.,* 2007; Kayaman & Arasli, 2007); **brand image** (Alhaddad, 2015; Chahal & Bala, 2012; Lee, Lee & Wu, 2011); **country of origin** (Moradi&Zarei (2012); **brand awareness** (Alhaddad, 2015; Wang & Finn, 2013; Kumar *et al.,* 2013; Wang & Li, 2012; Nguyen *et al.,* 2011), **brand association** (Sasmita & Suki, 2015; Buil *et al.,* 2013; Wang & Finn, 2013; Kumar, 2013; Moradi & Zarei, 2012; Lee, Lee & Wu, 2011); usability (Wang & Li, 2012); **personalization**

(Wang & Li, 2012); **identifiability** (Wang & Li, 2012); **perceived enjoyment** (Wang & Li, 2012).

In view of the research trends in brand equity, there seems to be no consensus on whether brand equity plays a dependent, intervening or independent role. While most studies split the brand equity according to its five dimensions (brand awareness, association, loyalty, image and perceived quality) others treat equity as customer based brand equity as a whole (Wang & Finn, 2013). The dimensions of brand equity were previously investigated as predictor variables as well as dependent variables (Wang & Li, 2012). Due to this inconsistency, the study of brand equity and its derivatives is rather confusing and more research needs to be conducted.

Table 2.8
Determinants of Brand Equity

Determinant	Authors	Country	Industry	Analysis Method	Finding
Brand Association (BAS), Brand Loyalty (BL), Brand Awareness (BAW), Brand image (BI), Brand Equity(BE)	Sasmita & Suki (2015)	Malaysia	Casual wear or sport attires (Adidas, Nike, Puma or Levi's)	Regression 200 young consumers	BAS →BE (+S) BL →BE (+S) BAW →BE (+S) BI →BE (+S)
Service experience (SE), Brand affinity (BA), customer satisfaction (CSAT) Brand Equity (BE)	Esmaeili Far & Rezaei, 2015	Iran	Banking industry	SEM	SE→ BE (+S) BA→ BE (+S) CS-→BE (NS) SE→ CS (+S) BA→CS (+S)

Determinant	Authors	Country	Industry	Analysis Method	Finding
Advertising awareness (AA), Brand awareness (BA) Brand image (BI) Brand Equity (BE	Alhaddad (2015)	Syria	Mobile market	SEM 273 University students	AA→ BE (+S) BA→BE (+S) BI→ BE (+S) AA→ BA (+S) AA→ BI (+S) BA→ BI (+S)
Package similarity (PS), Sales promotion (SP), perceived quality-PQ (DV) Willingness to pay-WTP (DV)	Thanasuta & Metharom (2015)	Thailand	Private labels	SEM	PS→ PQ (BE) (+S) SP→PQ (BE) (-S)
Brand loyalty (BL), Brand Image (BI) Brand equity (BE)	Al-Haddad (2014)	Syria	Soft drinks	SEM 204 University respondents	BL→BE (+S) BI→BE (+S)
Advertising (A), Sales promotion (SP) Event marketing (EM), Public relations (PR), Interactive marketing (IM), Direct marketing(DM) Personal selling (PS) Word of mouth marketing (WOM) Overall IMC (IMC) Brand equity (BE)	Mongkol (2014)	Thailand	Beverage	Correlation	A →BE (+NS) SP→BE (+S) EM→BE (+S) PR →BE (+S) IM →BE (+S) DM →BE (+S) PS →BE (+S) WOM→BE (+S) IMC→BE (+S).
Perceived quality (PQ), perceived value (PV), Brand personality (BP), Brand association (BA), Brand loyalty (BL), Organizational association (OA).	Buil, Martinez & Chernatony (2013)	Spain & UK	General shoppers	SEM	BL→BE (+S) PQ →BE (+S) PV→ BE (+S) BP→BE (NS) OA→BE (+S)

Determinant	Authors	Country	Industry	Analysis Method	Finding
Brand Awareness (BAW) Brand Association (BAS) Perceived Quality (PQ) Brand trust (BT) Brand loyalty (BL), Customer –based brand equity (BE)	Kumar at al. (2013)	India	Hospital	Correlation SEM (902 patients)	BAW →BE (+S) BAS →BE (+S) PQ →BE (+S) BT →BE (+S) BL →BE (+S)
Brand Awareness (BAW), Brand associations (BA), Brand Loyalty (BL), Brand Image (BI), Perceived Quality (PQ), Brand Equity BE-DV)	Severi & Ling, (2013)	Malaysia	Private University Business Students 330 respondents	Regression	BAW→BE (+S) BL→BE (+S) BA→BE (+S) PQ→BE (NS) BI→BE (NS)
Service quality (SQ), e-service quality (ESQ), retail ambient factors (RAF), retail design factors (RDF), retail social factors (RSF), website ambient factors (WAF), website design factors (WDF), Brand Equity (BE)	White, Joseph-Mathews &Voorhees (2013)	USA	Retailers	SEM 234 respondents	SQ →BE (+S) ES →BE (+S) SQ x ESQ →BE (- S) RAF → SQ (+S) RDF → SQ (NS) RSF→ SQ (+S) WAF→ ESQ (+S) WDF→ ESQ(+S) WSF→ ESQ(+S)
Past brand loyalty (PBL), Current brand awareness (CA), Current brand association (CB), Current perceived quality (CPQ) Current perceived value (CPV), Brand emotions (BE), Uniqueness (U)	Wang & Finn (2013)	Canada	Soft drink	Structure equation modeling (SEM)	PBL →CBBE (+S) CA→CBBE (+S) CB→CBBE (NS) CPQ→CBBE (-S) CPV→CBBE (+S) U →CBBE (+S) BE→ CBBE (+S)

Determinant	Authors	Country	Industry	Analysis Method	Finding
Price (P) Brand Equity (BE)	Davcik (2013)	Italy	Enriched food	Regression 739 questionnaires	P →BE (+S)
Job Satisfaction (JS), Internal marketing, (IM) Brand orientation (BO)	Azizi, Ghytasivand & Fakharmanesh (2012)	Iran	Marketing Managers of food and pharmaceuticals Industry	PLS 120 respondents, from 60 companies	JS→ BE(NS) IM→ BE (+S) BO→ BE (+S) IM→BO (+S) JS→ BO (+S)
SMS advertising (SMS), Personalized Ads (P), Interactive Ads (IA) General Ads (G) Brand Awareness (BA) Brand Associations BAS) Brand loyalty (BL)	Smutkupt, Krairit & Khang (2012)	Thailand	Bakery Cafe Chain	Experimental (SEM)	SMS → BA (+S) SMS →BAS (NS) SMS→ BL (NS)
Country of brand (COB), Country of manufacture (COM), Brand loyalty (BL), Perceived brand equity (BE), brand awareness /association (BA)	Moradi & Zarei (2012)	Iran	Mobile phones, laptops (students)	Structure equation modeling	COB→BE(NS) COM →BE (NS) BL→BE (S) PQ→BE (NS) BA→BE (NS)
Brand loyalty (BL), Perceived quality (PQ) Brand image (BI) Brand equity (BE)	Chahal & Bala (2012)	India	Healthcare sector	Regression	BL→BE (+ S) PQ→BE (+S) BI→BE (NS) BI→BL→BE (BL partial mediator)

Determinant	Authors	Country	Industry	Analysis Method	Finding
Usability (U), Personalization (P), Identifiability (I), perceived enjoyment (PE), Brand loyalty (BL), Perceived quality (PQ), brand awareness (BAW), brand association (BAS) Purchase Intentions (PI)	Wang & Li (2012)	Taiwan	Mobile service	Structure equation modeling	U→BE (NS) P→BL,PQ (+S) I→PQ,BAW,BAS (+S) PE→BL,PQ,BAW,BAS (+ S) BL,PQ,BAW, BAS→ PI (+ S)
Brand personality (BP), Consumer promotions (CP), Brand equity (BE)	Valette-Florence, Guizani & Merunka, (2011)	France	coffee, athletic shoes and cars	Regression Factor analyses 150 volunteers	BP →BE (NS) CP→BE (-S)
Brand Image (BI), Brand Association (BA) Brand Loyalty (BL) Perceived Quality (PQ	Lee, Lee & Wu (2011)	Taiwan	household computer	MANOVA	BI→BA (+S) BI→BL (+S) BI→PQ (+S)
Brand awareness, Brand after sales, perceived quality, Brand loyalty, After sales service	Ahmad & Butt, (2011)	Pakistan	Automotive	CFA, SEM	No relationship test just factor loadings. (Measurement model).
Advertising Attitudes (AA) Distribution Intensity (DI) Brand Awareness (BAW) Perceived quality (PQ) Brand loyalty (BL)	Nguyen, Barrett & Miller, (2011)	Thailand & Vietnam	International shampoo brands	SEM 603 female consumers	AA→BAW (+S) AA→PQ (+S-Bkk), (NS Vietnam) DI→BAW (+S), DI→PQ (NS)
Advertising (A) Public relations (PR) Direct marketing(DM) Sponsorship (S) Promotions (P), Internet interaction (II)	Petburikul (2009)	Thailand	Telephone	Correlation, One-way ANOVA 400 questionnaires	A & PR →BE (+S) DM → BE (+S) S →BE (+S) P →BE (+S) II →BE (+S)

Determinant	Authors	Country	Industry	Analysis Method	Finding
Relationship quality (RQ) Trust (T), satisfaction (SAT). Service staff (SS), servicescape (SSP), customer similarity (CS), and customer interaction (CI).	Wang, Hsu & Fang , (2009)	Taiwan	Department & bank	SEM	RQ →BE (+S) SS→BE (+S) SSP →BE (NS) CS →BE (NS) CI → BE (+S)
Physical retailing service quality (PRSQ), Overall perceived service quality (OPSQ),	Ha, (2009)	South Korea	Retailing Service Industry	SEM 282 respondents (retail customers)	PRSQ→BE (+S) OPSQ→BE(NS)
Team related factors (TRF), Organization related variables (ORF), Market related factors (MRF): geographic location (GL), competitive forces (CF), Existing brand community (EBC), international media arrangements IMA) Brand awareness (BA), brand associations (BAS)	Kerr & Gladden, (2008)	World satellite fans	Team sport		CF→BA (+S) GL→BA (+S) GL→ BL (+S), EBC→ BAS (+S), EBC → BL (+S), IMA → BA (+S).
Differentiation (D), Cost (C), Dynamism (DY) Retailers strategic integration (RSI)	Navarro & Delgado-Ballester (2009)	Spain	Retailing	OLS Regression 121 Home appliances Retailers	D → BE (NS) C→ BE (NS) DY→ BE (NS) RSI→ BE (S)

Determinant	Authors	Country	Industry	Analysis Method	Finding
Retailer awareness (RAW), Retailer Associations (RAS) Perceived quality (PQ), Retailer loyalty (RL),	Pappu & Quester (2008)	Australia	Clothing retailer	MANOVA 422 usable response	RAW→BE (+S), RAS→BE (+S) PQ→BE (+S) RL→ BE (+S)
Perceived quality (PQ), Awareness, Associations (BAS), Loyalty (L), Uniqueness (U). Brand equity(BE)	Anselmsson, Johansson & Persson (2007)	Sweden	Grocery Retailing	Explorative & Qualitative	Uniqueness → Brand equity (S).

Specifically, based on the review of the determinants of brand equity, the commonly studied determinants were brand loyalty, satisfaction, competitive advantage, marketing mix, as well as individual dimensions of brand equity such as brand association, brand awareness, perceived quality, brand image and brand trust. Based on this preview, the present study embarks on including all these variables as the main predictors of brand equity for the handicraft industry.

2.8 Previous Study of Brand equity

From the discussion of the determinants of brand equity, this study selected four main predictors of brand equity. It is classified into *brand loyalty*, *satisfaction*, *competitive advantage* (lower cost, unique design and originality), and *marketing mix* (product, distribution factors, packaging and display (promotion). Their relationships with brand equity are discussed subsequently.

2.8.1 Brand Loyalty and Brand Equity

Studies in the past have examined the direct relationship between brand loyalty and brand equity. In the light of the findings, these authors acknowledged that brand loyalty is a significant predictor of brand equity. Even though the studies were conducted in different settings such as Spain, Syria, Indian, Malaysia, Iran and also in different industries, they still produced significant and positive results (Sasmita & Suki, 2015; Alhaddad, 2014; Buil, Martínez & Chematony, 2013; Kumar, Dash & Purvar, 2013; Moradi & Zarei, 2012; Severi & Ling, 2013; Pappu & Quester, 2008). Another interesting area of their findings is the fact that some authors used Structural Equation Modeling (SEM) as a method of analysis (Alhaddad, 2014; Buil, Martinez & Chematony, 2013; Kumar, *et al.,* 2013; Moradi & Zarei, 2012). Others used regression (Sasmita & Suki, 2015; Severi & Ling, 2013; Pappu & Quester, 2008). The summary of these relationships is presented in Table 2.9. Hence, the proposed hypothesis for this study is H1: Brand loyalty is positively related to brand equity, H2: Satisfaction is positively related to brand equity, H3: Competitive advantage is

positively related to brand equity, and H4: Marketing mix is positively related to brand equity.

Table 2.9
Summary of Relationship between Brand Loyalty and Brand Equity

Author	Industry	Country	Analysis method No. of respondents	Finding
Sasmita & Suki (2015)	Casual wear or sport attires (Adidas, Nike, Puma or Levi's)	Malaysia	Regression 200 young consumers	Significant (positive)
Alhaddad (2014)	Soft-drink	Syria	SEM 204 students	Significant (positive)
Buil, Martinez & Chernatony (2013)	General Shoppers	Spain & UK	SEM 615 consumers	Significant (positive)
Kumar, Dash & Purvar, (2013)	Hospital	India	SEM 902 patients	Significant (positive)
Severi & Ling (2013)	Private universities	Malaysia	Regression 330 respondents	Significant (positive)
Moradi & Zarei (2012)	Mobile phones, laptops (students)	Iran	SEM 602 respondents	Significant (positive)
Pappu & Quester (2008)	Clothing	Australia	MANOVA 422 usable response	Significant (positive)

2.8.2 Satisfaction and Brand Equity

Satisfaction derived by the customer is seen as contentment from consumption experience and described by the consumers (Oliver, 2006). Satisfaction is consumers' "judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under or over-fulfillment" (Oliver, 1997, p.13). Usually expectations, disconfirmation of expectations, performance,

affect, and equity were used to model buyers' level of satisfaction. It is theorized that the higher the level of satisfaction between buyer and seller, the greater the probability of long-term relationships. In terms of customer base satisfaction, it is described as a customer base presenting a barrier to entry, a basis for customer base brand plays a significant and strong role in creating brand loyalty and brand equity.

The relationship between satisfaction and brand equity has been sparsely investigated in handicraft. Satisfaction as indicated from previous studies, affects brand equity positively (Esmaeili Far & Rezaei, 2015; Azizi, Ghytasivand & Fakharmanesh, 2012; Torres & Tribó 2011; Ha, 2009; Beerli, Martin & Quintana, 2004) (Table 2.10). Torres and Tribó (2011) found the relationship between satisfaction and brand equity to be significant and positive in the financial sector. In another study, Ha, (2009) empirically tested this relationship within the retail setting on 282 consumers as respondents in South Korea.

Furthermore, Beerli, *et al.,* (2004) explored the direct relationship between satisfaction and brand equity. The study was done in Spain with a sample size of 576 bank clients; this outcome too is significant. These studies prove that satisfaction plays a significant and positive role in affecting brand equity. In contrast, Esmaeili Far & Rezaei, (2015) found insignificant linkage between satisfaction and brand equity in the banking industry. Likewise, Azizi, *et al.,*

(2012) also found insignificant relationship between satisfaction and brand equity in Iran. Table 2.10 presents the findings on this relationship. Hence, the proposed hypothesis for this study is H2: Satisfaction is positively related to brand equity.

Table 2.10
Summary of Relationship between Satisfaction and Brand Equity

Author	**Industry**	**Country**	**Analysis method No. of respondents**	**Finding**
Esmaeili Far & Rezaei, 2015	Banking industry	Iran	SEM	Not Significant
Azizi, Ghytasivand & Fakharmanesh (2012)	Food and pharmaceuticals Industry	Iran	PLS 120 managers, marketing experts (respondents), from 60 companies	Not significant
Torres & Tribo (2011)	Financial	Spain	Regression 105 respondents	Significant (positive)
Ha, (2009)	Retailing Service Industry	South Korea	SEM 282 respondents (retail customers)	Significant (positive)
Beerli, Martin & Quintana (2004)	Bank	Spain	SEM 576 clients of bank	Satisfaction→Perceived Quality (a dimension of BE)Significant (positive)

2.8.3 Competitive Advantage and Brand Equity

Porter (1980) provides the Porter's five-force approach framework as being influenced by five determining structures: threat of new entries, threat of substitute products or services, bargaining power of buyers, bargaining power

of suppliers, and competitive intensity among industry incumbents. Subsequently, Porter, (1985) concluded that competitive advantage grows from three fundamental factors such as cost leadership, differentiation, unique benefits and focus. Cost leadership means firms offer lower prices than competitors but offering equivalent benefits (Porter, 1985). Differentiation is a strategy whereby firms offer products and services which do better than competitors. This can be done by offering unique products and services which are difficult to imitate. Focus refers to niche market strategy whereby firms concentrate on a narrow portion of the market (Porter, 1985).

A review of past studies examining this relationship has established equivocal results (Wang & Finn, 2013; Navarro & Delgado-Ballester, 2009; Kerr & Gladden, 2008; Anselmsson *et al.*, 2007). The nearest representative for competitive advantage called uniqueness is a significant predictor of customer based brand equity, a study done in Canada on soft drinks brands (Wang & Finn 2013) and Sweden on grocery brands (Anselmsson *et al.,* 2007). A few other studies investigating the relationship between competitive advantage and brand equity are quite timeworn (Navarro & Delgado-Ballester, 2009; Kerr & Gladden, 2008; Anselmsson *et al.,* 2007).

Conversely, the relationship between competitive advantage factors is also found to be insignificant (Navarro & Delgado-Ballester, 2009; Kerr & Gladden, 2009). This study found insignificant linkage between differentiation

and retailer equity as well as between cost and retailer equity among retailers' brand in Spain. Kerr and Gladden, (2008) also found mix findings whereby the linkage between competitive forces and brand awareness was found significant while the relationship between competitive forces and perceived quality, competitive forces and brand association and competitive forces and brand loyalty were found to be insignificant. This inconsistency of result showed that the relationship needs further examination as this study intended. Hence, the proposed hypothesis for this study is H3: Competitive advantage is positively related to brand equity.

Table 2.11
Summary of Relationship between Competitive Advantage (CA) and Brand Equity

Author	Industry	Country	Analysis method No. of respondents	Finding
Wang & Finn (2013)	Soft drink	Canada	SEM 234 young peoples	Uniqueness (CA)→CBBE (+S)
Hernandez-Espallardo & Navarro-Bailon (2008)	Retailer	Spain	121 retailers of home appliances (hypermarkets, department stores, retailers integrated and category killers)	Differentiation (CA) → Retailer equity (NS)Cost (CA) → Retailer equity (NS)
Kerr & Gladden (2008)	football	USA	Qualitative	Competitive force→Brand awareness (+S) Competitive force→Perceived quality (NS) Competitive force→Brand associations (NS) Competitive force→Brand loyalty (NS)
Anselmsson et al. (2007)	Grocery Retailing	Sweden	Explorative & Qualitative	Uniqueness (CA)→Brand equity (+S)

2.8.4 Marketing Mix and Brand Equity

The connotation of "marketing mix" as opined by McCarthy (1964) is referred to as the "four Ps" and is seen as way of translating marketing planning into practice. The product (understood to relate to both products and/or services) is designed for maximum customer benefit and priced in such a way that the buyer can afford the product; made available for the customer to buy (place), and promoted in order that potential buyers know as much as required about the product being offer.

In effect, the concept of the marketing mix outlines a course of action for the organization using controllable variables in an environment where many factors are uncontrollable. Viewed from a general perspective, it is the external market. Kotler (2000) broadened this classification to include customer, environmental, competitive and marketing decision variables. This classification implied that the marketing decision variables referred to were in fact the internal and controllable marketing variables.

Previous studies that examined the relationship between the elements of marketing mix and brand equity were fragmented and varied. The variations occurred either in the predictor names or in the brand equity dimension. The main marketing mix components that have been investigated as direct predictors of brand equity are *product/packaging* (Thanasuta & Metharom, 2015; Cuneo, Lopez & Yague, 2012; Allaway *et al.,* 2011; Valette-Florence *et*

al., 2011; Kayaman & Arasli, 2007; Rundh, 2005;), *price* (Alhaddad, 2014; Davcik, 2013; Stahl et al. 2011; Kim & Hyun, 2011; Villarejo-Ramos & Sanchez-Franco, 2005), *place or distribution* (Nguyen *et al.,* 2011;Kim &Hyun, 2011), and *promotion mix* (Thanasuta & Metharom, 2015; Mongkol, 2014; Bruhn *et al.,* 2012; Smutkupt*et al.*, 2012; Kim &Hyun, 2011; Baumgarth & Binckebanck, 2011; Valette-Florence*et al.*, 2009; Swobada, Haelsig, Schramm-Klem & Morschett, 2009; Petburikul, 2009; Sriram, Balachander & Kalwani, 2007) (Table 2.12).

Even though many studies have been conducted on this linkage, there are several literature gaps that could be observed in marketing mix studies. The first gap is that only one or two dimensions of marketing mix were included in each study. For instance, price has been investigated singly and found to be a significant and positive predictor of brand equity (Alhaddad, 2014; Davcik, 2013; Stahl *et al.,* 2012; Villarejo-Ramos & Sánchez-Franco, 2005).

Similarly, the other dimension of marketing mix like promotion has been examined singly to affect brand equity (Mongkol, 2014; Bruhn *et al.,* 2012). Promotion has been studied from several of its components among others: sales promotion, direct marketing, advertising, interactive marketing public relations, (Mongkol, 2014), social media factors (Smutkupt *et al.,* 2012). Brand equity component has also been studied from different angles such as brand loyalty, brand awareness, brand association, brand image and perceived

quality. The findings have also mostly revealed that positive and significant relationships exist, (Table 2.12).

The second research gap can be seen in the variations of the names of variables used. For example, product has been labeled as packaging similarities (Thanasuta & Metharom, 2015), brand personality (Valette-Florence *et al.,* 2009), product labels (Cuneo *et al.,* 2012) and product value (Allaway *et al.,* 2011). However, it is observed that this variable is the least to have been studied and most often inconsistent results were observed (Valette-Florence *et al.,* 2011).

Contrariwise, product brand personality, sales promotions, after sales service, advertising and distribution intensity have found non-significant relationship with brand equity (Kim & Hyun, 2011; Mongkol, 2014; Nguyen *et al.,* 2011; Sriram *et al.,* 2007; Valette-Florence et al., 2011). This shows that equivocal result was obtained in past studies while examining the relationship between marketing mix components and brand equity. Hence, further research is deemed necessary to bridge this gap. Hence, the proposed hypothesis for this study is H4: Marketing mix is positively related to brand equity.

Table 2.12
Summary of Relationship between Marketing Mix and brand equity

Author	Industry	Country	Analysis method No. of respondents	Finding
Thanasuta & Metharom (2015)	Private labels	Thailand	SEM	PS→PQ (BE) (+S) SP→PQ (BE) (-S) SP → WTP (+S) PS→ WTP(+S) PQ →WTP (NS)
Alhaddad (2015)	Mobile market	Syria	SEM 273 University students	Advertising awareness → Brand equity (+S)
Mongkol (2014)	Beverage	Thailand	Regression	Advertising→BE (+NS) Sales Promotion →BE (+S) Event Marketing→BE (+S) Public Relations →BE (+S) Interactive Marketing →BE (+S) Direct Marketing →BE (+S) Personal Selling→BE (+S) Word-of –Mouth Marketing→BE (+S)IMC→ BE (+S)
Alhaddad (2014)	Sport wear	Syria	Regression 328 business students	Price awareness →brand awareness/brand image (+S)
Davcik (2013)	Enriched-food	Italy	Regression 739 questionnaires	Price →Brand equity(+ S)
Bruhn, Schoenmueller & Schafer (2012)	Tourism, telecom and pharmaceuticals	Switzerland	SEM 393 questionnaires	Traditional media (Advertising) → brand awareness (+ S) Traditional media (Advertising) → functional brand image (+S) Traditional media (Advertising) → hedonic brand image (+S)
Smutkupt, Krairit & Khang (2012)	Bakery cafe chain	Thailand	Experimental (SEM)	SMS → BA (+ S) SMS →BAS (NS) SMS→ BL (NS)
Cuneo, Lopez & Yagu¨e (2012)	Households	Spain	MNL 933 purchases	Private labels brand → Brand equity (+S)

Author	Industry	Country	Analysis method No. of respondents	Finding
Allaway, Huddleston, Whipple & Ellinger, (2011)	Supermarket	USA	Stepwise Regression	Product → CBBE (+S) Prices → CBBE (+S)
Stahl, Heitmann, Lehmann & Neslin (2012)	Automotive	USA	SEM 39 brands	Pricing →Brand equity (-S)
Kim & Hyun (2011)	IT software	Korean	SEM 319 respondents	Channel→brand awareness (BA/BE) (+S) Price→BA/BE (+S) Promotion →BA/BE (+S) After sales serv →BA/BE (NS)
Nguyen, Barrett & Miller, (2011)	International shampoo brands	Thailand & Vietnam	SEM 603 female consumers	Advertising Attitudes (AA)→Brand Awareness (+S) AA→PQ (+S-Bkk), (NS Vietnam) Distribution Intensity→BAW (+S), DI→PQ (NS)
Baumgarth & Binckebanck (2011)	Business-to-Business	Germany	SEM 201 respondents	Salesperson's personality →B-to-B Brand equity (+S) Non-personal communication → B-to-B Brand equity (+S)
Valette-Florence, Guizani & Merunka (2009)	Coffee, athletic shoes and cars	France	Regression 150 customers	Brand personality→BE (NS) Consumer promotions →BE (-S)
Swobada, Haelsig, Schramm-Klem & Morschett (2009)	Retailer	Germany	SEM	Advertising → Retail brand equity (+S) Store design →Retail brand equity (NS)
Petburikul (2009)	Telephone	Thailand	One-way ANOVA 400 questionnaires	Advertising & PR →BE (+S) Direct Marketing → BE (+S) Sponsorship →BE (+S) Promotions →BE (+S) Internet Marketing →BE (+S)
Sriram, Balachander & Kalwani (2007)	Toothpaste and Dish Detergent	USA	Regression	Advertising to BE (+S) - (Dish detergent) Sales promotions to BE (NS)

Author	Industry	Country	Analysis method No. of respondents	Finding
Kayaman & Arasli (2007)	Hotel industry	Cyprus Island	SEM 345 tourists	Tangible→ BL/BE (+S) Responsive→BL/BE (+S) Tangible→BI/BE (+S) Reliability→BI/BE (+S) Empathy→BI (+S) BL→BI/BE (+S)
Riel, Mortanges & Streukens (2005)	Chemical	Belgium and Netherlands	Factor analyses 75 company	Significant (positive)
Villarejo-Ramos & Sánchez-Franco (2005)	Marketing communications	Spain	SEM 268 consumer	Price deals to BE (+S)
Rajh (2005)	Beverage	Croatia	SEM 424 respondents	Significant (positive)
Rundh (2005)	Food industry	Sweden		Packaging → BE
Collins & Stevens (2002)	Education	USA	1,955 students	Significant (positive)
Yoo, Donthu & Lee (2000)	Camera product	Korea	SEM 569 respondents	Significant (positive)

2.9 Brand Loyalty

The importance of how loyal a customer is towards product or service brand could not be denied. Why a customer stick to a brand could be triggered by many factors. It could be due to the quality of the product, brand image, brand attitude, etc. Hence, brand loyalty has been defined from several angles. The first definition is given by Oliver, (1999). He defines brand loyalty as:

"A deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-

brand or same brand set purchasing despite situational influences and marketing efforts having the potential to cause switching behavior".p.

This definition stresses the importance of commitment and consistency of customers to re-purchase the said product or service. For example, some customers still prefer to purchase a certain preferred perfume in spite of the hike in prices for that item.

Uncles, Dowling and Hammond (2003) define brand loyalty from four perspectives: attitudinal loyalty, behavioral loyalty, composite loyalty and contingency loyalty. Attitudinal loyalty is attached to consistent brand preference, relationship commitment and emotional attachment to brands (Morgan & Hunt, 1994; Oliver, 1999). Hence this definition is quite similar to the first definition by Oliver, 1999.

Attitudinal loyalty is sometimes equated to relationship commitment to brand (Morgan & Hunt, 1994; Fournier, 1998; cited in Uncles *et al.,* 2003). Oliver's (1999) defines attitudinal loyalty as consisting of three elements which are cognitive, affective and cognitive. These attitudinal elements are reflected as the first three stages of loyalty as shown in Figure 2.14.

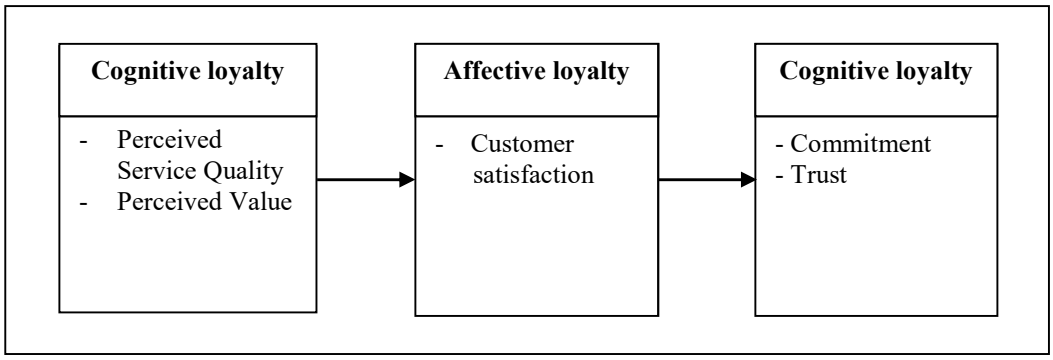

Figure 2.14
Three-Stage of Attitudinal Loyalty Model (Oliver, 1997, 1999)

First, cognitive loyalty refers to brand confidence based upon the availability of product information to the customer. The information needed could be based on whether consumers look for costs, benefits, and quality during their purchasing decision process. Consumers may shift to other product or service, which can offer better product benefits. Cost and benefits are translated into perceived value while quality is based on perceived service quality.

Secondly, affective loyalty is based on customers' feelings or liking towards a brand based on cumulative satisfying usage occasions. This stage of affective loyalty involves both liking and satisfaction. Satisfaction and dissatisfaction has a direct influence on attitude and attitude change. This attitude shift determines whether the consumers still continue or discontinue purchasing the product.

Thirdly, cognitive loyalty is understood as the customers' behavioral intention to keep on using a product in the future or a brand specific commitment. This means that the customers have an attachment or a commitment to the products that are based on more than cognition. It is a loyalty state containing commitment to buy. At this stage, the definition is akin to brand commitment as suggested by Morgan and Hunt's (1994).

One of the important dimensions of cognitive loyalty is word of mouth, where the consumer not only would re-visit certain store, but would also encourage relatives, friends and colleagues to patronize certain favored store. Hence, at cognitive stage customers will not only commit to buying but also come to trust the favored store. Attitudinal measures could be in the form of liking a brand, feeling committed to a brand, willingness to recommend it to others or having positive beliefs and feelings to a brand (trust, satisfaction, perceived value and image).

The advocates of attitudinal focus argue that strong attitudinal loyalty makes customers more resistant to the attempts other marketers make to steal them away (Gundlach *et al.,* 1995, cited in Ball *et al.,* 2004) and more resistant to counter persuasion and search for alternatives (Dick & Basu, 1994, cited in Ball *et al.,* 2004).

Essentially, behavioral loyalty is viewed in behavioral terms as repeat purchase, share of market, repurchase or purchase frequency, non-switching behavior or on-going propensity to buy (Dick & Basu, 1994; Jones & Sasser, 1995; Dekimpe et *et al.,* 1997; Ganesh *et al.*, 2000; Ehrenberg & Scriven, 1999; cited in Uncles *et al.,* 2003). Behavioral loyalty is beheld as repeated purchase (Dick & Basu, 1994). In another opinion, others regard behavioral loyalty as frequency of purchase because behavior reflects what customers actually do (Dekimpe *et al.,* 1997; Uncles *et al.,* 2003), while some describe the concept as share of wallet or share of purchases (Jones & Sasser, 1995). Correspondingly, Ganesh *et al.*, (2000) propose two behavioral factors in their loyalty items, active loyalty (positive word of mouth and intention to use) and passive loyalty (not switching even under less positive conditions).

Basically, researchers have integrated both attitudinal and behavioral to become composite loyalty (Jacoby 1971; Dick & Basu, 1994; Oliver, 1997; 1999; Uncles *et al.,* 2003). From the composite perspective, it is argued that behavioral and attitudinal loyalty are highly intertwined, repeated purchases lead to positive affect which leads to cognitive loyalty, high levels of involvement and intention to continue repurchase (Ball *et al.,* 2004).

Finally, brand loyalty is conceptualized by contingency approach whereby the relationship between attitude and behavior is allowed to be moderated by

contingency variables such as the individual's current circumstances, their characteristics, and/or the purchase situation (Uncles *et al.,* 2003).

The last three conceptualization of brand loyalty i.e behavioral, composite and contingency are not used for this study due to several arguments. Dick and Basu (1994) argue that the behavioral approach is insufficient to explain how and why loyalty is developed and maintained (cited in Pedersen & Nysveen, 2001). Repeat purchase as a measurement of loyalty is invalid because of happenstance buying or preference for convenience, and inconsistent purchasing could mask loyalty if consumers were multi-brand loyal (Jacoby & Chestnut, 1978, cited in Beerli *et al.,* 2004; Ball *et al.,* 2004). Furthermore, attributes of purchase situation (repeat purchase) are conceptualized as "nuisance" variables that inhibit the natural evolution of customer loyalty (Uncles *et al.,* 2003).

2.10 Determinants of Brand Loyalty

Brand loyalty has been predicted by many factors ranging from emotional attachment, corporate associations, corporate activities, corporate value, corporate personalities, functional benefits and symbolic benefits (So, Parsons & Yap, 2013); corporate-based brand association, functional brand associations, personnel based brand associations, experienced based brand association, brand trust (Phan & Ghantous, 2013); brand usage imagery congruity, brand attitude, brand personality (Liu, Li, Mizerski, & Soh, 2012);behavioral brand loyalty,

attitudinal brand loyalty (Kuikka & Laukkanen, 2012); perceived quality, brand awareness, advertising attitudes, distribution intensity (Nguyen, Barrett & Miller, 2011); customer satisfaction, image, trust (Amin, Isa & Fontaine, 2013). (Table 2.13)

Table 2.13
Determinants of Brand Loyalty

Antecedent	Authors	Country	Industry	Analysis Method	Finding
Emotional attachment (EA), Corporate associations (CA), corporate activities (CAC), corporate value (CV), corporate personalities (CP), functional benefits (FB), symbolic benefits (SB) Brand loyalty (BL)	So, Parsons & Yap (2013)	Australia & Singapore	Luxury goods	SEM 282 customers	EA→ BL (+S) CA→ BL (-S) CAC→ BL (NS) CV→ BL (NS) CP→ BL (NS) FB→ BL (+S) SB→ BL (NS)
Brand Trust (BT), Corporate- based brand association (CBBA), Functional brand associations (FBA), Personnel-based brand associations (PBBA), experienced based brand association (EBBA), Brand loyalty (BL)	Phan & Ghantous (2013)	Vietnam	Bank	SEM, 557 customers	Exclude moderators FBA→CBA (+S) PBBA→ CBBA (+S) FBA→BT (+S) PBBA→ BT (+S) CBBA→BT (+S) FBA→BL (NS) PBBA→ BL (+S) CBBA→ BL (+S) BT→ BL (+S) Old & New customer FBA→CBA(+S) PBBA→ CBBA (+S) FBA→BT (+S) PBBA→ BT(+S) CBBA→BT (NS) FBA→BL (NS) PBBA→ BL (NS) CBBA→ BL(+S) BT→ BL (+S) High & low visit freq FBA →CBA (+S) PBBA→ CBBA (NS) FBA→ BT (NS) PBBA→ BT (+S) CBBA→BT (NS) FBA→BL (NS) PBBA→ BL (-S) CBBA→ BL (NS) BT→ BL (+S)

Antecedent	Authors	Country	Industry	Analysis Method	Finding
Customer satisfaction (CS), Image, Trust, Customer loyalty (CL)	Amin, Isa & Fontaine (2013)	Malaysia	Islamic bank	SEM 1,000 Muslims and non-Muslims respondents	Muslims CS→ Image (+S) CS→ Trust (+S) CS→ CL (+S) Image → Trust (+S) Image → CL (+S) Trust → CL (+ S) Non-Muslims CS → Image (+S) CS → Trust (NS) CS → CL (+S) Image → Trust (+S) Image → CL (NS) Trust → CL (+S)
Brand usage imagery congruity (BUIC), brand attitude (BA) Brand personality (BP) Brand loyalty	Liu, Li, Mizerski & Soh (2012)	Australia, China & Singapore	Luxury fashion brand	SEM 264 questioners	BUIC→BL (+S) Brand awareness (+S)
Brand satisfaction (BS) Brand Equity (BE), Brand Value (BV) Behavioral brand loyalty (BBL) Attitudinal brand loyalty (ABL)	Kuikka & Laukkanen (2012)	Finland	Confectionery	Factor analysis 808 online questionnaire	BS→BBL (+S) BS→ABL (+S) BE→ABL (+S) BV→BBL (+S) BV→ABL (+S)
Perceived quality (PQ), brand awareness (BA), advertising attitudes (AA), distribution intensity (DI)	Nguyen, Barrett & Miller (2011)	Vietnam & Australia	Shampoo brands	SEM	PQ→ BL (+S) BA→BL (NS) BA →PQ (NS) AA→BA (NS) AA→PQ (NS) DI→BA (NS) DI→PQ (+S)
Physical Quality (PQ) Staff Behavior (SB) Ideal Self Congruence (ISC), Brand identification (BI) Lifestyle Congruence (LC) Customer satisfaction (CS) Brand Loyalty (BL)	Nam, Ekinci & Whyatt (2011)	Hotel & restaurant	UK	378 customer' response	PQ→ CS (+S) SB→ CS (+S) ISC→ CS (+S) BI → CS (+S) LC→ CS (NS) CS→ BL (+S) PQ→ BL (NS) SB→BL (+S) ISC→BL (+S) BI→BL (+S) LC→BL (NS)

Antecedent	Authors	Country	Industry	Analysis Method	Finding
Satisfaction (SAT) Staff service (SS) Self-image (SI) Brand awareness (BAW) Attitudinal Loyalty (AL)	Ahmad & Hashim (2011)	Hotel	Malaysia	SEM 415 questionnaires	SAT→AL (+S) SS→AL (+S) SI→AL (+S) BAW→AL (+S) SS→SAT (+S) SI→SAT (+S) BAW→SAT (+S)
Website satisfaction (WS), website trust (WT) Brand satisfaction (BS) parent brand level (PBL), Attitudinal loyalty(AL), Brand Loyalty(BL)	Horppu, Kuivalainen, Tarkiainen & Ellonen (2008)	Finland	Online	Regression 576 customer's bank	WS→WT (+S) WT→WL (+S) PBL→BS (+S) PBL→ WT (+S) BS→BL (-S) AL→BL(-S) BS→BL(+S) AL→BL(+S)
Satisfaction Loyalty	Torres-Moraga, Básquez-Parraga & Zamora-Parrage (2008)	Chile	Product (innovative and tradition)	Factor analysis 1,223 respondents	STP-LTP and → Brand loyalty (both product) (+S) Satisfaction → Brand loyalty (both product) (+S)
Public relation perception Customer Loyalty	Hsien & Lee (2008)	China	Insurance	Regression 367 respondents	Public relations perception → Customer loyalty (+S)
Satisfaction (Sat) Corporate image (CI), Store loyalty (SL)	Martenson, (2007)	Sweden	Retailing	SEM 1,000 consumer	Sat → SL (NS) CI → Sat (+S)
Satisfaction (SAT), Value (V), Resistance to change (RTC), Affect (AFF) Trust (T), Brand equity (BE)	Taylor, Celuch& Goodwin (2004)	USA	Heavy equipment manufacturers	SEM 9,998 respondents	SAT → BL (NS) V → BL (NS) RTC → BL (NS) AFF → BL (+S) T → BL (+S) BE → BL (+S)

2.11 Previous study of Brand Loyalty

This section discusses the studies that examine the determinants of brand loyalty such as satisfaction, competitive advantage, and marketing mix in detail.

2.11.1 Satisfaction and Brand Loyalty

A review of recent empirical studies on customer satisfaction and brand loyalty shows inconsistent findings about this linkage (Table 2.14). The reviewed found significant linkage between satisfaction and brand loyalty (Mohammadi & Kaviani, 2015; Kassim, Igau, Harun & Tahajuddin, 2014; Amin, Isa & Fontaine, 2013; Kuikka & Laukkanen, 2012; Nam, Ekinci & Whyatt, 2011; Ahmad & Hashim, 2010; Horppu, Kuivalainen, Tarkiainen & Ellonen, 2008; Torres-Moraga, Vásquez-Parraga, A.Z., & Zamora-González, 2008; Russell-Bennett, Rebekah & McColl-Kennedy, 2007; Martenson, 2007), while others found insignificant relationship (Martenson, 2007; Taylor, Celuch & Goodwin, 2004). Hence, the proposed hypothesis for this study is H5: satisfaction is positively related to brand loyalty.

Table 2.14
Summary of Relationship between satisfaction and brand loyalty

Author	Industry	Country	Analysis method No. of respondents	Finding
Mohammadi & Kaviani (2015)	food product	Iran	SEM 300 customers	Customer satisfaction → Brand loyalty (+S)
Amin, Isa & Fontaine (2013)	Islamic bank industry	Malaysia	SEM 1,000 Muslims and non-Muslims respondents	Muslims CS→ CL (+S) Non-Muslims CS→ CL (+S)
Kassim, Igau, Harun &Tahajuddin (2014)	Mobile phone	Malaysia	partial-least-squares regression (PLS) 150 usable questionnaires	Customer satisfaction → brand loyalty (+S)

Author	Industry	Country	Analysis method No. of respondents	Finding
Kuikka & Laukkanen (2012)	Confectionery	Finland	Regression Factor analysis 808 online questionnaire	Brand satisfaction (BS) → Behavioral Brand Loyalty (BBL) (+S) BS → Attitudinal Brand Loyalty (ABL) (+S)
Nam, Ekinci & Whyatt (2011)	Hotel & restaurant	UK	378 customer' response	CS → BL (+S)
Ahmad &Hashim (2011)	Hotel	Malaysia	SEM 415 questionnaires	SAT → AL (+S)
Horppu, Kuivalainen, Tarkiainen & Ellonen (2008)	Online	Finland	Regression 576 customer's bank	WS → WT (+S) BS → BL (-S) BS → BL (+S
Torres-Moraga, Vásquez-Parraga & Zamora-González (2008)	Product (innovative and tradition)	Chile	Factor analysis 1,223 respondents	Satisfaction → Brand loyalty (both product) (+S)
Russell-Bennett, Rebekah & McColl-Kennedy (2007)	advertising	Australia	SEM 1,331 businesses	Purchase Satisfaction → Attitudinal loyalty (+S)
Martenson (2007)	Groceries store	Sweden	SEM 1,000 consumer	Satisfaction → Store loyalty (+S)
Martenson, (2007)	Retailing	Sweden	SEM 1,000 consumer	SAT→ SL (NS)
Taylor, Celuch & Goodwin (2004)	Heavy equipment manufacturers	USA	SEM 9,998 respondents	SAT→BL (NS)

2.11.2 Competitive Advantage and Brand Loyalty

Studies examining the relationship between competitive advantage and loyalty show vague findings and are rather scarce (Table 2.15). Recent studies have found insignificant relationships between brand value and symbolic benefits to brand loyalty (Theng, Parsons & Yap 2013). Similarly, Kremer and Viot (2012) examined 138 consumers of retail industry in France and found the linkage between price and brand loyalty to be insignificant. Likewise, Kenning, Brock

and Ahlert (2011) found insignificant relationship between cost and brand loyalty.

Contrastingly, Kuikka and Laukkanen (2012) found that there is significant relationship between brand value and loyalty. However, Kenning *et al.,* (2011) found negative significant relationship between quality cost and price verification cost on loyalty. The latter study was conducted on 569 European wholesalers using structural equation modeling as the analysis method (Table 2.15). From the discussion, we can conclude that this linkage differs from one study to another, hence, more research are needed to better substantiate the linkage. Hence, the proposed hypothesis for this study is H6: Competitive advantage is positively related to brand loyalty.

Table 2.15
Summary of Relationship between Competitive Advantage and Brand Loyalty

Author	**Industry**	**Country**	**Analysis method No. of respondents**	**Finding**
Theng, Parsons & Yap (2013)	Luxury goods	Australia & Singapore	SEM 282 customers	Emotional Attachment → BL (+S) Corporate Associations →BL (-S) Corporate Value → BL (NS) Symbolic Benefits → BL (NS)
Kremer & Viot (2012)	Retailer	France	SEM 138 consumers	Prices → BL (NS)
Kuikka & Laukkanen (2012)	Finland	Confectionery	Factor analysis 808 online questionnaire	Brand Value →Behavioral Brand Loyalty (+S) Brand Value →Attitudinal Brand Loyalty (+S)
Kenning, Brock & Ahlert (2011)	wholesaler	Europe	SEM 569 buyers	Search cost →Buyer loyalty (NS) Quality control cost →Buyer Loyalty (-S) Price verification cost →Buyer Loyalty (-S)

2.11.3 Marketing Mix and Brand Loyalty

Even though studies examining the relationship between marketing mix variables are scarce, this linkage is found to significantly influence on brand loyalty (Dhurup, Mafini & Dumasi, 2014; Liu, Li, Mizerski, & Soh, 2012; Nguyen, Barrett & Miller, 2011; Jang, Ko, Koh & Kim 2008). Dhurup *et al.,* (2014) examined the relationship between packaging and brand loyalty in South Africa using 212 paint retailers found significant positive linkage. Liu *et al.,* (2012) found the linkage between brand personality and brand loyalty significant positive. Likewise, the linkage between products perceived quality is significant and positive to brand loyalty in a study conducted in Vietnam and Australia on shampoo brands (Nguyen *et al.,* 2011). Similarly, the linkage between price and brand loyalty was found to be positively significant. Another study investigating the linkage between community commitment and brand loyalty also exert significant relationship (Jang, *et al.,* 2008). The summary of the finding from these studies are on Table 2.16. Hence, the proposed hypothesis for this study is H7: Marketing mix is positively to brand loyalty.

Table 2.16
Summary of Relationship between Marketing Mix and Brand Loyalty

Author	Industry	Country	Analysis method No. of respondents	Finding
Dhurup, Mafini & Dumasi (2014)	Paint Retailing	South Africa	Regression 212 consumers	Packaging →Brand loyalty (+S) Price → Brand loyalty (+S)
Liu, Li, Mizerski, & Soh (2012)	Luxury fashion brand	Australia, China & Singapore	SEM 264 questioners	Brand personality → BL (+S).
Nguyen, Barrett & Miller (2011)	Shampoo brands	Vietnam & Australia	SEM	Perceived Quality → BL (+S)
Jang, Ko, Koh & Kim (2008)	Internet	South Korea	Regression 500 questionnaires	Community commitment to BL Significant (positive)

2.12 Mediating effects of Brand Loyalty

2.12.1 Mediation effects of Brand Loyalty on the relationship between Satisfaction and Brand Equity

The researcher found few empirical articles that investigated the intervening role of brand loyalty between satisfaction and brand equity (Kumar, *et al.,* 2013; Ha, 2009; Delgado-Ballester & Munuera-Aleman, 2005). However, Ha, (2009) tested the moderating role of brand loyalty while the others investigated untested mediating roles of brand loyalty. Based on direct effects of each triad linkage, it is found that brand loyalty is a partial mediator for the path between brand experience /brand trust to brand equity. Severi and Ling (2013) also empirically proved that brand loyalty is a partial mediator between brand association brand equity. On the other hand, the extent to which brand loyalty

mediates the relationship between satisfaction and brand equity has shown that brand loyalty is a full mediator (Delgado-Ballester & Munuera-Aleman 2005).

A most recent study on brand loyalty as a mediator was carried out to investigate if it exerts mediating influence on the relationship between cognitive factors and brand equity. It turned out that brand loyalty exerts partial effect on the linkage (Chen, 2015). However, these studies are limited and coupled with the fact that some are as far back as 2005; there is a need to further examine this linkages especially the selected variables related to handicraft since previous studies were concerned with cosmetics, hospital services, social media etc. Table 2.17 has details of the findings. Hence, the proposed hypothesis for this study is H8: Brand loyalty mediates the relationship between satisfaction and brand equity.

Table 2.17
The Mediating effect of brand loyalty on Satisfaction and brand equity relationship

Authors	Industry	Country	Analysis Method	Finding
Chen, 2015	Cosmetics brands	Taiwan	SEM 292 cosmetics users	Brand trust→ BL→ BE (Partial mediator) Experiential factors →BL→ BE (Partial mediator Cognitive factors →BL→BE (partial mediator

Authors	Industry	Country	Analysis Method	Finding
Kumar, Dash & Purvar (2013)	Hospital	India	SEM 902 patients	Brand experience →BL→BE (Partial mediation). Brand trust→ BL→ BE (partial mediation)
Severi & Ling (2013)	Brands from social media	Malaysia	Regression 300 business students	Brand Association→BL→BE (Partial mediator)
Ha (2009)	Department store	South Korea	SEM 282 customers	satisfaction →BL→BE BL significantly moderated linkage of satisfaction and brand equity.
Delgado-Ballester & Munuera-Aleman (2005)	Shampoo and beer	Spain	SEM 271 questionnaire	Satisfaction → BL→BE (BL Full mediator) – no test of BL conducted in this study.

2.12.2 Mediating Effect of Brand Loyalty on the Relationship between Competitive advantage and brand equity

Studies of this relationship are limited; the extensive literature revealed only one study. This could be a clear indication that the linkage was not given adequate attention by scholars in this field. One study which could closely be linked to this relationship is the empirical study that evaluated the mediating influence of brand loyalty on the relationship between perceived value and brand equity (Buil, *et al.,* 2013). The outcome of the study showed that brand loyalty could partially mediate the relationship. In this way, we could say that more study on this linkage is needed. Hence, the proposed hypothesis for this study is H9: Brand loyalty mediates the relationship between competitive advantage and brand equity.

Table 2.18
The Mediating effect of brand loyalty on competitive advantage and brand equity relationship

Authors	Industry	Country	Analysis Method	Finding
Buil, Chernatony & Martínez, (2013)	Consumer market	UK and Spain	SEM	PV→BL→B (BL partial mediator)

2.12.3 Mediating Effect of Brand Loyalty on the Relationship between Marketing Mix and Brand Equity

Empirical investigations to determine the extent to which brand loyalty mediates on the relationship between marketing mix and brand equity are sporadically done. However, few studies available showed that the marketing mix elements were examined independently. Buil, Martinez, and Chernatony (2013) found that brand loyalty is not a mediator of the relationship between perceived quality and brand equity. This study was tested on UK and Spain consumers.

However, brand loyalty is found to be a partial mediator on the relationship between distribution intensity, advertising spending and brand equity (Yoo, Donthu & Lee, 2000). Similarly, another study confirmed that brand loyalty partially mediates between channel and brand equity (Kim & Hyun, 2011). All of these studies were investigated in context and areas which are different from those of the present study. The mediating results are vague and thus there is a need to call for further empirical study to bridge the existing gap. The

summary of this can be seen on Table 2.19. Hence, the proposed hypothesis for this study is H10: Brand loyalty mediates the relationship between marketing mix and brand equity.

Table 2.19
The Mediating effect of brand loyalty on marketing mix and brand equity relationship

Authors	**Industry**	**Country**	**Analysis Method**	**Finding**
Buil, Martinez & Chernatony (2013)	Consumer market	UK & Spain	SEM	PQ→BL→BE (BL not mediator)
Yoo, Donthu & Lee (2000)	Camera product	Korean	SEM 569 respondents	Distribution intensity (place) →BL → BE (+S) (Partial) Advertising spending → BL→ BE (partial)
Kim & Hyun (2011)	IT software	Korean	SEM 319 respondents	Channel → BL→ BE (partial mediation)

2.13 Research Framework

This research framework is developed based on the extant literature. The main underpinning theoretical concept of brand equity and its applicability to handicraft SME is presented earlier. The research framework for this study includes factors associated with brand equity and brand loyalty (Figure 2.15).

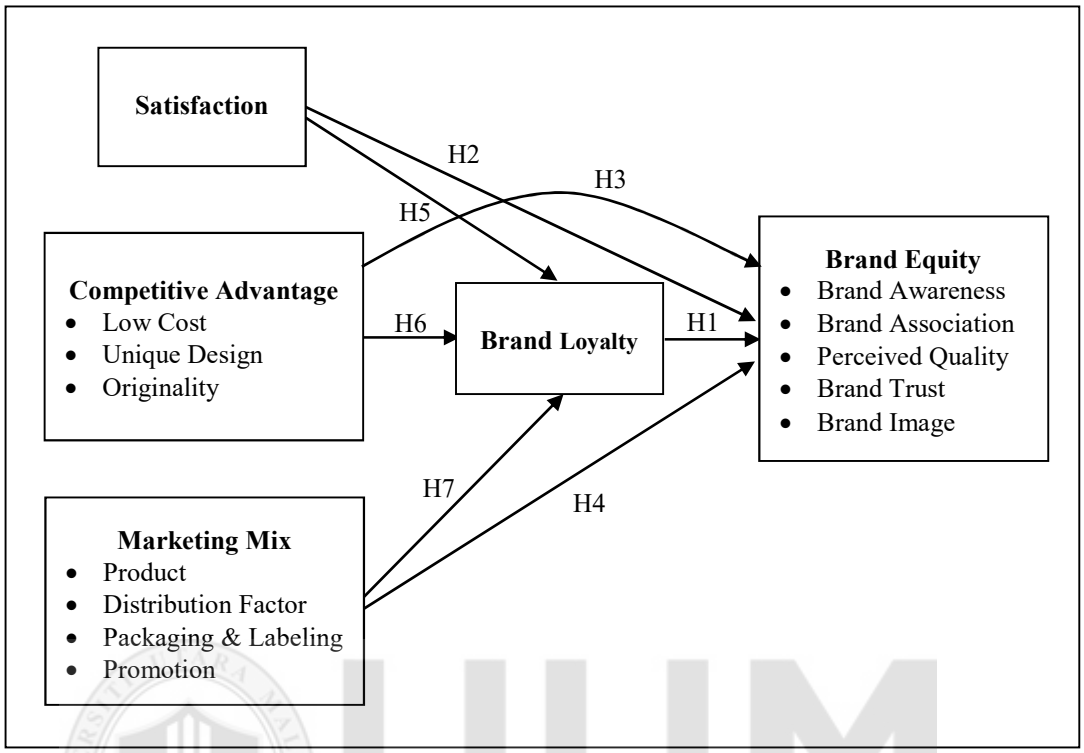

Figure 2.15
Research Framework

This study has selected five dimensions of brand equity, namely, brand awareness, brand association, perceived quality, brand trust and brand image. Unlike other previous studies which position the dimensions as predictor variables of brand equity (formative), this study places the five factors as factors that measure brand equity (reflective). Hence, all the dimensions are considered as the dependent or endogenous variables. Each dimension is discussed henceforth.

According to past literature, there are three independent variables which are seen as the most critical factors in developing brand equity. For this study,

three major factors are selected as independent variables as follows: (1) satisfaction, (2) competitive advantage (*low cost, unique design, originality)*, and (3) marketing mix (*product, distribution factors, packaging & labeling and display)*. In addition, this study has a mediating variable (brand loyalty). The above-mentioned variables could be significant in predicting the achievement of brand equity. These mediating variables have not been measured in previous studies. Each variable will be evaluated in the following section.

2.14 Summary of Chapter

This chapter commences with discussion of the definitions of brand equity, brand equity underpinning theory, previous research models, determinants of brand equity, summary of previous studies in brand equity, brand loyalty, previous studies in brand loyalty, and mediating effects of brand loyalty.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Preface

Based on the literature reviewed in chapter two, this chapter discusses the research design, the population, the sampling method, the development of the measurements, the pilot test results, the analysis methods and SEM procedure.

3.1 Research Design

The study utilized a primary data collection method and a quantitative approach to data analysis. A survey using a pre design questionnaire was used to collect a cross sectional data. A quantitative research design allows for empirical data analysis using multi-variate analysis method such structural equation modeling.

3.2 Sampling Method

This section provides a discussion on the population, sampling frame, sampling size and distribution of questionnaires to respondents.

3.2.1 The Study Population

In this study, the unit of analysis is the domestic tourist or local handicraft consumers (Table 3.1). The statistic shows that even though the numbers of Thailand domestic tourists increase the percentage increase is unstable. Since the domestic tourism market is rather large, involving between 98-162 million

people, and since we are targeting handicraft domestic tourist only, the scope of domestic tourists is narrowed down to handicraft customers only. To ensure we get our target respondents and to guarantee some kind of random sampling, the handicraft domestic tourists is obtained via the local producers of handicraft. Hence, this study targeted a total handicraft producer of 8,310 operating in five (5) regions in Thailand (see Table 3.2), namely: (1) Bangkok and the surrounding area; (2) the Central; (3) the North; (4) the Northeast; and (5) the South. The respondents were identified through the producers. The sampling frame of the producers is determined using the stratified purposive sampling. According to Krejcie and Morgan (1980), the sample size for a population of over a million is 398. Hence, a total of 400 samples size is set to adjust for non-response rate.

Table 3.1
Population of Thailand's Domestic Tourists (2009-2013)

Year	2009	2010	2011	2012	2013
No of domestic tourist	97,998,957	122,522,114	133,177,728	150,509,362	161,724,688
Percent increase		25%	8.7%	13%	7.5%

Source: *Department of Tourism (2014).*

3.2.2 Sampling Frame and sample size

A sample size of approximately 400 (398) was targeted as the final number to be collected. However, 500 questionnaires were distributed to customers of

handicraft producer so as to be prepared for non-response bias. To get this sample size, 100 producers were randomly sampled from the said population. Then, 5 customers from each of the selected producers was targeted, making a total of 500 respondents, were asked to fill out the questionnaire on brand equity and its determinants.

Table 3.2
The Number of Handicraft Producers

Region	Population of handicraft producers	Sampling Frame Number of Sampled producers (Proportionate sampling	Number of respondents (no of selected producer)
Bangkok and Surrounding Area	1,148	14 (82th)	70
Central Part	1,402	17 (82th)	85
North	1,797	22 (82th)	110
Northeastern	3,276	39 (148th)	195
South	687	8 (85th)	40
Total	**8,310**	**100**	**500**

Source: *Community Development Department (2012).*

3.2.3 Data Collection and Distribution procedure

The data collection procedure took place from December 2012 until July 2013. This period was selected because it was the school holiday and the New Year period where the local public looks for souvenirs for presents. The samples consisted of customers of handicraft producers operating in rural areas. Customers usually visited these venues as tourists, at the same time touring the factory to see the makings of the handicrafts. The target customers are local tourists only because the questionnaire is in Thai language. Also, local tourists

were targeted because more cooperation is expected in filling the form. The researcher has made prior arrangement with the producers who agreed to participate in this study. The questionnaires were posted to the selected producers with instruction to the customers on how to fill the forms. Each producer secured 5 customers who are willing to fill the forms. The selection of customers is based on systematic purposive method, whereby every five customers that entered the producer's factory were asked to participate in the survey and given the questionnaire at the entrance. They were kindly requested to complete and return the completed questionnaire at shopping area of the factory (cashier desk) before exit. A total number of 500 questionnaires were distributed and 419 were returned representing about 84 percent response rate. The main reason for the high response rate is because the researcher collaborated with the producer to give away souvenir as a token of appreciation for filling the research questionnaire.

3.3 Questionnaire Design

The questionnaire consists of two sections to be answered by respondents. The first part contains questions about the demographic background of the customer (Refer appendix A). It consists of seven demographic questions such as (1) gender, (2) age, (3) marital status, (4) monthly income, (5) education, (6) occupation and (7) reasons for buying handicraft.

The second part contains items designed for measuring the following fourteen (14) latent variables: brand equity as the main endogenous or dependent variable is measured by five 5 latent dimensions: brand awareness (5 items), brand association (5 items), perceived quality (5 items), brand trust (5 items), brand image (5 items); satisfaction (5 items); brand loyalty (8 items); competitive advantage is measured by three (3) latent dimensions: low cost (5 items), unique design (2 items), originality (5 items); and marketing mix is measured by five (5) dimensions which are product (5 items), distribution factors (5 items), packaging and labeling (5 items) and display (5 items) (see Table 3.2). The total item for this study is 70 items. The design of this part is based on measures used in previous studies as mentioned in the literature review. All instruments used a seven-point Likert scale (1) = strongly disagree; (2) = disagree; (3) = somewhat disagree; (4) = neither agree or disagree; (5) = somewhat agree; (6) = agree; and (7) = strongly agree (Vagias, Wade M., 2006).

A measurement system for brand equity is developed by using five dimensions which are brand awareness, brand association, perceived quality, brand trust and brand image (Table 3.3). The measurements are adapted from several sources: brand awareness (Anselmsson *et al.*2007; Kim et al., 2003; Armold *et al*., 1993; Rajh *et al*., 2005); brand association (Anselmsson et al. 2007; Pappu et al., 2006; Aaker, 1997); perceived quality (Aaker 1991, 1996; Yoo *et al*., 2000; Wang et al., 2008); brand trust (Power *et al*., 2008; Wu & Yen, 2007; Mangen *et al*., 2002; Zineldin *et al*., 2000), and brand image (Rajh *et al*., 2005;

Kayaman & Arasli., 2007; Kim *et al*., 2003). Each individual measurement used in this study is discussed in the preceding paragraphs.

Table 3.3
Instruments for Development of Questionnaire

Main variables	Dimensions/Latent variables	Items	Source
1. Brand equity	**5**	**25**	
	1. Brand awareness	5	Item 1-2 Kim *et al.,* 2003*;*Armold *et al.,* 1993 Item 3-4 Anselmsson *et al.,* 2007 Item 5 Rajh *et al.,* 2005
	2. Brand association	5	Item 1-4 Anselmsson *et al.,* 2007 Item 5 Pappu *et al.,* 2006*;*Aaker, 1997
	3. Perceived quality	5	Item 1-4 Aaker 1991, 1996;Yoo *et al.,* 2000 Item 5 Wang *et al.,* 2008
	4. Brand trust	5	Item 1-2 Power et *al.,* 2008 Item 3 Wu & Yen *al.,* 2007 Item 4 Mangen *et al., 2002* Item 5 Zineldin & Jonsson *al., 2000*
	5. Brand image	5	Item 1 Rajh *et al.,* 2005 Item 2 Kayaman & Arasli, 2007 Item 3-5 Kim *et al.,* 2003
2. Brand loyalty	**1**	**8**	Item 1-5 Kim *et al.,* 2003; Anselmsson *et al.* 2007 Item 6-8 Kim *et al.,* 2003*;*Aaker,1991
3. Satisfaction	one	5	Item 1 Donio *et al.,* 2006 Item 2 Aydin *et al.,* 2005 Item 3-4 Chenal *et al.,* 2009 Item 5 Fitzsimons *et al.,* 2000
4. Competitive Advantage	**3**	**12**	
	1. Low cost	5	Item 1-5 Espallardo *et al.,* 2008
	2. Unique Design	2	Item 1-2 Anselmsson *et al.,* 2007
	3. Originality	5	Item 1-5 Olson *et al.*, 2006

Main variables	Dimensions/Latent variables	Items	Source
5. Marketing Mix	**5**	**20**	
	1. Product	5	Item 1-2 Anselmsson *et al.,* 2007 Item 3-5 Rior *et al.,* 2008
	2. Distribution Factor	5	Item 1-2 Rajh *al.,* 2005 Item 3-4 Yoo *et al.,* 2002 Item 5 Pappu & Quester, 2008*)*
	3. Packaging and Labeling	5	Item 1-3 Vazquez *et al.,* 2003 Item 4-5 Silayoi *et al.,* 2007
	4. Display	5	Item 1-3 Rajh al., 2005
Total	**14 latent variables**	**70**	

The measurement for *brand awareness* consists of 5 items adapted from four sources (Anselmsson *et al.,* 2007; Kim *et al.,* 2003; Armold *et al.,* 1993; Rajh *et al.,* 2005). It generally measures levels of recognition, recall, top-of-mind, brand dominance, and brand knowledge. The instrument uses a seven-point Likert scale: (1= strongly disagree – 7 = strongly agree) (Table 3.3, Appendix A).

The instrument for measuring *brand association* is measured by five items (Anselmsson *et al.*, 2007; Pappu *et al.,* 2006; Aaker, 1997). In their study, participants were asked to recall their memories and provide information from a customer perspective regarding what they see or think in association with the brand. The attributes measured for brand association is based on several criteria which can be further categorized as structure, origin, functional, organizational associations, environment / friendliness and social image Five items are used to represent each of brand-associated factor on a seven-point Likert scale format, ranging from 1= strongly disagree to 7 = strongly agree).

Perceived quality utilizes items from several sources (Aaker 1991, 1996; Yoo *et al.,* 2000; Wang *et al.,* 2008). It is measured using the following five constructed items: "I think this brand has good quality, this brand is stable and reliable, this brand is easy to use and comfort Table, this brand is durable and this brand has excellent features and very good style".

Subsequently, the instrument for measuring *brand trust* is adapted from several sources (Power *et al.,* 2008; Wu & Yen, 2007; Mangen *et al.,* 2002; Zineldin *et al.,* 2000). The degree of brand trust can be determined by using statements like: "I have empathy with this brand", "this brand has product competence", "this brand can be trusted at times.", "this brand's display is suitable", and "this brand is truthful and honest". Following the study by Power *et al.,* (2008), respondents were asked to indicate their level of agreement towards brand trust using Likert-type seven-point scale, ranging from (1)"strongly disagree" to (7) "strongly agree".

Brand image measurement is sourced from several authors (Rajh *et al.,* 2005; Kayaman & Arasli., 2007; Kim *et al.,* 2003). The statements used are like: "the brand completely satisfies my needs", "This product has outstanding style", "it has different image from other handicraft", "this product has long history", and "the brand has a very clean image".

In conclusion, the total item for measuring brand equity is 25 items which is based on the summation of the five dimensions discussed earlier.

For the measurement of *brand loyalty*, eight items are selected based on adaptations from previous sources (Kim *et al.,* 2003; Anselmsson *et al.*, 2007; Aaker, 1991). The first five items are adapted from Anselmsson *et al.,* (2007) while item six to eight are adapted from Kim *et al.,* 2003. It is again measured using seven-point Likert scale with anchors ranging from strongly disagree (1) to strongly agree (7) (Appendix A).

Satisfaction is measured using five statements sourced from various authors (Donio *et al.,* 2006; Aydin *et al.,* 2005; Chenal *et al.,* 2009; Fitzsimons *et al.,* 2000). Various sources are deemed necessary because of the need to find statements that are see Table for handicraft brands. Five statements elucidate the satisfaction perception of customers towards handicraft products by answering using seven-point Likert scale ranging from strongly disagree (1) to strongly agree (7).

Additionally, competitive advantage is measured by three dimensions, namely low cost, unique design, and originality. The instrument for *low cost* uses five items developed by Espallardo *et al.,* (2008). It measures the customer's opinion regarding low prices compared to competitors, operation costs, service cost, reliable cost and functional cost (Appendix A).

Consequently, *unique design* is measured using five items sourced from previous studies (Anselmsson *et al.,* 2007; Wang et al., 2009; Dean *et al.,* 1999). The statements adapted are like “Its products have one unique feature”, “ I can rely on there being a good unison”, “The product has a unique combination of features”, “the advertisements “stand out” from other brands”, and “compared to other brands, the advertisement is “unique”. Again seven-point Likert scale is used to evaluate these statements.

The last dimension used to measure competitive advantage is *originality*. It is measured using instrument developed by Olson *et al.,* (2006). The five items selected mainly explicates design benefit, risk of originality reduction due to loss of brand meaning, high costs, platform sharing benefits and supplier weakness.

Finally, measurement of marketing mix is anchored on five dimensions, namely, product (product), distribution factors (place), packaging (product), labeling (product) and display (promotion).

In the handicraft industry, the main focus of the business is on tangible *product* segment, thus, three dimensions are taken from this sector. With regard to product instrument, five items are adapted from Anselmsson *et al.,* (2007) and

Rior *et al.,* (2008). The statements asked generally measure product quality, functionality, product range, preference and design.

Following on, the next "P" is the "place" factor or the *distribution factor* measured by five items on subjects such as outlets presence, channel type sand store features. This measurement is borrowed from *Rajh et al.,* (2005), Yoo *et al.,* 2002, Pappu & Quester (2008).

For the measurement of packaging and labeling, five items are adapted to be used in the handicraft products (Vazquez *et al.,* 2003). The packaging was dealt with in the study by Vazquez *et al.,* (2003) by using following items: "I think this brand has good designed packaging; its packaging has honest value; a packaging is designed specifically for this product; packaging cannot be copied readability"; and this brand has a well-designed packaging.

For labeling, the five items instrument is adapted from Silayoi *et al.,* (2007). Some of the statements are written as "this label has high quality producer logo; labeling has layout of graphics and information; this product labels has detail value; I think the label has good color and graphics; and I think this label has high technology".

Finally, the construct "display" which represents the promotion factor of the 4Ps is measured using an instrument developed by Rajh *et al.,* (2005). It

consists of five statements phrased as follows: “I know this product has attractive in-shop promotion; displays for this product are more expensive than displays for competing brands; this product has an attractive window display that draws me to shop inside; this brand is intensively displayed and displays for this product are frequent.

3.4 Reliability

Reliability is the degree to which a variable or set of variables is internally consistent with what it is proposed to measure (Hair *et al.,* 2006). Reliability can be measured through two methods, Cronbach alpha or composite reliability. Cronbach alpha values between .60 and .70 mean that the scale is internally consistent, hence reliable. The composite reliability analysis is performed through AMOS using the suggested equation:

$$\text{Composite reliability} = \frac{(\Sigma \text{ standardized factor loading})^2}{(\Sigma \text{ standardized factor loading})^2 + \Sigma \varepsilon j}$$

The composite reliability reading of more than 0.60 should show accepTable reliability (Bagozzi & Yi, 1988). Although researchers suggest 0.7 as the accepted cut-off point (Hair *et al,* 2006), any value >0.6 is regarded as satisfactory (Dinev and Hun, 2002; Hair *et al.,* 2006, Nunnally, 1978).

3.5 Validity

Validity is the degree to which a measure is measuring what concept it should measure and also free from any systematic or nonrandom error (Hair *et al.,* 2006).

There are five types of validity: content (face), construct, convergent, and discriminant validity. Hair *et al.,* 2006 define each type of validity clearly.

3.6 Content (face) validity

Content validity is the evaluation of the extent of correspondence between the items selected to constitute a summated scale and its conceptual definition. Face validity could be subjectively assess through ratings of expert judges, pretests with multiple sub populations so that the selection of the scale items extends past just empirical issues to include also practical issues (Hair *et al.,* 2006). In that case, modifications were made in the questionnaire in accordance with their recommendations and constructive comments.

3.7 Construct validity

Construct validity is the extent to which a set of measured variable actually represent the theoretical latent construct those items are designed to measure (Hair *et al.,* 2000). Malhotra and Stanton (2004) found that the more construct validity is employed, the more validity can be established. Construct validity is made up two basic types namely convergent validity and discriminant validity.

This research deployed both types. It can be tested by performing exploratory factor analysis (EFA) or confirmatory factor analysis (CFA).

3.8 Convergent validity

Convergent validity is extent to which indicators of a specific construct converge or share a high proportion of variance in common. In other words, it assesses the degree to which two measures of the same concept are correlated; a high correlation indicates that the scale is measuring its proposed concept. Therefore, reliability is also an indicator of convergent validity (Hair *et al.,* 2006). Reliability tests were conducted on both the pilot and actual data of this study.

3.9 Pretest and Pilot study

Once the questions has been developed and structured into a questionnaire design, it was translated into Thai language for better and easier understanding of the questions when distributed to local respondents. Back-translation procedure was followed whereby after the questionnaires were translated to Thai language; it was again back-translated into English language. The back translation was done by a University English language lecturer at one of the University in South Thailand (Refer Appendix B).

Hereafter, a pretest of the questionnaire items was performed among handicraft producers conducted at a handicraft exhibition in Bangkok. They are considered as focus group handicraft experts such as top executives (assistance general managers, chairmen, senior managers, administrative directors or authorized managers). In addition, brief interviews were conducted with the managers of some handicraft import companies at the same handicraft exhibition fair. From the results of the pretest, some questionnaire items are re-worded or revised to clarify meaning in the context of brand equity and hence, the initial questionnaire has been tested for face validity.

For the pilot study, 100 handicraft customers were targeted at ten (10) handicraft producer's venue in South Thailand. Questionnaires were distributed self-administered to the consumers when they entered the producer's outlet. The questionnaire was presented to each customer in person and they were asked to fill in the questionnaire assisted. The researcher monitors the time taken and observed attentively to any queries regarding answering the questionnaires.

The feedback from pilot study was analyzed using reliability and factor analysis methods to determine the reliability of each instrument and the factor loadings of each item. The pilot results of the factor analysis are presented in Table 3.4 – 3.6.

Table 3.4
Pilot factor analysis of Competitive Advantage Dimension Result

Statements	Item Code	Low Cost	Unique Design	Originality
Low Cost % Variance = 33.278				
It's likely that product is reliable and low cost.	LC4	0.996		
I think this product would be very low functional.	LC5	0.996		
This product reduces operations costs.	LC2	0.995		
I prefer this product because price below competence.	LC1	0.995		
This product reduces operations cost of servicing the customer.	LC3	0.994		
Unique Design % Variance = 24.030				
Its products have one unique feature.	UD1		0.802	
I can rely on there being a good unison.	UD3		0.800	
The product has a unique combination of features.	UD2		0.780	
Design benefits from platform sharing.	Ori1		0.670	
The advertised "stand out" from other brands.	UD4		0.648	
Compared to other brands, the advertised is "unique."	UD5		0.617	
Originality % Variance = 17.890				
Design hurt by supplier weakness.	Ori3			0.811
The product is a originality from the place that is good in its designing.	Ori4			0.807
Design OK, but costs are likely to be higher because of platform sharing	Ori2			0.636
The product is a originality from the place that is creative in its craftsman.	Ori5			0.550
Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy.		0.858		
Bartlett's Test of Sphericity				
Approx. Chi-Square		2528.710		
DF		105		
Sig		.000		

Table 3.5
Pilot factor analysis of marketing Mix Dimension Result

Statements	Item Code	Packaging & Labeling	Product	Display	Distribution Factors
Package & Labeling % Variance = 34.786					
A package is designed specially to products.	PL3	0.927			
This label has high scaled producer logo.	PL8	0.926			
Labeling has layout of graphics and information.	PL9	0.910			
This product has label of detail value.	PL7	0.891			
This product it has label of detail value.	PL4	0.886			
This label has quality of producer logo.	PL5	0.872			
Packaging, it has honest value.	PL2	0.863			
I think the label has good color and graphics.	PL6	0.854			
I think good looking packaging.	PL1	0.799			
I think this label uses high technology.	PL10	0.757			
Product % Variance = 16.241					
This product would be very high functional.	Pro2		0.741		
This product must be of very good quality.	Pro1		0.722		
This product is beautifully designed	Pro5		0.635		
I like product because one can find the broadest range of product	Pro3		0.627		
I have a preference for product because it provides the deepest specialized assortments.	Pro4		0.608		
Display % Variance = 6.932					
I know this product has attractive in-shop promotion.	Dis4			0.792	
Displays for this product are more expensive than displays for competing brands.	Dis3			0.779	
This product has an attractive window display that draws me to shop inside.	Dis5			0.766	
This brand is intensively displayed.	Dis2			0.725	
Displays for this product are frequent.	Dis1			0.487	
Distribution Factor % Variance = 4.836					
The number of stores selling this product is higher than the number of stores selling competing brands.	DF2				0.863
This product is distributed through as many stores as possible.	DF3				0.847
More stores sell product, as compared to its competing brands.	DF4				0.638
Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy.			0.888		
Bartlett's Test of Sphericity					
Approx. Chi-Square			2174.081		
DF			300		
Sig			.000		

Table 3.6
Pilot factor analysis of Brand Equity Dimension Result

Statements	Item Code	Brand Awareness	Brand Association	Perceived Quality	Brand Image	Brand Trust
Brand Awareness % Variance = 41.208						
Some characteristics of the product come to their mind quickly.	BAw2	0.767				
I can quickly recall the logo of this product.	BAs2	0.703				
I always talk about this brand in positive.	BAs4	0.699				
I know what the product looks like.	BAw3	0.628				
I can recognize the product among competing brand.	BAw1	0.619				
I am proud to buy this product brand.	BAs3	0.580				
I can recall the first-mentioned brand in a category.	BAw4	0.539				
I have no difficulty in imagining this product in my mind.	BAs1	0.532				
I think this product has a very good quality.	PQ1	0.465				
Brand trust % Variance = 6.791						
I know what the products of the competence with this brand.	BT2		0.7329			
I feel that I completely trust this firm activity and its products.	BT3		0.6734			
I have empathy with this brand.	BT1		0.6596			
There is no reason for us to be suspicious of the product.	BT5		0.6040			
Perceived Quality % Variance = 5.278						
This brand is stable and reliable.	PQ4			0.746		
This brand is easy to use and comfortable.	PQ5			0.632		
I think the brand offers products with excellent features.	PQ2			0.582		
I am acquainted with this brand.	BAw5			0.548		
It is appropriate to describe the product offered by this brands “up-market”	BAs5			0.483		
Brand Image % Variance = 5.165						
The product has a long history.	BI4				0.657	
This product is outstanding style.	BI2				0.652	
It has a differed image form other handicraft brands.	BI3				0.572	
The brand has a very clean image.	BI5				0.511	

Statements	Item Code	Brand Awareness	Brand Association	Perceived Quality	Brand Image	Brand Trust
Brand product % Variance = 4.623						
This brand offers very durable products.	PQ3					0.726
When I see a display I believe the product is suitable.	BT4					0.515
This brand completely satisfies my needs.	BI1					0.446
Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy.		0.885				
Bartlett's Test of Sphericity Variance						
Approx. Chi-Square		1539.045				
DF		300				
Sig		.000				

From the pilot test results, about 8 items were dropped from actual questions since they have high cross loadings. The actual questionnaire consists of 70 items which is distributed to the actual respondents.

3.10 Exploratory Factor Analysis (EFA) of Actual Data

Exploratory Factor Analysis for actual data was again performed through SPSS to confirm convergent validity of dimensions and constructs in research model. The values of factor loadings of items are well above 0.30, indicating adequacy of convergent validity (Table 3.6-Table 3.7) (Refer Appendix H).

3.10.1 Factor Analysis of Exogenous Variables

After carrying out factor analysis for exogenous variables the KMO produced value of .76 and .70, hence, exceeding the recommended value of .5 by Hair et al., (1998) or above .5 and Bartlett's Test of Sphericity is highly significant p-value = 0.000, support the factorability of correlation matrix (Table 3.7). The

loadings of each item are well above 0.30, indicating satisfactory convergent validity for all latent constructs.

Table 3.7
Factor Analysis of Exogenous Variables

Variables	Code	Items	Rotated component matrix		
			1	2	3
CA Variance= 15.496	Ori5	The product is a originality from the place that is creative in its craftsman.	.738		
	UD4	The product has a unique combination of features.	.718		
	Ori1	Design benefits from platform sharing.	.655		
	UD5	Compared to other brands, the advertised is "unique."	.577		
	Ori4	The product is a originality from the place that is good in its designing	.518		
	Ori3	Design hurt by supplier weakness.	.489		
	Ori2	Design OK, but costs are likely to be higher because of platform sharing	.357		
LC Variance= 12.794	LC4	This product reduces the cost of servicing the customer.		.761	
	LC2	This product reduces operations costs.		.735	
	LC3	This product reduces the cost of servicing the customer.		.628	
	LC5	I think this product would be very low functional.		.569	
SAT Variance= 12.728	Sat2	This product meets my pre-purchase expectation.			.652
	Sat3	I am happy about the decision to choose this product.			.632
	Sat5	I would be choosing from the same set of product options on my next purchase occasion.			.619
	Sat1	I am completely satisfied with the product of this firm.			.611
	Sat4	I believe that it is a right thing to purchase this product.			.493

KMO = .760; Bartlett's Test of Sphericity = 1118.448; variance = 41.019%, p-value = 0.000

Table 3.8
Factor Analysis of Exogenous Variables (continued)

Variables	Code	Items	Rotated component matrix			
			1	2	3	4
Packaging / label (PL)	PL1	I think good looking packages.	.767			
	PL2	Packaging, it has honest value.	.722			
	PL3	A package is designed specially to products.	.717			
Variance =14.964	PL4	This product it has label of detail value.	.697			
Display (Dis)	Dis2	This brand is intensively displayed.		.732		
	Dis3	Displays for this product are more expensive than displays for competing brands.		.695		
Variance =13.627	Dis4	I know this product has attractive in-shop promotion.		.690		
	Dis1	Displays for this product are frequent.		.669		
Product (P)	P3	I like product because one can find the broadest range of product			.671	
	P2	This product would be very high functional.			.632	
Variance =9.971	P1	This product must be of very good quality.			.531	
	P5	This product is beautifully designed.			.516	
Distribution Factor (DF)	DF4	More stores sell product, as compared to its competing brands.				.661
	DF5	This store offer products with excellent features.				.633
Variance =8.936	DF3	This product is distributed through as many stores as possible.				.592

KMO = 0.698; Bartlett's Test of Sphericity = 744.086; total variance = 47.498%, p-value = .000

3.10.2 Factor Analysis of Endogenous Variables

The endogenous variables were subjected to factor analysis; the outcome revealed KMO value of .78; this exceeded the recommended the threshold of .5 by Hair et al., (1998) or above .5 and Bartlett's Test of Sphericity is highly significant p-value = 0.000, support the factorability of correlation matrix (Table 3.9). The values of factor loading are also within the accepted range of above .30.

Table 3.9
Factor Analysis of Endogenous Variables

Variables	Code	Items	Rotated component matrix				
			1	2	3	4	5
Brand Association (Bas)& Brand awareness (Baw) Var= 11.478	BAs4	I always talk about this brand in positive.	.698				
	BAw3	I know what the product looks like.	.662				
	BAs3	I am proud to buy this product brand.	.596				
	BAw4	The first-mentioned brand in a category.	.493				
	BAs5	It is appropriate to describe the product offered by this brands "up-market"	.452				
	BAw2	Some characteristics of the product come to their mind quickly.	.449				
Brand Image (BI) Var= 10.516	BI4	The product has a long history.		.654			
	BI5	The brand has a very clean image.		.595			
	BAw1	I can recognize the product among competing brand.		.587			
	BT5	There is no reason for us to be suspicious of the product.		.350			
Perceived quality (PQ) Var= 9.143	PQ3	This brand offers very durable products.			.775		
	PQ4	This brand is stable and reliable.			.638		
	PQ5	This brand is easy to use and comfortable.			.481		
	PQ1	I think this product has a very good quality.			.474		
Brand trust (BT) Var= 8.855	BT2	I know what the products of the competence with this brand.				.847	
	BT1	I have empathy with this brand.				.842	
Brand differentiation Var= 8.210	BT4	When I see a display I believe the product is suitable.					.648
	BI2	This product is outstanding style.					.585
	BI3	It has a differed image form other handicraft brands.					.403

KMO = 0.779; Bartlett's Test of Sphericity = 1163.679; Total variance = 48.202%, p-value = .000

3.11 Operational definitions of variables

The definitions of the variables used in this study are given as follows:

Table 3.10
The definitions of the variables in this study

Variables	Construct & Definition
1. Brand Equity	Brand Equity is "a set of brand assets and liabilities linked to a brand, its name and symbol that adds to or detracts from the value provided by a product or service to a firm and /or to the firm's customers". This brand sets are made of brand awareness, brand association, perceived quality, brand trust and brand image (Aaker, 1991)
2. Brand Awareness	Brand awareness is creation of a brand node in consumer's memory, providing a sense of familiarity of the brand in the consumer's mind. (Aaker, 1991)
3. Brand Associations	Brand Associations are defined as "anything linked in memory to a brand" (Aaker, 1991)
4. Perceived Quality	Perceived quality is "the consumer's judgment about a product's overall excellence or superiority" (Zeithaml, 1988)
5. Brand trust	Trust is defined as "a willingness to rely on an exchange partner in whom one has confidence" (Morgan and Hunt, 1994).
6. Brand image	Brand image is perceptions about a brand as reflected by the brand associations held in consumer memory (Keller, 1993).
7. Brand loyalty	Brand loyalty is defined as "a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future" (Oliver, 1997).
8. Satisfaction	Satisfaction is as a judgment following a consumption experience-it is the consumer's judgment that a product provided (or is providing) a pleasurable level of consumption-related fulfillment (Oliver 1997).
9. Low cost	Low Cost is the lowest production and distribution costs and can be priced lower than its competitors and win large market share (Porter, 1980).
10. Unique design	Unique Design is idea-driven to promote individuality and difference from competitors (Anselmsson et al., 2007).
11. Originality	Originality is mainly a culture and resource of product to reflect history of the place of origin(Olson et al., 2006).
12. Product	Product value for a consumer is created when the benefits a consumer gets with a product are greater than the long-term costs a consumer is expected to have with a product (Slater and Narver, 2000),
13. Distribution factors	Distribution factors are creating channel to customer and approach to managing the perception of customer (Chailan, 2008).
14. Packaging	Packaging is built at all points of symbol to contact with the customer (Kapferer,2004).
15. Labeling	Labeling is identifying about product information to attribute and consumers understand (Ghodeswar, 2008).
16. Display	Display or promotional mix is defined as "any marketing effort whose function is to inform or persuades actual or potential consumers about the merit a product possess for the purpose of inducing a consumer to either start buying or continue to purchases the firm's product" (Adebisi,2006).

3.12 Screening methods

In the process of undertaking probability and multivariate analysis methods, several screening tests such as response bias, missing data, outlier's detection, normality, transformation and multi-collinearity are mandatory in the initial data screening process. In this study, each screening tests are conducted on the collected data of 419 datasets. This represents 84% response rate. The high response is attributable to the cooperation given by the customers and the handicraft producers. Also, the local tourists could understand the questions asked since it is in Thai language.

3.12.1 Response Bias

To confirm that the set of data for this study were free from response bias, the researcher used a comparison with known values for the analysis method. Five dependent sample t-tests are used to compare the mean scores on some continuous variables for two different groups of subjects (Danziger & Botwinick, 1980). Based on the response time (early and late response), 208 respondents were classified as early responses and 209 respondents as late responses. Independent sample t-test conducted on variables i.e. brand loyalty and satisfaction. The mean value of the first 208 responses was 4.3816 and that for the second was 4.5125 as show in Table 3.7. This indicates respondent from both groups are free from data bias, as also assorted by the t-test in the following Table 3.7. As shown in Table 3.10 above, no significant differences

exist for brand loyalty between early and late response groups. Therefore, the data is free from response bias (Appendix F).

Table 3.11
Independent Samples t-Test of response bias

Variable	MEAN	Group	N	Mean	Std. Deviation	F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.
BL	Equal variances assumed	1	208	4.3816	.63870	.014	.906	.828	415	.408	.05087	.06146
	Equal variances not assumed	2	209	4.3307	.61615			.828	414.312	.408	.05087	.06146
SAT	Equal variances assumed	1	208	4.5125	.50066	1.388	.239	.195	415	.846	.01011	.05188
	Equal variances not assumed	2	209	4.5024	.55716			.195	410.749	.846	.01011	.05187

3.12.2 Missing data

Missing data could happen when respondents did not answer certain questions due to personal reasons, carelessness, forgetfulness, lack of interest, or lack of knowledge. Hence, missing value needs to be detected and treated. The common statistical method to detect missing value is by conducting an 'explore' function via the SPSS. Once the missing values have been detected, it could be treated by replacing with mean, median or other options.

Table 3.11 shows that there is no missing value for all items examined in the model. Out of the total N=419, the number cases missing is null, thus the data set is tested for outliers.

Table 3.12
Missing value detection

Code	Cases Valid (N)	Percent (%)	Missing (N)	Percent (%)	Total (N)	Percent (%)
BL1	419	100	0	0	419	100
BL2	419	100	0	0	419	100
BL3	419	100	0	0	419	100
BL4	419	100	0	0	419	100
BL5	419	100	0	0	419	100
BL6	419	100	0	0	419	100
BL7	419	100	0	0	419	100
BL8	419	100	0	0	419	100

3.12.3 Outliers

The detection of outliers was carried out through Mahalanobis distance analyzed through SPSS regression; Table 3.12 illustrates the maximum readings of Mahalanobis distance of 165.652. When compared with chi square value for 70 items of 112.31, two cases are found to be more than the X2 value. These two cases were deleted from further analysis.

The detection of outliers becomes necessary when doing SEM because outliers effect the linearity assumption of the regression lines relating to hypotheses testing (Hair *et al.*, 2006). Outliers need to be detected by performing the Mahalanobis distance (D^2) test through SPSS. Mahalanobis distance measures cases that are farthest away from the center (Hawkins *et al.*, 2001). The cases which have D^2 values higher the chi-square values (χ^2) based on the number of

items used in the study would indicate that that particular case is an outlier. The best way to treat outliers is to delete the case altogether from further analysis.

Table 3.13
Residuals Statistics for the detection of Outliers

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	187.87	516.10	376.02	48.513	419
Std. Predicted Value	-3.878	2.888	.000	1.000	419
Standard Error of Predicted Value	43.173	105.661	72.162	8.833	419
Adjusted Predicted Value	153.80	559.59	376.36	54.954	419
Residual	-425.156	404.288	.000	211.859	419
Std. Residual	-1.899	1.806	.000	.946	419
Stud. Residual	-1.989	1.923	-.001	1.001	419
Deleted Residual	-466.176	458.566	-.343	237.073	419
Stud. Deleted Residual	-1.993	1.927	-.001	1.002	419
Mahalanobis Distance	**26.824**	**165.652**	77.896	**18.566**	**419**
Cook's Distance	.000	.007	.002	.001	419
Centered Leverage Value	.036	.221	.104	.025	419

a Dependent Variable: respno, Chi Square (X^2) = 112.31

Any Mahalanobis distance > 112.31, were deleted. Therefore, two (2) cases i.e. 261, 367 were deleted permanently, leaving a total of 417 cases for further analysis.

3.12.4 Normality

To detect non-normality in the data set, standardized values (z-scores) of each item are obtained through SPSS descriptive function. Any z-score values of more than ±2 are considered not observing normality (Table 3.13 – Table 3.17). Since the minimum and maximum z-score exceeded the value of ±2,

3.12.4 Normality

To detect non-normality in the data set, standardized values (z-scores) of each item are obtained through SPSS descriptive function. Any z-score values of more than ±2 are considered not observing normality (Table 3.13 – Table 3.17). Since the minimum and maximum z-score exceeded the value of ±2, these items are transformed. The items were transformed using CDFNORM function of z-score. This function returns the probability that a random variable with zero (0) mean and standard deviation 1 would be less than z-value, which must be numeric (ref-name of SPSS manual). The new transformed items are denoted by t (varname) example, tbl2 (Appendix G).

Data obtained from any cross-sectional research could suffer from serious normality problems if the sampling method was not conducted properly. Normality means that the data is not distributed normally. If the data collected is not under the normal bell curve, it may result in statistical tests to be invalid. There are several ways to detect non-normality of our data. Hair et al., (2006) give a useful guideline for the detection of univariate normality (single variable normality) through z-skewness and z-kurtosis. Z-skewness can be detected by saving the standardized values of individual variable in the data set. Many authors such as Ghozali & Fuad (2005) and Tabachnick & Fidell, (2007), suggest that normality is achieved if the data for a study achieved the necessary normality of the Z-value Skewness of <2 and the Z-value kurtosis of <7.

Therefore if saved standardized value exceeds 2, then there could be a problem of non-normal data.

For multivariate normality, we can detect it through Mardia's coefficient through SEM analysis in AMOS. For normality to be achieved, the kurtosis value of Mardia's coefficient should be less than 1.96 (t-value) and p- value of more than 0.05.

Table 3.14
Z-scores for Brand Awareness items

	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: BAw1	417	-2.62292	2.47506	.0259073	.89078611	tbaw1
Zscore: BAw2	417	-2.67011	2.36669	.0012855	.95123405	tbaw2
Zscore: BAw3	417	-3.39894	2.39347	.0390036	.94747141	tbaw3
Zscore: BAw4	417	-3.14078	2.21983	.0280250	.88841448	tbaw4
Zscore: BAw5	417	-2.69420	2.26694	-.0510370	.96607302	tbaw5

Table 3.15
Z-scores for Brand Association items

	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: BAs1	417	-2.30810	2.54593	-.0009817	.90045147	tbas1
Zscore: BAs2	417	-2.52736	2.33846	-.0536100	.97025199	tbas2
Zscore: BAs3	417	-2.99708	2.41287	.1165619	.91813114	tbas3
Zscore: BAs4	417	-3.10650	2.33655	.0936330	.90053546	tbas4
Zscore: BAs5	417	-3.58045	2.26993	.0158233	.94588135	tbas5

Table 3.16
Z-scores for Perceived quality items

	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: PQ1	417	-3.52184	2.22021	.0147284	.89066309	tpq1
Zscore: PQ2	417	-2.69967	2.15739	-.0579855	.90388315	tpq2
Zscore: PQ3	417	-3.84584	2.17268	.0077478	.99771170	tpq3
Zscore: PQ4	417	-3.50558	2.22664	-.0735805	.93996769	tpq4
Zscore: PQ5	417	-2.58756	2.32828	-.0506578	.95628187	tpq5

Table 3.17
Z-scores for Brand Trust items

	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: BT1	417	-3.38232	2.39495	.0258541	.98303290	tbt1
Zscore: BT2	417	-3.45757	2.36611	.0198828	1.01776106	tbt2
Zscore: BT3	417	-2.36196	2.05268	-.0240716	.94956129	tbt3
Zscore: BT4	417	-3.39811	2.51199	-.0155105	.91687759	tbt4
Zscore: BT5	417	-3.23057	2.20873	-.1152557	.92655744	tbt5

Table 3.18
Z-scores for Brand Image items

	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: BI1	417	-3.09455	2.14724	.0031918	1.02194116	tbi1
Zscore: BI2	417	-3.02860	2.29670	-.0047110	1.00340887	tbi2
Zscore: BI3	417	-3.16464	2.08089	.0118991	.99421010	tbi3
Zscore: BI4	417	-3.03649	2.16992	.0064281	1.00271808	tbi4
Zscore: BI5	417	-3.35319	2.13385	.0078058	.99813729	Tbi5

3.12.5 Data transformations

The suggested method to treat non-normality is by performing the cdfnorm transformation. CDFNORM is a statistical numeric function which returns the probability of a random variable with mean 0 and standard deviation 1 to be

less than z-value, meaning changing the non-normal data to become normal. This function can be conducted through SPSS. This was done by selecting “Transform” and then “Compute” “t” for transformation was used in the new name of the items transformed. Then select cdfnorm in the arithmetic function box to transform all non-normal variables to normal format. Hereafter, the new variable names created are used in further AMOS analysis.

3.12.6 Multicollinearity

Multicollinearity is a situation when the exogenous variables are highly correlated with each other (Pallant (2000). This is detected through the correlation matrix. As multicollinearity increases, it complicates the interpretation of the variate because it is more difficult to ascertain the effect of any single variable, owing to their interrelationships (Hair et al., 2006). To treat for multicollineraity, we need to test for the comparison test between average variance extracted (AVE) with correlation squred (Fornell, 1982). If the AVE is more than correlated squared, than there is minimal multicollinearity or the multicollinearity level could be tolerated.

3.12.7 Linearity and Homoscedasticity Status

The data conforms to the tests of linearity as shown in normal p-p plot statistics (Figure 3.1). This depicts that all variables are situated on the straight line of the dependent variable brand equity.

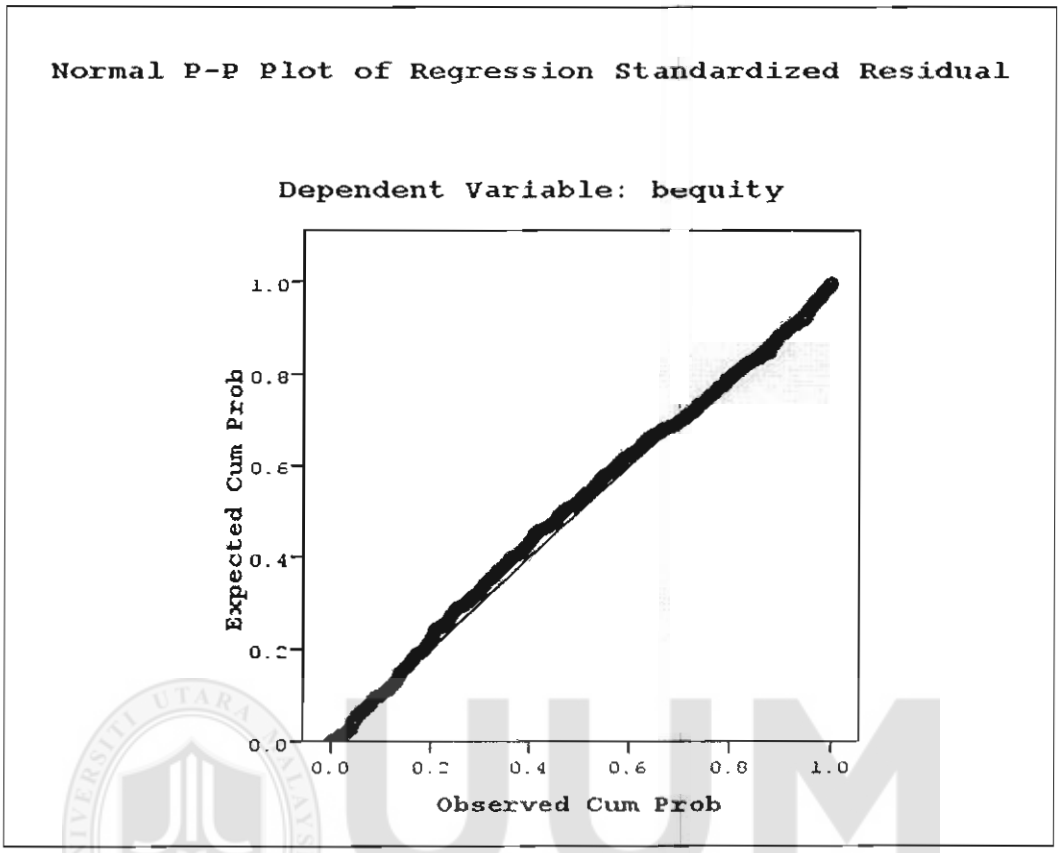

Figure 3.1
Linearity Assumption

Similarly, the result of homoscedasticity test as illustrated in Figure 3.2, indicates the absence of heteroscedasticity since the data set seems to be scattered evenly around the center.

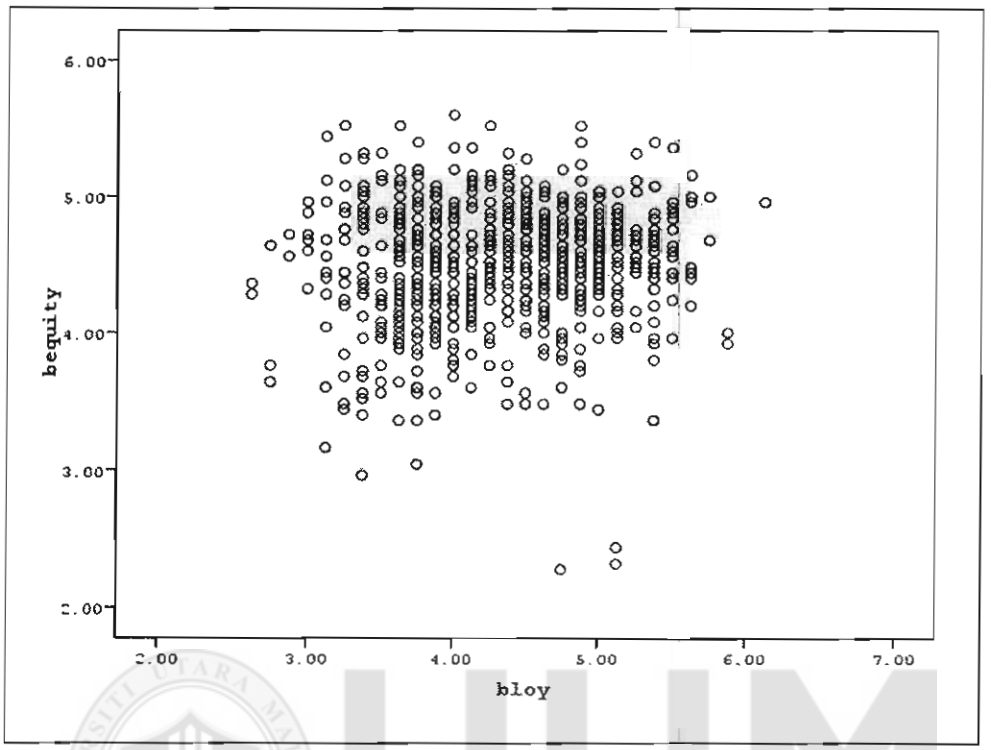

Figure 3.2
Homoscedasticity Result

3.13 Analysis method

This study utilizes multi-variate analysis method commonly known as Structural Equation Modeling (SEM), using AMOS. Structural Equation Modeling (SEM) is a multivariate technique combining aspects of factor analysis and multiple regressions that enables the researcher to simultaneously examine a series of interrelated dependence relationships among the measured variable and latent constructs (variables) as well as between several latent constructs (Hair et al., 2006). SEM will be used as the main analysis methods because my main research model needs mediating effects analysis as well as it

variable and latent constructs (variables) as well as between several latent constructs (Hair et al., 2006). SEM will be used as the main analysis methods because my main research model needs mediating effects analysis as well as it is able to generate new paths in the revised model. Seeing as SEM uses variance covariance analysis method, it is able to analyze causal relationships between and amongst latent variable analysis. Every part of structural equation models are distinguishes by three characteristics;

I. Estimation of multiple and interrelated dependence relationship.

II. An ability to represent unobserved concepts in these relationships.

III. Defining a model to explain the entire set of relationships.

SEM has developed to be one of the fewer aspects in selecting a research methodology for investigating issues related to social and behavioral sciences.

3.13.1 Justification for using SEM

There are several of reasons why this study adopted SEM and not multiple regressions. First, advanced multivariate analysis method such as SEM was seldom used in past brand equity studies. SEM is normally used when the research involves the measurement of multiple latent predictor variables, indirect effects and path analysis. In addition, SEM is working when a questionnaire is design to lodge interval and ratio scales. SEM is also used when the research is measuring something that is highly hypothetical and conceptual.

Most social science studies are hypothetical and conceptual in character (perceptive measures like satisfaction, bliss, weariness etc.). Regressions are for more metric scales (e.g. product, cost, value etc.).

There are many advantages of SEM compared to multiple regressions. These include: SEM allows more flexible assumptions to be made (mainly allowing explanation even in the face of multicollinearity) (Hair et al., 2006). SEM uses confirmatory factor analysis to reduce measurement error by having multiple indicators for every latent variable, the greater recognition given to the validity and the reliability of observed scores from extent instruments (Hair et al., 2006). Specifically, measurement error has become a major issue in many disciplines, but measurement error and statistical analysis of data have been treated individually. Structural equation modeling techniques explicitly take measurement error into account when statistically analyzing data. SEM test models overall rather than coefficients individually; SEM test models with multiple dependents (model mediating variables and to handle difficult data (i.e. non-normal data, incomplete data).

Generally, SEM involves the order of an underpinning model such as brand equity model used in this study (Aaker, 1991). Therefore, SEM provides an appropriate and most efficient estimation technique for series of separate multiple regression equations estimated simultaneously (Hair et al., 2006).

The main reasons for using SEM are: 1) SEM is most appropriate method when analyzing path structures as suggested in the research model; 2) It is also suiTable for analyzing multiple interdependent relationships as hypothesized; 3) it is a good analysis method for simultaneous multiple regression equations; 4) SEM can investigate causal relationships and; 5) it is possible to analyze mediating effects of intervening variable such as brand loyalty.

3.13.2 SEM Procedure

SEM is a very well know multivariate approach and attractive because it provides a conceptually appealing way to test theory (Hair et al., 2010). The six stages of structural modeling are;

1. Defining individual constructs
2. Developing the overall measurement model
3. Designing a study to produce empirical results
4. Assessing the measurement model validity
5. Specifying the structural model
6. Assessing structural model validly

3.13.3 Goodness of Fit Index

SEM enables the researcher to obtain Goodness of Fit (GOF) index of all measurement and structural models. Hair et al., (2010) said that GOF is indicates how well the specified model reproduces the observed covariance matrix among the indicator items. According to Hair et al., (2006), there are

three types of GOF indicator; 1) absolute fit measure; 2) incremental fit measure and 3) parsimonious fit measures. GOF index and the most frequently achieved measures. Overview of each of the achieved measures is show in Table 3.19.

Table 3.19
Summary of Goodness of Fit Indicators

Absolute Fit Level Determine the predicted level of the overall model fit (structural and measurement)	
Fit Measures	**Indications of Fit Measures**
Chi-square (χ^2) probability level	A *p* value >0.05 indicates an acceptable fit.
GFI Goodness-of-fit index	A value always≤1 and 1 indicates a perfect fit.
RMR Root mean square residual	Value close to .0, the better the model fit.
RMSEA Root mean square error of approximation	A value of about ≤0.08 indicates a reasonable error of approximation. The value should not be >0.1.
Incremental Fit Level Compare the proposed model with the basic model (as a comparison model)	
Fit Measures	**Indications of Fit Measures**
AGFI Adjusted goodness-of-fit index	≥0.9 = good model fit, ≤0.89 = marginal fit
TLI Tucker-Lewis index	A value between 0 and 1, a value close to 1 indicates a very good fit.
CFI Comparative fit index	A value between 0 and 1, a value close to 1 indicates a very good fit.
NFI Normed Fit Index	A value between 0 and 1, 1 indicates a perfect fit.
Parsimonious Fit Level Adjust the measure of fit to provide a comparison between models with differing numbers of estimated coefficients; the purpose is to determine the amount of fit achieved by each estimated coefficient.	
Fit Measures	**Indications of Fit Measures**
CMIN/DF **(χ^2/df)** Normed Chi-Square	Low bound =1.0 High bound= 2.0 Ratio between χ^2 divides degree of freedom

Source: Hair *et al.,* (2006)

3.13.4 Mediating or Indirect Effect

The total effect of one variable on another can be divided into *direct effects* (no intervening variables involved) and *indirect effects* (through one or more intervening variables (Hair et al., 2006). Indirect effect is a structural model with a hypothesized mediating effect which can produce direct and indirect effects. Direct effects are the relationship linking two constructs with a single arrow. Indirect effects are those relationships that involve a sequence of relationships with at least one intervening construct involved. Therefore, an indirect effect is a sequence of two or more intervening variables such as from satisfaction to brand equity through brand loyalty. The equation path from direct and indirect paths structure in Figure 3.3 shows an example.

Mediating effects can be substantiated when a and b remain significant relationships and c became insignificant when mediator is included (Ref)

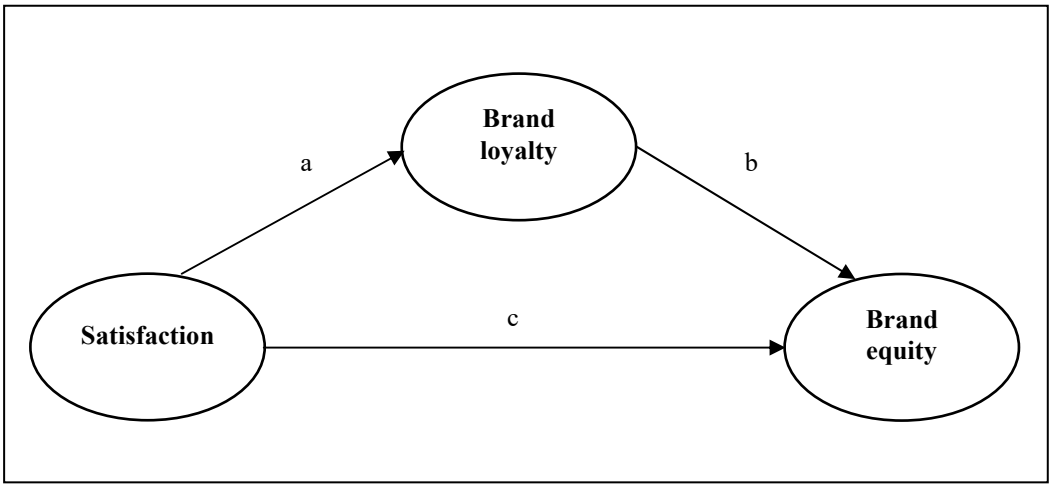

Figure 3.3
A SEM Model with Direct and Indirect Effect

3.14 Conclusion

This chapter discusses the methodology including the research design, questionnaire design, and questionnaire development, operational definitions of variables, data collection, pretest, pilot study, screening and analysis method. In the data analysis section, the statistical technique (SEM) used for data analysis was explained for the purpose and benefit of this study.

CHAPTER FOUR

RESEARCH FINDING

4.0 Preface

This section of the study consists of the results from analysis of data in congruence with the research design and methodology described in Chapter three. The finding commences with presentation of the demographics and attributes of the respondent. After, the actual variables descriptive statistics, all the data collected were then screened and the validity of measure was analysed next using factor analysis and the internal consistency procedure of reliability analysis, correlation estimation, convergent validity analysis, discriminate validity, confirmatory factor analysis (CFA), and Structural Equation Modelling (SEM). Finally, hypotheses testing are presented in the concluding section.

4.1 Respondent profile

The results of frequency descriptive analysis in Table 4.1 show that the respondents of this study consist of the following seven major items: (1) gender, (2) age, (3) status, (4) income, (5) level of education, (6) occupation and (7) reasons to buy handicrafts.The results obtained from analysing the above-mentioned variables are shown in Table 4.1. It shows that the respondents of this study comprise of 158 male (37.9%), while the 259 female (62.1%). The ratio of woman to man is three times more probably because

there are more women customers at tourist destination and souvenir shop. Surprisingly, more than 70% of the respondents were younger customers below 44 years. Only about 25% were older tourists. The majority of them are married (60.2%) holding degree (56.1%) and diploma qualifications (22.3%). More than 87% are earning 25,000 Baht per month while 12 % are top earners, employed in private sector (32.6%), business (29%), government servant (25.9%), and others as students and housewife (10%). The respondents gave the reasons for purchasing handicraft according to priority as quality product (74.6%), to commemorate (40.5%), design (35.7%), and appearance/image of product (28.8%) (Refer Appendix C).

Table 4.1
Respondent Profile

Category	Customer Response (n = 417)	
	Number	(%)
Gender		
Male	158	37.9
Female	259	62.1
Total	417	
Age		
18 – 24 years	14	3.4
25 – 34 years	143	34.3
35 – 44 years	158	37.9
45 – 54 years	75	18.0
55 – 64 years	25	6.0
More than 64 years	2	0.5
Total	417	
Status		
Single	145	34.8
Married	251	60.2
Separated	10	2.4
Divorce	11	2.6
Total	417	

Category	Customer Response (n = 417)	
	Number	(%)
Income/month		
Less than 5,000 THB	5	1.2
5,001 – 10,000 THB	87	20.9
10,001 – 15,000 THB	116	27.8
15,001 – 20,000 THB	94	22.5
20,001 – 25,000 THB	62	14.9
25,001 – 30,000 THB	32	7.7
30,001 – 35,000 THB	9	2.2
More than 35,000THB	12	2.9
Total	417	
Level of education		
Less than secondary school	6	1.4
Secondary school	28	6.7
Some college/Diploma	93	22.3
Bachelor Degree	234	56.1
Master or Doctoral Degree	56	13.4
Total	417	
Occupation		
Housewife	29	7.0
Business owner/Entrepreneur	121	29.0
Government officer	108	25.9
Private company employee	136	32.6
Student	12	2.9
Others	11	2.6
Total	417	
Reasons to buy handicrafts (answer can be more than once)		
To take home decorate	107	25.7
To commemorate	169	40.5
Design	149	35.7
Quality of product	311	74.6
Appearance/image of product	120	28.8
Reasonably priced	91	21.8
Supporting local businesses	78	18.7

* (1 USD = 32 THB)

4.2 Descriptive statistics

Once the data set were treated for outliers (N=417), the descriptive statistics for five key variables were presented in Table 4.2 This table details the descriptive statistics (mean, standard deviations, variance, min and max) of the constructs and its items. The seven constructs are brand loyalty (8 items), brand awareness (5 items), brand association (5 items), perceived quality (5 items), brand trust (5 items), brand image (5 items), satisfaction (5 items), low cost (5 items), originality (7 items), product (5 items), distribution factor (5 items), packaging and labelling (5 items) and display (5 items). The table shows that the packaging & labeling (PL) has the lowest mean with (4.10) while the highest mean is perceived quality with (4.72). From indications, the standard deviation for all variables falls between the ranges of .63 to .84; this demonstrates the presence of substantial satisfactory variability within the set of data used (Refer Appendix C).

Table 4.2
Descriptive statistics for all variables (N=417)

Variable	Code	No. items	Mean	S.D.	Max	Min
Brand Loyalty	BL	8	4.3561	.62726	5.88	2.88
Brand Equity	BE	25	4.4903	.40613	5.52	2.32
Satisfaction	Sat	5	4.5074	.52912	6.00	3.00
Competitive Advantage	CA	12	4.3379	.53111	5.67	2.75
Marketing Mix	MM	20	4.2207	.39243	5.35	3.20

4.3 Reliability Result

The reliability of all constructs as portrayed by Cronbach alpha shows values well above 0.60 (Nunnally). Similarly, composite reliability as calculated through structural models also shows improved reliability of all construct of well above 0.70. Thus, it is safely concluded that the data has adequate internal consistency.

Table 4.3
Reliability of all Variables

Variable	No. items	Cronbach's Alpha	Composite Reliability
Brand Equity	25	.773	0.968
Brand Loyalty	8	.767	0.951
Satisfaction	5	.607	0.692
Competitive Advantage	12	.684	0.937
Marketing Mix	20	.610	0.827

N=417

4.4 Multicollinearity

Multicollinearity could be detected by high values of correlation readings between two variables. Table 4.4 indicates that all correlations are below .5, thus indicating an absence of multicollinearity between these variables. Furthermore, according to Fornell & Larcker (1981), some of these multicollinearity can be tolerated by calculating average variance extracted (AVE) and with correlation squared. The AVE readings presented in the upper diagonal of the Table 4.5 show that the AVE between the two incumbent variables is more than their correlation squared. Hence, multicollinearity is

minimal and tolerable, which made them possible to be included in the structural models.

Table 4.4
Correlation (r) between all latent variables/correlation squared.

	SAT	CA	MM	BL	BE
Satisfaction (SAT)	1	.054	.046	.013	.232
Competitive Advantage (CA)	.233**	1	.040	.120	.087
Marketing Mix (MM)	.214**	.199**	1	.049	.099
Brand Loyalty (BL)	.112*	.347**	.222**	1	.023
Brand Equity(BE)	.482**	.295**	.315**	.154**	1

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
Upper diagonal are the correlation squared

Table 4.5
AVE, correlation squared

	SAT	CA	MM	BL	BE
SAT	1	.054	.046	.013	.232
CA	.975	1	.040	.120	.087
MM	.965	.963	1	.049	.099
BL	.980	.979	.968	1	.023
BE	.980	.971	.961	.976	1

*** Correlation is significant at the 0.001 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

4.5 Confirmatory Factor Analysis (CFA)

To ascertain whether the number of factors and the loadings of items on them conform to what is expected based on the pre-established theory of scale assessment, CFA was conducted. SEM techniques were used to relationships among multiple variables by Hair *et al.,* (2006). A confirmatory factor analysis (CFA) in first used to confirm the factor loading of the twelve constructs. This

indicates that all constructs conform to the contracts validity test. The remaining number of items for each construct are as follows; Brand loyalty-(BL) (8 items), Brand awareness-(Baw) (5 items), Brand association-(Bas) (5 items), Perceived quality-(PQ) (5 items), Brand trust-(BT) (5 items), Brand image-(BI) (5 items), Satisfaction-(SAT) (5 items), Low cost-(LC) (5 items), Originality-(Ori) (7 items), Product-(P) (5 items), Distribution factor-(DF) (5 items) and Packaging and labelling-(PL) (5 items). Table 4.6 shows that the values of factor loadings for all items are well above 0.30, thus indicating adequate convergent validity (Refer Appendix F)

Table 4.6
Factor Loading of the Construct Items Analysis (CFA)

Variable code	Item code	Statements	Factor loading
BL	BL1	I regularly buy the same handicraft brand.	.679
	BL2	I would recommend this handicraft to others.	.517
	BL3	This handicraft would be my first choice.	.664
	BL4	I will continue to use this brand because I am satisfied and acquainted with the brand of this handicraft.	.727
	BL5	I will use this brand in spite of competitors deal.	.692
	BL6	I would switch to other luxury handicraft for the next time.	.453
	BL7	I would not buy other brands, if this handicraft is not available at the store.	.618
	BL8	I consider myself to be loyal for this product.	.614
BE			
BAw	BAw1	I can recognize the product among competing brand.	.426
	BAw2	Some characteristics of the product come to their mind quickly.	.503
	BAw3	I know what the product looks like.	.678
	BAw4	The first-mentioned brand in a category.	.842
	BAw5	I am acquainted with this brand	.622

Variable code	Item code	Statements	Factor loading
BAs	BAs1	I have no difficulty in imagining this product in my mind.	.466
	BAs2	I can quickly recall the logo of this product.	.455
	BAs3	I am proud to buy this product brand.	.741
	BAs4	I always talk about this brand in positive.	.753
	BAs5	It is appropriate to describe the product offered by this brands "up-market".	.558
PQ	PQ1	I think this product has a very good quality.	.408
	PQ2	I think the brand offers products with excellent features.	.416
	PQ3	This brand offers very durable products.	.600
	PQ4	This brand is stable and reliable.	.512
	PQ5	This brand is easy to use and comfortable.	.392
BT	BT1	I have empathy with this brand.	.648
	BT2	I know what the products of the competence with this brand.	.485
	BT3	I feel that I completely trust this firm activity and its products.	.545
	BT4	When I see a display I believe the product is suitable.	.431
	BT5	There is no reason for us to be suspicious of the product.	.379
BI	BI1	This brand completely satisfies my needs.	.577
	BI2	This product is outstanding style.	.450
	BI3	It has a differed image form other handicraft brands.	.557
	BI4	The product has a long history.	.418
	BI5	The brand has a very clean image.	.573
Sat			
Sat	Sat1	I am completely satisfied with the product of this firm.	.600
	Sat2	This product meets my pre-purchase expectation.	.399
	Sat3	I am happy about the decision to choose this product.	.634
	Sat4	I believe that it is a right thing to purchase this product.	.755
	Sat5	I would be choosing from the same set of product options on my next purchase occasion.	.746
CA			
Low Cost	LC1	I prefer this product because price below competence.	.712
	LC2	This product reduces operations costs.	.718
	LC3	This product reduces the cost of servicing the customer.	.541
	LC4	The likely that product is reliable is low cost.	.750
	LC5	I think this product would be very low functional.	.666

Variable code	Item code	Statements	Factor loading
Originality	UD4	Its products have one unique feature.	.562
	UD5	The product has a unique combination of features.	.765
	Ori1	Design benefits from platform sharing.	.771
	Ori2	Design OK, but costs are likely to be higher because of platform sharing	.616
	Ori3	Design hurt by supplier weakness.	.676
	Ori4	The product is a originality from the place that is good in its designing	.649
	Ori5	The product is a originality from the place that is creative in its craftsman.	.767
MM			
Product	P1	This product must be of very good quality.	.654
	P2	This product would be very high functional.	.765
	P3	I like product because one can find the broadest range of product	.628
	P4	I have a preference for product because it provides the deepest specialized assortments.	.538
	P5	This product is beautifully designed.	.546
Distribution Factor	DF1	Compared to competing brands, this product is stocked in more stores.	.603
	DF2	The number of stores selling this product is higher than the number of stores selling competing brands.	.444
	DF3	This product is distributed through as many stores as possible.	.674
	DF4	More stores sell product, as compared to its competing brands.	.618
	DF5	This store offer products with excellent features.	.459
Packaging and Labeling	PL1	I think good looking packages.	.671
	PL2	Packaging, it has scale of producer a logo.	.734
	PL3	A package is designed specially to products.	.819
	PL4	This product it has label of detail value.	.750
	PL5	I think good looking color and graphics labeling.	.549
Dis	Dis1	Displays for this product are frequent.	.342
	Dis 2	This brand is intensively displayed.	.492
	Dis 3	Displays for this product are more expensive than displays for competing brands.	.563
	Dis 4	I know this product has attractive in-shop promotion.	.592
	Dis 5	This product has an attractive window display that draws me to shop inside.	.784

4.6 Goodness of Fit Indices

The goodness of fit (GOF) of selected indices for the exogenous, endogenous and hypothesized models is shown in Table 4.7. The GOF indices indicate that they are within the designated thresholds. Hence the models achieved goodness of fit benchmark. Table 4.8 shows the result of individual CFA of latent variables. The AMOS diagrams of each individual CFA are found in Appendix F.

Table 4.7
Goodness-of-Fit of Exogenous, Endogenous and Hypothesized Models

Indictors	Exogenous Model	Endogenous Model	Hypothesized model results	Threshold value
Absolute				
Ratio	2.748	2.105	2.017	Less than 2.00
RMSR	.006	.005	.005	Less than 0.10
Incremental Indices				
GFI	.797	.865	.744	0.90 and above
IFI	.473	.738	.535	0.90 and above
CFI	.463	.734	.527	0.90 and above
TLI	.428	.715	.511	0.90 and above
NFI	.363	.597	.367	0.90 and above
AGFI	.772	.847	.728	0.90 and above
Parsimonious Indices				
RMSEA	.065	.052	.049	Less than 0.08
P-value	.000	.000	.000	More than 0.05

Table 4.8
Goodness-of-Fit Results-Confirmatory Factor Analysis (CFA) of all measurements and structure models (N=417)

Code	Items	Items remaining	RMSEA	DF	CMIN	Ratio	CFI	TLI	IFI	P-Value
BL	8	6	.036	.9	13.980	1.553	.987	.978	.978	.123
BE	25	13	.027	.65	85.098	1.309	.945	.934	.947	.048
Sat	5	5	.054	.5	11.015	2.203	.931	.863	.935	.051
CA	12	6	.041	.9	15.296	1.700	.980	.967	.981	.083
MM	20	11	.032	.44	62.832	1.428	.933	.916	.936	.032
Exo	37	18	.021	.132	156.328	1.184	.960	.961	.967	.073
Endo	33	18	.025	.132	165.167	1.251	.952	.944	.953	.027
Hypo	70	27	.017	.314	352.005	1.121	944	968	972	.069

4.7 Structural Models

The study produces two structural models namely measurement model (Figure 4.1) and the generated fit model (Figure 4.2). The measurement model indicates that all latent variables perform first order analysis even those with dimensions such as brand equity, competitive advantage and marketing mix. First order analysis is conducted because the SEM model does not achieved goodness of fit as shown by its GOF indices for e.g. P-value=0.000 (Hair *et. al.,* 2006). Hence this model is fitted to produce the generated structural model in Figure 4.2.

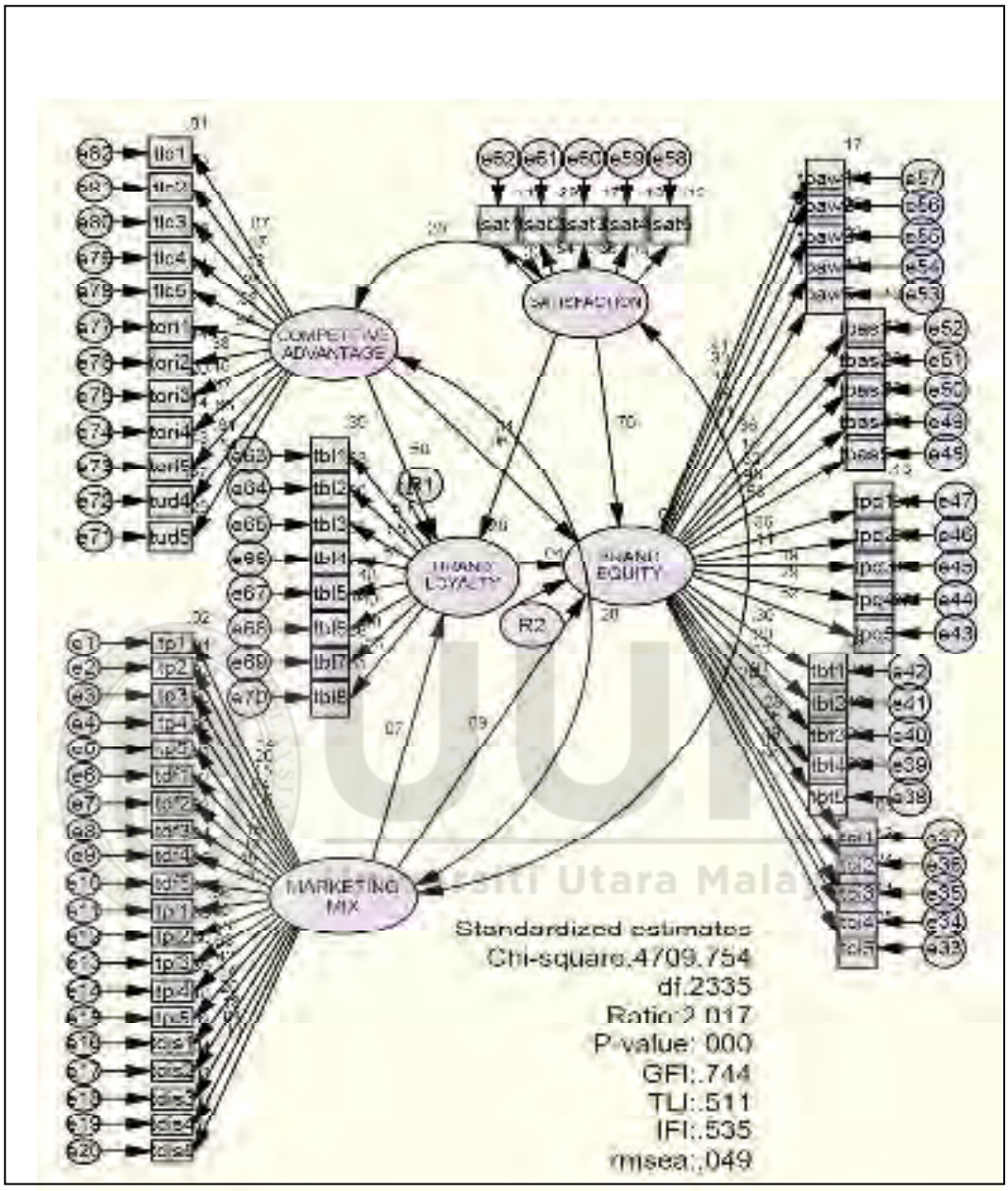

Figure 4.1
Measurement Model

4.8 Generated Model

The generated model shows that all GOF indices achieved the designated threshold of ratio=1.121; GFI=.944; RMSEA=0.017 and p-value=0.069 (Table

4.9). Hence the estimated regression values to indicate significant relationships between latent variables are valid based on the generated model (Refer Appendix G).

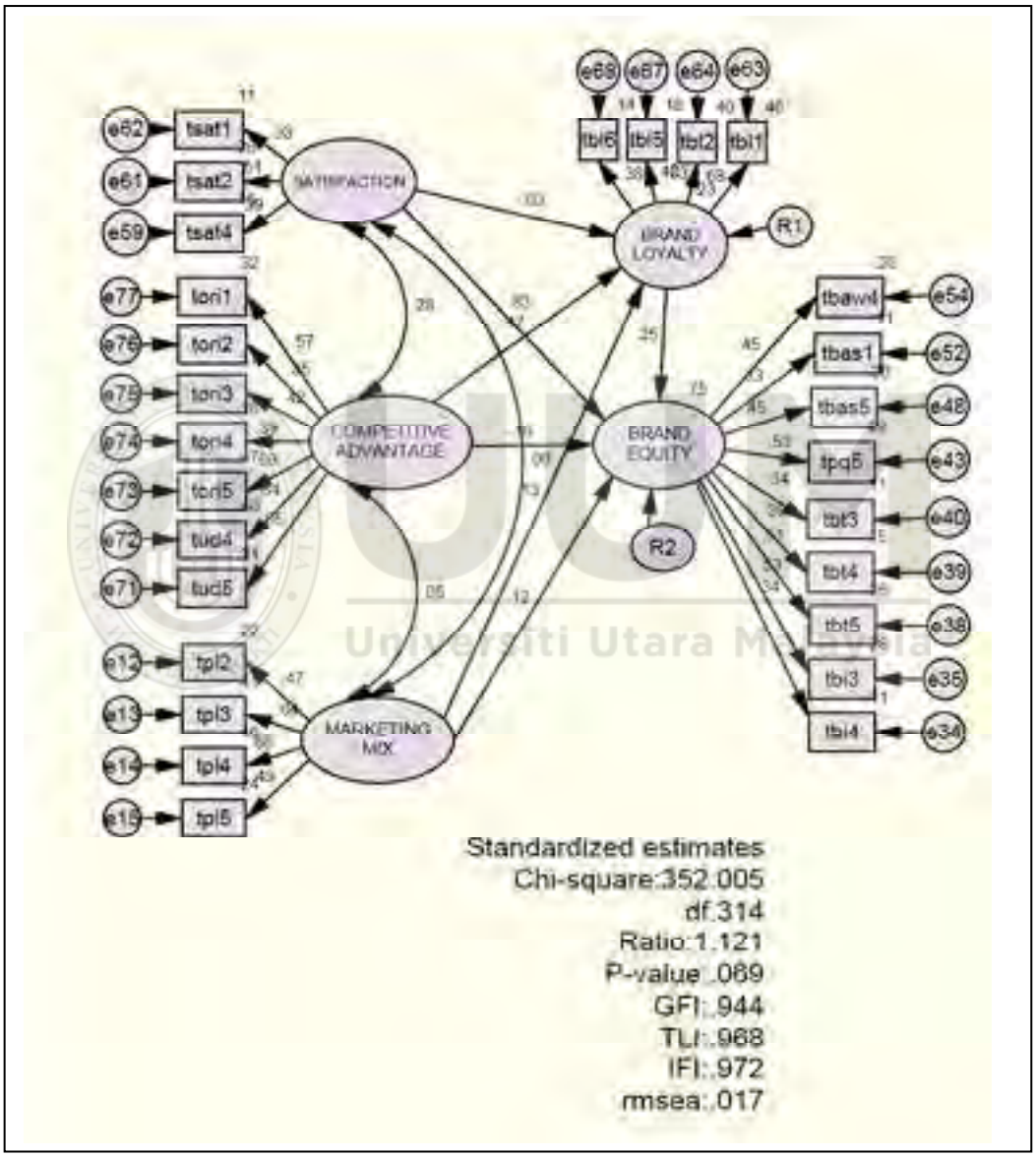

Figure 4.2
Generated Model

Table 4.9
Generated Model (Goodness-of-Fit indices)

Indicators	Generated Model	Threshold Value
Absolute Indices		
Ratio	1.121	Less than 2.00
RMSR	0.003	Less than 0.10
Incremental Indices		
GFI	0.944	0.90 and abov
IFI	0.972	0.90 and abov
CFI	0.971	0.90 and abov
TLI	0.968	0.90 and abov
NFI	0.791	0.90 and abov
AGFI	0.932	0.90 and abov
Parimonious Indices		
RMSEA	0.017	Less than 0.08
P-Value	0.069	More than 0.05

4.9 Squared multiple correlation (SMC)-R^2

The generated structural model indicates that 75% (.750) of the variance in the brand equity can be explained by exogenous variables. Similarly, 23.1% of variance in brand loyalty could be explained by the variables selected (Table 4.10).

Table 4.10
Squared multiple correlation for endogenous variables

Variable name	Squared multiple regression (SMC) (R^2)
BE	.750
BL	.231

4.10 Direct Hypothesis Results

The results of the direct parameter estimates are shown Table 4.21. It shows that satisfaction is directly related to brand equity (B=.834, p-value=.000). Hence H2 is supported. The next direct impact is shown by brand loyalty to brand equity (B=.251, p=.024). Hence, H1 is supported. Further supported direct impacts are competitive advantage to brand loyalty, thus H6 is supported. Other links are found to be insignificant (Table 4.11), indicating that H3, H4, H5 and H7 are rejected. The results of the regression estimates are illustrated diagrammatically in Figure 4.3.

Table 4.11
Direct Hypotheses Result of Generated Model

H	Exo	---▶	Endo	Std. Estimates	S.E	C.R	P	Status	Hypothesis
H1	BL	---▶	BE	.251	.125	2.252	.024	Sig	Support
H2	SAT	---▶	BE	.834	.332	3.769	***	Sig	Support
H3	CA	---▶	BE	-.160	.086	-1.450	.147	NS	Not support
H4	MM	---▶	BE	.125	.082	1.476	.140	NS	Not support
H5	SAT	---▶	BL	-.034	.133	-.342	.732	NS	Not support
H6	CA	---▶	BL	.465	.332	3.769	***	Sig	Support
H7	MM	---▶	BL	.129	.064	1.748	.081	NS	Not support

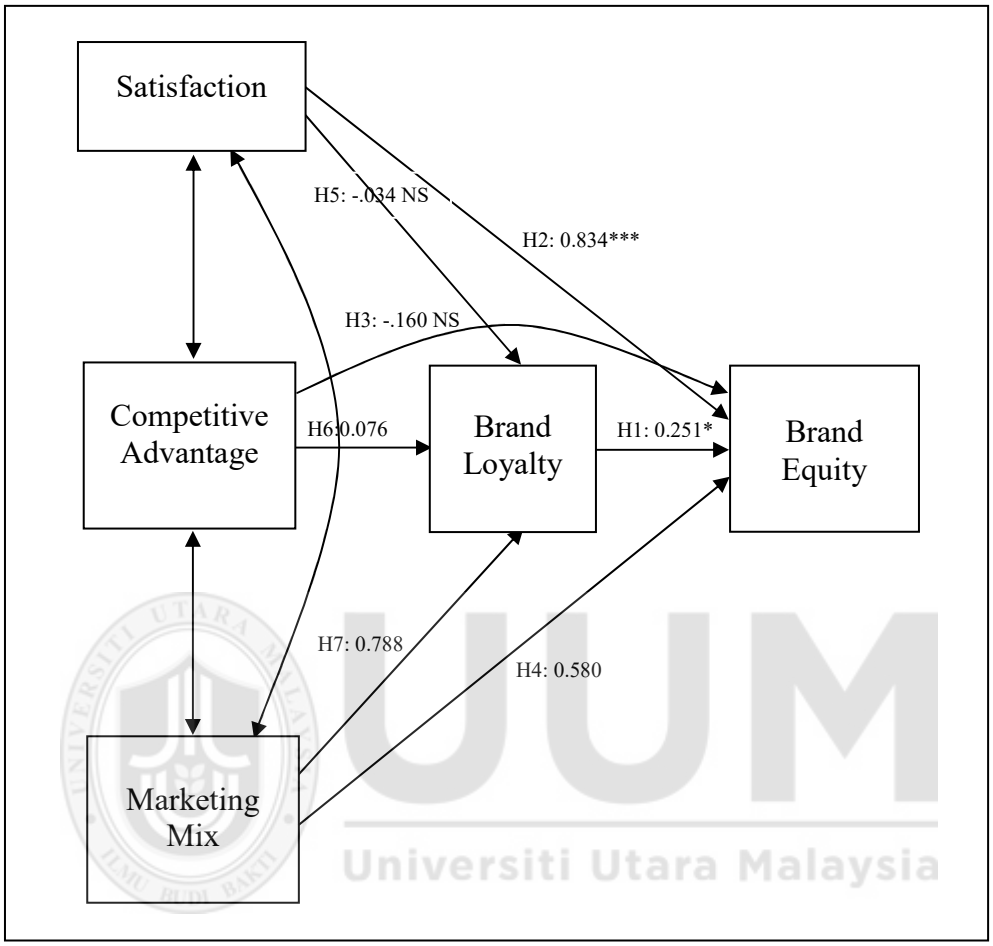

Figure 4.3
Final Result super-imposed in Research Framework

4.11 Mediating Effect

This study tests three mediating effects of brand loyalty. To remind, the rule used for supporting full mediation is when direct paths (a) and (b) remain significant relationships and c became insignificant when mediator is included in the model (Hair *et al.,* 2006). The findings of each of these mediating effects are discussed next.

4.11.1 The mediating effects of brand loyalty on the relationship between satisfaction and brand equity

As depicted in Figure 4.4, the direct path estimate between satisfaction and brand loyalty is insignificant before and after the mediator is added to the link. (Satisfaction→Brand loyalty →Brand Equity). Hence, brand loyalty did not mediate the link between satisfaction and brand equity. Hence H8 is not supported.

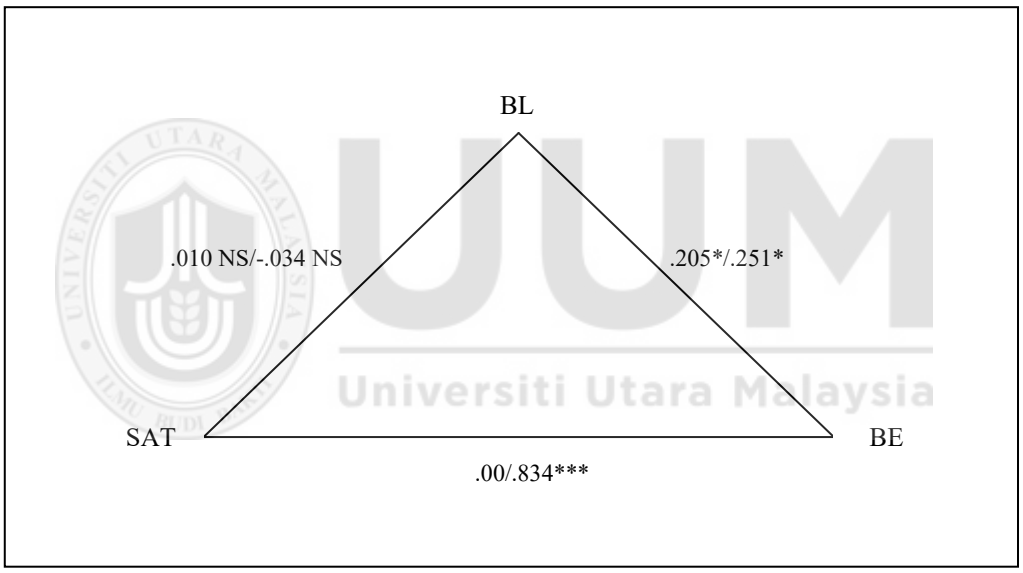

Figure 4.4
The mediating effect of BL on Sat→BE

4.11.2 The mediating effects of brand loyalty on the relationship between competitive advantage and brand equity

The mediating effect of brand loyalty on the link between competitive advantage and brand equity shows all significant estimates on the three direct effects before the addition of mediator brand loyalty (Figure 4.5). However, the

link between CA and BE became insignificant after the addition of mediator brand loyalty. Hence, brand loyalty is a full mediator, supporting H9 (Competitive advantage→Brand loyalty→Brand Equity).

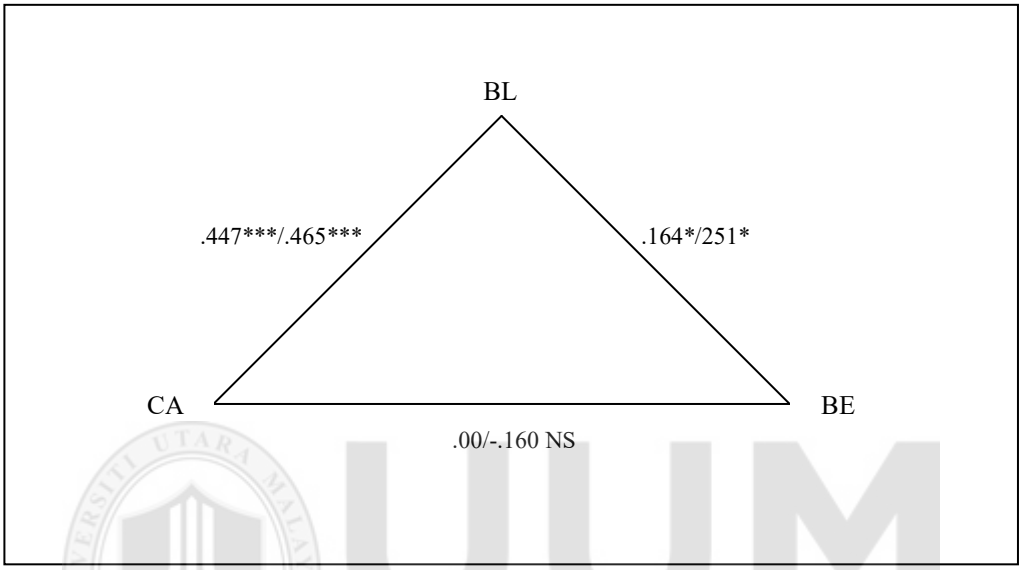

Figure 4.5
The mediating effect of BL on CA →BE

4.11.3 The mediating effects of brand loyalty on the relationship between marketing mix and brand equity

Figure 4.6 illustrates the extent to which brand loyalty mediates on the linkage between marketing mix and brand equity. Since the direct estimates between marketing mix and brand loyalty is not significant before and after the addition of the mediator, hence the mediation effect is null and void. Thus, brand loyalty did not mediate this linkage. Hence H10 is not supported (marketing mix→Brand loyalty →Brand Equity).

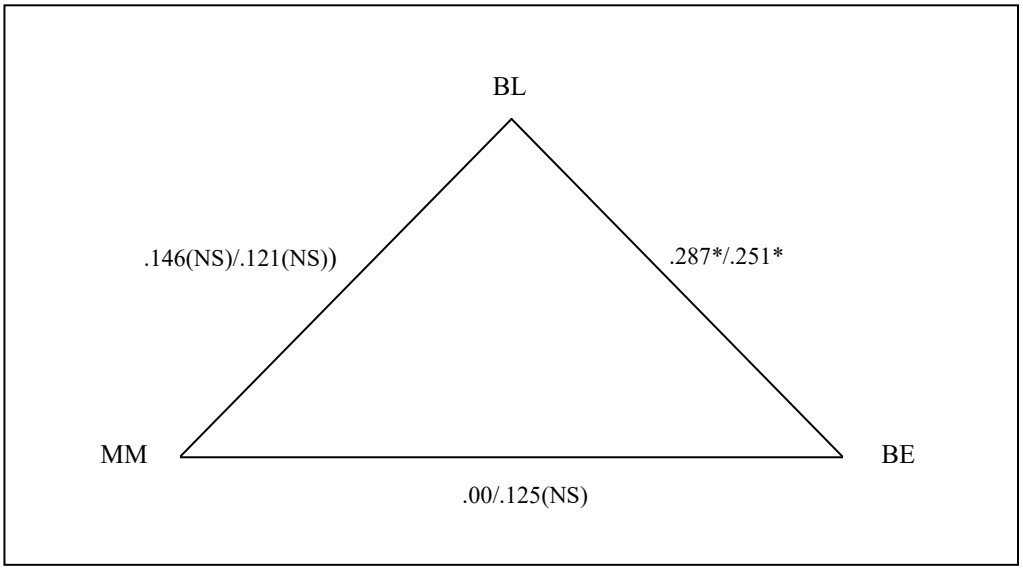

Figure 4.6
The mediating effect of BL on MM→BE

4.12 Mediating Effect Results of Generated Model

The mediating effect results are summarized in table 4.12. It shows that only H9 is supported while H8 and H10 are not supported.

Table 4.12
Mediating effect Results

H	Exogenous		Mediated		Endogenous	direct Effects Estimate-No link	direct Effects Estimate-link	Mediating Hypothesis
H8	Satisfaction	--->	Brand loyalty	--->	Brand Equity	SAT-BL = .010(NS) BL-BE = .205(S) SAT-BE = .000	-.034(NS) .251 (S) .834 (S)	Non Mediator
H9	Competitive Advantage	--->	Brand loyalty	--->	Brand Equity	CA-BL = .447(S) BL-BE = .164 (S) CA-BE = .000	.461(S) .251 (S) -.160 (NS)	Full Mediator
H10	Marketing Mix	--->	Brand loyalty	--->	Brand Equity	MM-BL = .146 (NS) BL-BE = .287 (S) MM-BE = .000	.129 (NS) .251 (S) .125 (NS)	Non Mediator

4.13 Summary of Findings

The summary of all the impacts of direct and indirect predictors of brand equity are presented in Table 4.13. Out of the ten hypotheses proposed, four significant hypotheses are supported (H1, H2, H6, H9) and rejected six insignificant impacts (H3, H4, H5, H7, H8, H10). These results are discussed thoroughly in chapter 5.

Table 4.13
Summary of Hypothesis testing

	Hypothesis	Hypothesis Direction	Result	Support
H1:	Brand loyalty is positively related to brand equity.	Positive	Positive	Supported
H2:	Satisfaction is positively related to brand equity.	Positive	Positive	Supported
H3:	Competitive advantage is positively related to brand equity.	Positive	Negative	Not Supported
H4:	Marketing mix is positively related to brand equity.	Positive	Positive	Not Supported
H5:	Satisfaction is positively related to brand loyalty.	Positive	Negative	Not Supported
H6:	Competitive advantage is positively related to brand loyalty.	Positive	Positive	Supported
H7:	Marketing mix is positively related brand loyalty.	Positive	Positive	Not Supported
H8:	Brand loyalty mediates the relationship between satisfaction and brand equity.	Full Mediator	Not Mediator	Not Supported
H9:	Brand loyalty mediates the relationship between competitive advantage and brand equity	Full Mediator	Full Mediator	Supported
H:10	Brand loyalty mediates the relationship between marketing mix and brand equity	Full Mediator	Not Mediator	Not Supported

CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.0 Preface

This sub-section of the study is structured in nine sections in an attempt to discuss and summarize the whole study. The chapter commences with the recapitulation of the study objectives. After that, the significant outcomes of direct antecedents of brand equity are discussed. Subsequently, the insignificant findings, contribution, limitation, recommendation and conclusion of the main findings are elaborated.

5.1 Research Objective Recapped

This study attempts to empirically investigate the brand equity model for the handicraft industry in Thailand. In doing so, three objectives were formulated consisting of (1) to examine the direct predictors of brand equity, (2) to examine the direct predictors of brand loyalty and (3) to examine the mediating effect of brand loyalty.

5.2 Objective One: To examine the direct predictors of brand equity

This study establishes two significant direct predictors of brand equity namely brand loyalty and satisfaction. Hence, hypothesis H1 and H5 are supported, while hypotheses H3 and H4 are not supported which are competitive advantage and marketing mix. Each significant relationship is discussed next.

5.2.1 Brand Loyalty and Brand Equity

This study unveils how brand loyalty is positively and significantly relates to brand equity. This result gives an indication that the higher the brand loyalty the higher the brand equity. This implies that brand loyalty among handicraft consumers seems to be an important indicator for the success of brand equity. Similar finding has been reported in past studies (Sasmita & Suki, 2015; Alhaddad, 2014; Buil *et al.,* 2013; Kumar *et al.,* 2013; Moradi & Zarei, 2012; Severi & Ling, 2013; Pappu & Quester, 2008). Even though none of the previous studies were conducted in handicraft setting, brand loyalty seems to be a significant factor in all settings. It is imperative that handicraft consumers will be loyal to a brand once they know about the brand (brand awareness), capture brand image, perceived the offering as quality product, will always select the same brand (brand association), develop brand trust, and finally repurchase the same brand over and over again. The demographic finding tends to support this assertion. The majority of the Thai domestic tourist seems to purchase handicrafts that are high in quality such as Thai silk, teak furniture, ornaments, costume jewelry, ceramics, glassware, leather goods etc. (Pisit Kongkun *et al.,* 2013).

Another probable reason for supporting this linkage could be that the majority of handicraft customers are working, married females. This group of customers seems to be more concerned about buying handicrafts for commemorating occasions such as festive season and special occasions and looking for quality

products for family members (Apinya Sakdasirorun & Adisara Laouipansakun, 2015).

5.2.2 Satisfaction and Brand equity

The direct link between satisfaction and brand equity is also found to be significant and positively related. This means that for consumers to be satisfied, they need to appreciate brand equity. Highly satisfied customers perceived the product as having high brand equity. Previous empirical writers have supported positive significant relationship between satisfaction and brand equity (Torres & Tribó 2011; H1, 2009; Beerli, Martin & Quintana, 2004).

Handicraft product is usually souvenir product and it represents a unique product of a country's valued culture. Thailand produces more than 25,000 OTOP products and exports over USD 400 million handicraft products to more than 10 countries globally in 2013 (Department of International Trade Promotion, 2014). Hence, the consumers must be satisfied before repeat purchase could be done. Probably, the repeat purchase could have occurred when the Thai products have brand equity. Meaning the Thai product have established its brand image, performed continuous brand awareness campaigns, people of Thailand have also built their trust on Thai products (Kamolwat Thammaraksa, 2010).

Satisfaction among domestic tourists in Thailand seems to be the highest mean score compared to other variables. This could imply that highly satisfied domestic tourists would prefer high brand equity products. One of the reasons for this high satisfaction could be traced from the cultural setting and interesting exhibition of the history, the makings of the crafts and the process of involved in producing the products at handicrafts centers. Local tourists not only gained new knowledge about the process but also can experience it as well. For example, at a silk handicraft center, the tourists are exposed to real silkworms, how the silkworms were cultured, the feeding of silkworm by mulberry leaves, how silkworm produce silk fiber and how the fiber is converted to silk threads and later weaved to become silk textiles of different colors and quality. The tourists are not bored at each center but learn new knowledge regarding the product process and production activities (Weerawan Marangkun, 2014).

5.3 Objective Two: To examine the direct predictors of brand loyalty

For this objective only competitive advantage predicts brand loyalty. Satisfaction and marketing mix do not predict brand loyalty as hypothesized.

5.3.1 Competitive advantage and brand loyalty

As mentioned above, competitive advantage is when the handicrafts are original Thailand products; the products are different from others or unique and able to maintain low cost pricing. Hence, high competitive advantage leads to

high brand loyalty. This finding is analogous with previous studies (Kenning, Grzeskowiak, Brock & Ahlert, 2011; Kuikka & Laukkanen, 2012; Theng, Parsons & Yap, 2013).

It is not surprising that the consumers proclaim that products which have competitive advantage triggers brand loyalty. It is expected that consumers in general love beautiful and unique things as souvenirs to bring back to their homes after visiting the handicraft centers. Thailand is known for its low pricing probably due to the use of local raw materials and guidance from OTOP department who monitors most handicrafts productions (Department of Industry Promotion, 2012). Additionally, in Thailand, the cost of living is quite low especially in the villages where the handicraft originates. Furthermore, the government monitors and gives financial help to motivate the handicraft operators and the industry.

5.3.2 Objective Three: To examine the mediating effect of brand loyalty

The finding reveals that brand loyalty fully mediates the relationship between competitive advantage and brand equity. This is expected since the direct relationship between competitive advantage and brand equity is not supported. This finding implies that for competitive advantage and brand equity to be operational, it needs the help of brand loyalty. The path shows that competitive advantage graces the path to brand loyalty before arriving at brand equity. This

demonstrates the importance of competitive advantage to be merged with brand loyalty for the extra upgrade of brand equity.

Buil *et al.,* (2013) found similar partial mediating result when investigating the consumer market in UK & Spain using structural equation modeling (SEM). They however, used perceived value as a dimension of competitive advantage to reflect the uniqueness and originality of products. They found brand loyalty is a partial mediator between perceived value and brand equity. Partial mediating effect means that both paths to brand equity can be used to increase brand equity i.e. using the path from competitive advantage to brand equity directly or using competitive advantage indirectly through brand loyalty

The implication from this finding could be that handicrafts interest groups need to acknowledge the importance of implementing competitive advantage in order to acquire brand loyalty which further improves brand equity. Implementation involves the makings of unique products, ensuring original products and low cost products. Many consumers prefer low cost products when they have spent most of their expenditure on flight tickets and accommodations.

5.4 Insignificant Findings

This study establishes six insignificant hypotheses namely: competitive advantage is not related to brand equity; marketing mix is not related significantly to brand equity; satisfaction is not significantly related to brand loyalty; also, marketing mix do not significantly influence brand loyalty. To this end, brand loyalty is not mediator of the relationship between satisfaction and brand equity; and brand loyalty also does not mediate the between marketing mix and brand equity. Each of this insignificantly relationship is discussed in the preceding section.

5.4.1 Competitive advantage is not related to brand equity

The review of past studies indicates that this finding is supported by a few past researchers (Hernández-Espallardo & Navarro-Bailón, 2009; Kerr & Gladden, 2008). Differentiation and cost were not significantly related to brand equity in the retail sector study in Spain. Similarly, competitive force is not related significantly to brand equity epitomized by brand associations, perceived quality and brand loyalty.

A probable explanation for this non-support may be due to the existing uniqueness and low cost products of handicraft products in Thailand. Hence the consumers expected these characteristics to be present in the handicrafts products that they bought, making them to behave indifferently.

5.4.2 Marketing mix is not related significantly to brand equity

This empirical study found that marketing mix as whole could not explain the variance in brand equity. This could mean the dimension of marketing mix varies from one another, which could dilute its direct significant effect on brand equity. Single dimension of marketing mix was not tested in this study. The dimensions of marketing mix has been found to have insignificant impact on brand equity in past studies such as product brand personality (Valette-Florence *et al.,* 2011); sales promotions (Sriram *et al.,* 2007); after sales service (Kim & Hyun, 2011); advertising (Mongkol 2014); and distribution intensity (Nguyen *et al.,* 2011). Marketing mix seems to have no significant impact on brand equity because in this study marketing mix is measured by product, distribution, packaging, labeling and display. Packaging could be unimportant to improve brand equity since handicrafts are bought for souvenir. It could be that what the consumers looked for in handicraft is its authentic outlook rather than the packaging and labeling. Furthermore, packaging and labeling are temporary coverings which could be torn off once used. Also, Thai people do not appreciate extensive packaging as long as the real product is of high quality (Ratirost Boonyarit *et al.,* 20).

5.4.3 Marketing mix is not related significantly to brand loyalty

Similar to the discussion above marketing mix does not necessarily lead to brand loyalty. Marketing mix dimensions could be place, promotion, product,

and price. This finding is supported by Nam, Ekinci & Whyatt (2011) whereby physical quality is found to be insignificantly related to brand loyalty amongst hotel and restaurant customers in the United Kingdom.

Possibly, marketing mix is not considered as an important factor to determine brand loyalty towards handicraft due to the many versions of the handicraft products and the prices are low cost.

5.4.4 Satisfaction is not related significantly to brand loyalty

One of the substantial contributor to brand equity is satisfaction, it is however not so with brand loyalty. The best explanation for this finding could be that satisfaction may not lead to brand loyalty since handicrafts are small items and serves as either souvenir or gift products. This finding is supported by previous studies (Martenson, 2007; Taylor, Celuch & Goodwin, 2004).

5.4.5 Brand loyalty does not mediate the relationship between satisfaction and brand equity

Brand loyalty fails to play a mediating role between satisfaction and brand equity. This finding indicates that brand loyalty is not an important mediator to consider because satisfaction has shown to have a direct significant and positive influence on brand equity. It could mean that extremely satisfied customers may prefer high brand equity handicraft products and they may not

be loyal to that brand. As discussed earlier Thailand produces a vast varieties of handicrafts which distorted the brand loyalty to a certain extent. This finding found partial mediating support from previous research (Liao, 2015; Kumar, Dash & Purvar, 2013; Severi & Ling, 2013).

As discussed earlier, the majority of handicraft customers are working, married females. Female shoppers usually look for latest design and new product development (Supaporn Wichaidit, 2016). In this aspect, female local tourists might not be loyal to old designed handicraft product. It could also mean that once the shoppers feel satisfied with the product, they automatically contemplate that the product has brand equity (Meena Ongbangnoi, 2010).

5.4.6 Brand loyalty does not mediate the relationship between marketing mix and brand equity

Lastly, loyalty to brand fails to mediate the link between marketing mix and brand equity. It implies that brand equity does not depend either on brand loyalty or marketing mix. For the consumers to be loyal to the handicraft products, it looks like that they do not regard marketing mix is necessary. Although this finding contradicts the theory of marketing, it could be justified that the industry is from rural areas and is operated by village people. It could be that the knowledge of marketing mix is still unknown to these operators hence the consumers feel that marketing mix is still lacking.

5.5 New Research Contribution

This study has managed to establish several significant predictors of brand equity, brand loyalty and mediating role of brand loyalty. Therefore, the study has achieved its objective of empirically testing some hypothesized relationships on brand equity. The study of brand equity is very scanty indeed and the current study enriches the present body of knowledge in this matter. Invariably, this study contributes to several stakeholders in the industry such as the academics, the practitioners and consumers.

5.5.1 Academic contribution

The main contribution to the academics is the establishment of a brand equity model for the Thai handicraft customers. The research model empirically tested and produced two significant predictors of brand equity (brand loyalty and customer satisfaction); one significant predictor of brand loyalty (competitive advantage and a full mediator effect of brand loyalty on the competitive advantage and brand equity linkage. Whilst previous studies have embarked on brand equity of sportswear (Sasmita & Suki, 2015), banking (Esmaeili Far & Rezaei, 2015), mobile phones (Alhaddad, 2015), private labels (Thanasuta & Metharom, 2015), soft drinks (Al-Haddad, 2014), Beverage (Mongkol, 2014), general products (Buil, Martinez & Chernatony, 2013), hospitals (Kumar *at al.,* 2013), retailing (White, Joseph-Mathews & Voorhees,2013), pharmaceutical (Azizi, Ghytasivand & Fakharmanesh, 2012) automobiles (Moradi & Zarei,

2012) and others, there was none in handicraft brand equity. Hence, these studies have enriched the body of existing knowledge in the brad equity of handicraft products.

Another theoretical contribution is the test for mediation of brand loyalty which is still at a minimal stage in the existing body of research. Besides basing the research framework on brand equity underpinning model (Aaker, 1991), the study augmented new empirical findings concerning the development of branding in the handicraft industry especially in Thailand. The finding also contributes to the existing literature on brand equity by elevating the generally limited empirical findings specifically in Thailand and South East Asia in general.

5.5.2 Practitioner's contribution

The finding points to the importance of two factors i.e. brand loyalty and satisfaction in improving brand equity to its new glory in Thailand. In view of this, manufacturers of handicraft need to gain more knowledge in ensuring brand loyalty and satisfaction of customers. Several marketing strategies towards improving brand loyalty could be done through loyalty programs such as membership cards, competition and special offers. Brand equity strategy has to be set at an early start of handicraft business so as to set the right marketing direction for the handicraft entrepreneurs. Continuous financial

support and training on marketing mix strategy, competitive advantage strategy and how to satisfy customers are needed to improve the industry.

5.5.3 Consumers contribution

The consumers of handicraft products are mostly tourists and foreign visitors. Thailand should take the pride of producing creative and cheap handicrafts as compared to neighboring countries. Consumers will always need handicraft products as souvenirs or gifts to give away to loved ones when they got back. With this in mind Thailand handicrafts have to be more creative, contemporary design and low priced in order to attract more customers.

5.6 Study Limitation

This study has its limitations. The first constraint is that it only focused on cross-sectional quantitative method. Second, the study was done on four selected predictor variables and brand equity. More exogenous variables should be included to explain a more comprehensive and holistic brand equity model (ref).

5.7 Recommendation for future research

Another brand equity underlying model can be used such as Keller (1993) to test the empirical linkages of brand equity. Keller (1993) conceptualizes brand equity as akin to customer based brand equity which is made up of brand

knowledge. Customer-based brand equity has not been tested empirically and deserves further empirical investigation.

Qualitative approach could be another option to explore the perceptions of handicraft manufacturers on brand equity. There is very limited qualitative studies investigating brand equity hence, this approach could be timely (Anselmsson *et al.,* 2007).

Future study could examine other predictors of brand equity such as electronic marketing, website design, trust and others. Marketing mix dimensions also need to be examined separately as they consist of different unrelated factors and may not converge into one main factor (Alhaddad, 2015).

5.8 Conclusion of study

The study achieves its objective by establishing brand loyalty and satisfaction as the significant predictors of brand equity while brand loyalty is predicted by competitive advantage. Brand loyalty is attested to be a significant full mediator between satisfaction and brand equity.

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APPENDIX A

QUESTIONNAIRE-English

Othman Yeop Abdullah Graduate School of Business
Universiti Utara Malaysia

THE DETERMINANTS OF BRAND EQUITY IN HANDICRAFT SME IN THAILAND

Dear Respondents,

I am a Ph.D student at Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia (UUM), Sintok, Kedah, Malaysia. I am now in the process of collecting the final data for my thesis entitled "The determinants of brand equity in handicraft in SME in Thailand". The purpose of this study is to collect information regarding brand equity perception for handicraft products in Thailand.

I would appreciate if you could spare some time and thought in completing this questionnaire. I hope that you would co-operate in completing the questionnaire with the best of your ability.

This questionnaire consists of two sections. Section one consists of questions about your demographic profile and part two about your perception towards handicraft product branding. Your response will be treated as confidential and used for research purposes only. There is no right or wrong answer.

Thank you for your willingness to participate in this study.

Yours sincerely,

Weerawan Marangkun
E-mail address: wewiene1958@hotmail.com

Section 1 : Respondent Profiles

(This section intends to get information about the respondents' demographic background). Please tick in box on the best answer according to your information.

1. Gender

❒ Male ❒ Female

2. Age ……..… years

3. Marital status

❒ Single ❒ Married

❒ Separated ❒ Divorce

4. Monthly income

❒ Less than 5,000 Baht ❒ 5,001-10,000 Baht

❒ 10,001-15,000 Baht ❒ 15,001- 20,000 Baht

❒ 20,001-25,000 Baht ❒ 25,001- 30,000 Baht

❒ 30,001-35,000 Baht ❒ More than 35,001 Baht

5. Level of Education

❒ Less than secondary school ❒ Secondary school

❒ Some college/Diploma ❒ Bachelor Degree

❒ Master or Doctoral Degree ❒ Other (please specify)……..

6. Occupations

❒ Housewife ❒ Business owner/Entrepreneur

❒ Government officer ❒ Private company employee

❒ Student ❒ Others (please specify)……..

7. What are reasons affecting your decision in buying handicrafts? (You can check more that 1 choice.)

❒ To take home decorate ❒ To commemorate

❒ Design ❒ Quality of product

❒ Appearance/image of product ❒ Reasonably priced

❒ Supporting local businesses ❒ Others (please specify)……

Section 2 : Brand equity

(This section intends to get information about brand equity of Thai handicrafts). Please tick in box for the best answer according to your knowledge.

Code	Statements	Strongly disagree	Disagree	Somewhat disagree	Neutral agree or disagree	Somewhat Agree	Agree	Strongly agree
BAw1	I can recognize the product among competing brand.	1	2	3	4	5	6	7
BAw2	Some characteristics of the product come to my mind quickly.	1	2	3	4	5	6	7
BAw3	I know what the product looks like.	1	2	3	4	5	6	7
BAw4	I can remember this brand in a category.	1	2	3	4	5	6	7
BAw5	I am acquainted with this brand.	1	2	3	4	5	6	7
BAs1	I have no difficulty in imagining this product in my mind.	1	2	3	4	5	6	7
BAs2	I can quickly recall the logo of this product.	1	2	3	4	5	6	7
BAs3	I am proud to buy this product brand.	1	2	3	4	5	6	7
BAs4	I always talk positive about this brand.	1	2	3	4	5	6	7
BAs5	It is appropriate to describe the product offered by this brand “up-market”	1	2	3	4	5	6	7

Code	Statements	Strongly disagree	Disagree	Somewhat disagree	Neutral agree or disagree	Somewhat Agree	Agree	Strongly agree
PQ1	I think this product has a very good quality.	1	2	3	4	5	6	7
PQ2	I think the brand offers products with excellent features.	1	2	3	4	5	6	7
PQ3	This brand offers very durable products.	1	2	3	4	5	6	7
PQ4	This brand is stable and reliable.	1	2	3	4	5	6	7
PQ5	This brand is easy to use and comfortable.	1	2	3	4	5	6	7
BT1	I have empathy with this brand.	1	2	3	4	5	6	7
BT2	I know the product competitors of this brand.	1	2	3	4	5	6	7
BT3	I feel that I completely trust this brand and its products.	1	2	3	4	5	6	7
BT4	When I see a display I believe the product is suitable.	1	2	3	4	5	6	7
BT5	There is no reason for us to be suspicious of the product.	1	2	3	4	5	6	7
BI1	This brand completely satisfies my needs.	1	2	3	4	5	6	7
BI2	This product is outstanding style.	1	2	3	4	5	6	7
BI3	It has a different image from other handicraft brands.	1	2	3	4	5	6	7
BI4	The product has a long history.	1	2	3	4	5	6	7
BI5	The brand has a very clean image.	1	2	3	4	5	6	7
BL1	I regularly buy the same handicraft brand.	1	2	3	4	5	6	7
BL2	I would recommend this handicraft to others.	1	2	3	4	5	6	7
BL3	This handicraft would be my first choice.	1	2	3	4	5	6	7
BL4	I will continue to use this brand because I am satisfied and acquainted with the brand of this handicraft.	1	2	3	4	5	6	7
BL5	I will use this brand in spite of competitors deal.	1	2	3	4	5	6	7
BL6	I would not switch to other luxury handicraft for the next time.	1	2	3	4	5	6	7
BL7	I would not buy other brands, if this handicraft is not available at the store.	1	2	3	4	5	6	7
BL8	I consider myself to be loyal for this product.	1	2	3	4	5	6	7

Code	Statements	Strongly disagree	Disagree	Somewhat disagree	Neutral agree or disagree	Somewhat Agree	Agree	Strongly agree
Sat1	I am completely satisfied with the product of this firm.	1	2	3	4	5	6	7
Sat2	This product meets my pre-purchase expectation.	1	2	3	4	5	6	7
Sat3	I am happy about the decision to choose this product.	1	2	3	4	5	6	7
Sat4	I believe that it is a right thing to purchase this product.	1	2	3	4	5	6	7
Sat5	I would be choosing from the same set of product options on my next purchase occasion.	1	2	3	4	5	6	7
LC1	I prefer this product because price below competitors.	1	2	3	4	5	6	7
LC2	This product reduces operations costs.	1	2	3	4	5	6	7
LC3	This product reduces the cost of servicing the customer.	1	2	3	4	5	6	7
LC4	It's likely that product is reliable and low cost.	1	2	3	4	5	6	7
LC5	I think this product would be very low functionally.	1	2	3	4	5	6	7
UD4	Its products have one unique feature.	1	2	3	4	5	6	7
UD5	The product has a unique combination of features.	1	2	3	4	5	6	7
Or1	Design benefits from platform sharing.	1	2	3	4	5	6	7
Or2	Design OK, but brand loses meaning with platform sharing.	1	2	3	4	5	6	7
Or3	Design hurt by supplier weakness.	1	2	3	4	5	6	7
Or4	The product is a originality from the place that is good in its designing	1	2	3	4	5	6	7
Or5	The product is originality from the place that is creative in its craftsman.	1	2	3	4	5	6	7

Code	Statements	Strongly disagree	Disagree	Somewhat disagree	Neutral agree or disagree	Somewhat Agree	Agree	Strongly agree
P1	This product must be of very good quality.	1	2	3	4	5	6	7
P2	This product would be very high function.	1	2	3	4	5	6	7
P3	I like product because one can find the broadest range of product	1	2	3	4	5	6	7
P4	I have a preference for product because it provides the deepest specialized assortments.	1	2	3	4	5	6	7
P5	This product is beautifully designed.	1	2	3	4	5	6	7
DF1	Compared to competing brands, this product is stocked in more stores.	1	2	3	4	5	6	7
DF2	The number of stores selling this product is higher than the number of stores selling competing brands.	1	2	3	4	5	6	7
DF3	This product is distributed through as many stores as possible.	1	2	3	4	5	6	7
DF4	More stores sell product, as compared to its competing brands.	1	2	3	4	5	6	7
DF5	This store offer products with excellent features.	1	2	3	4	5	6	7
PL1	I think good looking packages.	1	2	3	4	5	6	7
PL2	Packaging, it has honest value.	1	2	3	4	5	6	7
PL3	A package is designed specially to products.	1	2	3	4	5	6	7
PL4	This product it has label of detail value.	1	2	3	4	5	6	7
PL5	I think the label has good color and graphics.	1	2	3	4	5	6	7
Dis1	Displays for this product are frequent.	1	2	3	4	5	6	7
Dis2	This brand is intensively displayed.	1	2	3	4	5	6	7
Dis3	Displays for this product are more expensive than displays for competing brands.	1	2	3	4	5	6	7
Dis4	I know this product has attractive in-shop promotion.	1	2	3	4	5	6	7
Dis5	This product has an attractive window display that draws me to shop inside.	1	2	3	4	5	6	7

Thank you for your cooperation

APPENDIX B

QUESTIONNAIRE-Thai

Othman Yeop Abdullah
Graduate School of Business

Universiti Utara Malaysia

แบบสอบถาม

ปัจจัยของคุณค่าตราสินค้าสำหรับอุตสาหกรรมหัตถกรรมขนาดย่อมในประเทศไทย

ข้าพเจ้าเป็นนักศึกษาปริญญาเอก มหาวิทยาลัยยูทารา ประเทศมาเลเซีย ได้จัดทำแบบสอบถามเพื่อเป็นการเก็บรวบรวมข้อมูลเกี่ยวกับคุณค่าตราสินค้าของผลิตภัณฑ์หัตถกรรมของไทย โดยมุ่งหวังจะนำข้อมูลที่ได้รับจากการสำรวจมาใช้ประโยชน์ต่อการศึกษาครั้งนี้ จึงขอความกรุณาให้ตอบแบบสอบถามทุกข้อตามข้อเท็จจริง

คำชี้แจง: กรุณาใส่เครื่องหมาย ✓ หน้าข้อความที่ตรงกับข้อเท็จจริงหรือความคิดเห็นของท่านมากที่สุด

<u>ส่วนที่ 1 ข้อมูลทั่วไปเกี่ยวกับผู้ตอบแบบสอบถาม</u>

1. เพศ

❒ ชาย ❒ หญิง

2. อายุ ..... ปี

3. สถานภาพ

❒ โสด ❒ สมรส

❒ แยกกันอยู่ ❒ หย่าร้าง

4. รายได้ต่อเดือน

❒ ต่ำกว่า 5,000 บาท ❒ 5,001-10,000 บาท

❒ 10,001-15,000 บาท ❒ 15,001- 20,000 บาท

❒ 20,001-25,000 บาท ❒ 25,001- 30,000 บาท

❒ 30,001-35,000 บาท ❒ สูงกว่า 35,001 บาท

5. การศึกษา

❒ ต่ำกว่ามัธยมปลาย ❒ มัธยมปลาย/ปวช.

❒ อนุปริญญา/ปวส. ❒ ปริญญาตรี

❒ ปริญญาโทหรือสูงกว่า ❒ อื่นๆ ระบุ .....

6. อาชีพ

❒ แม่บ้าน ❒ เจ้าของธุรกิจ/ธุรกิจส่วนตัว

❒ ข้าราชการ/พนักงานรัฐวิสาหกิจ ❒ พนักงานบริษัท/ลูกจ้าง

❒ นักเรียน/นักศึกษา ❒ อื่นๆ ระบุ .....

7. สาเหตุที่ท่านตัดสินใจซื้อสินค้าหัตถกรรม เพราะ (เลือกตอบได้มากกว่า 1 ข้อ)

❒ เพื่อนำไปตกแต่งบ้าน ❒ เพื่อนำไปเป็นที่ระลึก

❒ การออกแบบสวยงาม ❒ รูปทรง/ภาพลักษณ์ของผลิตภัณฑ์

❒ คุณภาพดี/ทนทาน ❒ ราคาสมเหตุสมผล

❒ สนับสนุนธุรกิจในท้องถิ่น

<u>ส่วนที่ 2 เกี่ยวกับคุณค่าตราสินค้าหัตถกรรม</u>

คำชี้แจง : กรุณาใส่เครื่องหมาย ✓ หน้าข้อความที่ตรงกับข้อเท็จจริงหรือความคิดเห็นของท่านมากที่สุด

เกณฑ์การตอบ : แบบสอบถามนี้เป็นแบบประเมินค่า 7 ระดับ โดยมีเกณฑ์การประเมิน ดังนี้

รหัส	รายการ	1	2	3	4	5	6	7
BA1	ท่านคิดว่าจะสามารถจดจำสินค้าหัตถกรรมนี้ได้							
BA2	ท่านคิดว่าผลิตภัณฑ์นี้ มีลักษณะพิเศษเฉพาะที่สร้างความประทับใจได้อย่างรวดเร็ว							
BA3	ท่านรู้ถึงลักษณะของสินค้าหัตถกรรม							
BA4	ครั้งแรกที่กล่าวถึงผลิตภัณฑ์นี้ ท่านก็ประทับใจแล้ว							
BA5	ท่านเคยรู้จักผลิตภัณฑ์นี้มาก่อนแล้ว							
Bas1	ท่านไม่คิดมาก ในการตัดสินใจที่เลือกผลิตภัณฑ์นี้							
Bas2	ท่านสามารถจดจำสัญลักษณ์ของสินค้านี้ ได้อย่างรวดเร็ว							
Bas3	ท่านรู้สึกภูมิใจ ที่จะซื้อสินค้า "ตรา/ยี่ห้อ" นี้							
Bas4	ท่านมักจะกล่าวถึงผลิตภัณฑ์นี้ในทางที่ดีเสมอ							
Bas5	ท่านคิดว่าผลิตภัณฑ์นี้สามารถเข้าสู่ตลาดระดับสูงได้							

รหัส	รายการ	1	2	3	4	5	6	7
PQ1	ท่านคิดว่าผลิตภัณฑ์นี้ มีคุณภาพดีมาก							
PQ2	ท่านเห็นควรว่าผลิตภัณฑ์นี้ สามารถนำเสนอสิ่งที่ดีในอนาคต							
PQ3	ท่านคิดว่าผลิตภัณฑ์นี้ มีความทนทานอย่างสูง							
PQ4	ท่านมีความคิดเห็นว่าผลิตภัณฑ์มีความน่าเชื่อถือ							
PQ5	ผลิตภัณฑ์นี้ใช้งานได้ง่าย และมีความเหมาะสม							
BT1	ท่านสนใจสินค้าหัตถกรรม "ตรา/ยี่ห้อ" นี้							
BT2	ท่านรู้ถึงความสามารถของผลิตภัณฑ์นี้							
BT3	ท่านรู้สึกเชื่อใจผู้ผลิตสินค้าหัตถกรรมรายนี้							
BT4	เมื่อท่านเห็นการจัดแสดงสินค้า ก็เชื่อมั่นในสินค้าทันที							
BT5	ท่านคิดว่าไม่มีเหตุผล ที่จะไม่เชื่อถือในผลิตภัณฑ์นี้							
BI1	สินค้านี้ สามารถตอบสนองความพอใจได้อย่างเหมาะสม							
BI2	สินค้านี้ มีความโดดเด่นในสไตล์ของตัวมันเอง							
BI3	สินค้านี้ มีรูปแบบที่แตกต่างไปจากหัตถกรรมอื่น							
BI4	สินค้านี้ มีประวัติความเป็นมาที่ยาวนาน							
BI5	สินค้านี้ มีภาพลักษณ์ที่ดี							
BL1	ท่านมักจะซื้อสินค้าหัตถกรรม "ตรา/ยี่ห้อ" เดียวกัน							
BL2	ท่านคิดจะแนะนำสินค้าหัตถกรรมนี้ให้แก่ผู้บุคคลอื่น							
BL3	ท่านตัดสินใจเลือกสินค้าหัตถกรรมนี้ เป็นอย่างแรก							
BL4	ท่านจะใช้สินค้านี้ตลอดไป เพราะพอใจและคุ้นเคย							
BL5	ท่านยังคงใช้สินค้านี้ แม้ว่าจะมีคู่แข่งขันมากมาย							
BL6	ถ้ามีโอกาส ท่านคิดจะเปลี่ยนไปใช้สินค้าหัตถกรรมที่หรูหรา/ราคาแพงกว่านี้							
BL7	ท่านไม่คิดจะซื้อสินค้าหัตถกรรม "ตรา/ยี่ห้อ" อื่น							

รหัส	รายการ	1	2	3	4	5	6	7
BL8	ท่านยังมั่นคงและภักดีต่อผลิตภัณฑ์นี้ตลอดไป							
Sat1	ท่านมีความพึงพอใจอย่างยิ่งกับสินค้าของกิจการนี้							
Sat2	สินค้านี้อยู่ในความคาดหวัง ที่ท่านจะซื้อ							
Sat3	ท่านรู้สึกมีความสุข ที่ได้ตัดสินใจเลือกสินค้านี้							
Sat4	ท่านเชื่อมั่นว่าได้ทำสิ่งถูกต้องในการเลือกซื้อสินค้านี้							
Sat5	ท่านจะเลือกซื้อสินค้าที่เป็นชุดเดียวกันในโอกาสต่อไป							
LC1	ท่านรู้สึกพอใจสินค้า เพราะมีราคาต่ำ							
LC2	ท่านคิดว่าสินค้ามีต้นทุนในการผลิตต่ำ							
LC3	ท่านคิดว่ากิจการนี้ ลดการให้บริการแก่ลูกค้า							
LC4	ท่านมั่นใจว่าสินค้าน่าเชื่อถือและมีราคาถูก							
LC5	สินค้านี้ น่าจะมีส่วนประกอบ (ชิ้นส่วน) น้อยมาก							
UD4	สินค้านี้ได้รวบรวมคุณลักษณะเด่นๆ ไว้ด้วยกัน							
UD5	ท่านคิดว่าสินค้ามีเอกลักษณ์เฉพาะตัว							
Or1	สินค้ามีรูปแบบที่มีคุณค่า ซึ่งได้มาจากการระดมความคิด							
Or2	รูปแบบของสินค้าเป็นที่ยอมรับ แต่ไม่ได้มีการระดมความคิดในการออกแบบ							
Or3	รูปแบบของสินค้าเป็นที่ยอมรับ แต่ราคาเพิ่มสูงขึ้นเพราะหลายฝ่ายเข้ามามีส่วนร่วมในการออกแบบ							
Or4	รูปแบบสินค้าเป็นที่ยอมรับ แต่น่าจะหารูปแบบใหม่ๆ มาจากแหล่งอื่นด้วย							
Or5	สินค้านี้มีวัตถุดิบเป็นข้อจำกัดของรูปแบบ							
P1	ท่านคิดว่าสินค้ารายการนี้ มีคุณภาพดีมาก							
P2	ท่านคิดว่าสินค้ารายการนี้ มีองค์ประกอบมาก							
P3	ท่านชอบสินค้ารายการนี้ เพราะสามารถพบเห็นได้อย่างบ่อย ๆ							

รหัส	รายการ	1	2	3	4	5	6	7
P4	ท่านชื่นชอบสินค้ารายการนี้ เพราะสามารถเลือกได้อย่างได้ตามที่ต้องการ							
P5	สินค้ารายการนี้ มีการออกแบบที่สวยงาม							
DF1	จำนวนร้านค้าที่ขาย "ตรา/ยี่ห้อ" นี้ มีเป็นจำนวนมาก							
DF2	เมื่อเปรียบเทียบระหว่างสินค้านี้กับสินค้าของคู่แข่งขัน "ตรา/ยี่ห้อ" จะมีอยู่ในสต๊อกมากกว่า "ตรา/ยี่ห้อ" อื่น ๆ							
DF3	สินค้า "ตรา/ยี่ห้อ" นี้ มีการวางจำหน่ายในร้านค้าอย่างกว้างขวาง							
DF4	ร้านค้าส่วนมากจะขายสินค้า"ตรา/ยี่ห้อ" นี้ เมื่อเทียบกับคู่แข่งขัน							
DF5	ร้านค้านี้ จะเสนอขายสินค้าที่มีลักษณะเฉพาะเป็นพิเศษ							
PL1	ท่านคิดว่าบรรจุภัณฑ์ของสินค้าร้านนี้ ดูดีและสวยงาม							
PL2	บรรจุภัณฑ์ของสินค้าร้านนี้ ดูมีคุณค่าอย่างแท้จริง							
PL3	บรรจุภัณฑ์ของสินค้า มีตราและสัญลักษณ์ของผู้ผลิตอยู่ด้วย							
PL4	สินค้านี้ มีฉลากที่แสดงรายละเอียด อย่างมีคุณค่า							
PL5	ท่านคิดว่าสีสันและภาพของฉลากสินค้านี้ ดูสวยงาม							
Dis1	ท่านคิดว่าสินค้านี้ มีการจัดแสดงอย่างสม่ำเสมอ							
Dis1	ท่านคิดว่าสินค้านี้ มีการจัดแสดงอย่างมากมาย							
Dis1	ในการจัดแสดงสินค้านี้ มีค่าใช้จ่ายสูงกว่าคู่แข่งขัน							
Dis1	ท่านคิดว่าสินค้านี้ดึงดูดความสนใจ สำหรับการโฆษณาภายในร้านค้า							
Dis1	สินค้านี้ดึงดูดความสนใจ จากการจัดแสดงหน้าร้าน เพื่อชักนำให้เข้าไปภายในร้าน							

APPENDIX C

DESCRIPTIVE PROFILE

Appendix C
Descriptive Profile

Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	158	37.9	37.9	37.9
	female	259	62.1	62.1	100.0
	Total	417	100.0	100.0	

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	3.4	3.4	3.4
	2	143	34.3	34.3	37.6
	3	158	37.9	37.9	75.5
	4	75	18.0	18.0	93.5
	5	25	6.0	6.0	99.5
	6	2	.5	.5	100.0
	Total	417	100.0	100.0	

Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	145	34.8	34.8	34.8
	Married	251	60.2	60.2	95.0
	Separated	10	2.4	2.4	97.4
	Divorce	11	2.6	2.6	100.0
	Total	417	100.0	100.0	

Occ

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Housewife	29	7.0	7.0	7.0
	Business owner/Entrepreneur	121	29.0	29.0	36.0
	Government officer	108	25.9	25.9	61.9
	Private company employee	136	32.6	32.6	94.5
	Student	12	2.9	2.9	97.4
	Others	11	2.6	2.6	100.0
	Total	417	100.0	100.0	

Edu

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than secondary school	6	1.4	1.4	1.4
	Secondary school	28	6.7	6.7	8.2
	Diploma	93	22.3	22.3	30.5
	Bachelor Degree	234	56.1	56.1	86.6
	Master or Doctoral degree	56	13.4	13.4	100.0
	Total	417	100.0	100.0	

Inc

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 5,000 Baht	5	1.2	1.2	1.2
	5,001-10,000 Baht	87	20.9	20.9	22.1
	10,001-15,000 Baht	116	27.8	27.8	49.9
	15,001-20,000 Baht	94	22.5	22.5	72.4
	20,001-25,000 Baht	62	14.9	14.9	87.3
	25,001-30,000 Baht	32	7.7	7.7	95.0
	30,001-35,000 Baht	9	2.2	2.2	97.1
	More than 35,001 Baht	12	2.9	2.9	100.0
	Total	417	100.0	100.0	

APPENDIX D

Z-SCORES FOR ALL ITEMS

Appendix D
Z-scores for all items

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: BL1	417	-1.93959	1.74946	-.0375627	.93369541	bl1
Zscore: BL2	417	-2.24874	1.67834	.0043872	.98025705	tbl2
Zscore: BL3	417	-2.29174	2.52517	-.0045742	.96296699	tbl3
Zscore: BL4	417	-1.39300	2.39433	.0261163	.98065370	tbl4
Zscore: BL5	417	-2.37306	2.44400	.0250705	.95900385	tbl5
Zscore: BL6	417	-2.31382	2.53585	.1005498	1.02237848	tbl6
Zscore: BL7	417	-2.13852	2.69060	.0340070	.99110378	tbl7
Zscore: BL8	417	-1.36643	2.52574	-.0130354	.98384274	tbl8

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: BAw1	417	-2.62292	2.47506	.0259073	.89078611	tbaw1
Zscore: BAw2	417	-2.67011	2.36669	.0012855	.95123405	tbaw2
Zscore: BAw3	417	-3.39894	2.39347	.0390036	.94747141	tbaw3
Zscore: BAw4	417	-3.14078	2.21983	.0280250	.88841448	tbaw4
Zscore: BAw5	417	-2.69420	2.26694	-.0510370	.96607302	tbaw5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: BAs1	417	-2.30810	2.54593	-.0009817	.90045147	tbas1
Zscore: BAs2	417	-2.52736	2.33846	-.0536100	.97025199	tbas2
Zscore: BAs3	417	-2.99708	2.41287	.1165619	.91813114	tbas3
Zscore: BAs4	417	-3.10650	2.33655	.0936330	.90053546	tbas4
Zscore: BAs5	417	-3.58045	2.26993	.0158233	.94588135	tbas5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: PQ1	417	-3.52184	2.22021	.0147284	.89066309	tpq1
Zscore: PQ2	417	-2.69967	2.15739	-.0579855	.90388315	tpq2
Zscore: PQ3	417	-3.84584	2.17268	.0077478	.99771170	tpq3
Zscore: PQ4	417	-3.50558	2.22664	-.0735805	.93996769	tpq4
Zscore: PQ5	417	-2.58756	2.32828	-.0506578	.95628187	tpq5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: BT1	417	-3.38232	2.39495	.0258541	.98303290	tbt1
Zscore: BT2	417	-3.45757	2.36611	.0198828	1.01776106	tbt2
Zscore: BT3	417	-2.36196	2.05268	-.0240716	.94956129	tbt3
Zscore: BT4	417	-3.39811	2.51199	-.0155105	.91687759	tbt4
Zscore: BT5	417	-3.23057	2.20873	-.1152557	.92655744	tbt5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: BI1	417	-3.09455	2.14724	.0031918	1.02194116	tbi1
Zscore: BI2	417	-3.02860	2.29670	-.0047110	1.00340887	tbi2
Zscore: BI3	417	-3.16464	2.08089	.0118991	.99421010	tbi3
Zscore: BI4	417	-3.03649	2.16992	.0064281	1.00271808	tbi4
Zscore: BI5	417	-3.35319	2.13385	.0078058	.99813729	Tbi5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: BI1	417	-3.09455	2.14724	.0031918	1.02194116	tbi1
Zscore: BI2	417	-3.02860	2.29670	-.0047110	1.00340887	tbi2
Zscore: BI3	417	-3.16464	2.08089	.0118991	.99421010	tbi3
Zscore: BI4	417	-3.03649	2.16992	.0064281	1.00271808	tbi4
Zscore: BI5	417	-3.35319	2.13385	.0078058	.99813729	Tbi5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: LC1	417	-2.36042	1.98466	.0100499	1.00599244	tlc1
Zscore: LC2	417	-2.09625	2.09289	-.0028115	.99804409	tlc2
Zscore: LC3	417	-2.83400	2.13354	.0001285	1.01290971	tlc3
Zscore: LC4	417	-2.82056	1.94093	-.0109400	1.01336967	tlc4
Zscore: LC5	417	-2.97077	1.98088	.0100086	1.00377831	tlc5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: UD4	417	-1.89348	2.22782	-.0016819	.99618672	tud4
Zscore: UD5	417	-2.72580	2.32048	.0161010	1.01008757	tud5
Zscore: Ori1	417	-2.83382	2.58015	.0069351	1.00853014	tori1
Zscore: Ori2	417	-1.91746	2.51155	.0045643	1.00117950	tori2
Zscore: Ori3	417	-1.88952	2.37990	.0127326	.99714691	tori3
Zscore: Ori4	417	-1.97868	2.40469	.0180594	.99305980	tori4
Zscore: Ori5	417	-2.76494	2.32019	.0049251	1.00387832	tori5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: P1	417	-2.45748	2.20372	-.0054270	1.02018852	tp1
Zscore: P2	417	-2.71366	2.37317	.0091453	1.00621640	tp2
Zscore: P3	417	-3.39129	2.31861	-.0066462	1.00299843	tp3
Zscore: P4	417	-3.11303	2.09706	.0092745	.99181832	tp4
Zscore: P5	417	-2.60664	2.16386	-.0135098	1.00557409	tp5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: P1	417	-2.45748	2.20372	-.0054270	1.02018852	tp1
Zscore: P2	417	-2.71366	2.37317	.0091453	1.00621640	tp2
Zscore: P3	417	-3.39129	2.31861	-.0066462	1.00299843	tp3
Zscore: P4	417	-3.11303	2.09706	.0092745	.99181832	tp4
Zscore: P5	417	-2.60664	2.16386	-.0135098	1.00557409	tp5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: PL1	417	-2.33431	2.27873	.0032958	1.00287628	tpl1
Zscore: PL2	417	-2.32497	2.15890	.0126455	1.00451643	tpl2
Zscore: PL3	417	-2.42925	2.20389	.0215730	1.00796016	tpl3
Zscore: PL4	417	-2.24605	2.10058	-.0034152	1.00644676	tpl4
Zscore: PL5	417	-2.21873	2.12568	.0003135	1.01248633	tpl5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: Dis1	417	-2.65513	2.41098	.0065123	1.00116294	tdis1
Zscore: Dis2	417	-2.75455	2.42193	.0080971	1.01503133	tdis2
Zscore: Dis3	417	-2.55670	2.34036	.0040288	1.00609663	tdis3
Zscore: Dis4	417	-2.84495	2.33209	.0133565	.98591152	tdis4
Zscore: Dis5	417	-2.65192	2.26570	.0101379	1.02120695	tdis5

APPENDIX E

FACTOR ANNLYSIS

Appendix E

Factor Analysis

Rotated Component Matrix[a]			
	Component		
	1	2	3
Ori5	.727		
UD4	.677		
Ori1	.664		
UD5	.584		
Ori4	.532		
Ori3	.490		
Ori2	.399		
LC2		.747	
LC4		.728	
LC3		.622	
LC5		.571	
LC1		.510	.468
Sat2			.652
Sat3			.632
Sat5			.619
Sat1			.611
Sat4			.493
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 4 iterations.			

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.711
Bartlett's Test of Sphericity	Approx. Chi-Square	186.226
	df	10
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.120	18.353	18.353	3.120	18.353	18.353	2.634	15.496	15.496
2	2.335	13.734	32.087	2.335	13.734	32.087	2.175	12.794	28.291
3	1.518	8.932	41.019	1.518	8.932	41.019	2.164	12.728	41.019
4	.982	5.777	46.796						
5	.970	5.708	52.505						
6	.928	5.459	57.964						
7	.872	5.132	63.095						
8	.843	4.957	68.052						
9	.797	4.689	72.741						
10	.720	4.236	76.977						
11	.687	4.043	81.020						
12	.619	3.644	84.664						
13	.616	3.623	88.287						
14	.568	3.343	91.630						
15	.522	3.072	94.703						
16	.458	2.696	97.398						
17	.442	2.602	100.000						

Extraction Method: Principal Component Analysis.

Rotated Component Matrix[a]

	Component			
	1	2	3	4
PL1	.767			
PL2	.722			
PL3	.717			
PL4	.697			
Dis2		.732		
Dis3		.695		
Dis4		.690		
Dis1		.669		
P3			.671	
P2			.632	
P1			.531	
P5			.516	
DF4				.661
DF5				.633
DF3				.592

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.698
Bartlett's Test of Sphericity	Approx. Chi-Square	744.086
	df	105
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.467	16.445	16.445	2.467	16.445	16.445	2.245	14.964	14.964
2	2.006	13.376	29.821	2.006	13.376	29.821	2.044	13.627	28.591
3	1.450	9.668	39.489	1.450	9.668	39.489	1.496	9.971	38.562
4	1.201	8.009	47.498	1.201	8.009	47.498	1.340	8.936	47.498
5	.977	6.510	54.008						
6	.868	5.785	59.793						
7	.852	5.680	65.474						
8	.811	5.407	70.881						
9	.786	5.240	76.121						
10	.747	4.982	81.103						
11	.690	4.600	85.703						
12	.641	4.270	89.973						
13	.564	3.759	93.732						
14	.492	3.280	97.013						
15	.448	2.987	100.000						

Extraction Method: Principal Component Analysis.

APPENDIX F

NORMALITY

Appendix F

Normality

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: BL1	417	-1.93959	1.74946	-.0375627	.93369541	bl1
Zscore: BL2	417	-2.24874	1.67834	.0043872	.98025705	tbl2
Zscore: BL3	417	-2.29174	2.52517	-.0045742	.96296699	tbl3
Zscore: BL4	417	-1.39300	2.39433	.0261163	.98065370	tbl4
Zscore: BL5	417	-2.37306	2.44400	.0250705	.95900385	tbl5
Zscore: BL6	417	-2.31382	2.53585	.1005498	1.02237848	tbl6
Zscore: BL7	417	-2.13852	2.69060	.0340070	.99110378	tbl7
Zscore: BL8	417	-1.36643	2.52574	-.0130354	.98384274	tbl8

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: BAw1	417	-2.62292	2.47506	.0259073	.89078611	tbaw1
Zscore: BAw2	417	-2.67011	2.36669	.0012855	.95123405	tbaw2
Zscore: BAw3	417	-3.39894	2.39347	.0390036	.94747141	tbaw3
Zscore: BAw4	417	-3.14078	2.21983	.0280250	.88841448	tbaw4
Zscore: BAw5	417	-2.69420	2.26694	-.0510370	.96607302	tbaw5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: BAs1	417	-2.30810	2.54593	-.0009817	.90045147	tbas1
Zscore: BAs2	417	-2.52736	2.33846	-.0536100	.97025199	tbas2
Zscore: BAs3	417	-2.99708	2.41287	.1165619	.91813114	tbas3
Zscore: BAs4	417	-3.10650	2.33655	.0936330	.90053546	tbas4
Zscore: BAs5	417	-3.58045	2.26993	.0158233	.94588135	tbas5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: PQ1	417	-3.52184	2.22021	.0147284	.89066309	tpq1
Zscore: PQ2	417	-2.69967	2.15739	-.0579855	.90388315	tpq2
Zscore: PQ3	417	-3.84584	2.17268	.0077478	.99771170	tpq3
Zscore: PQ4	417	-3.50558	2.22664	-.0735805	.93996769	tpq4
Zscore: PQ5	417	-2.58756	2.32828	-.0506578	.95628187	tpq5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: BT1	417	-3.38232	2.39495	.0258541	.98303290	tbt1
Zscore: BT2	417	-3.45757	2.36611	.0198828	1.01776106	tbt2
Zscore: BT3	417	-2.36196	2.05268	-.0240716	.94956129	tbt3
Zscore: BT4	417	-3.39811	2.51199	-.0155105	.91687759	tbt4
Zscore: BT5	417	-3.23057	2.20873	-.1152557	.92655744	tbt5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: BI1	417	-3.09455	2.14724	.0031918	1.02194116	tbi1
Zscore: BI2	417	-3.02860	2.29670	-.0047110	1.00340887	tbi2
Zscore: BI3	417	-3.16464	2.08089	.0118991	.99421010	tbi3
Zscore: BI4	417	-3.03649	2.16992	.0064281	1.00271808	tbi4
Zscore: BI5	417	-3.35319	2.13385	.0078058	.99813729	Tbi5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: BI1	417	-3.09455	2.14724	.0031918	1.02194116	tbi1
Zscore: BI2	417	-3.02860	2.29670	-.0047110	1.00340887	tbi2
Zscore: BI3	417	-3.16464	2.08089	.0118991	.99421010	tbi3
Zscore: BI4	417	-3.03649	2.16992	.0064281	1.00271808	tbi4
Zscore: BI5	417	-3.35319	2.13385	.0078058	.99813729	Tbi5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: LC1	417	-2.36042	1.98466	.0100499	1.00599244	tlc1
Zscore: LC2	417	-2.09625	2.09289	-.0028115	.99804409	tlc2
Zscore: LC3	417	-2.83400	2.13354	.0001285	1.01290971	tlc3
Zscore: LC4	417	-2.82056	1.94093	-.0109400	1.01336967	tlc4
Zscore: LC5	417	-2.97077	1.98088	.0100086	1.00377831	tlc5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: UD4	417	-1.89348	2.22782	-.0016819	.99618672	tud4
Zscore: UD5	417	-2.72580	2.32048	.0161010	1.01008757	tud5
Zscore: Ori1	417	-2.83382	2.58015	.0069351	1.00853014	tori1
Zscore: Ori2	417	-1.91746	2.51155	.0045643	1.00117950	tori2
Zscore: Ori3	417	-1.88952	2.37990	.0127326	.99714691	tori3
Zscore: Ori4	417	-1.97868	2.40469	.0180594	.99305980	tori4
Zscore: Ori5	417	-2.76494	2.32019	.0049251	1.00387832	tori5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: P1	417	-2.45748	2.20372	-.0054270	1.02018852	tp1
Zscore: P2	417	-2.71366	2.37317	.0091453	1.00621640	tp2
Zscore: P3	417	-3.39129	2.31861	-.0066462	1.00299843	tp3
Zscore: P4	417	-3.11303	2.09706	.0092745	.99181832	tp4
Zscore: P5	417	-2.60664	2.16386	-.0135098	1.00557409	tp5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: P1	417	-2.45748	2.20372	-.0054270	1.02018852	tp1
Zscore: P2	417	-2.71366	2.37317	.0091453	1.00621640	tp2
Zscore: P3	417	-3.39129	2.31861	-.0066462	1.00299843	tp3
Zscore: P4	417	-3.11303	2.09706	.0092745	.99181832	tp4
Zscore: P5	417	-2.60664	2.16386	-.0135098	1.00557409	tp5

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: PL1	417	-2.33431	2.27873	.0032958	1.00287628	tpl1
Zscore: PL2	417	-2.32497	2.15890	.0126455	1.00451643	tpl2
Zscore: PL3	417	-2.42925	2.20389	.0215730	1.00796016	tpl3
Zscore: PL4	417	-2.24605	2.10058	-.0034152	1.00644676	tpl4
Zscore: PL5	417	-2.21873	2.12568	.0003135	1.01248633	tpl5

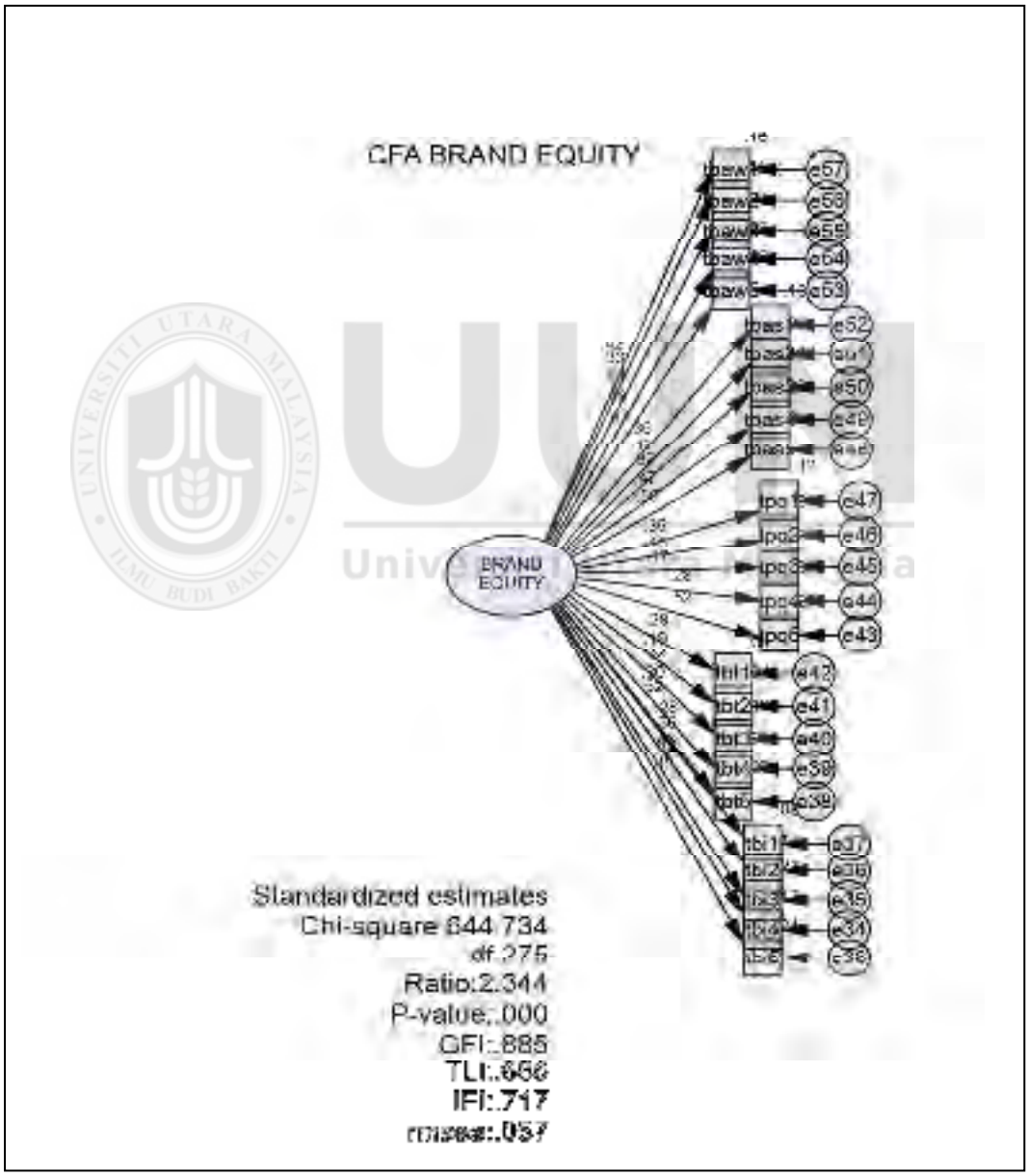
Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Tranformed
Zscore: Dis1	417	-2.65513	2.41098	.0065123	1.00116294	tdis1
Zscore: Dis2	417	-2.75455	2.42193	.0080971	1.01503133	tdis2
Zscore: Dis3	417	-2.55670	2.34036	.0040288	1.00609663	tdis3
Zscore: Dis4	417	-2.84495	2.33209	.0133565	.98591152	tdis4
Zscore: Dis5	417	-2.65192	2.26570	.0101379	1.02120695	tdis5

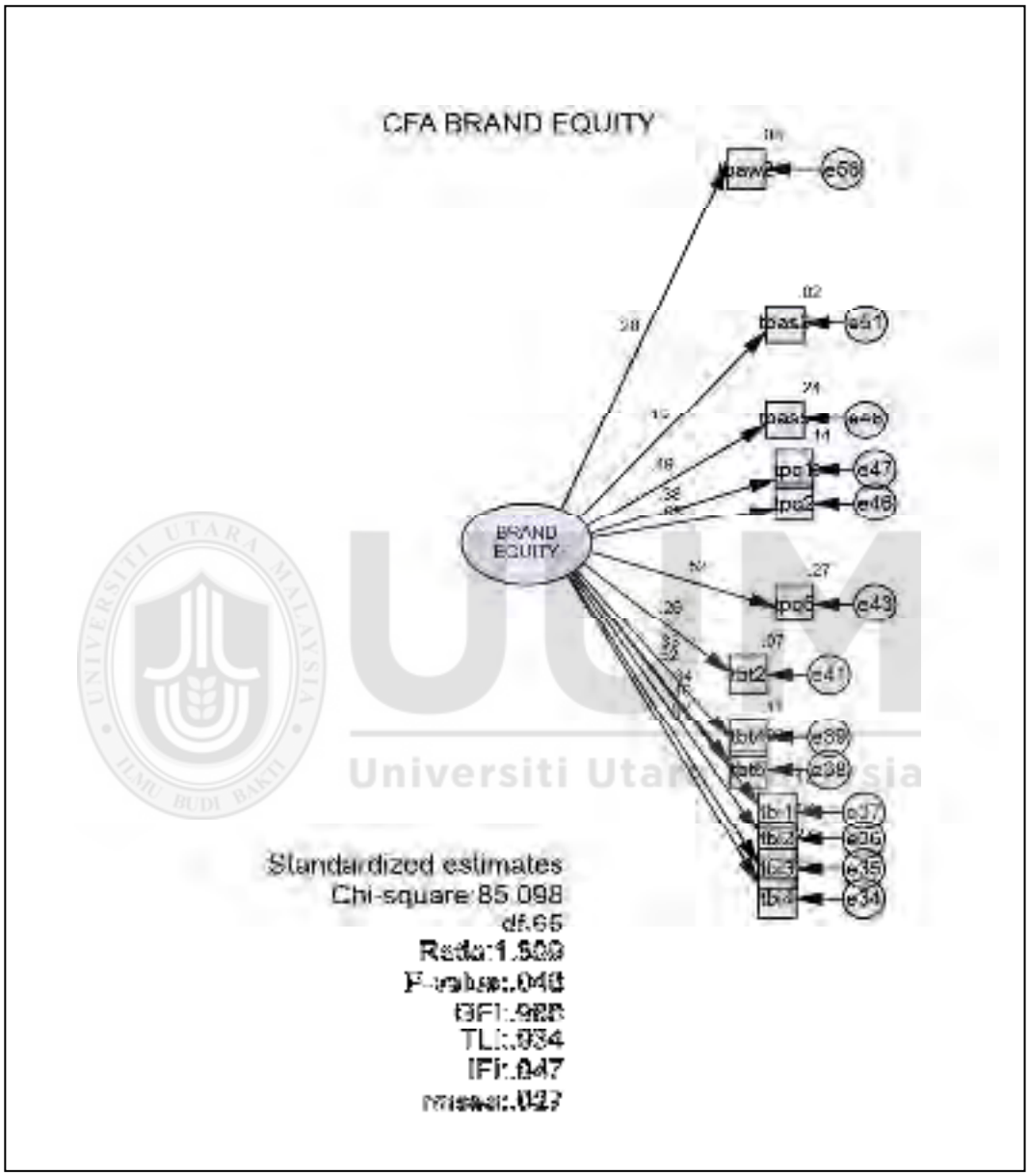
APPENDIX G

CONFIRMATORY FACTOR ANALYSIS

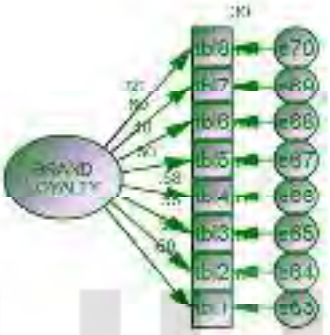
Appendix G

Confirmatory Factor Analysis



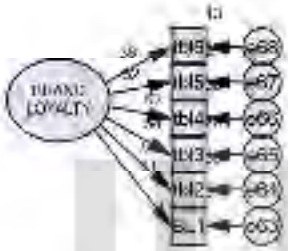

CFA BRAND EQUITY
BRAND EQUITY
Standardized estimates
Chi-square 85.098
df 65

CFA BRAND LOYALTY



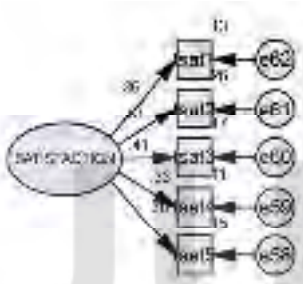
Standardized estimates
Chi square:78.327
df.20
Ratio:3.916
P-value:.000
GFI:.955
TLI:.871
IFI:.900
rmsea:.084

CFA BRAND LOYALITY



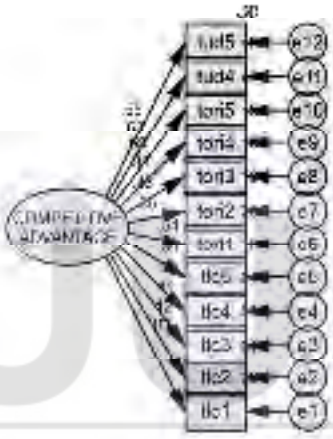
Standardized estimates
Chi-square=13.980
df=9
Ratio=1.553
P-value=.125
GFI=.992
TLI=.978
CFI=.987
RMSEA=.045

CFA SATISFACTION

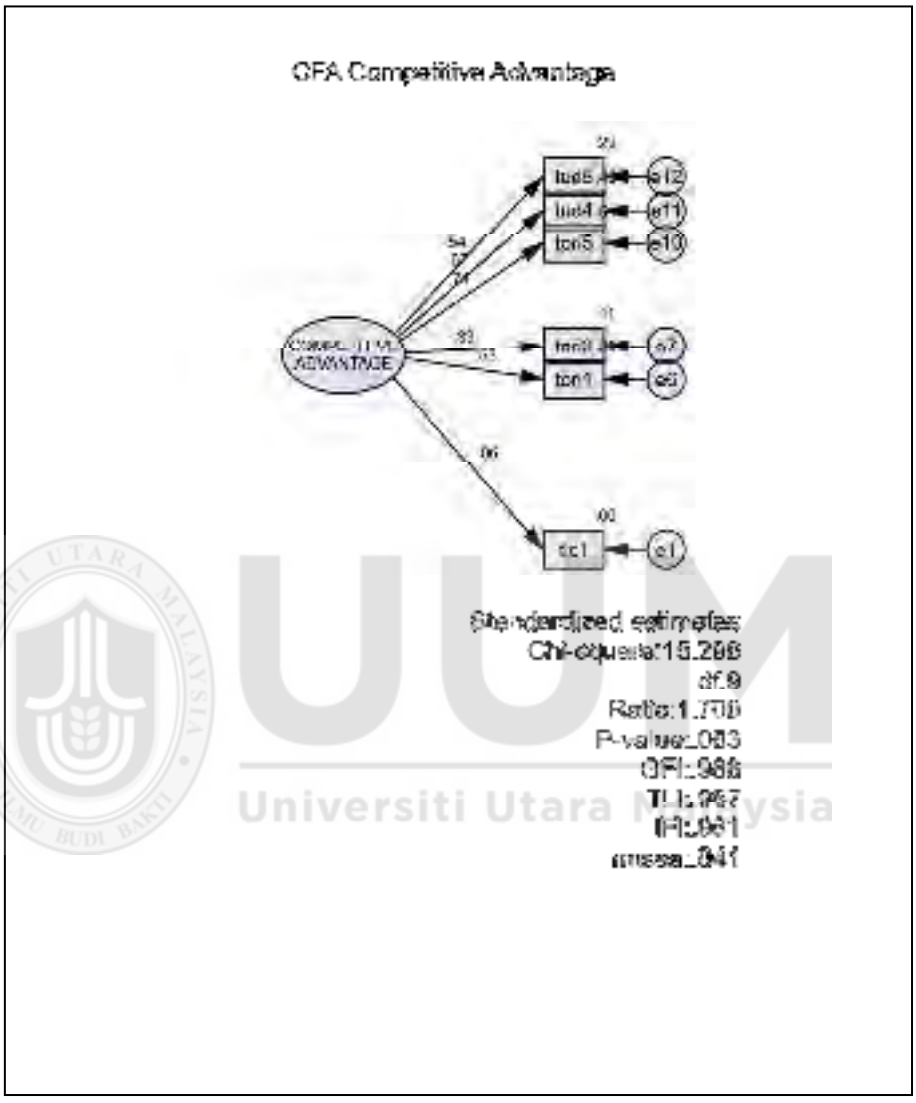


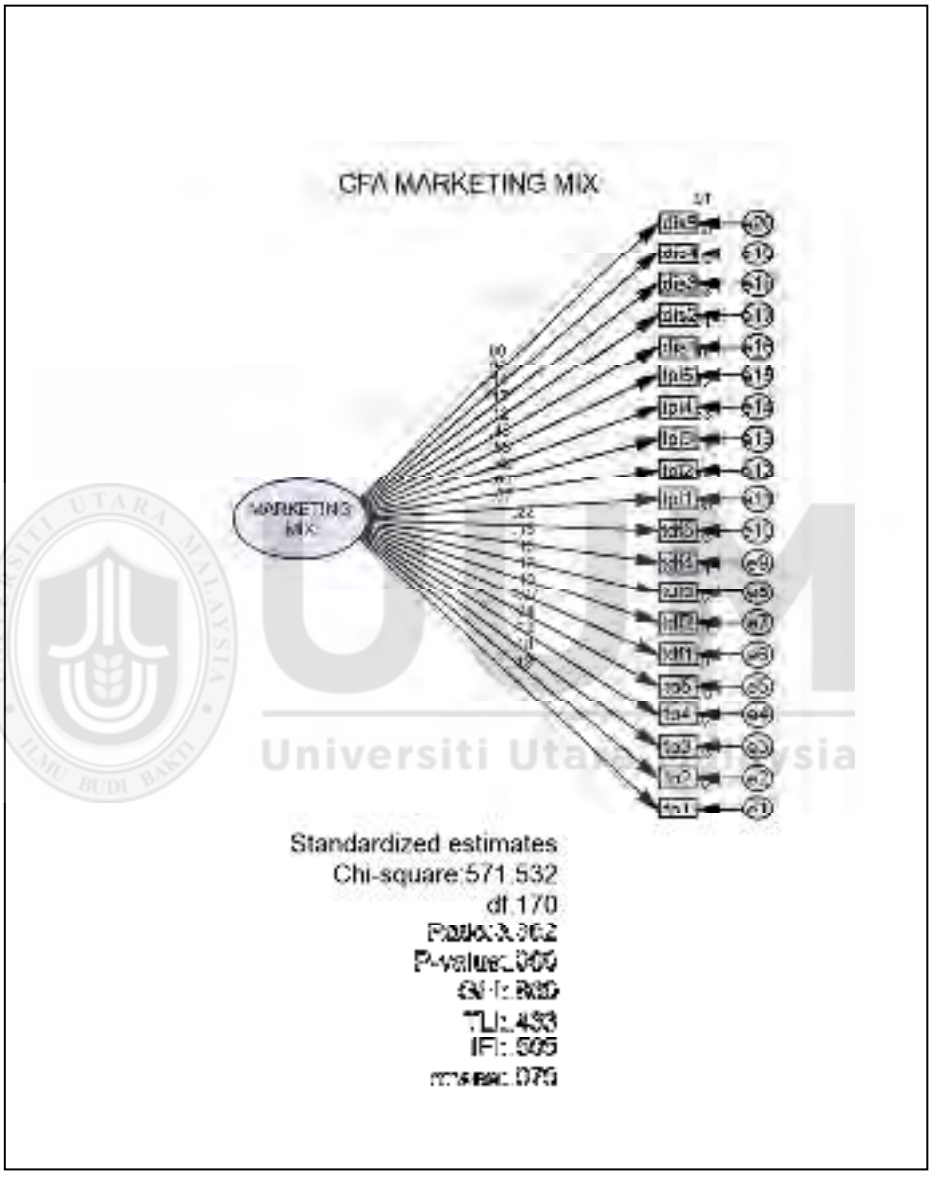
Standardized estimates
Chi-square=11.019
df=5
Ratio=2.203
P-value=.051
GFI=.990
TLI=.963
IFI=.935
rmsea=.054

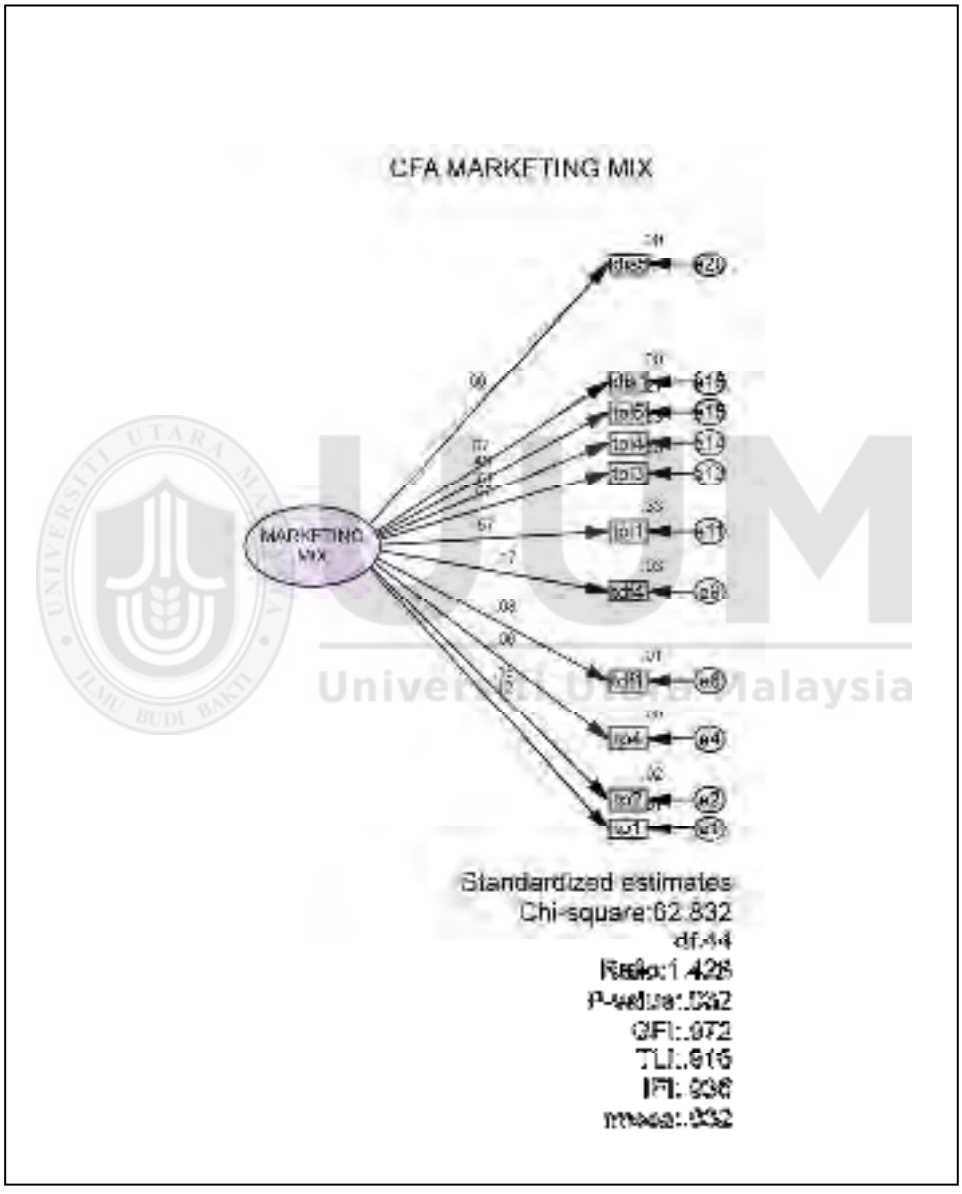
CFA Competitive Advantage

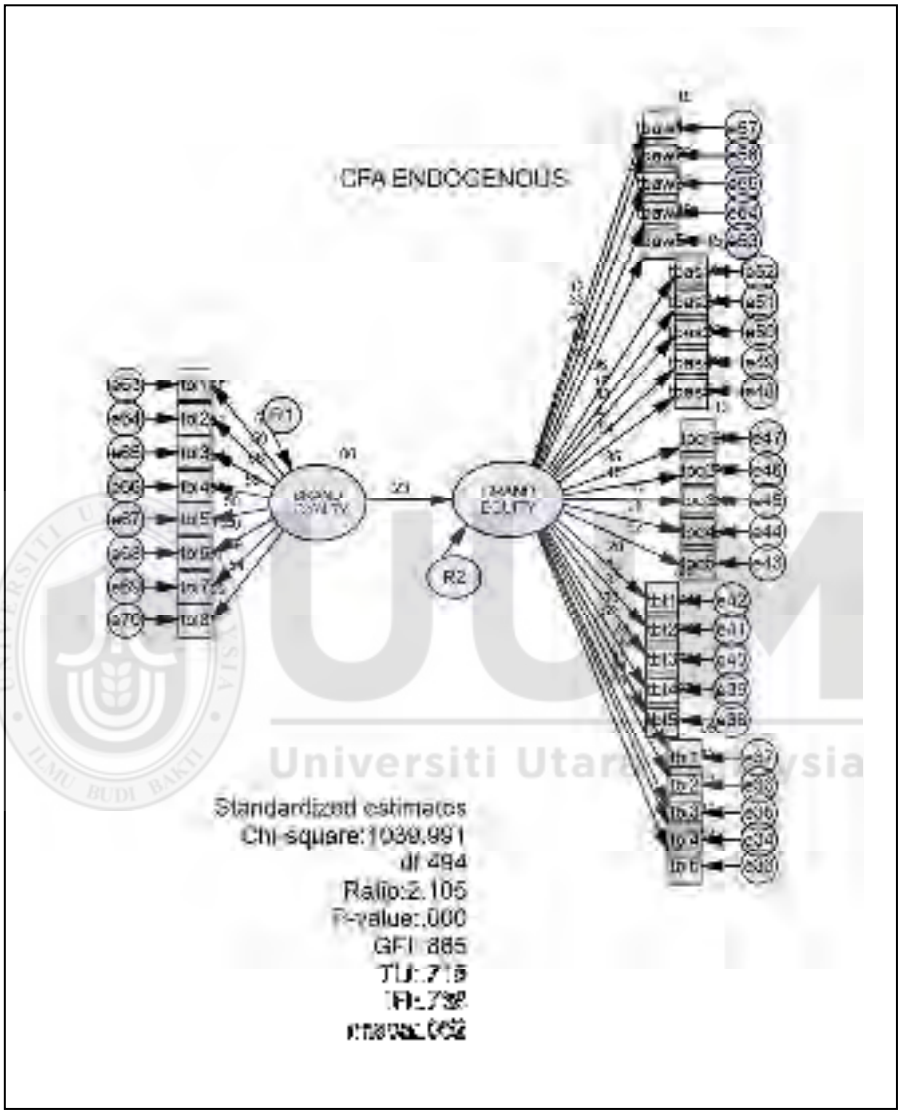


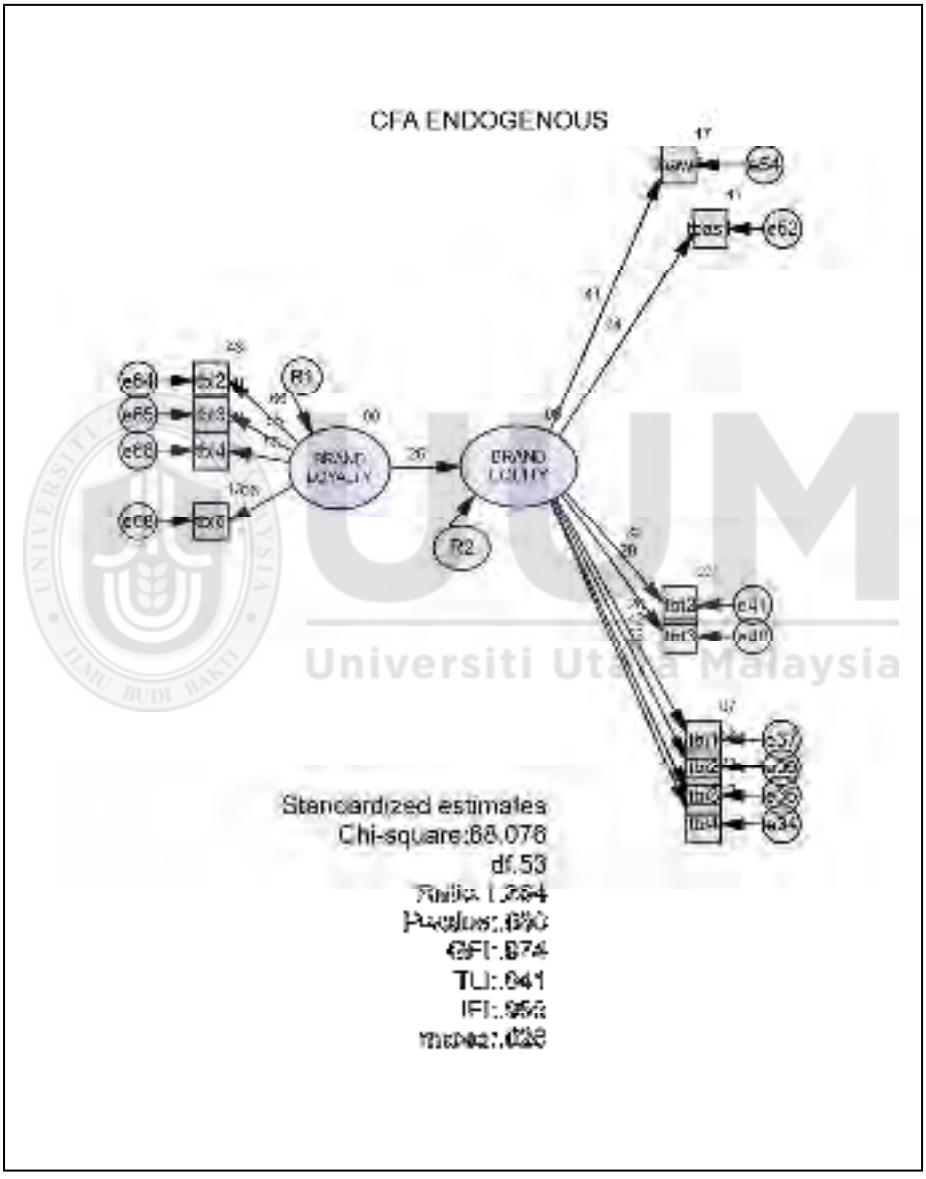
Standardized estimates
Chi-square:312.878
df:54
Ratio:5.794
P-value:.000
GFI:.660
TLI:.555
IFI:.642
rmsea:.107

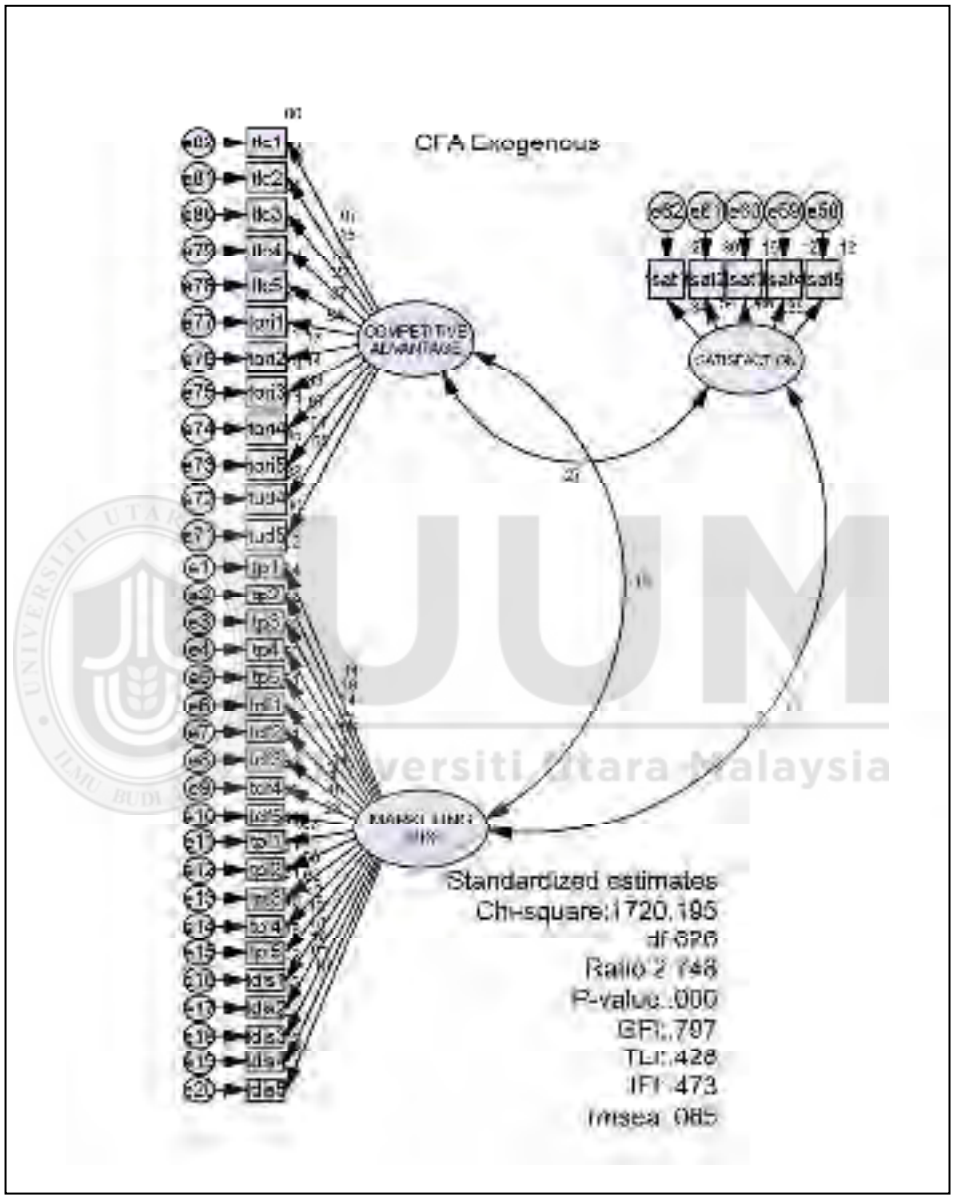


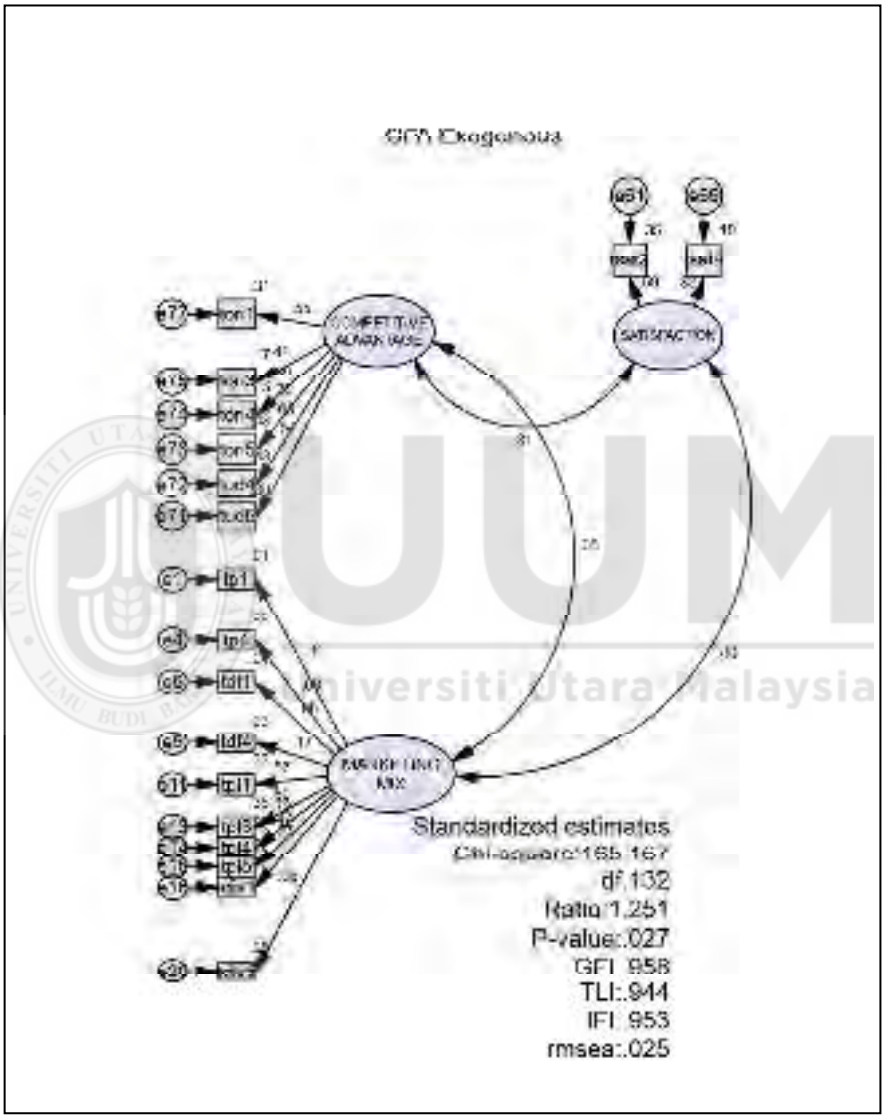

CFA MARKETING MIX
MARKETING MIX
Standardized estimates
Chi-square:571.532
df:170






CFA ENDOGENOUS
Standardized estimates
Chi-square:66.076
df.53
GFI:.974
TLI:.941
R1
R2
BRAND LOYALTY
BRAND EQUITY





APPENDIX H

GENERATED MODEL FINAL OUTPUT

Appendix H

Generated Model Final Output

Analysis Summary

Date and Time

Date: Wednesday, February 17, 2016
Time: 4:58:56 PM

Title

New marketing mix p.069 final use: Wednesday, February 17, 2016 4:58 PM

Notes for Group (Group number 1)

The model is recursive.

Sample size = 417

Variable Summary (Group number 1)

Your model contains the following variables (Group number 1)

Observed, endogenous variables
tsat1
tsat2
tsat4
tbl6
tbl5
tbl2
tbl1
tbaw4
tbas1
tbas5
tpq5
tbt3
tbt4
tbt5
tbi3
tbi4
tud5
tud4

tori5
tori4
tori3
tori2
tori1
tpl5
tpl4
tpl3
tpl2
Unobserved, endogenous variables
BRAND_LOYALTY
BRAND_EQUITY
Unobserved, exogenous variables
SATISFACTION
e62
e61
e59
e68
e67
e64
e63
e54
e52
e48
e43
e40
e39
e38
e35
e34
R1
COMPETITIVE_ADVANTAGE
e71
e72
e73
e74
e75
e76
e77
MARKETING_MIX
e15
e14
e13
e12
R2

Variable counts (Group number 1)

Number of variables in your model:	61
Number of observed variables:	27

Number of unobserved variables: 34
Number of exogenous variables: 32
Number of endogenous variables: 29

Parameter Summary (Group number 1)

	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	34	0	0	0	0	34
Labeled	0	0	0	0	0	0
Unlabeled	29	3	32	0	0	64
Total	63	3	32	0	0	98

Assessment of normality (Group number 1)

Variable	min	max	skew	c.r.	kurtosis	c.r.
tpl2	.010	.985	.050	.416	-1.075	-4.483
tpl3	.008	.986	.200	1.663	-1.029	-4.289
tpl4	.012	.982	.060	.496	-1.067	-4.446
tpl5	.013	.983	.020	.166	-.992	-4.134
tori1	.002	.953	-.107	-.896	-.870	-3.624
tori2	.028	.994	.078	.648	-.911	-3.796
tori3	.029	.991	.034	.282	-.845	-3.522
tori4	.024	.992	.110	.914	-.990	-4.128
tori5	.003	.990	-.094	-.787	-1.152	-4.803
tud4	.029	.987	.040	.338	-1.346	-5.609
tud5	.003	.990	-.102	-.847	-1.199	-4.998
tbi4	.001	.985	.166	1.383	-1.163	-4.849
tbi3	.001	.981	.185	1.544	-1.176	-4.903
tbt5	.001	.986	.240	1.997	-.994	-4.142
tbt4	.000	.994	.384	3.202	-.882	-3.677
tbt3	.009	.980	-.129	-1.077	-.875	-3.648
tpq5	.005	.990	.056	.466	-1.257	-5.238
tbas5	.000	.988	-.025	-.205	-1.260	-5.252
tbas1	.010	.995	-.030	-.247	-1.235	-5.148
tbaw4	.001	.987	-.054	-.450	-1.090	-4.545
tbl1	.026	.960	-.088	-.731	-1.298	-5.413
tbl2	.012	.953	.052	.431	-1.331	-5.548
tbl5	.009	.993	-.014	-.118	-1.273	-5.308
tbl6	.010	.994	-.083	-.692	-1.318	-5.492
tsat4	.001	.986	.454	3.783	-.645	-2.689
tsat2	.001	.977	.249	2.076	-1.222	-5.095

Variable	min	max	skew	c.r.	kurtosis	c.r.
tsat1	.077	.984	.456	3.804	-1.058	-4.410
Multivariate					-.937	-.242

Observations farthest from the centroid (Mahalanobis distance) (Group number 1)

Observation number	Mahalanobis d-squared	p1	p2
118	47.621	.008	.971
40	47.235	.009	.901
181	46.673	.011	.826
74	45.029	.016	.905
68	42.676	.028	.992
58	42.523	.029	.983
79	42.406	.030	.968
182	41.965	.033	.968
43	41.932	.033	.939
98	40.710	.044	.988
113	40.502	.046	.985
217	40.486	.046	.972
131	40.318	.048	.963
314	40.280	.048	.941
158	40.127	.050	.927
12	39.986	.051	.911
391	39.986	.051	.865
67	39.734	.054	.868
319	39.352	.059	.899
315	39.338	.059	.857
162	39.312	.059	.809
73	39.248	.060	.765
393	39.134	.062	.736
56	39.104	.062	.675
143	39.037	.063	.625
335	38.879	.065	.615
135	38.608	.069	.654
151	38.578	.069	.592
155	38.439	.071	.579
310	38.362	.072	.539
199	37.809	.081	.714
327	37.780	.081	.662
26	37.639	.084	.658
208	37.593	.085	.612
117	37.494	.086	.591
330	37.207	.091	.661

Observation number	Mahalanobis d-squared	p1	p2
337	37.133	.093	.632
55	37.132	.093	.567
59	37.124	.093	.503
299	37.082	.094	.458
57	36.996	.095	.437
203	36.980	.095	.381
54	36.958	.096	.330
331	36.821	.098	.338
14	36.786	.099	.297
159	36.784	.099	.245
373	36.633	.102	.259
126	36.520	.104	.258
133	36.307	.109	.304
292	36.086	.113	.361
149	36.023	.115	.337
316	35.973	.116	.308
64	35.889	.118	.298
333	35.731	.121	.325
50	35.671	.123	.304
213	35.459	.128	.363
358	35.423	.128	.329
32	35.283	.132	.352
154	35.246	.133	.320
332	35.209	.134	.290
275	35.119	.136	.287
128	35.007	.139	.297
291	34.990	.139	.259
175	34.984	.139	.219
160	34.968	.140	.187
293	34.941	.140	.163
48	34.933	.141	.134
308	34.725	.146	.178
233	34.662	.148	.169
401	34.452	.153	.222
397	34.319	.157	.246
411	34.319	.157	.206
108	34.259	.159	.196
124	34.252	.159	.165
134	34.182	.161	.160
169	34.178	.161	.132
138	34.143	.162	.118
171	34.001	.166	.139
140	33.899	.169	.147
274	33.710	.175	.193

Observation number	Mahalanobis d-squared	p1	p2
45	33.596	.178	.211
398	33.585	.178	.181
172	33.343	.186	.264
119	33.188	.191	.311
322	33.079	.194	.333
177	33.010	.197	.332
145	32.958	.198	.320
70	32.845	.202	.346
324	32.747	.206	.364
200	32.730	.206	.331
201	32.649	.209	.338
406	32.555	.212	.355
188	32.555	.212	.312
305	32.517	.213	.293
18	32.474	.215	.279
72	32.469	.215	.244
139	32.445	.216	.221
189	32.419	.217	.200
289	32.263	.222	.248
147	32.219	.224	.236

Notes for Model (Default model)

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	378
Number of distinct parameters to be estimated:	64
Degrees of freedom (378 - 64):	314

Result (Default model)

Minimum was achieved
Chi-square = 352.005
Degrees of freedom = 314
Probability level = .069

Estimates (Group number 1 - Default model)

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
BRAND_LOYALTY	<---	MARKETING_MIX	.111	.064	1.748	.081	
BRAND_LOYALTY	<---	SATISFACTION	-.045	.133	-.342	.732	
BRAND_LOYALTY	<---	COMPETITIVE_ADVANTAGE	.326	.075	4.345	***	
BRAND_EQUITY	<---	SATISFACTION	1.252	.332	3.769	***	
BRAND_EQUITY	<---	MARKETING_MIX	.121	.082	1.476	.140	
BRAND_EQUITY	<---	BRAND_LOYALTY	.281	.125	2.252	.024	
BRAND_EQUITY	<---	COMPETITIVE_ADVANTAGE	-.125	.086	-1.450	.147	
tsat1	<---	SATISFACTION	1.000				
tsat2	<---	SATISFACTION	1.601	.349	4.588	***	
tsat4	<---	SATISFACTION	1.149	.274	4.189	***	
tbl6	<---	BRAND_LOYALTY	1.000				
tbl5	<---	BRAND_LOYALTY	1.090	.217	5.017	***	
tbl2	<---	BRAND_LOYALTY	1.675	.291	5.761	***	
tbl1	<---	BRAND_LOYALTY	1.727	.298	5.791	***	
tbaw4	<---	BRAND_EQUITY	.945	.157	6.007	***	
tbas1	<---	BRAND_EQUITY	.734	.148	4.955	***	
tbas5	<---	BRAND_EQUITY	1.000				
tpq5	<---	BRAND_EQUITY	1.202	.182	6.589	***	
tbt3	<---	BRAND_EQUITY	.720	.145	4.971	***	
tbt4	<---	BRAND_EQUITY	.783	.142	5.502	***	
tbt5	<---	BRAND_EQUITY	1.082	.167	6.468	***	
tbi3	<---	BRAND_EQUITY	1.159	.176	6.580	***	

			Estimate	S.E.	C.R.	P	Label
tbi4	<---	BRAND_EQUITY	.747	.150	4.984	***	
tud5	<---	COMPETITIVE_ADVANTAGE	1.000				
tud4	<---	COMPETITIVE_ADVANTAGE	1.221	.140	8.706	***	
tori5	<---	COMPETITIVE_ADVANTAGE	1.246	.138	9.032	***	
tori4	<---	COMPETITIVE_ADVANTAGE	.710	.113	6.275	***	
tori3	<---	COMPETITIVE_ADVANTAGE	.712	.108	6.567	***	
tori2	<---	COMPETITIVE_ADVANTAGE	.608	.106	5.711	***	
tori1	<---	COMPETITIVE_ADVANTAGE	.975	.120	8.146	***	
tpl5	<---	MARKETING_MIX	1.000				
tpl4	<---	MARKETING_MIX	1.401	.199	7.034	***	
tpl3	<---	MARKETING_MIX	1.359	.194	7.011	***	
tpl2	<---	MARKETING_MIX	.993	.162	6.138	***	

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
BRAND_LOYALTY	<---	MARKETING_MIX	.129
BRAND_LOYALTY	<---	SATISFACTION	-.034
BRAND_LOYALTY	<---	COMPETITIVE_ADVANTAGE	.465
BRAND_EQUITY	<---	SATISFACTION	.834
BRAND_EQUITY	<---	MARKETING_MIX	.125
BRAND_EQUITY	<---	BRAND_LOYALTY	.251
BRAND_EQUITY	<---	COMPETITIVE_ADVANTAGE	-.160
tsat1	<---	SATISFACTION	.334
tsat2	<---	SATISFACTION	.506
tsat4	<---	SATISFACTION	.389
tbl6	<---	BRAND_LOYALTY	.377
tbl5	<---	BRAND_LOYALTY	.424
tbl2	<---	BRAND_LOYALTY	.633
tbl1	<---	BRAND_LOYALTY	.679
tbaw4	<---	BRAND_EQUITY	.447
tbas1	<---	BRAND_EQUITY	.334

			Estimate
tbas5	<---	BRAND_EQUITY	.452
tpq5	<---	BRAND_EQUITY	.531
tbt3	<---	BRAND_EQUITY	.335
tbt4	<---	BRAND_EQUITY	.388
tbt5	<---	BRAND_EQUITY	.511
tbi3	<---	BRAND_EQUITY	.529
tbi4	<---	BRAND_EQUITY	.336
tud5	<---	COMPETITIVE_ADVANTAGE	.554
tud4	<---	COMPETITIVE_ADVANTAGE	.635
tori5	<---	COMPETITIVE_ADVANTAGE	.686
tori4	<---	COMPETITIVE_ADVANTAGE	.394
tori3	<---	COMPETITIVE_ADVANTAGE	.418
tori2	<---	COMPETITIVE_ADVANTAGE	.351
tori1	<---	COMPETITIVE_ADVANTAGE	.566
tpl5	<---	MARKETING_MIX	.487
tpl4	<---	MARKETING_MIX	.682
tpl3	<---	MARKETING_MIX	.637
tpl2	<---	MARKETING_MIX	.468

Covariances: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
SATISFACTION	<-->	COMPETITIVE_ADVANTAGE	.004	.001	2.672	.008	
SATISFACTION	<-->	MARKETING_MIX	.001	.001	.603	.547	
COMPETITIVE_ADVANTAGE	<-->	MARKETING_MIX	.001	.001	.721	.471	

Correlations: (Group number 1 - Default model)

			Estimate
SATISFACTION	<-->	COMPETITIVE_ADVANTAGE	.280
SATISFACTION	<-->	MARKETING_MIX	.057
COMPETITIVE_ADVANTAGE	<-->	MARKETING_MIX	.050

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
SATISFACTION	.007	.003	2.667	.008	
COMPETITIVE_ADVANTAGE	.026	.005	5.337	***	
MARKETING_MIX	.017	.004	4.279	***	
R1	.010	.003	3.196	.001	

	Estimate	S.E.	C.R.	P	Label
R2	.004	.002	1.640	.101	
e62	.056	.004	13.203	***	
e61	.053	.005	10.385	***	
e59	.052	.004	12.614	***	
e68	.077	.006	13.301	***	
e67	.068	.005	12.919	***	
e64	.053	.006	9.540	***	
e63	.044	.005	8.297	***	
e54	.057	.004	13.069	***	
e52	.068	.005	13.745	***	
e48	.062	.005	13.030	***	
e43	.059	.005	12.291	***	
e40	.065	.005	13.738	***	
e39	.055	.004	13.462	***	
e38	.053	.004	12.499	***	
e35	.055	.004	12.307	***	
e34	.069	.005	13.733	***	
e71	.058	.005	12.397	***	
e72	.057	.005	11.310	***	
e73	.045	.004	10.331	***	
e74	.071	.005	13.592	***	
e75	.062	.005	13.467	***	
e76	.068	.005	13.788	***	
e77	.052	.004	12.264	***	
e15	.054	.004	12.276	***	
e14	.038	.005	8.220	***	
e13	.046	.005	9.441	***	
e12	.059	.005	12.493	***	

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
BRAND_LOYALTY	.231
BRAND_EQUITY	.750
tpl2	.219
tpl3	.405
tpl4	.464
tpl5	.237
tori1	.321
tori2	.123
tori3	.174
tori4	.155
tori5	.471
tud4	.404

	Estimate
tud5	.307
tbi4	.113
tbi3	.280
tbt5	.261
tbt4	.151
tbt3	.112
tpq5	.282
tbas5	.204
tbas1	.111
tbaw4	.200
tbl1	.462
tbl2	.400
tbl5	.180
tbl6	.142
tsat4	.151
tsat2	.256
tsat1	.111

Matrices (Group number 1 - Default model)

Total Effects (Group number 1 - Default model)

	MARKETING_MIX	COMPETITIVE_ADVANTAGE	SATISFACTION	BRAND_LOYALTY	BRAND_EQUITY
BRAND_LOYALTY	.111	.326	-.045	.000	.000
BRAND_EQUITY	.152	-.034	1.239	.281	.000
tpl2	.993	.000	.000	.000	.000
tpl3	1.359	.000	.000	.000	.000
tpl4	1.401	.000	.000	.000	.000
tpl5	1.000	.000	.000	.000	.000
tori1	.000	.975	.000	.000	.000
tori2	.000	.608	.000	.000	.000
tori3	.000	.712	.000	.000	.000
tori4	.000	.710	.000	.000	.000
tori5	.000	1.246	.000	.000	.000
tud4	.000	1.221	.000	.000	.000
tud5	.000	1.000	.000	.000	.000
tbi4	.114	-.025	.925	.210	.747
tbi3	.176	-.039	1.436	.326	1.159
tbt5	.165	-.036	1.342	.305	1.082
tbt4	.119	-.026	.970	.220	.783
tbt3	.110	-.024	.892	.203	.720

	MARKETING_MIX	COMPETITIVE_ADVANTAGE	SATISFACTION	BRAND_LOYALTY	BRAND_EQUITY
tpq5	.183	-.041	1.490	.338	1.202
tbas5	.152	-.034	1.239	.281	1.000
tbas1	.112	-.025	.909	.207	.734
tbaw4	.144	-.032	1.171	.266	.945
tbl1	.192	.563	-.078	1.727	.000
tbl2	.187	.546	-.076	1.675	.000
tbl5	.121	.355	-.049	1.090	.000
tbl6	.111	.326	-.045	1.000	.000
tsat4	.000	.000	1.149	.000	.000
tsat2	.000	.000	1.601	.000	.000
tsat1	.000	.000	1.000	.000	.000

Standardized Total Effects (Group number 1 - Default model)

	MARKETING_MIX	COMPETITIVE_ADVANTAGE	SATISFACTION	BRAND_LOYALTY	BRAND_EQUITY
BRAND_LOYALTY	.129	.465	-.034	.000	.000
BRAND_EQUITY	.157	-.043	.825	.251	.000
tpl2	.468	.000	.000	.000	.000
tpl3	.637	.000	.000	.000	.000
tpl4	.682	.000	.000	.000	.000
tpl5	.487	.000	.000	.000	.000
tori1	.000	.566	.000	.000	.000
tori2	.000	.351	.000	.000	.000
tori3	.000	.418	.000	.000	.000
tori4	.000	.394	.000	.000	.000
tori5	.000	.686	.000	.000	.000
tud4	.000	.635	.000	.000	.000
tud5	.000	.554	.000	.000	.000
tbi4	.053	-.014	.278	.084	.336
tbi3	.083	-.023	.437	.133	.529
tbt5	.080	-.022	.422	.128	.511
tbt4	.061	-.017	.320	.097	.388
tbt3	.053	-.014	.277	.084	.335
tpq5	.083	-.023	.438	.133	.531
tbas5	.071	-.019	.373	.113	.452
tbas1	.052	-.014	.275	.084	.334
tbaw4	.070	-.019	.369	.112	.447
tbl1	.087	.316	-.023	.679	.000
tbl2	.081	.294	-.021	.633	.000
tbl5	.055	.198	-.014	.424	.000

	MARKETING_MIX	COMPETITIVE_ADVANTAGE	SATISFACTION	BRAND_LOYALTY	BRAND_EQUITY
tbl6	.048	.175	-.013	.377	.000
tsat4	.000	.000	.389	.000	.000
tsat2	.000	.000	.506	.000	.000
tsat1	.000	.000	.334	.000	.000

Direct Effects (Group number 1 - Default model)

	MARKETING_MIX	COMPETITIVE_ADVANTAGE	SATISFACTION	BRAND_LOYALTY	BRAND_EQUITY
BRAND_LOYALTY	.111	.326	-.045	.000	.000
BRAND_EQUITY	.121	-.125	1.252	.281	.000
tpl2	.993	.000	.000	.000	.000
tpl3	1.359	.000	.000	.000	.000
tpl4	1.401	.000	.000	.000	.000
tpl5	1.000	.000	.000	.000	.000
tori1	.000	.975	.000	.000	.000
tori2	.000	.608	.000	.000	.000
tori3	.000	.712	.000	.000	.000
tori4	.000	.710	.000	.000	.000
tori5	.000	1.246	.000	.000	.000
tud4	.000	1.221	.000	.000	.000
tud5	.000	1.000	.000	.000	.000
tbi4	.000	.000	.000	.000	.747
tbi3	.000	.000	.000	.000	1.159
tbt5	.000	.000	.000	.000	1.082
tbt4	.000	.000	.000	.000	.783
tbt3	.000	.000	.000	.000	.720
tpq5	.000	.000	.000	.000	1.202
tbas5	.000	.000	.000	.000	1.000
tbas1	.000	.000	.000	.000	.734
tbaw4	.000	.000	.000	.000	.945
tbl1	.000	.000	.000	1.727	.000
tbl2	.000	.000	.000	1.675	.000
tbl5	.000	.000	.000	1.090	.000
tbl6	.000	.000	.000	1.000	.000
tsat4	.000	.000	1.149	.000	.000
tsat2	.000	.000	1.601	.000	.000
tsat1	.000	.000	1.000	.000	.000

Standardized Direct Effects (Group number 1 - Default model)

	MARKETING_MIX	COMPETITIVE_ADVANTAGE	SATISFACTION	BRAND_LOYALTY	BRAND_EQUITY
BRAND_LOYALTY	.129	.465	-.034	.000	.000
BRAND_EQUITY	.125	-.160	.834	.251	.000
tpl2	.468	.000	.000	.000	.000
tpl3	.637	.000	.000	.000	.000
tpl4	.682	.000	.000	.000	.000
tpl5	.487	.000	.000	.000	.000
tori1	.000	.566	.000	.000	.000
tori2	.000	.351	.000	.000	.000
tori3	.000	.418	.000	.000	.000
tori4	.000	.394	.000	.000	.000
tori5	.000	.686	.000	.000	.000
tud4	.000	.635	.000	.000	.000
tud5	.000	.554	.000	.000	.000
tbi4	.000	.000	.000	.000	.336
tbi3	.000	.000	.000	.000	.529
tbt5	.000	.000	.000	.000	.511
tbt4	.000	.000	.000	.000	.388
tbt3	.000	.000	.000	.000	.335
tpq5	.000	.000	.000	.000	.531
tbas5	.000	.000	.000	.000	.452
tbas1	.000	.000	.000	.000	.334
tbaw4	.000	.000	.000	.000	.447
tbl1	.000	.000	.000	.679	.000
tbl2	.000	.000	.000	.633	.000
tbl5	.000	.000	.000	.424	.000
tbl6	.000	.000	.000	.377	.000
tsat4	.000	.000	.389	.000	.000
tsat2	.000	.000	.506	.000	.000
tsat1	.000	.000	.334	.000	.000

Indirect Effects (Group number 1 - Default model)

	MARKETING_MIX	COMPETITIVE_ADVANTAGE	SATISFACTION	BRAND_LOYALTY	BRAND_EQUITY
BRAND_LOYALTY	.000	.000	.000	.000	.000
BRAND_EQUITY	.031	.092	-.013	.000	.000
tpl2	.000	.000	.000	.000	.000
tpl3	.000	.000	.000	.000	.000
tpl4	.000	.000	.000	.000	.000
tpl5	.000	.000	.000	.000	.000

	MARKETING_MIX	COMPETITIVE_ADVANTAGE	SATISFACTION	BRAND_LOYALTY	BRAND_EQUITY
tori1	.000	.000	.000	.000	.000
tori2	.000	.000	.000	.000	.000
tori3	.000	.000	.000	.000	.000
tori4	.000	.000	.000	.000	.000
tori5	.000	.000	.000	.000	.000
tud4	.000	.000	.000	.000	.000
tud5	.000	.000	.000	.000	.000
tbi4	.114	-.025	.925	.210	.000
tbi3	.176	-.039	1.436	.326	.000
tbt5	.165	-.036	1.342	.305	.000
tbt4	.119	-.026	.970	.220	.000
tbt3	.110	-.024	.892	.203	.000
tpq5	.183	-.041	1.490	.338	.000
tbas5	.152	-.034	1.239	.281	.000
tbas1	.112	-.025	.909	.207	.000
tbaw4	.144	-.032	1.171	.266	.000
tbl1	.192	.563	-.078	.000	.000
tbl2	.187	.546	-.076	.000	.000
tbl5	.121	.355	-.049	.000	.000
tbl6	.111	.326	-.045	.000	.000
tsat4	.000	.000	.000	.000	.000
tsat2	.000	.000	.000	.000	.000
tsat1	.000	.000	.000	.000	.000

Standardized Indirect Effects (Group number 1 - Default model)

	MARKETING_MIX	COMPETITIVE_ADVANTAGE	SATISFACTION	BRAND_LOYALTY	BRAND_EQUITY
BRAND_LOYALTY	.000	.000	.000	.000	.000
BRAND_EQUITY	.032	.117	-.009	.000	.000
tpl2	.000	.000	.000	.000	.000
tpl3	.000	.000	.000	.000	.000
tpl4	.000	.000	.000	.000	.000
tpl5	.000	.000	.000	.000	.000
tori1	.000	.000	.000	.000	.000
tori2	.000	.000	.000	.000	.000
tori3	.000	.000	.000	.000	.000
tori4	.000	.000	.000	.000	.000
tori5	.000	.000	.000	.000	.000
tud4	.000	.000	.000	.000	.000
tud5	.000	.000	.000	.000	.000

	MARKETING_MIX	COMPETITIVE_ADVANTAGE	SATISFACTION	BRAND_LOYALTY	BRAND_EQUITY
tbi4	.053	-.014	.278	.084	.000
tbi3	.083	-.023	.437	.133	.000
tbt5	.080	-.022	.422	.128	.000
tbt4	.061	-.017	.320	.097	.000
tbt3	.053	-.014	.277	.084	.000
tpq5	.083	-.023	.438	.133	.000
tbas5	.071	-.019	.373	.113	.000
tbas1	.052	-.014	.275	.084	.000
tbaw4	.070	-.019	.369	.112	.000
tbl1	.087	.316	-.023	.000	.000
tbl2	.081	.294	-.021	.000	.000
tbl5	.055	.198	-.014	.000	.000
tbl6	.048	.175	-.013	.000	.000
tsat4	.000	.000	.000	.000	.000
tsat2	.000	.000	.000	.000	.000
tsat1	.000	.000	.000	.000	.000

Modification Indices (Group number 1 - Default model)

Covariances: (Group number 1 - Default model)

			M.I.	Par Change
e12	<-->	COMPETITIVE_ADVANTAGE	4.898	.005
e77	<-->	R2	6.390	.004
e75	<-->	MARKETING_MIX	4.043	.004
e74	<-->	e77	4.005	.006
e72	<-->	e74	4.887	-.008
e72	<-->	e73	6.538	.008
e34	<-->	e12	4.923	.007
e34	<-->	e73	4.015	-.006
e43	<-->	e13	5.486	.007
e48	<-->	COMPETITIVE_ADVANTAGE	4.601	-.005
e48	<-->	R1	6.250	-.004
e48	<-->	e12	5.537	-.008
e52	<-->	e14	4.491	-.006
e54	<-->	COMPETITIVE_ADVANTAGE	8.414	.006
e54	<-->	R1	5.280	.004
e63	<-->	e13	6.099	-.007
e63	<-->	e77	4.338	.006
e59	<-->	e63	4.839	.006
e62	<-->	MARKETING_MIX	4.269	.004

			M.I.	Par Change
e62	<-->	e14	4.162	.006
e62	<-->	e54	8.743	-.009

Variances: (Group number 1 - Default model)

	M.I.	Par Change

Regression Weights: (Group number 1 - Default model)

			M.I.	Par Change
tpl2	<---	COMPETITIVE_ADVANTAGE	6.373	.225
tpl2	<---	tori1	4.143	.092
tpl2	<---	tud5	4.140	.088
tpl2	<---	tbi4	5.875	.108
tpl2	<---	tbi3	4.787	.099
tpl3	<---	tbt3	4.042	-.088
tpl3	<---	tbl1	5.756	-.099
tpl4	<---	tbas1	4.393	-.085
tori1	<---	tbi4	4.501	.090
tori1	<---	tbi3	4.984	.096
tori1	<---	tbas1	4.199	.088
tori3	<---	MARKETING_MIX	4.235	.239
tori3	<---	tpl4	4.040	.094
tori5	<---	tbi4	4.613	-.090
tbi4	<---	tpl2	4.517	.101
tbi4	<---	tori5	4.947	-.100
tbi4	<---	tbl2	5.245	-.101
tbi3	<---	tpl2	5.796	.106
tbt3	<---	tpl3	4.081	-.093
tpq5	<---	tpl3	4.101	.092
tbas5	<---	BRAND_LOYALTY	9.907	-.428
tbas5	<---	tpl2	6.269	-.115
tbas5	<---	tbl1	6.477	-.113
tbas5	<---	tbl2	6.632	-.109
tbas1	<---	tpl4	5.364	-.113
tbas1	<---	tori1	4.239	.097
tbaw4	<---	COMPETITIVE_ADVANTAGE	6.524	.220
tbaw4	<---	BRAND_LOYALTY	10.112	.414
tbaw4	<---	tori5	5.372	.096
tbaw4	<---	tud5	4.075	.084
tbaw4	<---	tbl1	7.606	.117
tbaw4	<---	tbl2	5.306	.094
tbaw4	<---	tsat1	8.527	-.141
tbl1	<---	tori1	6.513	.111

			M.I.	Par Change
tbl1	<---	tori5	4.422	.087
tbl1	<---	tsat4	5.440	.113
tbl5	<---	tpl3	4.048	-.096
tsat1	<---	tpl4	5.763	.107
tsat1	<---	tbaw4	5.946	-.109

Minimization History (Default model)

Iteration		Negative eigenvalues	Condition #	Smallest eigenvalue	Diameter	F	NTries	Ratio
0	e	10		-.277	9999.000	1843.038	0	9999.000
1	e	2		-.026	1.911	955.655	20	.621
2	e	1		-.029	1.393	598.148	5	.800
3	e	0	77.213		1.118	443.621	5	.904
4	e	0	222.641		.859	392.926	2	.000
5	e	0	398.949		.755	359.237	1	1.131
6	e	0	919.771		.518	353.385	1	1.040
7	e	0	1717.952		.233	352.085	1	1.084
8	e	0	2065.516		.101	352.006	1	1.074
9	e	0	2114.330		.015	352.005	1	1.015
10	e	0	2084.995		.000	352.005	1	1.000

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	64	352.005	314	.069	1.121
Saturated model	378	.000	0		
Independence model	27	1679.019	351	.000	4.784

RMR, GFI

Model	RMR	GFI	AGFI	PGFI

Model	RMR	GFI	AGFI	PGFI
Default model	.003	.944	.932	.784
Saturated model	.000	1.000		
Independence model	.010	.677	.652	.628

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.790	.766	.972	.968	.971
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.895	.707	.869
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	38.005	.000	88.135
Saturated model	.000	.000	.000
Independence model	1328.019	1204.165	1459.366

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	.846	.091	.000	.212
Saturated model	.000	.000	.000	.000
Independence model	4.036	3.192	2.895	3.508

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.017	.000	.026	1.000
Independence model	.095	.091	.100	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	480.005	489.242	738.122	802.122

Model	AIC	BCC	BIC	CAIC
Saturated model	756.000	810.557	2280.507	2658.507
Independence model	1733.019	1736.916	1841.912	1868.912

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	1.154	1.063	1.274	1.176
Saturated model	1.817	1.817	1.817	1.948
Independence model	4.166	3.868	4.482	4.175

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	422	444
Independence model	99	103

APPENDIX I

Publication

PUBLICATION

1. Weerawan Marangkun, Nik Kamariah Nik Mat & Nattakarn Eakuru (2011). The measurement of Brand Equity Model of handicraft SME in South Thailand, *International Journal of Arts and Sciences*, 4 (6): 84-99, ISSN: 1944-6934. International Journal.org.

2. Nik Kamariah Nik Mat, Weerawan Marangkun & Nattakarn Eakuru (2011). The determinants of brand equity in handicraft SME in Thailand, International Journal of Arts and Science (IJAS) *Conference Proceedings,* 20-24 June 2011. Prague, Czech Republic, Organized By Cumberland, USA.

3. Weerawan Marangkun, Nik Kamariah Nik Mat & Nattakarn Eakuru (2010). The Validation of Brand Equity Model of handicraft SME in South Thailand, *Proceedings International Journal of Arts & Sciences (IJAS),* Schulstrabe 15, 79288 Gotteinheim, Freiburg, Germany, 28 Nov-3rd Dec 2010. Organized by Central Connecticut State University, USA.

4. Nik Kamariah Nik Mat & Weerawan Marangkun, (2010). Brand Equity of Handicraft SME in Thailand, *Proceedings of the First International Seminar: Entrepreneurship and Societal Development in Asean (ISE-SODA 2010),* organized by Co-operative and Entrepreneurship Development Institute, (CEDI), UUM. Bay View Hotel, Langkawi. 27 February to 1 Mac 2010.

5. Weerawan Marangkun & Nik Kamariah Nik Mat (2009). The Potential of Small and Medium Enterprises (SME) in Handicraft Industry in South Thailand. *Proceeding of 7th Eco-Energy & Materials Science & Engineering Symposium,* Chiang Mai, Thailand. 19-22 Nov. 2009. Holiday Inn Chiang Mai.