THE IMPACT OF BRAND IMAGE AND BRAND AWARENESS ON REPURCHASE INTENTION THROUGH PERCEIVED QUALITY

(Study on Lake Toba, North Sumatera)

BACHELOR THESIS

Submitted for Fulfilling Partly Prerequirement to acquire Bachelor Degree

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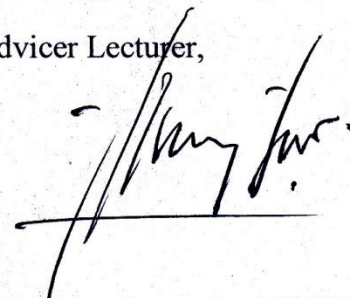
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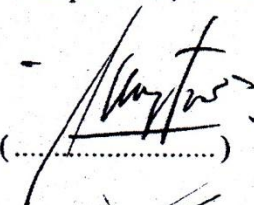
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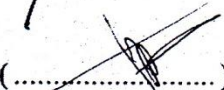Thesis Title   : THE IMPACT OF BRAND IMAGE AND BRAND
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I, who signed below, Mindo Yumanda Siboro, claimed my bachelor thesis titled by The Impact of Brand Image and Brand Awareness on Repurchase Intention through Perceived Quali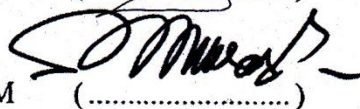ty (study on Lake Toba, North Sumatera) is owned by me. Hereby I declare in truth that the thesis, there is no writings as a whole or as a part of which I took by copied or imitated in a form of sentences or symbols which represent writer's ideas or opinion without perission from writer.

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MOTTO AND DEDICATION

Philippians 2:10

That in the name of Jesus every knee should bow, in heaven and on earth and under the earth.

1 Corinthians 13:3

If I give all I possess to the poorand surrender my body to the flames, but have not love, I gain nothing.

1 Corinthians 10:13

No temptation has overtaken you except what is common to mankind. And God is faithful; he will not let you be tempted beyond what you can bear. But when you are tempted, he will also provide a way out so that you can endure it.

I dedicate my undergraduate thesis to my Lord, Jesus Christ, my parents, my sister, and my brother.

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ABSTRACT

Nowadays, Tourism, one of the Indonesian foreign exchange has been giving high role in raising the Indonesia GDP. Number of tourist in Indonesia is increasing significantly. Whereas, the number of the local visitors who came to Lake Toba (one of the biggest tourism place in Indonesia) increasing slowly. The aim of this research is to examine the factors that may influence tourist to visit Lake destination. The study surveyed 185 visitors who came to Lake Toba. The survey period was from the third week of July 2015 until the forth week of July 2015. The data analyses were conducted by confirmatory factor analysis and structural equation modeling. The results of statistical analysis reflected that most of the visitors of Lake Toba are highly concern about Brand Image four times more than Brand Awareness. This study demonstrated that brand image and brand awareness positively affected perceived quality, moreover, perceived quality was factors that influenced the tourist to visit Lake Toba.

Keywords: Brand Image, Brand Awareness, Perceived Quality, Repurchase Intention

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CHAPTER I

INTRODUCTION

1.1   Research Background

Tourism takes part in raising prosperity, not only material and spiritual prosperity, but also cultural prosperity (conducting, interpreting and disseminating meaningful data about arts and culture and its impact on our region's growth and vibrancy) and intelectual prosperity (creations of the mind: inventions; literary and artistic works; and symbols, names and images used in commerce).

A very strategic prospect in tourism sector absolutely become a great opportunity to Indonesia as a country of which abundant nature resource and huge culture inside, spread in more than 17,000 (seventeen thousand) islands. The Tourism sector which has taken role as one of the biggest foreign exchange contribution after oil and natural gas and has been counted on by the government to be the main pillar in the national economic development. Expanding the tourism sector must be seriously, systematically, and professionally handled, so that the development and utilization tourism assets can offer a significant contribution in bringing tourism role as an advantage sector in future development into reality.

Drawing of Tourism Strategic Prospec as a national development pillar can be seen from the increasing numbers of national and foreign tourists arrival in the

latest years. The Tourism sector also absorbs millions of labors for hotels, food and beverages, transportations, tour guiders, and industries.

Table 1.1
Indonesia Tourism Foreign Exchange Ranking

2012		2013	
Jenis Komoditas	**Nilai (juta US$)**	**Jenis Komoditas**	**Nilai (juta US$)**
Minyak & gas bumi	36,977.00	Minyak & gas bumi	32,633.2
Batu bara	26,166.30	Batu bara	24,501.4
Minyak kelapa sawit	18,845.00	Minyak kelapa sawit	15,839.1
Karet olahan	10,394.50	**Pariwisata**	**10,054.1**
Pariwisata	**9,120.85**	Karet olahan	9,316.6
Pakaian jadi	7,304.70	Pakaian jadi	7,501.0
Alat listrik	6,481.90	Alat listrik	6,418.6
Tekstil	5,278.10	Makanan olahan	5,434.8
Makanan olahan	5,135.60	Tekstil	5,293.6
Kertas dan barang dr kertas	3,972.00	Kertas dan barang dr kertas	3,802.2
Bahan kimia	3,636.30	Kayu olahan	3,514.5
Kayu olahan	3,337.70	Bahan kimia	3,501.6

Source: Ministry of Tourism and Creatif Economic, 2013

According to Ministry of Tourism and Creatif Economic Performance Accountability Report (2012), Tourism offers a significant contribution to Indonesia Economy. Impact of Tourism bussiness on GDP is about Rp296.97 T, four percent from our GDP in 2011. GDP Creating in the tourism sector accomplished by expending of domestic tourists, tourism budgeting, expending of foreign tourists, and investment in tourism bussiness include: tourism attraction initiatives; tourism area initiatives; tourism transportation services; tour-agency services; food and beverages services; accomodation availability; entertainment and recreation organizing; meeting - insentif tour - conference and exhibition organizing; tourism information services; tourist consultation services, tourist guide services; water tours; and spa.

In 2012, Tourism sector contributed US$ 9.12 billion of foreign exchange, rising from US$ 8.55 million in 2011. The increasing of foreign exchange revenue in 2012 was not only based on advantage of foreign tourists from US$ 7.64 billion in 2011 to US$ 8.04 billion in 2012, but also from the rising of expending from US$ 1,118.26 million in 2011 up to US$ 1,133.81 million in 2012. In other words, advantage quantity of tourism foreign exchange was accordanced with advantage of quality.

The economic growth of Indonesia's tourism sector outpaced that of the other G20 nations in 2013, according to the World Travel & Tourism Council's (WTTC) Travel and Tourism: Economic Impact Report (2014) . The travel and tourism sector's contribution to Indonesia's GDP rose by 8.4 percent, driven by increasing both domestic and foreign travel and tourism.

The number of tourists visiting North Sumatera were 189,094 people from January to September 2014, or increased 4.50% since the last period in 2013. (Harian Sinar Indonesia Baru, Nov,5th 2014, p.11).

Table 1.2
Number of International and Domestic Passanger
Via Polonia Airport (Person)

Year	International	Domestic	TOTAL
2011	701700	2719806	3421506
2012	775157	3059973	3835130

Source: Statisctics Indonesia, 2012

Table 1.3

Flow of Passenger by Commercial Port (Person)

Year	International	Interisland	TOTAL
2011	110020	255617	365637
2012	123395	244273	367668

Source: Statisctics Indonesia, 2012

Table 1.4

Flow of Passanger by Uncommercial Port (Person)

Year	Passanger
2011	88481
2012	91362

Source: Statisctics Indonesia, 2012

Tables 1.2 – 1.4 showed us the arrival of the passengers from three different accomodations; Polonia Airport, commercial port, and uncommercial port in North Sumatera Province. Number of domestic passangers via polonia airport since 2011 to 2012 increased 11.11% or 339,963 person. While, only 5.5% rising from flow of passengers by commercial port were about 20.222 persons. However, much less passangers came from the uncommercial port only 5.5% or 5,025 persons. So, more people came to visit North Sumatera Province from 2011 until 2012.

Besides role, impact, and numbers of tourism, the appearance of the tourism is important. Tourism can supply a much needed infrastructure, which boosts destination economies and raises standards of living. It may also strengthen the case for the protection of threatened resources.

Lake Toba is one of the awesome natural wonders of the world. This is a so enormous crater lake and has an island in the middle which sizes as Singapore. More than 1,145 square kilometers, and a depth of 450 meters, Lake Toba is

actually more like an ocean. This is the largest lake in Southeast Asia to the jungle of Bukit Lawang which organgutans make their home and one of the deepest lakes in the world. Additionally, Lake Toba is surrounded by seven regencies at once; Samosir, Simalungun, Toba Samosir, Humbang Hasundutan, North Tapanuli, Dairi, and Karo in North Sumatera Province.

Apart from that, Lake Toba, one of five Geoparks in Indonesia is expected to follow the trail of Geopark Batur Bali to the Global Geopark Network (GGN) maintained by Unesco. These are Sewu Mountain Geopark, Geopark Merangin Jambi, Toba Geopark, Geopark Rajaampat Papua, and Geopark Rinjani. This was expressed by Secretary of State for the Ministry of Geology and Mineral Resources Yun Yunus Kusumabrata at the conference of Monitoring and Performance Evaluation Geology Board (2012) and it will be have our support in terms of tourism promotion. A Geopark is an area which has a natural heritage value (geology). It is hoped to become a sustainable economic development strategy for the area through a good and realistic management structure.

Moreover, Yahya, Minister of Tourism and Creatif Economic state, "Lake Toba sits in the sixth place from eighty eight National Tourism Development Areas in Indonesia. This means Lake Toba is one of the advantage area to be visited in Indonesia," after attending the Partnership with Indonesia Tourism Promotion Board to Achieve Tourism Target Meeting in Jakarta in Oct,31st 2014. Yahya will drive the quality improvement of tourist destinations, including the 15—soon to be 25—National Tourism Development Areas (KSPN). In other word, this area have its potency of rising the national tourism which is important

impact on one or more aspecs such as economic growth, social and culture, natural resources empowerment, natural environment support, and also defence and security.

Picture 1.1
National Tourism Development Area

1. KSPN. Kintamani–Danau Batur dan sekitarnya
2. KSPN. Komodo dan sekitarnya
3. KSPN. Borobudur dan sekitarnya
4. KSPN. Rinjani dan sekitarnya
5. KSPN. Nongsa - Pulau Abang dan sekitarnya
6. KSPN. Toba dan sekitarnya
7. KSPN. Bukittinggi dan sekitarnya
8. KSPN. Bromo–Tengger–Semeru dan sekitarnya
9. KSPN. Bunaken dan sekitarnya
10. KSPN. Raja Ampat dan sekitarnya
11. KSPN. Pangandaran dan sekitarnya

Source: Minister of Tourism and Creative Economic, 2014

The amazing Lake Toba which was formed around 75,000 years ago in one of the most fierce volcanic eruptions ever known to the still smouldering Mt Sibayak, volcanoes dominate the landscape everywhere. It welcomes individual to come and sit back, relax and absorb some beautiful pristine scenery. This is also a place to come and enjoy the legendary of Batak hospitality, enjoy some traditional palm wine with the locals, and have coffee.

1.2   Research Problems

My research took place in Lake Toba, North Sumatera Province, which surrounded by seven regencies; Samosir, Simalungun, Toba Samosir, Humbang Hasundutan, North Tapanuli, Dairi, and Karo.

While the tourism sector in national even in North Sumatera province increases gradually, however percentage trend of domestic tourists went down slightly until 2013.

Table 1.5
Tourists Arrival in Samosir Regency

Month	2010	2011	2012	2013
Jan	12,690	7,808	14,917	12,717
Feb	5,028	5,441	5,498	6,431
Mar	3,130	6,338	5,640	5,893
Apr	6,173	9,308	7,480	7,308
May	9,125	11,895	9,580	8,382
Jun	6,501	9,065	10,491	11,487
Jul	7,466	6,456	7,234	12,519
Ags	5,938	7,533	19,891	23,049
Sep	20,376	19,940	7,096	6,045
Oct	4,864	7,780	8,049	8,439
Nov	3,965	6,460	7,116	7,180
Dec	9,373	11,873	16,538	14,667
TOTAL	**94,629**	**109,897**	**119,530**	**124,117**

Source: Statistics Regencies, 2014

Apart from that, in 2011, number of tourists in Samosir Regency increased to 13.89% in 2011, but it decrease 8.06 % in 2012 whereas continually was

slightly down in 2013 in the percentage of 3.7%. In short, Although the number of

domestic tourists seem steadily increase, but the ratio decreased moderately.

Table 1.6
Number of Tourists by Tourism Places
in Simalungun Recency

ObjekWisata Tourist Places	2011			2012			2013		
	Nusan tara	Manca negara	Jumlah	Nusan tara	Manca negara	Jumlah	Nusan tara	Manca negara	Jumlah
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[5]	[6]	[7]
Parapat	95 122	8 889	104 011	125 583	-	125 583	133.558	9.800	143 350
Karang Anyer	-	-	-	3 105	-	3 105	2.300	-	2 300
Museum Simalungun/ Rumah Bolon	3 091	996	3 091	1 206	976	2 182	226	330	556
Haranggaol	1 840	-	1 840	830	-	830	8.565	-	8 565
Permandian Alam Sejuk (PAS)	212 770	-	212 770	194 322	-	194 322	190.646	-	190 646
Jumlah	311 777	9 885	321 662	325 046	976	326 002	335 295	10.130	345 425

Source: Tourism Office of Simalungun Regency, 2014

Turning out attention to Simalungun Regency. 4.08% number of tourists in

Simalungun Regency fall down in 2012 and went down continually in 2013, 3.06

%. In short, the ratio was slowly down and the number of domestic tourists looked

increase steadily.

Table 1.7
Number of Domestic Tourists
in Toba Samosir Recency

Month	2010	2011	2012	2013
Jan	13592	14123	14223	14703
Feb	7520	7942	8300	9471
Mar	7356	7456	8501	9766
Apr	8378	8491	8702	8973
May	7554	7678	7800	7890
Jun	9765	10414	10600	11735
Jul	9256	10938	12001	12128
Ags	7852	8857	8860	8893
Sep	7748	7911	9035	9254
Oct	7678	7871	8878	8992
Nov	8452	9235	9290	10393
Dec	13564	13772	14780	15302
TOTAL	108715	114688	120970	127500

Source: Statistic Regencies, 2014

The similar trend was experienced by the Toba Samosir Regency from 2010 until 2013. the ratio of domestic tourists number decreased gradually; nevertheless, number of tourists rose constantly in the end of each period (one year).

To summarize, the research problem was the decreasing of the visitors from 2010 to 2013 to Lake Toba gradually.

1.3   Research Purpose and Research Advantages

The purpose of this research is to demonstrate how Brand Image and Brand Awareness affected Repurchase Intention through perceived quality and to study over again about the last similar research.

The advantages of this research are as follow:

a.   Government and Tourism Office

Government and Tourism office can have some additional information in increasing the purchase intention the tourist in apropriate way by socialization, implementation, education, and controling to the subordinate to the most closed society.

b.   Non-Govenrment Organization related to Tourism

This research will support the goverment vision through the activity of its organization so that the implementation and the results of purchasing activity will be raised.

c.   Lake Toba citizen

It supports and takes role in contributing his/her hospitality to provide a great environment for the tourist in order to grow a number of arrival tourists.

d.   Tourism Bussinesses

It contributes investment for increasing repurchase intention of the tourists by serving innovatively so that every single thing offered by them will be in tourists' minds and creates more purchase activities.

e.   Academic

Not only add some information about the tourism places and the contribution in applied life but this research will also give knowledge about brand image, brand awareness through perceived quality in repurchase intention.

CHAPTER II

LITERATURE REVIEW

2.1 Theory

2.1.1 Brand Image

When someone came to a place, there will be one or several things kept in mind before leaving the appropriate place. The way people give opinion and emotion are considered. In fact, those interesting and attractive part that will be filled in visitors' mind. All of the planned stuff only appeared by organized things, stakeholder supports, and also control. (Knapp,2000).

Aaker and Joachimsthaler, (2000) said "the challenges faced by companies in building brands are: to be noticed, to be remembered, to change perceptions, to reinforce attitudes, and to create deep customer relationships"

While being in a tourism place, actually, a visitors is using their feeling and brain to enjoy what things that the visitors can received from the appropriate place. For someone who have just come, a tourism place is a new place for everything, may a visitors confused to find out more about things that attract visitor's mind. Hunt (1975) posited that tourism destination images are people's impressions of those who do not live in the destination country.

According to the latest guidelines for tourism marketing (Lopes, 2011), the development of the image of a tourist destination is based on consumer rationality and emotion and also as a result of two main components: Perceptual and

cognitive – the destination image is evaluated by the attributes of its resources of attractions which motivates tourist to visit the destination; and Affective – referring to feelings and emotions raised by tourist destinations. The overall image of the destination is a combination of both components.

The individuals evaluate both positive and negative images. (Echtner & Ritchie, 2003). When the positive image dissapear, that means the potential travelers will make a new choice of the destination (McLellan & Foushee, 1983). (Chen & Kerstetter, 1999, p. 257). Though, importantly keeping the images be stable over time. In fact, as Fakeye and Crompton (1991) suggested, an image may continue long after the factors contributing it have changed. Images may have stability over time even if there are dramatic changes in destination attributes.

2.1.2 Brand Awareness

Awareness might not always lead to purchase because it acts as product curiosity (Fesenmaier et al., 1993). Gartner (1993) viewed awareness as what someone knows or thinks they know about a destination. Meanwhile, Woodside and Lysonski (1989, p. 8) described awareness as ''unaided recall from long-term memory and aided recognitions''. However, Pike (2002) referred to it in a tourism context as the destination that first comes to mind when an individual is considering taking a trip.

They claimed that without awareness, a destination may not be chosen by a person that has an intention to travel. Therefore, in order for a tourism

destination to be known, it must create greater awareness (Milman and Pizan, 1995) because awareness can be heard and recognised.

Brand Awareness is measured with two indicators: the perception of the interviewed tourist that knew the destination before the travel and the analysis of the typology of communication channels through which tourists knew the destination.

2.1.3   Perceived Quality

Perceived quality is a result of consumers' subjective judgment on a product (Zeithaml, 1988; Dodds et al., 1991; Aaker, 1991). Bhuian (1997) also consider perceived quality as a judgment on the consistency of product specification or an evaluation on added value of a product. Garvin (1983) proposes that perceived quality is defined on the basis of users' recognition while objective quality is defined on the basis of product or manufacturing orientation. Perceived quality is: 1) different from objective or actual quality, 2) a higher level of abstraction rather than a specific attribute of a product, 3) a global assessment that in some cases resembles attitude and 4) a judgment usually made within a consumer's evoke set (Zeithaml, 1988, p. 2). The differences between objective quality and perceived quality lie in that objective quality has a pre-design standard to a product, and perceived quality is influenced by internal and external product attributes which is an evaluation basis for consumers (Olshavsky, 1985; Zeithaml, 1988).

Kan (2002) points out that objective quality is that consumers will use their experience and knowledge to evaluate overall product benefit, function, durability, technology and reliability when consumers purchase a product. Aaker (1991) argues that perceived quality can show the salient differentiation of a product or a service and becomes a selective brand in consumers' mind. The reason why perceived quality is different to real quality is because (a) a previous bad image of a product will influence consumers' judgment on product quality in the future. Moreover, even if the product quality has been changed, consumers will not trust that product because of their unpleasant experience in previous (Aaker, 1996), (b)manufacturers and consumers have different views on the judgment of the quality dimensions (Morgan, 1985; Aaker,1996), (c) consumers seldom hold enough information to evaluate a product objectively. Though consumers have enough information, they may be insufficient in time and motivation to do a further judgment, and in the end they can only select little important information and make an evaluation on quality (Aaker, 1996; Wan, 2006). In addition, perceived quality is a relative concept which possesses situational, comparative, and individual attributes.

Perceived quality will be affected by factors such as previous experience, education level, and perceived risk and situational variables such as purchase purpose, purchase situation, time pressure, and social background from consumers (Holbrook & Corfman, 1985). In sum, perceived quality is a consumer subjective judgment on product quality, and he or she will evaluate product quality from their previous experiences and feelings.

High-perceived quality increases the effectiveness of marketing programs, and leads to purchase decisions, position a brand on the perceived quality dimension, provides an opportunity to charge a premium prices, influences a channel member interest in a positive way, and offers an opportunity tointroduce brand extensions (Aaker, 1991). Research study results show that perception of high quality services is directly related to the opinion of visiting a particular destination, and a perception of low quality of tourism services is related to the intention of choosing another destination (Olimpia, 2011). Brand positioning should reinforce the determinant attributes for which the destinations are already perceived positively and competitively (Pike, 2009, p. 864).

Aaker (2000) has declared perceived quality as an important dimension of brand equity and describes it as an intangible overall feeling about a brand that, however, is usually based on underlying dimensions including characteristics of products to which the brand is attached such as reliability and performance.

2.1.4   Repurchase Intention

Tourist attitude describes the psychological tendencies expressed by the positive or negative evaluations of tourists when engaged in certain behaviors (Ajzen, 1991; Schiffman & Kanuk, 1994; Kraus, 1995). Tourist attitude comprises cognitive, affective and behavioral components (Vincent & Thompson, 2002). The cognitive response is the evaluation made in forming an attitude, the affective response is a psychological response expressing the preference of a tourist for an entity and the behavioral component is a verbal indication of the intention of a

tourist to visit. Tourist attitude is an effective predictor of tourist decision for traveling to a certain destination (Ragheb & Tate, 1993; Jalilvand & Samiei, 2012b). The more favorable the attitude toward the behavior, the stronger will be an individual's intention to perform the behavior (Ajzen, 2001). Um and Crompton (1990) found that attitude is influential in determining whether a potential destination is selected as part of the evoked set and in selecting a final destination. Lee (2009) also found that tourist attitude affects future tourist behavior.

Repurchase Intention is a post-purchase behavior. The Satisfaction and dissatisfaction on a product will influence the upcoming consumer behavior (Kotler and Keller, 2009). Repurchase Intention is consumer behavior that appeared in response to an object. Repurchase Intention shows the desire of customers to make repeat purchases in the future. Hellier et al. (2003) states that a decided plan by the visitors to repurchase on certain services is depending on the situation and the level of preference. Individual attitudes include personal preferences to others and obedience to others' expectation and unpredictable situations signify that consumers change purchase intention because a situation is appearing, for example, when the price is higher than expected price (Dodds et al., 1991). By a process of elimination, which is normally image based; an individual selects a destination they wish or want to visit (Gartner, 1989; Goodrich, 1978; Leisen, 2001).

Intention to repurchase (continuance intention) is herein defined as an intention to continue visiting appropriate places for making their purchases. The

same can be valid for destinations as people are willing to go to a place where they can feel themselves comfortable and safe and enjoy it at the same time. Interests of the services create loyal customers who demonstrate their behavioural loyalty through repeat purchases (Jones and Taylor, 2007). Research study results show that perception of high quality services is directly related to the opinion of visiting a particular destination, and a perception of low quality of tourism services is related to the intention of choosing another destination (Olimpia, 2011).

2.2   Relationships Among Variables

2.2.1   Relationship between Brand Image and Perceived Quality

Brand image is an impression or picture moving in consumer's mind about perceived quality of experience memories from which they get. When consumers think about a brand with the great image, so this kindly influence the perceived quality that will be found. This statement explicitly said by Rizky and Pantawis (2011), Sitinjak and Tumpal (2009), Chang et al (2008) in their previous research that brand image significantly relate toward brand equity; brand loyalty, and perceived quality.

The tourism place actually coordinate with the visitors' perceptions and expectations. Image is the way visitors know much more about the places. So, the place will be more interesting if there are many interesting things too. (Lawson and Baud-Bovy, 1977; Fakeye and Crompton, 1991; Bigne et al., 2001). Brand image influence perception of a place. Meenaghan (1995) explains that though the image of a destination sent to the customer is controllable since the stakeholder

view the happening, the image that the target customer receives or perceives is not because not every moment is recorded with the visitors.

Similarly stated by Ming Lee et al (2011) in his preveious research that a company of which strategy is merger and acuisisi will affect toward its brand image until consumer's perceived quality has its influence. a previous bad image of a product will influence consumers' judgment on product quality in the future. Moreover, even if the product quality has been changed, consumers will not trust that product because of their unpleasant experience in the past (Aaker, 1996).

Refer to the explanation from the last researcher, the research hypotheses was proposed as follow:

H1: Brand image will be affected positevely to perceived quality

2.2.2   Relationship between Brand Awareness and Perceived Quality

The rising of consumer consciousness has made consumers choose to purchase their familiar and favorable brand. Macdonald and Sharp (2000) mention that even though consumers familiarize and are willing to purchase a product, brand awareness is still an important factor to influence purchase decision. When consumers want to buy a product, and a brand name can come to their minds at once, it reflects that product has higher brand awareness.

A product with a higher brand awareness will have higher better quality evaluation. In choosing a product, the consumers concern about perceived quality and brand awareness. Perceived quality can help consumers to have a subjective judgment (Zeithaml, 1988; Dodds et al., 1991; Aaker, 1991) on overall product

quality that make a product hold a salient differentiation and become a selective brand in consumers' minds (Aaker, 1991).

High familiarity may signal for providing high level of quality. Baker et al. state that familiarity exerts important effects on brand choice by (1) enhancing perceptual identification of a brand, (2) generating positive affect toward the brand, and (3) motivating purchase behavior. Dick et al. found that there is a link between brand familiarity and proneness probably because greater familiarity serves to increase the experience based understanding that brand are better quality.

Refer to the explanation from the last researcher, the research hypotheses was proposed as follow:

H2: Brand awareness will be affected positevely to perceived quality

2.2.3   Relationship Between Perceived Quality and Repurchase Intention

With a higher trust in a product, a higher purchase activity will be made. Trust comes from quality which lets the consumers enjoying with. In order to increase number of visitors, destination management should put more emphasis on quality of the tourism place. More importantly, destination management should make consumers rely less on extrinsic cues such as brand, packaging when assessing destination.

High-perceived quality increases the effectiveness of marketing programs, and leads to purchase decisions (Aaker, 1991). Research study results show that perception of high quality services is directly related to the opinion of visiting a

particular destination, and a perception of low quality of tourism services is related to the intention of choosing another destination (Olimpia, 2011). The result is the same as the results of Chen (2002), Wu (2007) and Judith and Richard (2002). Lastly, the study verifies that both perceived quality act as a mediator between brand awareness and purchase. When the perceived quality of a product is high, consumers are satisfied and more likely to purchase it again. Consumer purchase intention is considered as a subjective inclination toward a product and can be an important index to predict consumer behavior (Fishbein & Ajzen, 1975). The study is the same as the results of Carman (1990), Boulding*et al.*, (1993), Parasuraman*et al.*, (1996) about direct relationship between perceived quality and purchase intentions.

Refer to the explanation from the last researcher, the research hypotheses was proposed as follow:

H3: Perceived quality will be affected positevely to Purchase Intention

2.3   Previous Researches

Supporting this research result, the table 2.1 below provided required previous researches to be compared.

Table 2.1
Previous Research

| No.	Research Title	Research Variabels	Research Results
1.	Muhammad Taufandra, I Gede Bayu Rahanatha. Influence of Brand Image toward Perceived Quality and Brand Loyalty	Brand Image (independent) , Perceived Quality (intervening) , Brand Loyalty (dependent)	Brand Image affected positively to Perceived Quality, Brand Image affected positively to Brand Loyalty, Perceived Quality

	(Empiric case: Indomaret Bukit Jimbaran) 2014.		affected positively to Brand Loyalty.
2.	Hsiang-Ming Lee, Ching-Chi Lee, Cou-Chen Wu. Brand Image strategy Affects Brand Equity after Mergers and Acquisitions. 2011. (Empiric case: Taiwan Company via website)	Independent Variable: Brand Image Dependent Variable: Brand Loyalty Brand Association Perceived Quality	Each of the three dimensions of brand equity (perceived quality, brand association, and brand loyalty) was expected to vary significantly based on the variance of the two brand images after Mergers and Acquisitions
3.	Aikaterini Manthiou, Juhee Kang, and Thomas Schrier. A visitor-based brand equity perspective: The case of a public festival 2014.	Brand image, Festivals, Brand awareness, Brand loyalty, Brand quality, Visitor-based brand equity	Perceived brand quality played an important role in connecting the brand equity dimensions; brand awareness, perceived brand image, perceived value and brand loyalty.
4.	Hsin Kuang Chi, Huery Ren Yeh, Ya Ting Yang. The Impact of Brand Awareness on Consumer Purchase Intention: The Mediating Effect of Perceived Quality and Brand Loyalty (Empiric case: 315 Cellular phone users living in Chiyi 2008)	Brand Awareness (independent), Perceived Quality (intervening), Brand Loyalty (intervening), Purchase Intention (dependent)	a. Relationship among brand awareness, perceived quality, brand loyalty and puchase intention were significant and positive effect. b. Perceived quality had a positive effect on brand loyalty c. Perceived quality would mediate the effects between brand awareness and purchase intention d. Brand loyalty would mediate the effects between brand awareness and purchase intention
5.	Jing Bill Xu and Andrew Chan. A Conceptual	Independent Variabel: a. Service	a. Advertising efforts were proposed to arouse brand

	Framework of Hotel Experience and Customer-Based Brand equity.	Performance b. Advertising Efforts c. Word of Mouth Intervening Variable: a. Brand Awareness b. Brand Association c. Quality of Experience d. Brand Loyalty Deependent Variable: Brand Equity	awareness & brand associations in a profound manner in the hotel industry, weak effects on the formation of QoE. b. WoM was proposed to generate strong effects on brand awareness, brand associations, and QoE. c. Service performance functioned as an important way of imparting QoE, or experiential brand image, to hotel guests. However, it was proposed as a source that places marginal or weak effects on the generation of brand awareness and brand associations.
6.	Inci Dursuna , Ebru Tumer Kabadayıb , Alev Kocan Alanc, Bulent Sezend. Store Brand Purchase Intention: Effects of Risk, Quality, Familiarity and Store Brand Shelf Space (Empiric case: five supermarkets operating in Turkey and four products including food and homecare products) 2011.	Shelf Space (independent) Familiarty (intervening) Perceived Risk (intervening) Perceived Quality (intervening) Purchase Intention (dependent)	a. Purchase intention were found to be significantly affected by perceived risk, perceived quality and familiarity b. Perceived range of shelf space contributed significantly to perceived qualityand familiriaty c. Familiarity significant indicator of perceived risk and perceived quality
7.	Devonalita Agusli & Yohanes Sondang Kunto. The Influence of Brand Equity Dimention	Independent: Brand Awareness Perceived Quality Brand Association Brand Loyalty	Brand awareness, perceived quality, brand association, brand loyalty contributed

	toward Purchase Intention (Empiric case: Midtown Hotel, Surabaya) 2013.	Dependent: Purchase Intention	significantly to purchase intention

2.4 Theoritical Framework

Picture 2.1
Framework Model
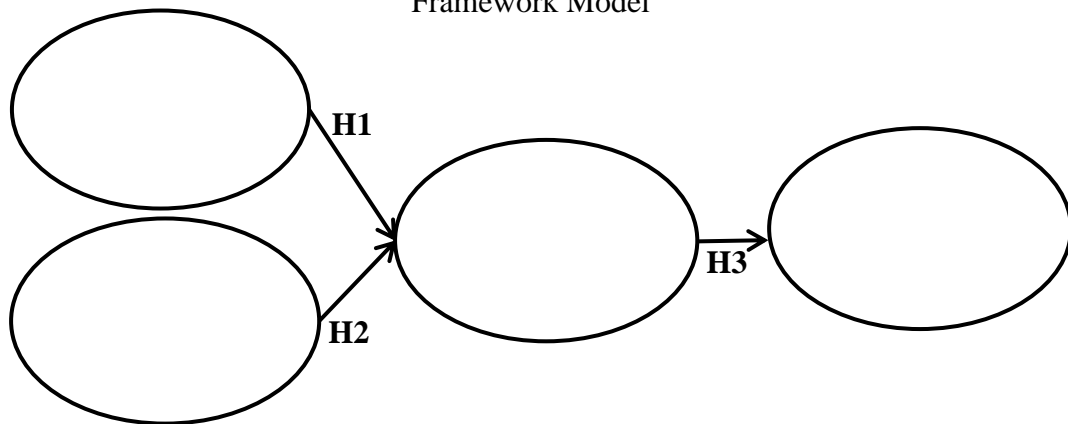
Source:
Hsiang Ming Lee, Ching-Chi Lee, Cou-Chen Wu (2011); Aikaterini Manthiou, Juhee Kang, and Thomas Schrier (2014), Hsin Kuang Chi, Huery Ren Yeh, Ya Ting Yang (2008)

2.5 Hypotheses

This research hypotheses were proposed as follows:

H_1: Brand Image affected positively to Perceived Quality

H_2: Brand Awareness affected positively to Perceived Quality

H_3: Perceived Quality affected positively to Repurchase Intention

CHAPTER III

RESEARCH METHOD

3.1 Research Variable and Operational Definition

A measurable concept is done by looking at the behavioral dimensions, facets, or properties denoted by the concept. These are then translated into observable and measurable elements so as to develop an index of measurement of the concept. Operationally, defining a concept involves a series of steps.

According to Uma Sekaran and Roger Bougie in Research Methods of Bussiness book: A Skill-Building Approch, a variable is anything that can take on differing or varying values. The values can differ at various times for the same object or person, or at the same time for different objects or persons. The three of variables were discussed in this research:

3.1.1 Independent Variable: Brand Image and Brand Awareness

An independent variable is one that influences the dependent variable in either a positive or negative way. That is, when the independent variable is present, the dependent variable is also present, and with each unit of increase in the independent variable, there is an increase or decrease in the dependent variable also. In other words, the variance in the dependent variable is accounted for by the independent variable.

Brand image is the perception in the mind of the customers about the brand. A differentiated, ''ownable'' brand image can build an emotional and

rational bridge from customers to a company, a product, or a service (Knapp, 2000). The indicatorsof this variable are proposed as follows:

a. Good recreational opportunities (BI1)

b. Beautiful scenery and natural attractions (BI2)

c. Clean and fresh environments (BI3)

d. Safe and secure (BI4)

e. Good value for money (BI5)

Picture 3.1
Variable Model: Brand Image
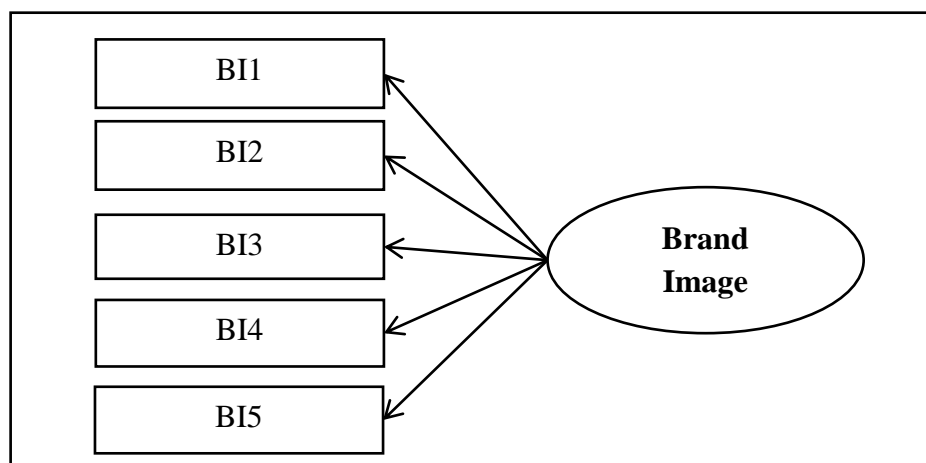
Source: Birgit Leisen, 2001

Brand Awareness relating to the strength of the trace in memory, as reflected by consumers' capability of identifying the brand under different conditions (Rossiter and Percy, 1987). The indicators of this variable were proposed as follows:

a. Recall the brand (BA1)

b. Familiar with Lake Toba (BA2)

c. First comes to people mind when an individual was considering taking a trip (BA3)

d. Be experienced with Lake Toba (BA4)

e. Knowledge about lake toba (BA5)

Picture 3.2
Variable Model: Brand Awareness
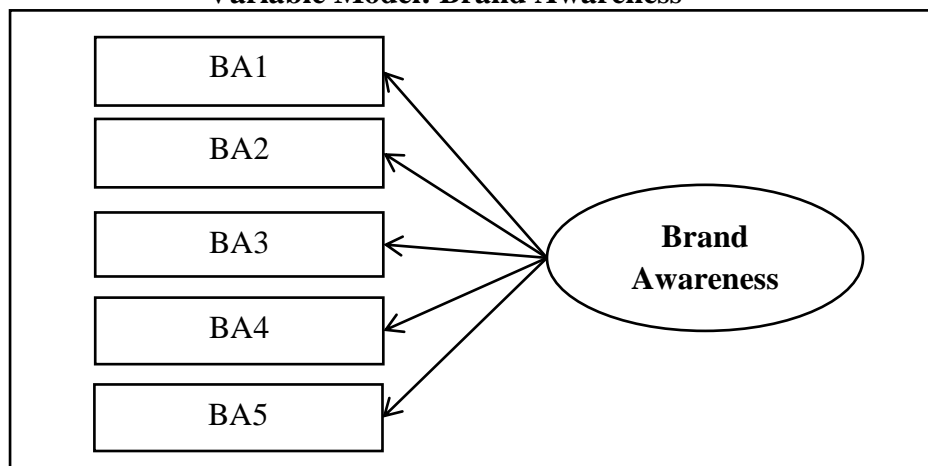
Sources: Aziz et.al. , 2012

3.1.2 Intervening Variable: Perceived Quality

An intervening variable is one that surfaces between the time the independent variables start operating to influence the dependent variable and the time their impact is felt on it. There is thus a temporal quality or time dimension to the intervening variable. The intervening variable surfaces as a function of the independent variable(s) operating in any situation, and helps to conceptualize and explain the influence of the independent variable(s) on the dependent variable.

Perceived quality is a result of consumers' subjective judgment on a product (Zeithaml, 1988; Dodds et al., 1991; Aaker, 1991). Bhuian (1997) also consider perceived quality as a judgment on the consistency of product specification or an evaluation on added value of a product. The indicators of this variable were proposed as follows:

a. Service delivery process (PQ1)

b. Business tourism facilities (PQ2)

c. Tangible things (PQ3)

d. Trade mark (PQ4)

Picture 3.3
Variable Model: Perceived Quality
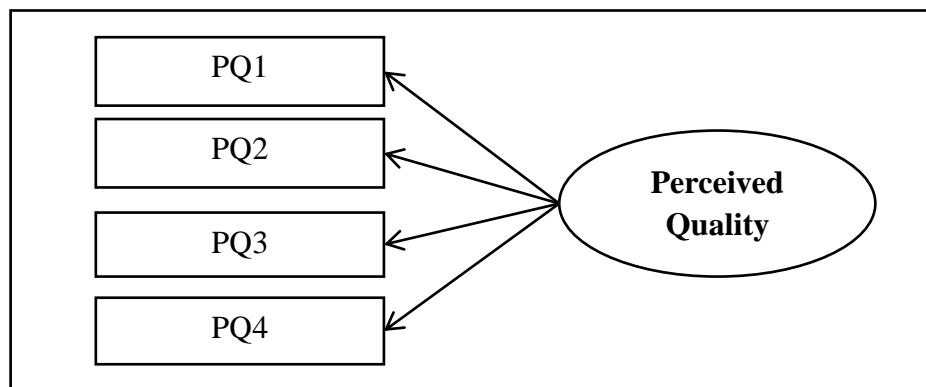
Source: Aziz et.al, 2012

3.1.3 Dependent Variable: Repurchase Intention

The dependent variable is the variable of primary interest to the researcher. The researcher's goal was to understand and describe the dependent variable, or to explain its variability, or predict it. In other words, it was the main variable that leads itself for investigation as a variable factor. Through the analysis of the depen- dent variable (i.e., finding what variables influence it), it was possible to find answers or solutions to the problem. For this purpose, the researcher would be interested in quantifying and measuring the dependent variable, as well as the other variables that influence this variable.

Repurchase Intention is a post-purchase behavior. The Satisfaction and dissatisfaction on a product will influence the upcoming consumer behavior (Kotler and Keller, 2009). Repurchase Intention is a consumer behavior that

appeared in response to an object. Repurchase Intention shows the desire of customers to make repeat purchases in the future.. After deciding to purchase a product or some service, a consumer ussually has references on some some consideration. The indicators of this variable were proposed as follows:

a. Consider go to this destination again (PI1)

b. Intent to visit this destination again (PI2)

c. Possible that I go back to this destination (PI3)

d. Predict I will visit Lake Toba in the future (PI4)

Picture 3.4
Variable Model: Repurchase Intention
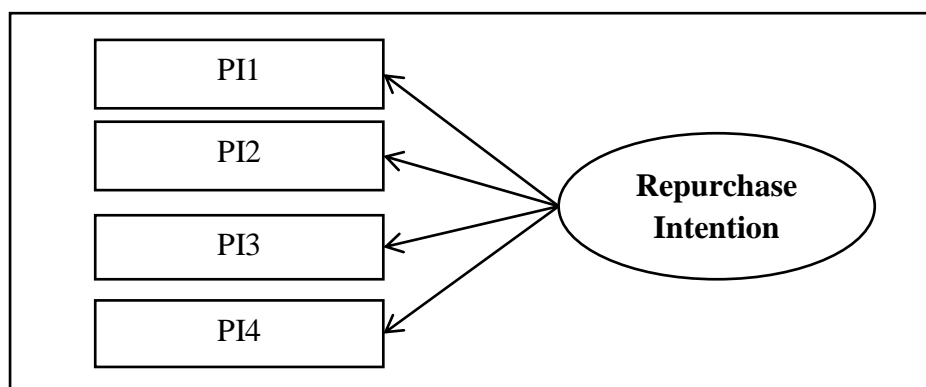
Source: Dursun et.al., 2011

3.2 Population and Sample

Population refers to the entire group of people, events, or things of interest that the researcher wishes to investigate (Sekaran, 2013). In this research, the population was all of the local tourists of seven regencies surrounding the Lake Toba environment, North Sumatera Province; Simalungun Regency, Toba Samosir Regency, Samosir Regency, Karo Regency, Dairi Regency and Humbang Hasundutan Regency who have the appropriate characteristic.

Samples are subsets of the population. The samples consist of some members of the population. This subset is taken because in many cases it is impossible to examine all of the population, therefore we make a representative sample of the population. By examining the sample, the research conclusions can be generalized for the population.

SEM analysis required sample at least 5 times of the indicators. This research contained 18 indicators, so the amount of samples were 18 x 5 equaled to 90 samples (Ferdinand, 2006). In addition, In Chi-Square Test in SEM analysis, the size of sample has important role in interpretating the result of SEM analysis. The recomendation sample size is between 100 and 200 for Maximum Likelihood estimation method (Ghozali, 2013).

To facilitate the data analysing, this research would be applied to 185 samples of local tourists from three regencies (Simalungun, Toba Samosir, and Samosir). This research population were all of the local tourists (seven regencies) visiting Lake Toba. Tourist is any person travelling for a period of 24 hours or more in a country other than that in which be ussualy resides in order to enjoy recreation of family; healthy, meeting or works (knowledge; job; sports; etc), entrepreneurship oriented.

Research respondents would be male and female whose biological ages between 17 – Early Adulthood; since their characteristics: start to know what is the quality means, and 55 – late elderly; since their characteristics: (1) have their perception based on their personal experiences (2) don't have to hurry in

purchasing things (3) calmly and friendly (4) not affected by the changes of times (Mangkunegara, 2002).

The quistionairres consisted of two main parts: First part was filtering questions and the second part was the indicators queries. The first part contained about the respondent's characteristics; the name, the gender, the ages (between 17-year-old and 55-year-old), the education, the earning per month, and the frequency visit to Lake Toba (min.3 times) in last three year, individual's income – to adjust the quality clasification. The second part contained about the respondents' answer on 18 questionairres' questions. The survey period was from 08.00 – 19.00 around the hotel near Lake Toba, souvenir shops near Lake Toba, Lake Toba sides. The questionnaires would be filled on the spot.

Picture 3.5
Map of Regencies surrounding Lake Toba,
North Sumatera

3.3 Sources of Data

3.3.1 Primary Sources of Data

Primary data refers to information obtained firsthand by the researcher on the variables of interest for the specific purpose of the study. Sources of primary data in my research is questionnaires spreading (Sekaran, 2013).

3.3.2 Secondary Sources of Data

Secondary data refers to information gathered by someone other than the researcher conducting the current study. Data can also be obtained from secondary sources, for example in my research, government publications, industry analyses offered by the media, annual reports of company, and the internet. Such data can be internal or external to the organization and accessed through the Internet or perusal of recorded or published information (Sekaran, 2013).

Secondary sources of data in my research came from the statistics data, moreover related organization website also from newpaper article, and preveious research.

3.4 Data Collection Method

3.4.1 Questionnaires

A questionnaire is a preformulated written set of questions to which respondents record their answers, usually within rather closely defined alternatives. Questionnaires are an efficient data collection mechanism when a study is descriptive or explanatory in nature. They also intoduce a much larger

chance of nonresponse and nonresponse error. They are administered personally in my research (Sekaran, 2013).

The questionnaire would be in five major sections; first section included questions on the tourist profile such as gender, education, age, and income, intention of buying. The next four questions were developed to assess the respondents level of agreement on brand image, brand awareness, perceived quality, and repurchase intention. There would be 18 questions were selected for all four sections. All data collected were analysed using the AMOS 20.0.

According to Sekaran (2013), the scales have to be used depending on the type of data that need to be obtained. In this research, Likert scale interval 1- 7 is applied. The likert scale is designed to examine how strongly respondents agree with a statement on a ten-point scale with the following anchors:

1 = Strongly Disagree 2 3 4 5 6 7 = Strongly Agree. Hence the likert scale allows us to distinguish consumers in terms of how they differ from one another in their attitude toward the indicator. Besides the close questions which is indicators, the questionnaires apply one open questions each indicators.

3.5 Data Analyses Method

3.5.1 Hypothesis Test

Data Analysis and research intrepretation which are created to answer research questions in order to solve the particular social phenomenon. Data analysis is a data simplification process to be an easier reading and implementing later. Analysis method applied in this research was Structural Equation Model

(SEM) which was operated by AMOS 20.0. The reason is SEM may measure a simultaneously complex set of relationships. Ferdinand (2006) explained research modelling through the SEM may answer the question of the researcher in regression and dimensional (measure the dimension of a concept).

Complete SEM modeling basicly consists of two main parts which are Measurement Model and Structural Model. Measurement Model is used for confirming the indicators of a latent varable. Structural Model is made to explain the causative among the factors. In this research was applied two kinds of analysis method, for example:

1. Confirmatory Factor Analysis is used to confirm the most dominant factors in a variable group.
2. Regression weight in SEM is used to research how much the influence among the variables.

Steps that include for describing the SEM, as follows:

A. Theoritical Developing Model

Structural equation modelling (SEM) based on causality relationship, when a changing variable is assumed to affect the others. The strong of the relationship among one variable to others are not located in theoretical justification in order to support analyses. So, the relationship among one variable to others is a theory of deduction.

The most critical mistake in developing model based on theory is losing one or more predictive variables and this called specification error. The

implication of losing the significant variable is giving bias to the important variable measurement.

## B. Draw and Modify Path Diagram to Structural Equation

There are two things need to be done; draw the structural model in which connect endogen and exogen laten construct , and creates the measurement model in which connects the endogen and exogen variable construct to indicator variable or manifest.

When measurement model has been specified, a reliability from the indicator must be completed. The indicator reliability has two ways, i.e. estimate empirically or specify.

Moreover, correlation specified with endogen or exogen construct is needed and correlates the exogen construct several times, this creates share with endogen construct. Indicator variable or manifest in measurement model can be correlated from the correlation construct. It is better avoided unless in special issue. In study, for example, discover surely effect of measurement or data collecting from two or more indicators or longitudinal study of which indicator was collected although in the different timing period.

Picture 3.6
Path Diagram: The Impact of Brand Image and Brand Awareness on
Repurchase Intention through Perceived Quality
(Study Case Lake Toba, North Sumatera)
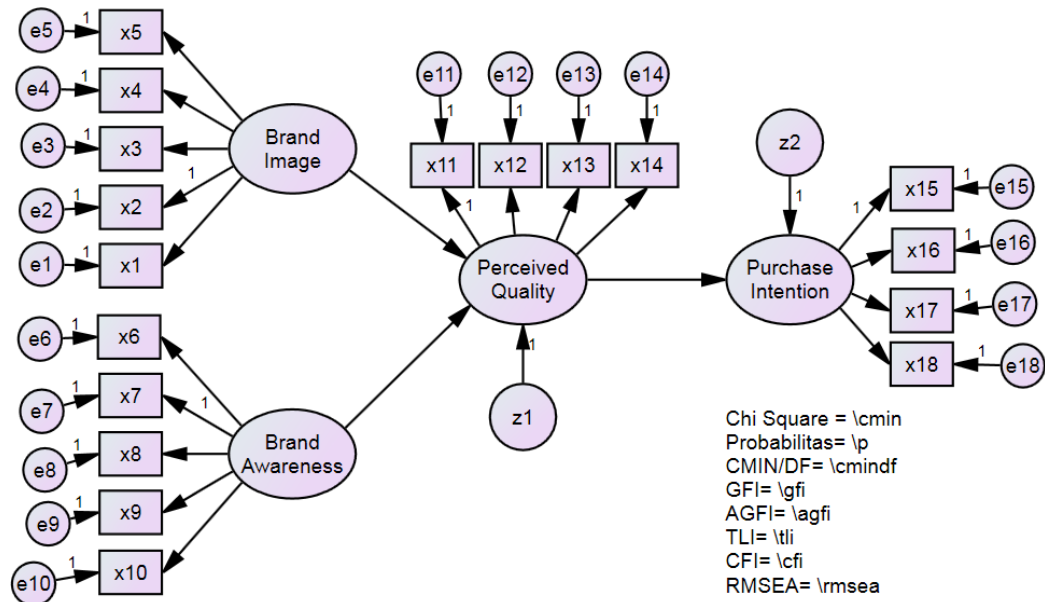
Source: Primary Sources of Data, 2015

C. Select Input Matrix for Data Analysing and Proposed Model Estimation

Structural equation modelling (SEM) uses only input such as variant matrix/ covariant or correlation matrix. Individual raw data observation can enter to AMOS program while AMOS will change early the raw data to covariant matrix or countable correlation.

In the beginning, structural equation modelling (SEM) is formulated using variant matrix/ covariant (often called covariance structural analysis). The advantages of variant matix is in giving the comparing validity between the different population and different sample. However, difficult to give the interpreting result since coeficient need to be interpreted based on construct measurement unit.

Although, correlation matrix in structural equation modelling (SEM) (SEM) is variant standardize/ covariant. Correlation application is suitable if the research purpose just to understand the relation pattern among the construct, but not totally explain variant from construct furthermore, other utilization to compare several different variables, in which measurement scale affecting covariant matrix. Obtainable coefficient from correlation matrix always in standardized formed unit is the same betha coefficient in regression equation and around -1,0 and +1,0.

In short, the matrix input must be applied in order to test the theory. Whereas, if just to see the relation pattern but not total explaining that needed in theory testing, so the using the correlation matrix is acceptable.

1. Size of Samples

The number of samples have important role for interpreting the result of SEM. Size of sample helps basic in sampling error estimation. Using the Maximum Likelihood (ML) needs around 100-200 samples. When more samples earned, more sensitive ML method in detecting distinction of the data in avoiding an extremely bad *goodness-of-fit*.

2. Estimation of Model

Previously, ordinary least square (OLS) was applied, but now replacing by ML which is more efficient and unbiased if asumption of multivariate normality is complete. ML do sensitive with non-normality too so weighted least square (WLS), generalized least square (GLS), and asymtotically distribution free (ADF) are created. My research applied AMOS for estimating SEM model.

D. Measure Model Identification

During the estimation process, unlogical and meaningless results which link to stuctural model identification problem often appear. There are four steps seeing how the identification problem is detected: (1) big standard error value for one or more coefficients, (2) inability of the particular program to invert information matrix, (3) the impossible of estimation value, for example negative error variance, (4) high correlation value (>0.90) among the estimation coefficients.

If the existence of identification problem, so there are three things need to be concerned: (1) how big the coefficient relatively estimating of covariant or correlation amount is, (2) using of reciprocal among the construct (non-recursive model) or (3) mistaken in determining fix value of the construct scale. Setting more constraints in the model unless the identification problem dissapear.

E. Evaluate Model Estimation

There are three basic asumptions need to be fulfilled in order to apply SEM; (1) observation of independent data, (2) random sampling respondent, (3) possess linear relation. Furthermore, SEM is sensitive of data distribution characteristics, especially distribution of which multivariate normality is straying also high data curtois.

After all the asumption compeleted, look if there is offending estimate, i.e. coefficient estimation either in structural model or model measurement of which value over the acceptable limits.

If there is no more offending estimate in a model, the overall model fits to be rated. There are three types of goodness-of-fit: (1) absolute fit measurement, (2) incremental fit measurement, (3) parsimonious fit measurement.

1. Absolute fit measurement

For the measurement of absolute fit, the three most basic measurements are the likelihood ratio of chi-square statistic, the goodness-of-fit index and the root mean square residual.

a. Likelihood ratio of chi-square statistic (χ_2)

The Chi-Square value is the traditional measure for evaluating overall model fit and, 'assesses the magnitude of discrepancy between the sample and fitted covariances matrices' (Hu and Bentler, 1999: 2). Chi-Square statistic is in essence of statistical significant test and it is sensitive to sample size which means that the Chi-Square statistic nearly always rejects the model when large samples are used (Bentler and Bonnet, 1980; Jöreskog and Sörbom, 1993). On the other hand, where small samples are used, the Chi-Square statistic lacks power and because of this may not discriminate between good fitting models and poor fitting models (Kenny and McCoach, 2003).

b. Goodness-of-fit index (GFI)

This statistic ranges from 0 to 1 with larger samples increases its value. When there are a large number of degrees of freedom in comparison to sample size, the GFI has a downward bias and fair fit (Sharma et al, 2005).

c. Root mean square error of approximation (RMSEA)

RMSEA in the range of 0.05 to 0.080 is considered to an indication of fair fit and values above 0.080 indicates poor fits. Empirical result of RMSEA is suitable with confirmatory model or competing model strategy of which sample is large.

2. Incremental fit measurement

The incremental fit measurement assesses the incremental fit of the model compared to a null model, where the null model is hypothesized as a single-factor model with no measurement error.

a.   Adjusted Goodness-of-fit index (AGFI)

AGFI is devoloped from GFI and adapted with ratio degree of freedom for null model. The AGFI value will be accepted in the range between 0 and 1 and it is suggested generally in the values of 0.90 or greater.

b.   Tucker-Lewis-Index (TLI)

This measurement merges the parsimony size into comparison index between proposed model and null model. TLI value is in the range between 0 and 1. The suggested TLI value is more than 0.90 which is a well fitting model.

c.   Normal fit index (NFI)

NFI is the comparison measurement between proposed model and null model. NFI values varies from 0 (no fit at all) until 1,0 (perfect fit). Neither TLI nor NFI have no absolute standard, although, the accepted values of 0.90 or greater is a well fitting model.

3. Parsimonious fit measurement

This measurement type is the best when compares to several developed models for a given data sets in order to choose which model could be the best described in the variable relationships. While the data of the three developed model came from different data sets, the comparison will only be done as to which model is most fit to describe the data used.

a. Parsimonious normed fit index (PNFI)

The PNFI is the result of applying James, et al.'s (1982) parsimony adjustment to the NFI. While no threshold levels have been recommended for these indices, Mulaik et al (1989) noted that it is possible to obtain parsimony fit index to the half area while other goodness of fit indices achieve values over .90 (Mulaik et al 1989).

b. Parsimonious goodness-offit index (PGFI)

PGFI modifies GFI based on estimated model. PGFI value is about 0 and 1 and if the value near 1,0 indicates the best parsimony model.

F. Measurement Model Fit

After the whole model be evaluated, the next step measures each construct for indicating unidimential and reliability. The unidimentionality refers to an asumption which underlies calculation of realibility and shows when the indicator of construct has been acceptable fit one dimensional model. Appliying the Cronbach Alpha does not mean that it has unidimentionality, although it has unidimentionality asumption.

Approach to indicated masurement model is to quantify a composite reliability and variance which extrated on each constructs. Reliability refers to internal consistency indicator for each construct. Generally, realibility value range will be accepted if it is more than 0.70, but for the exploratory research could be less than 0.70.

$$\text{Construct Reliability} = \frac{(\Sigma \text{std loading})^2}{(\Sigma \text{std loading})^2 + \Sigma \varepsilon \, j}$$

$$\text{variance extracted} = \frac{\Sigma \text{std loading}^2}{\Sigma \text{std loading}^2 + \Sigma \varepsilon \, j}$$

G. Structural Fit Model

Evaluating srtuctural fit model involves significant from its coefficient. SEM gives a result of coefficient estimation, standard error and critical value for each coeffeicient. So, we can measure each significance statistically in a certain level of significance (0.05). the significance level selection is affected by theoritical justification for acceptable of causality relationship. If hypothesis proposed has a negative or positive relationship, one tail significant test will be applied. However, two tails significant test will be used if the relationships does not have a tangible relationships.

H. Comparation Competing or Nested Model

Competing model or developing model strategy is carried out by a comparation result of one model to determine the best model from many alternatives. Starting model and then specification several models are applied to gain the fit model.

The difference of the models can be seen from the chi-square value (X^2) that tests statisticly with certain degrees of freedom. Number of construct and indicators must be similar to, so null model is equal to the others (nested model). But, if the model turns out to be non-nested model of which indicators and constructs are different, the parsimony fit measurement will be applied.

I.   Model Interpretation and Modification

When model has been accepted, modification of model is needed to fix to the theoritical or goodness-of-fit explained. If the model is modified, the model must be cross-validated before the modification is accepted.

Generally, estimation of parameter in SEM based on Maximum Likelihood (ML). There are four factors in fulfilling the asumptions:

1.   Large sample

Covariant structure analysed or SEM based on large sample theory, the size of large sample is critical in order to get the exact parameter estimation, and hit the asymptotic distributional approximation too.

2.   Multivariate of observed normal variable distribution

Accordng to the non-normality empiric research in SEM, West et al. (1995) found 4 important things: First, more abnormal data with a larger value of χ^2 measured by ML and GLS esimation. This condition suggests a research modify hypothesys to be fit. Eventhough, larger value of χ^2 may risk to no more fit theoritically.

When the sample size is small (even in normal multivariate condition), both ML and GLS methods produce increased χ^2.

3.   Validity of hypothesis model

The confirmatory factor analysis (CFA) is the ability to assess the construct validity of the proposed measurement theory. The construct validity measures to how far the indicator can reflect the latent constructs of its theory. So, the construct validity gives a confidents of the indicator of which is taken from sample obtained of the actual characteristics of population.

4.   Interval variable scale measurement

The measurement of variables scale in SEM analysis is controversial. Likert scale appears to measure variables or constructs based on the subject declaration of a accepted concept. The score generated by Likert scale can be considered continuous or interval.

Table 3.1
Range of Goodnes of Fit Measurement

Goodness of Fit Measurement	Range of Significant Value
Confirmatory Factor Analysis	
a. Loading factor	> 0.5
b. Critical Ratio	> 1.96
Absolute Fit Measure	
a. Likelihood-Ratio Chi-Square Statistic	small
b. CMIN	$(N-1)$ F min
c. CMIN/DF	< 2 (fit)
d. GFI	0 (poor) – 1.0 (perfect)	> 90%
e. RMSEA	0.05 – 0.08
Incremental Fit Measures	
a. AGFI	≥ 0.90
b. TLI	≥ 0.90
c. NFI	≥ 0.90
Parsimonious Fit Measures	
a. PGFI	0 – 1.0 (more parsimony)
Measurement Model Fit	
a. Undimentional	> 0.70 (generally) ;
b. Reliability	< 0.70 (accepted if eksploratoty research)
Structural Model Fit	
a. Coefficient Significancy	0.05