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The impact of brand equity's dimensions on purchase intention: An empirical study of beer brand in Vietnam

Bachelor of Business Administration Thesis

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SUMMARY

The purposes of the thesis are to investigate the impact of brand equity's dimensions on the purchase intention of beer brands in the context of Vietnam. Samples were collected from beer drinkers and buyers in the Vietnamese market and studied through quantitative and qualitative analyzes to examine hypotheses. As a result: (a) dimensions of brand equity consist of Brand Awareness, Brand Association, Brand Loyalty, Perceived Quality, Brand Desire; (b) dimensions all have an influence on Purchase intention except Brand awareness, where Perceived quality is the most impactful dimension.

Several studies on the influence of brand equity on purchase intent have been conducted throughout the world over the years, but none on the beer market, particularly in Vietnam. The following study uses data collected from customers in three regions of Vietnam through convenience sampling and interviews to accurately assess customer evaluation behavior in Vietnam. With these findings, the study points out useful suggestions for businesses in Vietnam to be able to improve their brand equity to help increase consumer purchase intention.

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CHAPTER 1: INTRODUCTION

1.1 Topic Background

With continual growth, the beer manufacturing and trade business plays a critical part in the global economy, bringing in income and providing hundreds of billions of dollars to the budget. According to the research "Worldwide Beer Market and COVID-19 Impact in the Medium Term" In 2015, the worldwide beer market was \$498.66 billion USD (in retail prices) and the average per capita consumption was \$112.45 USD (in retail prices)¹. The emergence of the coronavirus illness (COVID-19) and the subsequent adoption of lockdown and social separation laws in a number of nations have affected on-premises beer consumption and sales. On the contrary, this tendency has increased demand for home delivery services and to-go packs via online platforms.

The beverage production and trade business has long been one of Vietnam's most significant and promising economic sectors. This is the industry that mobilizes a large number of social resources, particularly from the domestic and international private sectors, produces a large number of employees, and contributes to the budget year after year; contributes to social security. With a yearly consumption of billions of liters, it is easy to see why beer firms all over the world want to capture the Vietnamese market. According to the Nikkei Asian Review, Vietnam is one of Asia's fastest-growing beer markets.²

According to Minh Dung (2020)³, in the last ten years, the Beer industry in Vietnam has expanded speedily, beer production accounts for 95 percent of total alcoholic beverage consumption in Vietnam. Moreover, annual beer consumption increases steadily, Vietnam has used up over 4.5 billion liters of beer (including all types of beer such as canned beer, bottled beer, draft beer,...) by the end of 2019, making Vietnam the largest beer consumer in the ASEAN region. Beer consumption has risen in Vietnam at a pace of 6.6 percent per year over the last six years, which is extremely significant when compared to the global

¹ Research and Markets, 'Global Beer Market Report 2020 with Impact of COVID-19 in the Medium Term', GlobeNewswire News Room, 19 October 2020, <https://www.globenewswire.com/en/newsrelease/2020/10/19/2110117/28124/en/Global-Beer-Market-Report-2020-with-Impact-of-COVID-19-in-theMedium-Term.html>.

² 'Vietnam's Top Beer Maker Sabeco Loses Its Fizz', Nikkei Asia, <https://asia.nikkei.com/Business/FoodBeverage/Vietnam-s-top-beer-maker-Sabeco-loses-its-fizz>.

³ 'Cạnh Tranh Quyết Liệt Giành Thị Phần Bia', Báo Nhân Dân, <https://nhandan.vn/tin-tuc-kinh-te/canh-tranh-quyetliet-gianh-thi-phan-bia-609791/>.

average of 0.2 percent. Due to the market's high attraction, the world's major beer brands, including Heineken, Budweiser, Carlsberg, Tiger, Sapporo, and others, have all "landed" in Vietnam.

Depending on the Vietnam Beer, Alcohol, and Beverage Association (VBA), from 2011 to 2021, Vietnam's average beer consumption will rise by 65%. However, the beverage sector has been impacted from the beginning of 2020, due to the combined impacts of the Covid-19 outbreak and Decree 100, the beverage business group's manufacturing capacity is presently less than 80% of its pre-pandemic level (General Statistics Office of Vietnam, 2021).

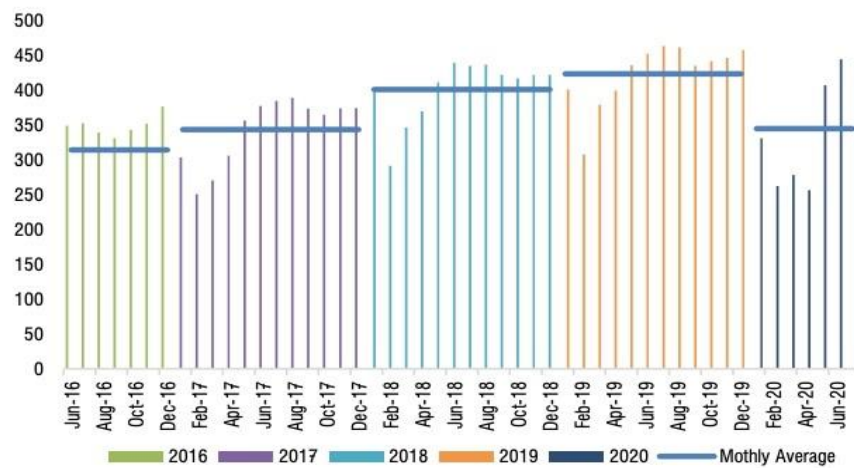


Figure 1. 1: Monthly beer consumption (General Statistics Office of Vietnam)

In 2020, Beer consumption per capita is 40.5 liters, a decrease of 7.1 liters compared to 2019. Beer output was 3,955.1 million liters, a decrease of 13.9%, and the indicator of consumption of the beverage industry decreased by 6.3% compared to 2019⁴. In the first five months of 2021, the Covid-19 pandemic grew more complicated, and some communities were forced to institute social distancing measures to avoid epidemic sickness, such as limiting meetings and dining in public areas. As a result, the beverage industry's index of industrial production (IIP) fell by 0.5% in May compared to the previous month (General Statistics Office of Vietnam, 2021).

⁴ Ha Thai, 'Tác động kép của dịch Covid-19 và Nghị định số 100/2019/NĐ-CP tới Ngành công nghiệp sản xuất đồ uống', General Statistics Office of Vietnam, <https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2021/06/tac-dong-kep-cua-dich-covid-19-va-nghi-dinh-so-100-2019-nd-cp-toi-nganh-cong-nghiep-san-xuat-do-uong/>.

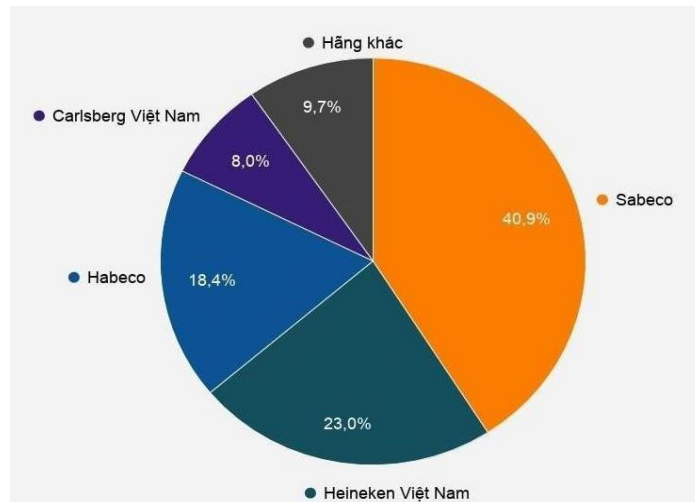


Figure 1.2: Vietnam's beer market share 2018 (Source: FPTTS)

According to the FPTTS data chart (2018), four brewing groups control more than 90% of the Vietnamese beer market share: Heineken, Sabeco, Habeco, and Carlsberg. The rest will be important worldwide brands like Sapporo, Budweiser, ... Sabeco is the market leader, accounting for 40.9 percent of Vietnam's beer production market share. Sabeco's major products include Saigon Red Beer (Saigon Export 355), Canned beer 333, and Beer cans Saigon Lager, Green Saigon Beer, Saigon Beer... Heineken is ranked second, with four major beer brands: Heineken, Tiger, Larue, and Amstel controlling approximately 23 percent of the Vietnamese beer market. Habeco with Hanoi Beer branded products were fiercely competed by two rivals Sabeco and Vietnam Brewery Co., Ltd (Heineken Vietnam). Particularly in the case of Carlsberg, after acquiring all interests at Hue Brewery, this Danish brewery is ranked 4th in the market with an 8% market share.

After ThaiBev acquired 53.6 percent of the capital of Saigon Beer Alcohol Beverage Joint Stock Corporation (Sabeco) through the legal entity Vietnam Beverage, Hanoi Beer Alcohol Beverage Joint Stock Corporation (Habeco) is the last large company in the Vietnamese beer market that is not dominated by foreign giants.⁵

1.2 Practical Problem

Stemming from the above background, Vietnam's beer market is gradually becoming a fiercely competitive playground among beer brands to find their place in the market.

⁵ 'ThaiBev thôn tóm Sabeco - Thương vụ M&A hàng đầu của ngành bia châu Á', Báo Pháp luật Việt Nam điện tử, 26 October 2019, <https://baophapluat.vn/post-321100.html>.

Up to now, the Vietnamese beer market has been dominated by domestic beer brands such as Habeco (Hanoi Beer Alcohol Beverage Joint Stock Corporation) and Sabeco (Saigon Alcohol Beer and Beverage Joint Stock Corporation). However, in recent years, due to the great attraction from the potential market in Vietnam, a series of leading beer brands in the world have rushed to invade the beer market here such as Heineken, Tiger, Carlsberg, Budweiser, Sapporo, Corona, Baltika, Beck's,... The Vietnamese beer market is more became more crowded when more than 30 famous foreign beer brands globally have joined. The emergence of more and more international beer brands has caused fierce competition not only between domestic beer brands and foreign beer brands but also between foreign beer brands. Besides, since foreign beer brands have flocked to Vietnam, the market share of famous domestic beer brands has decreased significantly. According to Bach Moc (2021)⁶, the revenue of Heineken Vietnam Company (Heineken Trading) did not a deduction but also lift slightly, reaching more than 55,700 billion VND. In previous years, Heineken Trading's revenue grew very strongly, reaching nearly 20% per year. Meanwhile, Sabeco Trading with a similar role to Heineken Trading recorded a decrease of more than VND 7,000 billion in revenue, to VND 30,167 billion. Sabeco's consolidated revenue reached VND 27,961 billion, down nearly VND 10,000 billion. Thus, the revenue gap between Heineken and Sabeco widened further after the first year of the Covid-19 pandemic, the difference in commercial revenue was more than 1 billion USD. The fact that the Vietnamese beer market is having too many beer brands and the market share is gradually falling into the hands of foreign beer brands, causing many problems that seriously affect Vietnamese beer brands. Vietnamese beer brands are even gradually disappearing and being replaced by a series of famous foreign brands in the future. Brand positioning will be a difficult challenge for Vietnamese beer brands to stand firm in this competitive market.

Not only that, the "big guys" in the beer industry also continuously expand branches and increase production capacity at factories in order to access the market more effectively, and at the same time create fierce competitive pressure on the beer production businesses in Vietnam. Anheuser-Busch InBev Company (Belgium) inaugurated the most modern Budweiser brewery in Binh Duong province, with a capacity of 50 million liters per year,

⁶ 'Doanh Thu Sabeco Ngày Càng Bị Heineken Bỏ Xa, Thị Phần Lớn Hơn Nhưng Lại Chỉ Bằng Nửa | Tin Tức Doanh Nghiệp Niêm Yết |', CafeF.vn, accessed 16 September 2021, <http://s.cafef.vn/SAB-432241/doanh-thusabeco-ngay-cang-bi-heineken-bo-xa-thi-phan-lon-hon-nhung-lai-chi-bang-nua.chn>.

and has since increased its capacity to 100 million liters per year. Besides, Sapporo Company (Japan) which owns the Sapporo beer brand has continuously evolved its investment in the factory and heavily spent on brand advertising in Vietnam⁷. Sapporo's brewery in Long An province has expanded its capacity from 40 million to 100 million liters per year. In addition, beer companies continually launch new beer cans and beer bottles with attractive, trending designs and progressively high quality to meet the tastes of customers⁸. In fact, beer brands are expanding into a more broad market and no longer monopolizing market share based on regional tastes as before. The above shows that large foreign beer companies not only invest in production but also focus a lot on brand image. That makes the competition more and more fierce. At the same time, it requires other beer brands to also invest in the quality of the brand more to gain a foothold in the market. Because it can be seen that enjoying beer now is not just about enjoying the taste. Consumers are increasingly setting higher standards for the products they consume. They tend to care more about brand quality, image, product packaging. That is why beer brands are always racing to refresh their brand image and upgrade their brand equity to help customers satisfy their needs.

The emergence of many international beer brands and huge investments in their brands have made the competition in the Vietnamese beer market increasingly fierce. Therefore, investing in brand equity development becomes a top priority and more necessary than ever for businesses, especially in today's globalized economy. In addition, consumers' demand for beer with services will increase in the future. Therefore, this competition requires businesses to know the buying behavior of consumers in order to have appropriate strategies to increase the brand equity of their products.

In particular, at present, the amount of research on the beer market in Vietnam accounts for very little. A number of research papers focus on the topic of beer consumption habits and behavior of consumers in Vietnam, for example, "Research on consumer behavior of Saigon beer products in Long Xuyen City" in 2009, "Factors influencing consumers' decision to choose Saigon Beer brand in the Mekong Delta" in 2017,... It shows that there is very little research on the beer market in Vietnam. At the same time, the research scope

⁷ Thương Báo Công, 'Bình Dương: Khánh thành nhà máy bia AB InBev Việt Nam | Báo Công Thương', Báo Công Thương điện tử, kinh tế, chính trị, xã hội, 21 May 2015, <https://congthuong.vn/binh-duong-khanh-thanh-nha-may-bia-ab-inbev-viet-nam-51671.html>.

⁸ 'Sapporo Tăng Công Suất, Mở Rộng Thị Trường - VietNamNet', accessed 16 September 2021, <https://vietnamnet.vn/vn/thi-truong-tieu-dung/sapporo-tang-cong-suat-mo-rong-thi-truong->

of the above studies is also quite narrow and the time of the study is quite old. Besides, in Vietnam, the studies about the impact of brand equity on consumers' purchase intention are often studied in the confectionery market, mobile phone market, cosmetics market, etc. In particular, there are no studies on the beer market.

Therefore, it is new and urgent to study the constitutive of beer brand equity's dimensions that affect the purchase intention of consumers in Vietnam. The research will help beer brands in Vietnam understand the thoughts and intentions of consumers, understand what consumers want, thereby improving and enhancing brand equity for their products in the fiercely competitive beer market.

1.3 Research objectives

The primary goal of the thesis is to identify the dimensions of brand equity influence consumer's purchase intention about beer in Vietnam. After that, the research will evaluate and measure how is the impact of these aspects on consumer purchase intention so as to come up with more effective solutions to build and promote the brand. This study is achieved by performing the following objectives:

- Objective 1: Determining the dimensions of brand equity.
- Objective 2: Investigating the impact of brand equity's dimensions on purchase intention about beer in Vietnam.
- Objective 3: Give useful recommendations and propose some solutions to enhance brand equity about beer in Vietnam.

1.4 Research questions

The questions used for finding out research objectives are as follows:

- Question 1: What are the dimensions of brand equity?
- Question 2: How do these brand equity's dimensions impact on purchase intention about beer in Vietnam?
- Question 3: What are some useful recommendations about how to build and develop brand equity about beer in Vietnam?

1.5 Research scope

The major goal of this thesis is to determine how the dimensions of brand equity influence purchase intention about beer brands in Vietnam. To provide the most precise and impartial

data available, the research study's scope was enlarged countrywide and focused on people aged 18 years old and older.

Target sample characteristics:

- Survey type: Online
- Age: 18 years old and older
- Gender: Male/ Female and Others
- Number of respondents: 458
- Scope of the research: Viet Nam

1.6 Methodology and data overview

In this study, quantitative approaches are used to collect data through surveys, then analyzed by SPSS, thereby drawing conclusions about the beer market through collected data. While qualitative methods are used to collect data through in-depth interviews with the aim of helping to learn more about the situation and consumer psychology, helping to widen the scope and enhance the analytical power of research. For the Vietnamese market, qualitative research helps the scales to match reality. Surveys will be sent via Facebook and the results will be analyzed using SPSS software. The number of survey respondents was 458. Newspapers, the internet, research articles, and internal data were used for secondary research.

1.7 Outline of thesis

Chapter 1: Introduction

Chapter 1 presents background information on the background of the study including essential information for research such as research background, research objectives, research questions, and methodology.

Chapter 2: Literature review

Chapter 2 presents the relevant theories as to the foundation for the formation and development of research questions and provides a research model with hypotheses.

Chapter 3: Methodology

Chapter 3 presents research methods such as quantitative analysis, qualitative research, and data collection methods. Then explain why the study has to do it.

Chapter 4: Analysis and finding

Chapter 4 is the chapter analyzing the data from the research results of chapter 3. Thereby better understanding the factors of beer brand equity in the Vietnamese market that affect purchase intention

Chapter 5: Recommendation and conclusion

Based on the analysis of chapter 4 and chapter 5, conclusions and recommendations will be made about the factors of beer brand equity in the Vietnamese market that affect purchase intention.

CHAPTER 2: LITERATURE REVIEW

2.1 Brand

There are many views surrounding the term brand and can be divided into 2 main points of opinion: traditional opinion and general opinion.

- Traditional opinion:

According to the American Marketing Association (1960), a brand is a name, symbol, design, or combination of the foregoing used to differentiate one seller's or a group of sellers' goods or services from those of competitors.

Based on the foregoing, the mark is presented as an integral part of the product and the primary function of the mark is to set it apart from competing products of the same kind. This view continued with the development of the marketing industry until the end of the twentieth century, many researchers argue that this view cannot explain the roles of brands in the global economy and fierce competition.

- General opinion:

"Brand is not simply a name or a symbol, but it is much more complex" is the opinion of researchers in contrast to the traditional view. Branding elements include all those signs, both tangible and intangible, intended to distinguish different goods or services or to differentiate different manufacturers from competitors. A brand is a collection of attributes that give target customers the values they want (Davis, 2002).

As Stephen King of WPP was said that: *"A product is what is made in a factory, a brand is what a customer buys"*. Products can quickly become obsolete, but a brand, if successful, will never be obsolete (Aaker, 1991). The concept that the product is a component of the brand is increasingly accepted by researchers and practitioners, and gradually the brand has replaced the product in the marketing activities of the business (Chevron, 1998; Bhat and Reddy, 1998)

According to this point of view, in Vietnam, Professor Ton That Nguyen Thiem believes that a brand is all that consumers, markets, and society think about a firm and the products and services that it provides.

In short, a brand is a collection of signs that customers or the public perceive through consuming products or services or decoding messages from product or service providers

or created by other ways to distinguish one supplier's goods, services, or group of goods or services from another supplier, or to distinguish between suppliers.

2.2 Brand Equity

Based on Aaker (1991), brand equity is included brand assets and liabilities connected with a brand; it is name and symbol, plus or minus the value that a product or service provides to a business and to its consumers. It means that brand equity is the additional value that engages consumers. This is also the concept that many later researchers cite the most.

Given the same amount of product attributes the distinct consumer preference between focused branded items and unbranded items is known as brand equity (Yoo, Donthu and Lee, 2000). Brand equity can be described from both a consumer and a business standpoint (Atilgan *et al.*, 2009).

Similarly, Keller (1993) defines a brand with high value when customers are aware of it and have a favorable perception of the features and benefits it provides. Consumers purchase products not just because of the quality of the product, but also because of the brand. The more valuable a brand is, the more valuable its products are. Brand equity is the customer's knowledge of that brand...

Just as was argued by Keller (1998) demonstrate that brand equity refers to the brand's unique marketing effects. When it comes to the positive aspect of brand equity, people are prepared to spend more for the same quality simply because of the attractiveness of the product name (Bello and Holbrook, 1995). Nonetheless, low product quality and customer service, for example, could harm the brand's image, resulting in a drop in sales volume.

Following Christodoulides and Chernatony (2010), brand equity is a complicated and multi-faceted notion, it must be measured using a list of measures rather than a single measure.

Besides, Lassar *et al.* (1995) said that brand equity is derived from customers' faith in a brand rather than its competitors. This trust leads to consumer loyalty, and they are prepared for a higher price for the brand.

The term "brand equity" is a very bountiful and abstract concept. It has been many different perspectives, goals, and approaches to analyzing brand equity in the past, but in general, brand equity is handled from two basic perspectives, which are consumer-based brand equity and financial-based brand equity. From financial-based brand equity, Brand equity is considered as a separate asset with the purpose of determining the brand's value relative

to the total value of a company's assets, and it can be used as a basis for evaluation. Performance pricing internally or for consolidation plans outside the business (Feldwick, 1996). However, this approach does not help managers much in taking advantage and developing the value of the brand (Kim *et al.*, 2008; Thọ, 2002). From the other perspective, brand equity is also known as brand equity based on customers, taking customer reviews as the focus. Through the association and perception of customers for each specific brand, it will add value to the product (L.C.Winters,1991). In a marketing study, the brand equity based on the customer is favored by more researchers because “*if a brand has no meaning to customers, then no definition of brand equity is real meaning*” (Cobb-Walgren, Ruble and Donthu, 1995). After all, the source of all activities must come from the customer.

To sum up, Brand equity is one of the added values for an enterprise's products/services in the eyes of consumers. This added value can be considered from the firm, the trade, or the consumer. In this research, we will define brand equity focuses on consumer-based brand equity.

2.3 Consumer Behavior

2.3.1 Consumer Behavior

All marketing decisions are made on the basis of assumptions and consumer behavior understanding (Hawkins, Mothersbaugh and Best, 2007). According to the American Marketing Association, the relationship between environmental stimuli and human cognition and behavior that causes individuals to modify their lives is referred to as consumer behavior. To put it another way, consumer behavior encompasses people's sensations and thought, as well as the activities they conduct during the consuming process. Customers' sentiments, attitudes, and behaviors could all be influenced by factors like other consumers' opinions, advertising, packaging, product presentation, and so on.

According to Kotler and Levy (1969) the precise behavior of an individual in making decisions to acquire, use, dispose of a service or product is referred to as customer behavior. Consumer's consumption behavior is influenced at different levels by factors: cultural, social, personal circumstances, and psychological factors...(Hoyer and MacInnis, 2007).

Wilkie (1994) described consumer behavior as the physical and emotional behaviors that individuals engage in while selecting, buying, consuming, and eliminating things services to meet needs and their wishes.

As said by Belch and Belch (2012), consumer behavior is the process and sequence of human actions associated with searching, choosing, buying, selling, using, evaluating, and deciding to choose services and products to satisfy their wants and needs. Consumer behavior is defined as the dynamic interaction of mental, behavioral, cognitive, and environmental elements that influence how individuals live their life (Bennett, 1989).

Researching the factors affecting consumer behavior will help businesses understand and predict the buying behavior of consumers (Brent, 1975).

According to Kotler (1996) consumer behavior research is a complicated subject, since there are several factors involved, and their proclivity to interact and impact one another. Environmental and marketing considerations enter the buyer's mind. Certain purchase decisions are influenced by buyer traits and decision processes. Consumer purchases are impacted by a combination of internal variables (psychological and personal characteristics) and external forces (cultural factors and social factors).

In a nutshell, customer behavior refers to people's thoughts and sentiments when purchasing and consuming, which are influenced by aspects in the external environment that surroundings customer behavior include behaviors such as acquiring, utilizing, and discarding goods and services.

2.3.2 Purchasing decision process

Understanding customer behavior may be gained through researching each stage of the decision-making process, explaining why customers buy or do not buy a product. On this basis, businesses can know the factors affecting consumer behavior in each decision-making stage so that they can make reasonable policies in their production and business activities... The EKB model (Engel, Blackwell and Kollat, 1978) demonstrates that consumer behavior is a continuous process that includes recognizing a need, acquiring information, weighing choices, making a purchasing decision, and then evaluating the purchase. Also on this basis, Kotler (2009) presents the process of creating a consumer choice decision through 5 steps as follows:



Figure 2. 1: Model of the consumer buying process. (Kotler 2009, 208.)

In fact, the buying process does not always have to go through these 5 stages. Consumers can skip or reverse some stages depending on the characteristics of the product to be purchased.

- Need identification:

The purchasing process starts when consumers perceive that there is a need or a problem, according to (Kotler *et al.*, 2020). The need arises when there are internal or external stimuli. Marketers can stimulate consumer demand with advertising and promotion programs.

- Information search

At this stage, the buyer is already aware of the need. In the process of searching for information, buyers often look for the following sources:

- Source of personal information: through family, neighbors, friends, relatives of buyers
- Sources of commercial information: advertising, agents, salespeople, packaging, in-store displays.
- Public information sources: mass media, product/service evaluation organizations.
- Information from personal experience: due to trial, or experience from previous products.

However, individuals surrounding the customer provide the most effective source of information (Kotler *et al.*, 2020). The consumers of offered items are understanding as more information is obtained. Or, if the enthusiasm level is great enough, the buyer can buy the product right away without additional information searching (Kotler *et al.*, 2020)

- Evaluation of alternatives

The buyer will analyze the information and alternatives after gathering all of the information. Buyers will select the product or service that best meets their requirements. The more valuable a product or service is, the more important purchase decisions are, the more criteria are used to assess the product, and the more people are engaged in the purchasing process. At this point, Kotler *et al.*, (2020) share that in every purchase scenario, sets of criteria for consumer usage in product evaluation vary. In certain situations,

customers can carefully evaluate other brands, and they can slip through and purchase impulsively in other cases. Furthermore, additional external variables, including family, friends, society, might influence the evaluation process at this point as consumers can make recommendations to buy (Kotler *et al.*, 2020).

- Buying decision

On the basis of the selected option, the consumer forms a purchase intention. But when it comes to buying, there are two more factors that can interfere with the decision: other people's attitudes and unexpected factors. Consumers normally choose to buy a favorite brand. Kotler *et al.*, (2020) argue that this decision might be driven by other people's opinions and surprising events. Purchasing decisions include many sub-decisions such as brand decisions, supplier decisions, purchase volume decisions, purchase timing decisions, and payment methods decisions.

- Post-purchase behavior

Satisfied or unsatisfied are two common states in this stage. Customers are dissatisfied if the product fails to meet expectations; if values matching expectations are effectively delivered, customers are satisfied; if expectations are exceeded, the consumer is pleased (Kotler *et al.*, (2020)). These two states will determine the post-purchase behavior of the customer. Satisfied customers will return to buy products. At the next buying stage, customers will easily make a repeat purchase decision or recommend to relatives to buy. On the contrary, customers are not satisfied when new needs appear, they will look for new suppliers. Consumers will repeat a new buying process in search of better products.

2.3.3 Purchase Intention

Consumer behavior is reflected in the steps of the shopping process: pre-purchase, during-purchase and post-purchase. Another approach to analyze consumer behavior is to measure the purchase intention of customers. Consumers go through many stages to make a purchase decision, the stage of forming purchase intention is an important stage that determines the final behavior of customers (Figure 2.2). In this study, the author focuses on researching consumer purchase intention, that is, studying consumer behavior at the stage before making a purchase decision.

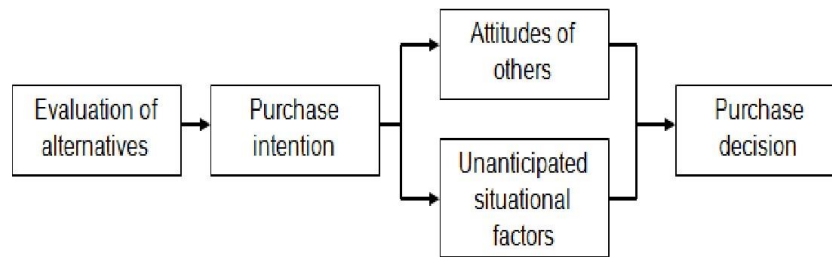


Figure 2. 2: Steps between evaluation of alternatives and a purchase decision. (Kotler 2009)

Purchase intention is a consumer's own hobby for a product or brand, and it has been found to be an essential component in forecasting consumer behavior (Ajzen and Fishbein, 1975). Ghosh (1990) has combined a number of studies on buying behavior with the consumer buying decision process. Therefore, when a customer chooses a product, the final decision depends on their intentions. Consequently, most marketers think that purchase intention is an effective way to predict consumer purchases.

Purchase intention can measure a customer's ability to purchase a product, The higher the customer's purchase intent, the more likely they are to purchase the product (Dodds, Monroe and Grewal, 1991; Schiffman and Kanuk, 1999). Customers will rely on experience, references and the external environment for gathering information, weighing possibilities, and making purchase decisions (Zeithaml, 1988; Dodds, Monroe and Grewal, 1991; Schiffman and Kanuk, 1999).

Spears and Singh (2004) argue that consumer intention is a buyer's perceived intention to buy a brand. Zeithaml (1988) measured the intention to purchase according to three levels: ability to buy, desire to buy and consider buying. Engel, Blackwell and Minian (1978) also divide consumer intention into three distinct levels: unplanned buying behavior, partially planned buying behavior and pre-planned buying behavior.

Thus, purchase intention is an important concept in marketing because consumers often do not make a decision when buying a service or product of a certain brand while the intention to buy it is not high.

2.4 Theoretical frameworks

2.4.1 Related models

There are many types of research models from several organizations (even divergent academic sciences within the same institution) that use different questions on assessment forms. This study will collect two types of related theoretical models: brand equity model

and brand equity impact purchase intention model. The data collection, data analyses, and displaying results are in the following.

2.4.1.1 Conceptual model of brand equity

The synthesis of influential variables from previous studies						
Dimensions of brand equity	Aaker (1991)	Keller (1993)	Lassar <i>et al.</i> (1995)	Atilgan <i>et al</i> (2005)	Lee and Leh (2011)	Tho, N. Đ., & Trang, N. T. M. (2002)
Brand awareness	X	X		X	X	X
Brand association	X			X	X	
Brand loyalty	X			X	X	X
Perceived Quality	X			X	X	X
Brand image		X				
Brand price/value			X			
Brand social image			X			
Brand performance			X			
Brand identification/ attachment			X			
Brand trustworthiness			X			
Brand desire						X

Table 2. 1: Comparison between previous research results

a) The conceptual model proposed by Aaker (1991)

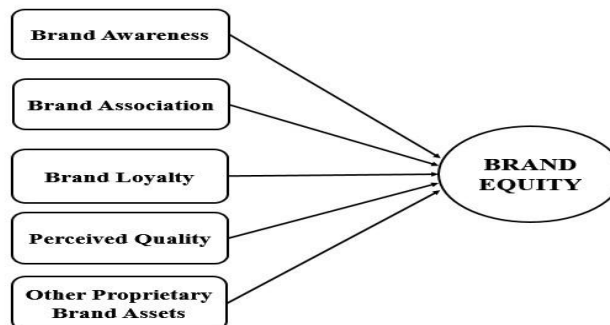


Figure 2. 3: Conceptual model of Aaker (1991)

According to Aaker (1991) four main factors measuring brand equity represent consumer perceptions comprise brand awareness, brand loyalty, perceived quality, and brand association. There are also other proprietary brand assets like trademarks, patents, and channel relationships but unrelated with consumer perception. Four brand equity's dimensions are also consistent with the studies of Washbun and Plank (2002), Yoo and Donthu (2000). The constitutive factors in the research of Aaker (1991) are considered as the main research direction on CBBE (Customer-based brand equity). Aaker's (1991)

CBBE model is considered a highly generalized customer-based brand equity measurement model and has been practically verified by researchers for many different product types and industries.

b) The conceptual model by Keller (1993)

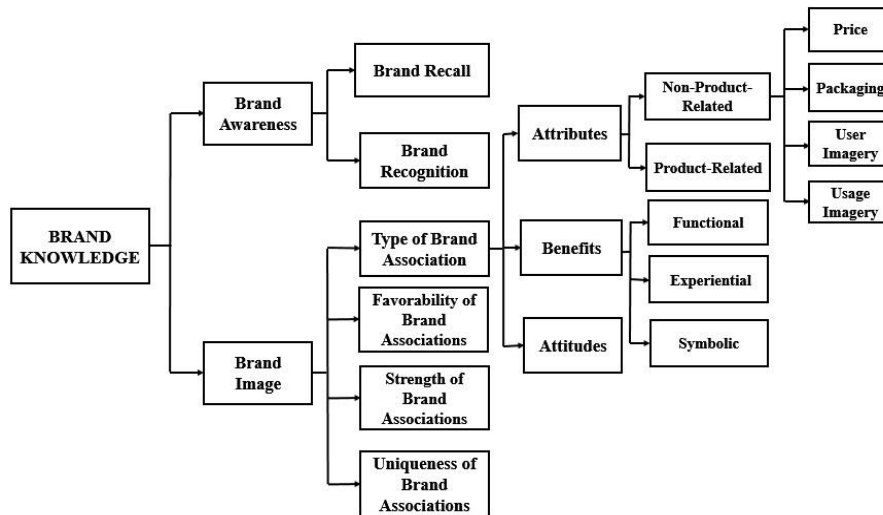


Figure 2. 4: Conceptual model of Keller (1993)

Customers buy products not only because of the quality of the product but also because of its brand. Customer-based brand equity is also described by Keller (1993) as the impact of brand knowledge on a consumer's reaction to a brand's marketing. By the data to Keller (1993), brand knowledge is a precursor to consumer-based brand equity and may be thought of as an in-memory brand with a variety of connections. Then, brand knowledge is divided into two different constructs: brand awareness and brand image. Brand knowledge is an approach that seeks to source prospective sources of customer-based brand equity. This model shows that the strength of the essence of a brand is what consumers know, see, feel, and hear about it, and it is the consequence of time and experience.

c) The conceptual model proposed by Lassar *et al.* (1995)

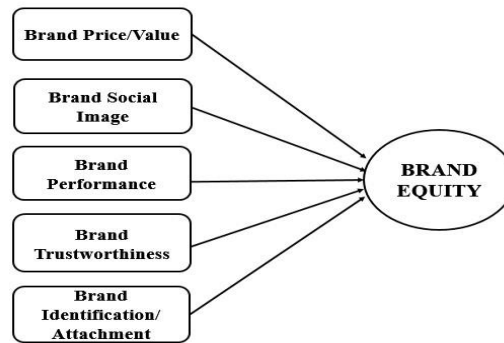


Figure 2. 5: Conceptual model of Lassar *et al.* (1995)

Lassar *et al.* (1995) evaluated brand equity from two points of view: financial and consumer-based perspective. Assessing brand equity from a financial standpoint aids in the evaluation of a company's assets. However, it offers little to assist managers in maximizing and developing the brand's value for customers. Therefore, this research focuses on the second point of view: consumer-based brand equity assessment. According to Lassar *et al.* (1995), brand equity consists of five factors: Brand price/value, Brand social image, Brand performance, Brand trustworthiness, Brand identification/attachment. The authors tested the scale in two product categories – television monitors and watches.

d) The conceptual model proposed by Atilgan *et al.* (2005)

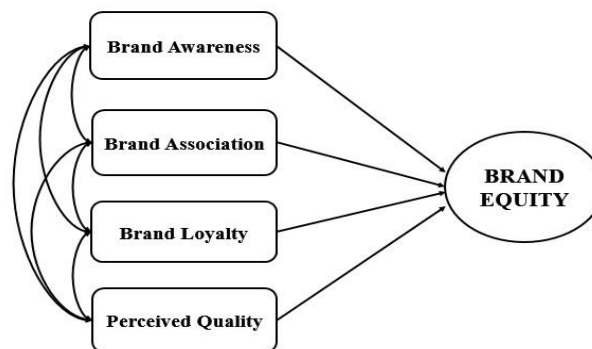


Figure 2. 6: Conceptual model of Atilgan *et al.* (2005)

This study examines the feasibility and usability of a customer-based brand equity model using Aaker's brand equity model. The data was gathered from a group of Turkish university students. Collected data includes 255 valid samples. The results show that brand loyalty is rise affect the dimensions of brand equity. Perceived quality, brand awareness, and brand association, according to the writers, have no significant direct impact on brand equity. Through the observed pairwise comparison of the dimensions of the brand equity model, there is a correlated relationship between brand loyalty, brand awareness, and

perceived quality. In addition, brand awareness and brand association were discovered to be correlated. These structures are interconnected and can't be completely separated from the phenomenon of total brand equity.

e) The conceptual model proposed by Lee and Leh (2011)

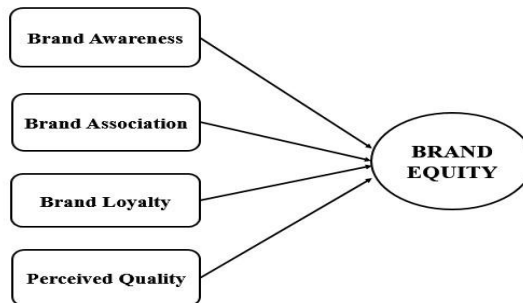


Figure 2. 7: Conceptual model of Lee and Leh (2011)

This thesis provides a model of brand equity in Malaysia, which helps to develop a legitimate and trustworthy brand equity model. According to the authors, this thesis concentrates on four dimensions, which are brand association, perceived quality, brand awareness, brand loyalty, and measurement. Based on 30 questionnaire structures, synthesized from articles in the literature, there are four Brand Awareness variables, seventeen Brand Association variables, five Perceived Quality variables, and four Brand Loyalty variables. The authors sent 500 questionnaires to all regions of Malaysia and 489 valid samples were taken for analysis. After the author performed a more in-depth analysis, some constructs of brand equity were excluded and this model consisting of 4 factors and 14 constructs is still maintained in this study. The constructs included three variables each for brand awareness, perceived quality, and brand loyalty, and five for brand association.

f) The conceptual model proposed by Thọ, N. Đ., & Trang, N. T. M. (2002)

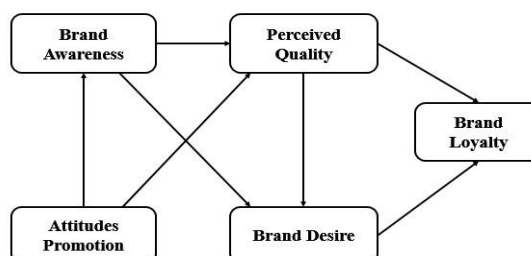


Figure 2. 8: Conceptual model of Thọ, N. Đ., & Trang, N. T. M. (2002)

This study of authors Thọ, N. Đ., & Trang, N. T. M. (2002) have measured brand equity through four brand awareness, brand loyalty, brand desire, perceived quality to evaluate

attitudes promotion and brand equity. The research helps to improve performance and efficiency to find out what affects brand equity in the Vietnamese market

The authors focus on consumer products and are carried out through two steps: preliminary research and formal research. The scale model and the theoretical model were both evaluated using shampoo. Survey subjects are customers shopping at supermarkets such as CO.op Mart, Big C, City Mart.

A Preliminary study was conducted utilizing both qualitative and quantitative methodologies. These early investigations were carried out in Ho Chi Minh City. The information collected from this quantitative study is used to screen the observed variables (measured variables) used to measure the component concepts of brand equity. Formal research is also conducted by quantitative research method, using direct information collection techniques by interviewing at the home of research subjects. This formal study was conducted in Hanoi. The results show that there are two main factors that create consumer loyalty to the brand: brand desire and perceived quality. In addition, two factors that enhance the perceived quality of consumers' perception of the brand are brand awareness and the attitude of consumers towards advertising and promotion. The results add to the existing brand equity theory through a model of brand equity in Vietnam.

2.4.1.2 The impact of Brand equity on Purchase intention

No.	Reference	Dimensions of brand equity having impact on Purchase Intention	Country
1	Jalilvand, M. R., Samiei, N., & Mahdavinia, S. H. (2011)	Brand awareness Brand association Brand loyalty Perceived quality	Isfahan, Iran
2	DK Gautam, SK Shrestha (2018)	Brand awareness Brand loyalty	Kathmandu, Nepal
3	Lê Thanh Tuấn (2015)	Brand awareness Brand loyalty Perceived quality Brand desire	Ho Chi Minh city, Vietnam
4	Vitor Azzari, Anderson Pelissari (2020)	Brand awareness Brand association Brand loyalty Perceived quality	Brazil

Table 2. 2: Research about Brand Equity impact Purchase Intention

- a. The conceptual model proposed by Jalilvand, M. R., Samiei, N., & Mahdavinia, S. H. (2011)

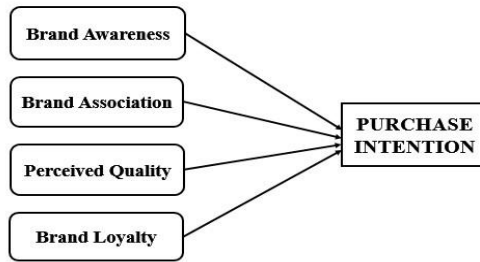


Figure 2. 9: Conceptual model of Jalilvand, M. R., Samiei, N., & Mahdavinia, S. H. (2011)

This thesis objective is to determine the impact of dimensions brand equity’s of Vietnamese customers purchase intention. Based on Aaker’s conceptual framework, the study has four dimensions are brand awareness, brand association, brand loyalty, perceived quality. This study was carried out by the authors Jalilvand, Samiei and Mahdavinia (2011) on the Automobile Industry in Iran. This research has provided new insight into a well-known branding phenomenon that attracts the attention of academics, business leaders, and media pundits. Research results show that brand loyalty, brand awareness, brand loyalty and perceived quality are correlated. Among the dimensions of brand equity, brand association and brand awareness strongly affect purchase intention. Brand loyalty and perceived quality have a weaker impact, but all four factors are supported for the study.

b. The conceptual model proposed by DK Gautam & SK Shrestha (2018)

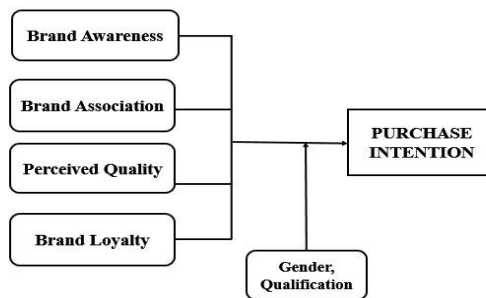


Figure 2. 10: Conceptual model of DK Gautam & SK Shrestha (2018)

The fundamental component for making a solid bond with clients and building brand equity is comprehending the effect of brand equity on consumer’s purchase intention: the dimensions of brand equity influencing purchase intention. Compiled from the literature of the past, DK Gautam & SK Shrestha (2018) investigated smartphone brands in Kathmandu. The authors came to the conclusion that brand loyalty was the strongest influencing factor in purchase intention. The second most influential factor in purchase

intention is brand awareness. Besides, the analytical results also show that perceived quality and brand association are not significant for purchase intention. Besides, there is a discrepancy in purchase intention between males and females. In terms of buying smartphones, females are more sophisticated than males. The qualification did not affect purchase intention.

c. The conceptual model proposed by Le Thanh Tuan (2015)

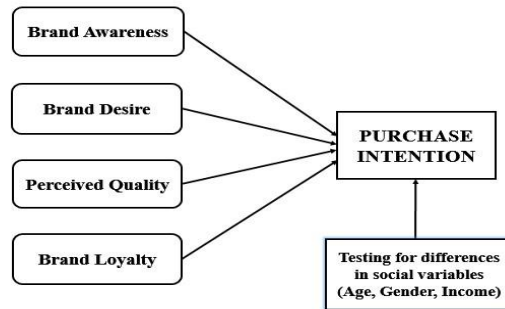


Figure 2. 11: Conceptual model of Le Thanh Tuan (2015)

The study Le Thanh Tuan (2015) investigates the connection between the dimension of brand equity effect on consumer purchase intention smartphones in Ho Chi Minh city. It was carried out through two phases including preliminary research and formal research. With preliminary research, the author can explore, adjust and identify the concepts used in the scale of brand equity components that affect customers' purchase intention, draw results based on past theories. From there, the author identifies four main components of brand equity that affect purchase intention, including Brand Awareness, Perceived Quality, Brand Desire, and Brand Loyalty. The formal research was carried out by quantitative research method through online survey method with the number of questionnaires given out 450 and 310 valid votes collected. The perceived quality factor has the highest influence. Next, the second most influential brand desire factor. The desire for the brand shows the level of interest and consumption tendency, so this factor has a great impact on the customers buying behavior. After that, brand awareness and finally brand loyalty have the lowest impact. Through analysis of control variables (age, gender, income), the author infers that there is a discrepancy in purchase intention between groups with different incomes. Observing the descriptive table shows that the high-income group will be more loyal than the low- and medium-income group.

d. The conceptual model proposed by Azzari & Anderson Pelissari (2020)

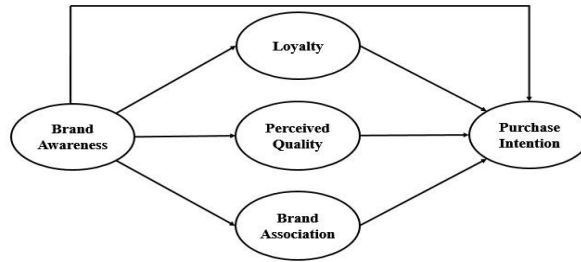


Figure 2. 12: Conceptual model of Azzari & Pelissari (2020)

Comprehension of consumer behavior towards a particular product and brand is a complicated mission involving various variables. Many kinds of research on brand equity have been conducted in the past. In addition, this study looked at the past function of brand awareness in other aspects of consumer-based brand equity (CBBE) and its impact on consumer purchasing intention. This is research conducted by Azzari & Pelissari (2020) on smartphone brands in Brazil with 622 users surveyed. According to the findings, brand awareness has no direct impact on purchase intention. Brand awareness indirectly affects purchase intention, through brand loyalty, perceived quality, brand association. The results of the examination of the constructs' relationships with the purchase intention variable revealed that it has a weak influence on brand association and a moderate influence on perceived quality. Therefore, the study helped to integrate the variables constituting brand equity together. Brand recognition can help to increase market penetration and develop consumer loyalty.

2.4.2 Research gaps

The concept of brand equity is a complex, multidimensional concept and there is currently no consensus on the aspects of brand equity. The term Brand equity still has many different approaches, which leads to a lack of agreement on the definition of brand equity and its dimensions. Base on Aaker (1991, 1996), he shows four dimensions: brand awareness, brand association, perceived quality, and brand loyalty. But to Lassar et al. (1995), there are five dimensions to measure brand equity: price/value, brand social image, brand performance, identification/ attachment, brand trustworthiness. Keller, K.L. (1993), there are only two main dimensions: brand image, brand awareness. Given these differences, dimensions of brand equity are still an open topic and more research is needed to find out what dimensions are most suitable for brand equity in the context of Viet Nam.

In addition, there are also contradictions in research results on the impact of dimensions on purchase intention. We find there is a contradiction in the results of research on what

dimension most effect consumer purchase intention. Research by Mohammad Reza Jalilvand (2011) shows that brand association and brand awareness have the strongest affect on purchase intention. However, DK Gautam, SK Shrestha (2018) find that brand loyalty has a great effect on brand equity. In VietNam, the study by Le Thanh Tuan (2015) found that the perceived quality factor has the highest influence. Our study aims to examine what dimension of brand equity has the strongest effects on consumer purchase intention especially for the beer industry in the Vietnam market.

Currently, in Vietnam, there are many research topics on how brand equity affects brands or researches on improving brand equity, but there is little research on how dimensions of brand equity effect purchase intention. Especially about the beer industry in the Vietnam market.

2.5 Hypothesis and research model

In general, compiled from the literature of the past, defined definitions, theories, and research. This article has more or less appropriate elements for dimensions that impact purchase intention in Vietnam. However, also have some models are not suitable for the Vietnamese market. For example, Keller (1993) model introduces two dimensions of brand equity, brand image and brand awareness. But brand image includes many components brand association and brand association, which includes many other sub-components such as attributes, benefits, attitudes. This subpart contains many other sub-components This makes measurement difficult. Besides, the customer-based on brand equity measure proposed by Lassar *et al.* (1995) focus solely on association, leaving out essential behavioral components of brand equity (e.g. behavioral loyalty). Furthermore, the scale is deemed insufficient for confirmatory factor analysis because was created and validated using a convenience sample of 113 customers (Hinkin, 1995).

This study will pay attention to measuring the brand equity of Vietnamese beer based on two major research models. They are the model of Thọ, N. Đ., & Trang, N. T. M. (2002) and the model of Aaker because two models are built in accordance with the Vietnamese market and very popularly applied in other studies. Moreover, this model is not too complicated, the research concepts are quite clear, it is easy to build the scale as well as easy for the research subjects to answer the questionnaire. This research will has hypothesizes that there are five brand equity dimensions of beer in Vietnam that impact purchase intention, which are a brand association, brand awareness, perceived quality,

brand loyalty, brand desire, and some control variables (gender, age, income, occupation, purchase frequency). In summary, six hypotheses are based on the proposed models.

2.5.1. Define dimensions of brand equity

2.5.1.1. Brand Awareness

“Brand awareness is a key determinant of brand equity” (Aaker, 1996; Keller, 2003; Mackay, 2001; Yoo and Donthu, 2001; Washburn and Plank, 2002; Pappu, Quester and Cooksey, 2005). According to Aaker (1991), The capacity of target customers to recognize or distinguish a certain brand among a group of brands available on the market is known as brand awareness. Based on Kotler and Keller (2006), brand awareness is the ability of consumers to identify brands under a variety of conditions, expressed through their recognition and memory results. As described in Keller (1993), the capacity of a client to recognize and differentiate the attributes of a brand amid a vast number of brands on the market is referred to as brand awareness.

“When a customer decides to consume a certain brand, they must first become acquainted with the brand. As a result, brand awareness is the first characteristic that customers use to identify a brand among a group of rival brands” (Tho, 2002).

There are three main levels of brand awareness. The first is the highest level recognized brand (Top of mind). Spontaneous is the next step. Finally is prompt to remember (Prompt). When adding the three levels of brand awareness, we get the total brand awareness. When asked about a specific type of goods, the first recognizable brand is the one that customers will think of initially. When Vietnamese people think of telephones, they usually think of the iPhone first. So, the iPhone is always the first brand that comes to mind when want to purchase a phone.

2.5.1.2. Perceived Quality

Base on Aaker (1991), Perceived Quality is the value that customers perceive when purchasing a product. This is the customer's assessment of a product's or service's overall quality or superiority over its initial perception and alternatives. *“It is an important factor in building brand equity”* (Keller, 1998). According to Zeithaml (1988), This is the customer's view of overall product quality, defined as the distinction between the entire value received and the value expected from a product.

Perceived quality is formed when the perceived benefit is higher or equal to the perceived benefit. Perceived benefits are the attributes, benefits, and costs that customers perceive in

actual consumption, sought benefits are the attributes, benefits, and costs that customers expect. The quality that consumers perceive is the factor that customers based on the process of making a purchase decision.

Perceived quality often does not coincide with the actual quality that the business provides because consumers are not experts in this area. Acebrón and Dópico, 2000; Bernués *et al.*, 2003 said that: Customers find it difficult to make reasonable judgments about the quality. Color, flavor, form, the appearance of the product, and the availability of product information are potential quality aspects that consumers use to 'infer' quality.

2.5.1.3. Brand Association

According to Keller (1993), the brand association includes the brand's significance for customers. Base on Aaker (1991), brand association is anything that is associated with the remembrance of the consumer about a brand. Agreeing with the above view, Keller (1998) argues that brand association are nodes of information related to consumers' memories of the brand and it will convey the importance to consumers of that brand. *“These are preserved in the customer's memory, either directly or indirectly, and are connected with the brand or brand owner”* (Aperia, 2004). According to Yoo (2000), customers will immediately associate some characteristic features of a certain brand when this brand is mentioned. Brand association is a complex concept that connects to another, consisting of many ideas, situations, and events that form a network of knowledge about the brand. According to Kolter (2003), Brand association transmit not just the notion of the product, but also its meaning in terms of meeting client needs.

Brand association are typically divided into two categories: product-related features such as brand performance and non-product-related attributes such as brand personality and organizational affiliations (Aaker, 1996; Chen, 2001; Keller, 2003; Netemeyer *et al.*, 2004; Pappu, Quester and Cooksey, 2005). Customers assess a product not just on whether it can execute the functions for which it was created, but also on why they should choose this brand over others (Aaker, 1996) like the brand's faultfree, long-term physical operation and perfect physical construction of the product (Lassar *et al.*, 1995).

The benefits of brand association include assisting in the information gathering process, providing a rationale for brand choice, generating positive attitudes or emotions, and providing for brand extension.

2.5.1.4. Brand Loyalty

According to Chaudhuri (1999), Consumers' desire to buy and utilize a brand from a family of items and to repeat this behavior is referred to as brand loyalty. "Brand loyalty on the basis of customers is a core element of brand equity, an important factor to maintain brand equity" (Aaker, 1991). According to Kotler (2003), companies typically have the illusion that they are continually hunting for new markets, but they forget to nurture existing customers, according to the marketing industry, while the profits for the brand of the existing market are often much higher compared to new markets due to less expensive marketing costs.

According to Bowen and Shoemaker (1998), Brand loyalty is also a measure of a customer's future attachment to a brand. Once brand loyalty is high, customers are less inclined to switch brands just based on price, and loyal customers purchase more frequently. In addition, loyal customers bring a great benefit to the business through their recommending the company's products to other customers (Assael, 1995). According to Oliver (1997), Brand loyalty is a consumer's passionate commitment to continuously buy a certain brand in the future despite the effects of circumstances and competitors' activities that are likely to cause customers to product switch to another brand. The behavioral component of brand loyalty is the basis for this definition, brand equity is created by a consumer's continued purchase and preferential attitude toward a brand. Base on Chaudhuri and Holbrook (2001), the attitude component of brand loyalty is the degree to which consumer dedication is characterized by the separate values associated with a certain brand.

2.5.1.5. Brand Desire

According to ND Tho and NTM Trang (2007), brand desire is a crucial component of brand equity. When customers are interested in a brand, they will show a caring attitude and desire to use products and services bearing that brand. Brand interest will be the motivation for customers to want to own this brand instead of other competing brands. "The brand desire tells the level of interest and consumption tendency of that consumer. Therefore, brand desire is the result of the process of evaluating one brand against other brands in the same competitive set" (ND Tho and NTM Trang, 2002).

2.5.2 Hypothesis development

2.5.2.1 Impact of brand awareness on purchase intention

- a) Brand Awareness

Brand awareness provides an opportunity to differentiate between products with similar characteristics. When a buyer decides to purchase a specific brand, the brand must first be identified. As a result, brand awareness is the first characteristic that customers use to identify a brand among a group of rival brands (Tho, 2002). Besides that, consumers are constantly passive recipients of product information and do not want to expend a great deal of time and effort on brand selection (Hoyer, 1984). Consumers' choice between brands within a product group can be influenced by a high level of brand awareness, even if there is no other association associated with that brand. The more customers recognize the product, the more likely the customer will purchase (Grover and Srinivasan, 1992). Aaker (1991) also suggested brand awareness has a substantial impact on customer purchasing behavior. A customer with a greater level of awareness of a brand will have more consideration for that brand when choosing to buy a product. In the buying process, brand awareness is critical when people want to purchase a product. Pitta and Katsanis (1995) show that in the classical consumer behavior, consumers realize a necessary problem often they choose familiar products when they have a high brand awareness for them, with that product, more specifically it involves recalling the brand or considering the brand as a substitute. Thus, brand awareness will direct consumers to choose the most familiar brand they know about it. Consumers' brand awareness of a certain brand increases or decreases, the intention to purchase that brand also increases or decreases.

Therefore, the authors have proposed hypothesis H1 as follows:

H1: Brand Awareness has an influence on Purchase Intention of consumers.

b) Perceived Quality

Perceived quality plays the main role in building brand equity (Keller, 1998b). Customers often make purchasing decisions based on the perception of the basic features of the product and trust its brand because they have no experience with the product before they buy it. Consumers always want to spend less time and effort to obtain information about products so that they can judge the quality of products, and observing a brand can influence a customer's final decision. In the buying decision-making process, perceived quality has an influence on the evaluation stage and in turn affects the customer's intention. Sethuraman and Cole (1997) assert that a strong perceived quality increases the perceived value of consumers when making a purchase and they are willing to pay for that brand.

Perceived quality is used by customers as a metric when making a purchasing decision, especially when brand information is limited. Perceived quality also helps brands in brand positioning and differentiation in the market (Kandasamy, 2015). Some studies have found that perceived quality has a direct and considerable influence on purchase intentions of consumer, while others have found an indirect effect through satisfaction (Cronin and Taylor, 1992; Sweeney, Soutar and Johnson, 1999). Whereas, it was observed that a dual influence (ie, direct and indirect) of perceived quality on purchase intentions of consumer exists for items, but research studies on services have documented a single impact (ie, direct or indirect) (Tsiotsou, 2006). Consumers' perceived quality of a certain brand increases or decreases, the intention to purchase that brand also increases or decreases. Therefore, the authors have proposed hypothesis H2 as follows:

H2: Perceived Quality has an influence on Purchase Intention of consumers

c) Brand Association

According to Kolter (2003) Brand Association conveys not just the notion of the product but also its meaning in meeting client demands. Brand association includes product attribute or customer benefit that is incentive to purchase and use the brand. They are also the foundation for purchasing decisions and brand loyalty. Furthermore, favorable attitudes and emotions are created through brand association, which might lead customers to a brand (Aaker, 1991). Thus, brand association have a relationship with customers' consumption trends. Consumers' brand association with a certain brand increases or decreases, the intention to purchase that brand also increases or decreases. Therefore, the authors have proposed hypothesis H3 as follows:

H3: Brand Association has an influence on the Purchase Intention of consumers.

d) Brand Loyalty

Brand loyalty is comprised of a consumer's conscious and unconscious decisions to buy a specific brand on a regular basis (Sharma *et al.*, 2013). The more loyal the brand is, the higher the profit it brings to the company, that is, the brand has a high value (Tho, 2002). Reichheld (1996) argues that a brand is successful in business once customers make decisions about the brand and have association with it. They are generally loyal to one

brand, continuing to purchase in the future, repeating purchases, recommending to other people, choosing those items over others, even if other brands offer greater features or lower pricing. Thus, the higher the loyalty of customers to the brand, the higher the intention to continue buying that brand. Consumers' loyalty to a certain brand increases or decreases, the intention to buy that brand also increases or decreases. Therefore, the authors have proposed hypothesis H4 as follows:

H4: Brand Loyalty has an influence on the Purchase Intention of consumers.

e) Brand Desire

When consumers intend to consume, customers often recognize many different brands and compare brands with each other, then they tend to consume the brands that they are interested in. A customer's liking for a brand measures the customer's evaluation of that brand. In the process of evaluating consumers will express their feelings. The brand that receives the positive emotions of consumers will receive a competitive advantage (Tho, 2002). Consumers' desire for a certain brand increases or decreases, the intention to buy that brand also increases or decreases. Therefore, the authors have proposed hypothesis H5 as follows:

H5: Brand Desire has an influence on the Purchase Intention of consumers

f) Control variables

Base on the theory of consumer behavior, Kotler and Keller (2012) individual factors namely age, gender, occupation, region, income, purchase frequency, and so on impact customer behavior. To be certain the above independent variables are significant, the effect of these individual traits must be controlled for. As a result, we have the following hypotheses:

H6.1: There is a difference in customer Purchase Intention by gender

H6.2: There is a difference in customer Purchase Intention by age

H6.3: There is a difference in customer Purchase Intention by region

H6.4: There is a difference in customer Purchase Intention by monthly income

H6.5: There is a difference in customer Purchase Intention by occupation

H6.6: There is a difference in customer Purchase Intention by purchase frequency

2.5.3 Research model

From the theories, models, and behaviors that have been studied in previous articles on customer behavior, the following conceptual model was created to investigate the impact of brand equity's dimensions on purchase intention in Viet Nam. The model includes five dimensions of Brand Equity: Brand association, Brand Awareness, Perceived Quality, Brand Loyalty, Brand Desire and Control Variables to affect customer's purchase intention. From the model, we can easily see the link of determinants of customer purchase intention. To sum up, all of the definitions, theories, and models mentioned and analyzed in this chapter were based on previous studies. Models are analyzed combined with studies and theories to make the basic model. Adjustments are applied to the final model for better suitability to the research context. And the most proper model is chosen to apply in this paper is the model below:

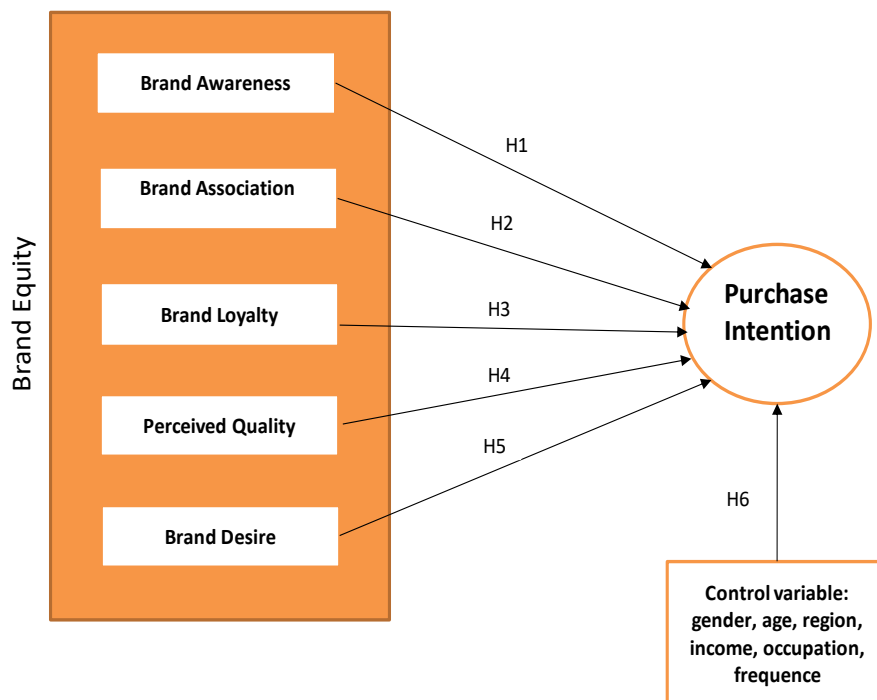


Figure 2. 13: The proposed research model

CHAPTER 3: METHODOLOGY

3.1 Research philosophy

The research philosophy is a conjugation of opinions about how evidence about a phenomenon should be collected, processed, used (Doyle *et al.*, 2020). Realism, positivism, interpretivism, and pragmatism are some popular research philosophies.

Realism: In philosophy, realism refers to objects that are recognized or perceived to have existence or nature that is independent of whether or not anyone is thinking about or watching them. Phillips (1987) defines philosophical realism as the view that entities exist separately with being perceived, or separately with our theories about them.

Positivism: is a philosophical that rejects metaphysics and theory by making any assertions that may be properly supported scientifically, logically, or mathematically. Positivists believe that reality is stable and can be seen and described objectively, which means that they do not interfere with the phenomena under examination (Levin, 1988). They argue that events have to be disparted and observations must be reproducible.

Interpretivism: also known as interpreting study components, involves researchers in interpreting study aspects; hence, interpretivism incorporates human interest into a study. As a result, "*interpretive researchers assume that access to reality (given or socially constructed) is only through social constructions such as language, consciousness, shared meanings, and instruments*" (Myers, 2008).

Pragmatism: is a research philosophy that holds that concepts are only meaningful if they promote action. The pragmatic study theory is concerned with the truth. It contends that the subject of research frequently influences the choice of research theory (Doyle *et al.*, 2019). In this research perspective, realistic outcomes are seen as significant (Saunders *et al.*, 2019). Furthermore, based on Alghamdi and Li (2013), pragmatism does not belong to any conceptual framework or reality.

We are investigating positivism in this study. Beginning with the development of a theoretical foundation, data will be gathered and verified in the Vietnam market. The analysis and assessment of the problem based on the results of positivism research will be a good basis for the research to find and propose recommendations for businesses.

3.2 Research Approach

Following to Saunders *et al.* (2012), a research approach is used to establish hypotheses and conclusions whether the outcomes are false or true. Deductive and inductive research approaches are two types of contrasting research. Abductive is a combination of inductive and deductive reasoning. Each study could have its very own technique of studies approach.

Deductive approach: According to Silverman, (2013) the deductive approach begins with building hypotheses based on theories that already exist and designing research strategies to test them. Simply put, the deductive approach can be described as "*inference from a general result to a specific result*". A deductive approach is used when a logical conclusion can be drawn from a set of assumptions. If all these preconditions turn out to be true, then the conclusion is true. The deductive approach uses questionnaires to generate understandings of observations, allowing comparisons of different people's understandings based on empirical facts. Determines if the variables are correlated or if one affects the other. The information you receive can be used to confirm or reject the question and you can repeat the process. Deductions as a method of social research are becoming more popular and are most clearly associated with the types of classical and logical positivism.

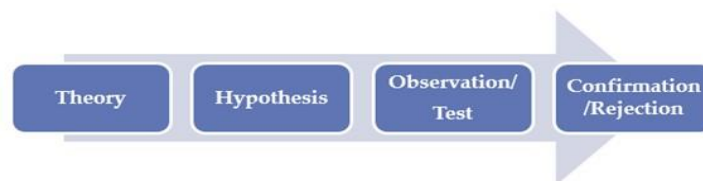


Figure 3. 1: Deductive research in research approach (Saunders, Lewis and Thornhill, 2012)

Inductive approach: on the contrary to deductive research, an inductive approach is an approach from specific to general (Bryman and Bell, 2011). The inductive approach allows you to create new theories through qualitative research, rather than adopting existing theories as in the deductive approach. This clearly distinguishes between the two approaches. There is no structure for data collecting with this technique, thus the study topic might be developed after the data has been gathered. Inductive theory development begins with data collection and ends with the development of a hypothesis as a result of data analysis. Interviews are conducted on specific topics and the data is analyzed to look for respondent trends (Flick, 2011). This is the point at which a new concept emerges, but it is also correct to be able to determine that it fits existing theory when the evidence is

evaluated (Bryman and Bell, 2011). Inductive methods are very useful when a difficulty, a problem, or an unknown issue that the researcher wishes to investigate.

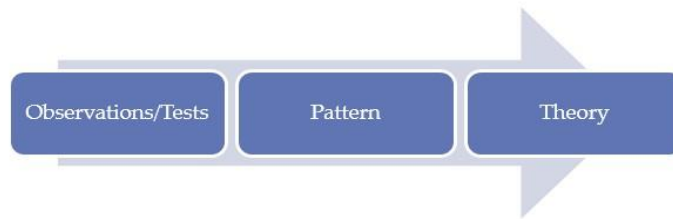


Figure 3. 2: Inductive research in research approach (Saunders, Lewis and Thornhill, 2012)

Abductive approach: Abductive is a form of logical reasoning that begins with an observation or set of observations and then finds the simplest and most probable conclusion from the observations. Basically, it has interaction between the specific and the general. This process, unlike deductive reasoning, generates reasonable conclusions but does not positively verify them. The abductive approach is common when inductive research progresses and the researcher finds to exploit, and then test, the developed theory.

The figure below depicts the key distinctions between abductive, deductive, and inductive approaches:

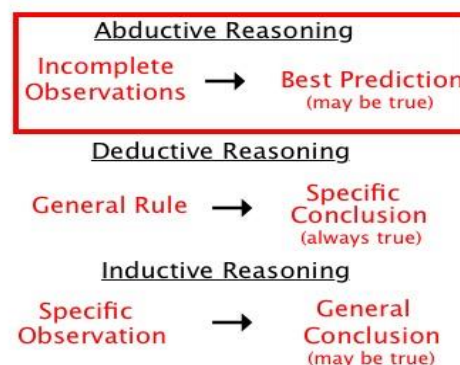


Figure 3. 3: Compare the main differences between abductive, deductive and inductive approaches

For this study, we use a deductive research approach to study purchase intention based on the dimensions of brand equity. Based on previous studies, we used factors that have been proven to affect purchase intention and then survey them again. It will help us more accurately identify the factors that impact our purchase intention.

3.3 Research process

The Research Process is a process of multiple scientific steps in conducting the research work.

According to Hair *et al.* (2010), the research process consists of 4 stages:

Stage 1: Determine the Research Problem

- Step 1: Identify and clarify information needs: As mentioned by Hair *et al.* (2010), before involving research, decision-makers usually develop a problem statement. It is critical for the researcher to thoroughly grasp the problem; hence, a problem definition procedure must take place.
- Step 2: Define the research problem and questions: Step two requires the researcher to reframe the problem as a research topic. A literature review must be done by the researcher in order to offer context for comparable difficulties. According to the authors, the literature study may reveal important theories and factors to incorporate into the research. The preceding chapters' literature reviews offered information on marketing ideas and sponsorship features (Hair *et al.*, 2010)
- Step 3: Specify the research objective and confirm the information value: Hair *et al.* (2010) state that study objectives should be based on the research topic stated in the preceding stage. Finally, both the researcher and the decision-makers must evaluate the information's anticipated value. Concerns such as whether the information should be gathered at all, if the information will reveal anything new to the decision-maker, whether it will give important insights, and questions about the advantages that will be supplied by this information are examples of these.

Stage 2: Select the Research Design

- Step 4: Determine the research design and data sources: The research design provides a framework for data gathering and analysis. The best research design is determined by the study objectives and information needs. The researcher has to examine data kinds, data collecting methods, sample methods, schedules, and budgets. There are three types of research designs, and an individual research project may occasionally necessitate a combination of these techniques to achieve the thesis's objectives (Hair *et al.*, 2010). Researchers must determine the sources of information they will utilize in order for research to give knowledge that aids in issue solving (Burns and Bush, 2010). Based on Malhotra and Peterson (2006), it

has two techniques for collecting data: secondary sources (information that already exists) and primary sources (collection of fresh information directly for the specific study topic at hand) (Malhotra, 2010)

- Step 5: Develop the sampling design and sample size: The sample design must be taken into account when doing primary research. Based on these writers, even if secondary research is conducted, the researcher must still determine if the population represented by the secondary data is relevant to the current study issue (Hair *et al.*, 2010).
- Step 6: Examine measurement issues and scales: This stage entails identifying the concepts to be studied as well as assessing the variables associated with the research topic. These measurement difficulties and scales are critical for both primary and secondary research (Hair *et al.*, 2010).
- Step 7: Design and pretest the questionnaire: Interviews or self-administered questionnaires are the two most common methods for obtaining data; another alternative is to watch persons or market events. Self-administered surveys, personal interviews, computer simulations, telephone interviews, and focus groups are among the methods used by researchers to collect data. Questioning techniques can elicit information on attitudes, intentions, motives, and prior behavior, which are typically absent in observational research. When creating a questionnaire, researchers must consider the sequencing and structure of the questions, as well as pre-testing the questionnaire (Hair *et al.*, 2010)

Stage 3: Execute the Research Design

- Step 8: Collect the prepared data: After collecting data, researchers must complete a number of tasks before data analysis can begin. To begin, each response category must be assigned a number value in order for data may be recorded into an electronic data file (Hair *et al.*, 2010)
- Step 9: Analyze data: The researcher is now confronted with a significant amount of raw data that must be analyzed and transformed into relevant knowledge. The researcher has to analyze the processed data and turn it into useful knowledge for decision-makers (Wiid and Diggines, 2010)
- Step 10: Interpret data to create knowledge: Knowledge is generated via active and thorough analysis of the outcomes. Interpretation is more than just a narrative account of the findings; it entails combining various elements of the data into

conclusions that may be utilized to answer the research questions. The interpretation of the data and the conclusions made determine the effectiveness of the research process (Hair *et al.*, 2010).

Stage 4: Communicate the Research Results

- Step 11: Prepare and present the final report: Any research report should have the following sections: an executive summary, introduction, issue description and goals, methodology, results and conclusions, and limits of the study (Hair *et al.*, 2010). The research report must be thorough in order to make informed judgments regarding the marketing challenge or opportunity (Wiid and Diggines, 2010).

3.4 Research methodology

Research methodology is mention how the researcher systematically designs, study to ensure that the research objective is accurate and has dependable results. There are two main sorts of research methods: quantitative and qualitative research. Both of them also have distinct purposes and approaches and are crucial for acquiring other types of knowledge. According to this, both qualitative and quantitative research methods were used to serve the research.

3.4.1 Qualitative research method

a) Objective

Qualitative research is a method of exploring, describing, and interpreting data based on surveying experience, awareness, motive, intent, behavior, and attitude. According to Creswell (1994), qualitative research is a holistic method that involves the find of a problem. In addition, qualitative research is described as a naturally occurring open model that allows the researcher to improve a level of detail from being heavily involved in real-life experiences.

Qualitative research has the objective is to better comprehend the situation and attitudes of Vietnamese customers towards beer brands and to ensure that their behaviors, opinions and views are objective and correct. Qualitative research helps us adapt to the criteria we are studying.

b) Type of qualitative research method

Qualitative research methods are intended to demonstrate the behavior and perceptions of a target audience in relation to a certain issue. There are many types of qualitative research

methods such as in-depth interviews, record keeping, case study research, and focus groups that are usually used.

c) Advantage of qualitative method

Qualitative research helps clarify the behavioral and attitude factors of the subject. Qualitative research uses an unstructured survey method, which makes it extremely flexible. Helps you find useful information quickly. Qualitative research uses unstructured research techniques, which makes it extremely flexible. Helps you find useful information quickly.

d) Disadvantages of qualitative

Qualitative research often takes time due to the labor-intensive nature of collecting and analyzing notes, posting interviews and identifying topics. On the other hand, qualitative research is also difficult to analyze and write research reports, and it is also difficult to find interviewees. In general, investigators need to be familiar with the field of investigation and techniques for in-depth analysis to get the most exact and valuable information without the investigator's discomfort. Being subjective, it is hard to generalize research results to all. The clarity of quantitative research is higher than qualitative research. For some delicate topics, researchers keep the identities of respondents secret.

3.4.2 Quantitative research method

a) Objective

Its objective is the assemble quantifiable data and manipulation existing statistical data using surveys, questionnaires, statistical, mathematical, numerical analysis, or computer technology of the data collected through the survey. It is defined as a systematic study of the phenomenon. tool. After carefully collecting and analyzing this data, you can foresee your product's or service's future and make necessary improvements..

The aim of quantitative research is to measure and test the relationships between variables in a statistical format. Information and data are collected through a large questionnaire survey using a large number of samples.

b) Type of quantitative research method

The main aim of it is to count, classify, build statistical models, and try to explain what is observed. Quantitative studies can be divided into four categories: descriptive, correlated, causal comparison / quasi-experimental, and experimental studies.

c) Advantage of quantitative

Quantitative data can be interpreted by statistical analysis, and since statistics are in accord with mathematical principles, so quantitative methods are considered scientific and rational. So, this is ideal for testing the proposed hypothesis. On the other hand, quantitative studies are highly representative, so the results of quantitative studies can be generalized to the sample population. In addition, analytical software can help you process large amounts of data fast and correctly with analysis software. It will reduce technical errors that can stem from human factors when processing the data.

d) Disadvantage of quantitative

Quantitative research doesn't clarify the phenomenon of people, especially behavioral studies. Researchers may lose valuable survey details if they focus too much on testing hypotheses. On the other hand, the subjects' answers are affected by many factors, so they are not completely objective. There may be differences in understanding the question. It happens when the respondent doesn't understand the question intended by the researcher, but the understanding is different and the answer is based on the understanding. When it comes to quantitative research, most forms of research cannot intervene, explain, or clarify questions to respondents. Not like qualitative research, quantitative research uses many complex survey methods, so it needs more time to design the survey procedure and collect data. It requires a bigger sample size to generalize to the population and is more costly than qualitative research.

In this study, a mixed-method is adapted. Quantitative data provide generalization, and qualitative data provide contextual information. Combining the two methods helps us have a more comprehensive view of the research topic.

After qualitative methods collect data through the in-depth interviewing of customers to test variables. Quantitative methods will use to collect through surveying after identifying variables from theory and interviewing customers by qualitative methods.

3.5 Research Design

The research design includes the required data, sampling plans, and methods of analyzing and collecting the data. This thesis investigates the influence dimensions of brand equity on Vietnamese buyer intention on beer brand, where there have been fewer studies about this topic using a conceptual model built from previous research, especially in the beer

consumer market. In this study, both qualitative and quantitative research methods were used.

The research is separated into four steps. Stemming from the consumer goods background, Vietnam is currently judged as a country with an estimated high alcohol consumption rate in Southeast Asia. The Vietnam beer market is gradually becoming a fiercely competitive playground among beer brands to find their place in the market. From there, we mentioned research problems, research objectives, research method, research scope, and research questions.

In the second step, the theoretical background of the previous research dimension of brand equity on purchase intention was reviewed. Follow to the literature review, common dimensions of brand equity that have an influence on purchase intention were identified, we propose a model. In this study, the model will measure the brand equity approach towards consumer perception. In this step three, qualitative research (In-depth Interview) was conducted involving 15 beer consumers in different provinces in Vietnam. Qualitative research helps us learn more about the current situation and consumer sentiment, helping to expand the scope and enhance the analytical power of the research. Besides, the scales we apply in this study are taken from foreign scales and some

Vietnamese studies, but with a different product item, we now apply it to the product category beer. With the Vietnamese market, qualitative research helps those scales to be more suitable with the reality that we study.

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Finally, based on qualitative results and literature review, we develop measurement and questionnaire design for our research. The online survey was then sent randomly to all of the people through groups on Facebook. An online survey (i.e. Google Forms) was used in this study as the quantitative data-gathering instrument. Before sending the official survey, a pre-test survey was sent to 10 participants. A pre-test survey helps us see how

long it takes on average to complete this survey. In addition, we monitor the survey participants' understanding of the scale and adjust accordingly.

In this research, the Statistical Package for the Social Sciences (SPSS, version 26.0) was utilized to analyze the data. We use SPSS Software for control variables analysis and to assess the normality of the data, and test structural analysis of the measurement model. We perform descriptive analysis, reliability analysis, correlation analysis, and regression analysis, exploratory factor analysis (EFA). As a result, it helps us to assess analytical results and determine which factors are important most effective, which factors need to be improved, and which factors must be maintained. The research design for this thesis is illustrated in the figure below:

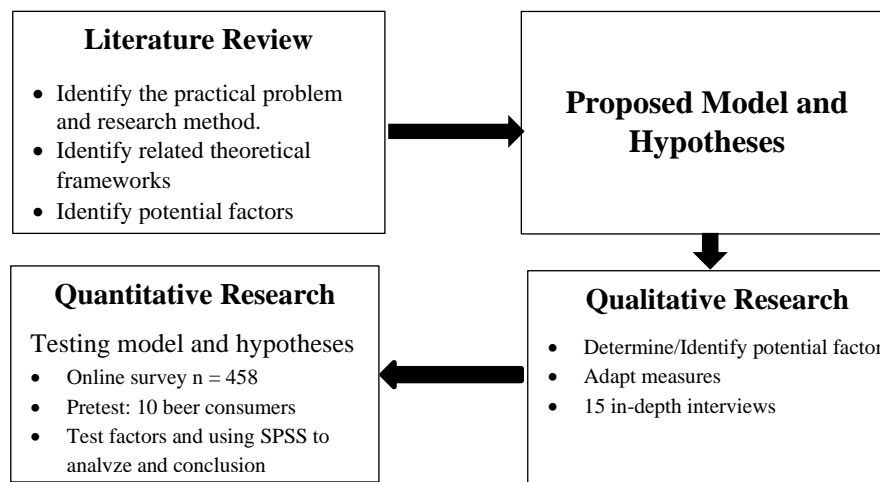


Figure 3. 4: Research and analysis process

3.6 Data collection method

3.6.1 Qualitative study

3.6.1.1 Sampling method

Due to the serious situation of COVID-19, we conducted the interview online and recorded the interview process. Because the scope of the study is Vietnam, the online interview will make it easier for us to reach people in different provinces. Fifteen people were chosen at random to be interviewed. We interview based on the criteria of diversifying the subjects so that the collected data is richer. Therefore, the interviewees are all different in terms of gender, region, frequency of beer purchase, etc. For the age, we only interviewed people in the legal drinking age range (18 years and older). In-depth interviews contain open-ended questions to encourage consumers to freely share different perspectives. Exploiting a lot of new information from consumers will help our research become more realistic and

accurate. Qualitative research will help us strengthen the quantitative scale. Instead of answering Yes/No and rating it according to the agreement level of the Likert scale, the interview allows us to interact more with the respondents to better understand why they made such a decision. Not only that, but also the group also encouraged individuals to disclose more about their motivations for making choices. Furthermore, our team was able to uncover some suggestions to improve the existing situation for beer companies in the Vietnamese market from new ideas that interested participants through the in-depth interview

A sample size of 15 was chosen according to the principles of reporting data saturation in interview studies proposed by Francis *et al.* (2010), with an initial analysis sample of 12 and stopping criterion of 3. Using a sample size of 12 for the initial analysis and a stopping criteria of 3. The initial analytical sample generated 12 shared new perspectives after 12 interviews. However, a new opinion was elicited in interviews 11 and 12. Because there was no new opinion in interviews 13, 14, or 15, the stopping requirement for concept saturation (3 interviews with no new shared viewpoint) indicates that saturation was attained after 15 interviews. There would have not been missed if sampling had stopped at this moment.

3.6.1.2 In-depth interview guidelines

We developed a guideline that consists of two parts: a part on the question of brand equity and a part on the question of the influence of brand equity on purchase intention. Going in these two directions helps qualitative analysis to be consistent with quantitative analysis. The following are questions posed to the interviewees:

1. How often do you buy bottled beer or canned beer, how often do you buy beer per week (month)? When buying beer, are you interested in the brand of beer?
2. What beer brands do you know on the market? Why do you know these brands? Can you tell the difference between beer brands? If so, what are the points?
3. When mentioning any beer brand, what do you immediately think of?
4. When you feel like a certain brand of beer, are you willing to buy beer of that brand?
5. In your opinion, what characteristics of the beer brand do you consider the most important? Why?

6. What brand of beer do you usually buy the most? Will you continue to buy beer from that brand in the future? Why?

7. Is the beer brand currently having any problems? Can you explain/be more specific?

3.6.2 Quantitative study

3.6.2.1 Sampling method

According to Acharya *et al.* (2013), a sample is a part of the population that has been chosen to be representative of the entire population. Based on will make statistical inferences from them and estimate the characteristics of the population as a whole.

Non-probability and probability sampling are the two types of sampling methods (Hair *et al.*, 2010). According to Hair (2016), The researcher can quantify sample error by using probability sampling. Nonprobability sampling plans, on the other hand, are unable to evaluate sample error, limiting the generalizability of study findings.

In probability sampling, each sampling unit in the defined target population has an equal opportunity to be selected as a representative sample. Probability sampling methods include simple random sampling, systematic random sampling, stratified random sampling, and cluster sampling. Based on the sort of probability sampling design used, the actual probability of selection for each sampling unit may or may not be equal. By estimating the chance that the sample findings are different from the intended target population, probability sampling allows the researcher to assess the data's dependability and validity.

In nonprobability sampling, not sampling units of the population have an equal chance of participating in the study. As a result, the sampling error is unknown. The sampling units are chosen depending on intuition or researcher knowledge. The sampling approach and how successfully the researcher conducts the selection activities determine how representative the sample is of the defined target population The type of nonprobability sampling will be based on the following four methods: convenience sampling, purposive sampling, quota sampling, and snowball sampling.

To sum up, in this research, we use non-probability sampling, specifically the convenience sampling method. A convenient sampling method can help researchers access consumer information more easily and quickly. Besides, for a limited time, this method has the benefit of allowing a time-saving study, as it uses an already existing population. In addition, it is a research method that helps researchers to generate data in a cost-effective

way. According to this method, we prioritize sending surveys to friends, acquaintances and other relationships. Besides, we also post surveys on private and public groups with high number of members (from 100,000 members) and high interaction (more than 30 posts per day). At the same time, we comment on surveys in large pages that have a large following and support communication on Facebook. That will help the data have more diverse and accurate information.

3.6.2.2 Sample size

In a study, estimating sample size is very crucial. The bigger the sample size, the more representative the population. At the same time, it will make the preciseness of the research higher and decline the possibility of errors in the research. From the standpoint Hair *et al.* (2010); Hatcher (1994) the sample size was calculated based on a ratio of 5:1. As a result, depending on the quantification of the question, this study's minimum size should be at least five times larger. Based on the total number of variables observed in this research, 31 question items mean the minimum sample size should be at least: $n = 5 \times 31 = 155$.

For the minimum sample size for regression analysis, Green (1991) offers two cases. In case one, if the goal of this the regression is only to determine the general fit of the model such as R², F test ... then the smallest possible sample size is $50 + 8m$ (m is the number of independent variables or remaining called predictor participating in the regression). To investigate the components of each independent variable, such as t-test, regression coefficient, etc., a sample size of $104 + m$ should be used (m is the number of independent variables).

Besides, according to Tabachnick and Fidell (1996), there are 6 levels of sample size assessment as follows:

Level	Sample size (surveys)
Very poor	50
Poor	100
Fair	200
Good	300
Very good	500
Excellent	1000

Table 3. 1: Level of sample size assessment of Tabachnick and Fidell (1996)

To conduct research on the influence of brand equity dimensions on consumers' purchase intention in the beer industry in Vietnam, the survey subjects are those who have ever

purchased beer and drank beer. The total number of samples to be taken is determined to be about 500 samples. After filtering the results, the number of valid samples obtained was 430 samples. As a result, this number satisfies both the rule of thumb of Hair *et al.* (2010), Hatcher (1994) and the recommendation of Tabachnick and Fidell (1996).

3.6.2.3. Questionnaire design

Primary Data will be collected by us through two methods: in-depth interviews and questionnaires. Firstly, based to Guion, Diehl and McDonald (2011), in-depth interviews will "*allow the interviewer to deeply explore the respondent's feelings and perspectives on a subject. This results in rich background information that can shape further questions relevant to the topic*".

Also, the main benefit of in-depth interviews is that they recommend more thorough information than other data collection methods, such as surveys. They can also generate a more casual environment for getting data – people may feel more at ease discussing their program with you rather than filling out a survey (Boyce and Neale, 2006)

Secondly, Rowley (2014) said that: "*The big advantage of questionnaires is that it is easier to get responses from a large number of people, and the data gathered may therefore be seen to generate findings that are more generalizable*". Furthermore, They primarily focused on the cheap cost of data collecting and processing (Bowling and Veloso, 2002) . Besides, Questionnaires enable anonymity, which can help to decrease bias by promoting honest and simple responses (Marshall, 2005).

The sample includes all people aged 18 years and over and living and studying in Vietnam; used to and like to drink beer. Prior to the survey, the survey tool was piloted with 15 people. Previous interviews were conducted to refine the questionnaire. Items have been modified based on feedback. The survey questionnaire ensures the confidentiality of survey participants as no personal information asked can be used to identify respondents.

Online survey: Survey link is posted on Facebook, specifically job search groups, study exchange groups, famous community pages, etc. Online respondents answered questions and the data was stored in an excel file survey. Online surveys are a great way to reach and interact with a research target audience. Especially as mentioned, in this dangerous situation of COVID-19 like this. This is the fastest way to get answers from people all over the country. Online surveys also help to conduct market research at a fraction of the normal cost. With online surveys, it is feasible to pre-screen participants, allowing only those who

fit the target profile to participate. Those that fit the study's specified profile are authorized to complete the survey. It is also very convenient for anyone to take a survey; it only takes a few minutes to complete the survey anywhere.

Initially, our research will use the qualitative method through in-depth interviews to collect data more objectively and accurately. Interviewees will be asked open-ended questions to mine the data more broadly. Because we want to learn more about the situation and problems that beer brands are facing. At the same time, we also want to know how consumers in Vietnam perceive and evaluate beer brands. Therefore, the major purpose of this approach is to discover the key brand equity factors that influence consumers' purchase intention in the Vietnamese beer market. Thence, give conclusions and adapt the question items to include the quantitative method appropriately.

Quantitative methods will be studied through survey questionnaires. The structure of the survey consists of 5 parts: introduction, filter question, other questions, the main question, and conclusion. In the "Introduction" section, we explain why we conducted a survey on consumer purchasing intentions for beer brands in the Vietnamese market. The second part is a "Filter Question" to filter survey participants to see if they are a good fit for our study. The respondents must be those who have ever drunk beer and bought beer cans/bottles. In the third part, "other questions" related to demographics: gender, age, occupation, income, location, etc. This section will help us segment customers to know which customer groups influence the intention to buy beer the most. Demographic questions will be measured using a nominal scale. Next is the "Main Question" - this is the most important part, the series of questions that will give the results to conduct the analysis and make the final conclusion in the research. Question items to measure variables used a 5-Point Likert Scale, ranging from strongly disagree to strongly agree. Finally, there's the "Conclusion" section, where we'll close up the survey and thank survey respondents for their time and patience to complete it.

3.6.2.4. Measurement models

Surveys can be taken both online as well as offline. Because the participants can conduct it directly under the supervision and observation of the researchers, an offline survey is preferred to collect accurate data. Furthermore, because it is more difficult to process the input, online surveys have reduced the quality of the data. However, because the scope of

this study was so broad, online surveys were an affordable way to collect data. In addition, Google Forms is being used to gather information for this study.

In the survey, there are a total of seven factors including six independent variables and one dependent variable. Question items to measure variables used a 5-point Likert Scale. According to Bissonnette (2007), The Likert scale is a scale that was used to measurement scale the questionnaires, suitable to identify opinions, behaviors, and perceptions of individuals or consumers. Survey respondents select answers to a particular statement based on their level of agreement. The answers include 5 levels follow as 1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree.

a) Purchase Intention

Purchase Intention has three items taken from Jalilvand, Samiei and Mahdavinia (2011)

Code	Items	Reference
INTEN_1	I would buy brand X rather than any other brand available.	Jalivand, Samiei and Mahdavinia (2011)
INTEN_2	I am willing to recommend others to buy this brand's beer.	
INTEN_3	I am willing to purchase this brand's beer in the future.	

Table 3. 2: Measurement scale of Purchase Intention

b) Brand Awareness

Items of Brand Awareness are taken from Jalilvand, M. R., Samiei, N., & Mahdavinia, S. H. (2011); Goi Chai Lee and Fayrene Chieng Yew Leh (2011) and got from results of qualitative research. There are seven items. Therein three items are taken from Jalilvand, M. R., Samiei, N., & Mahdavinia, S. H. (2011), the next two items are taken from Goi Chai Lee and Fayrene Chieng Yew Leh (2011) and two items are derived from in-depth interviews.

Code	Items	Reference
AWARE_1	I know what X looks like.	Jalivand, Samiei and Mahdavinia (2011)
AWARE_2	I can recognize X among other competing brands.	
AWARE_3	I am aware of X.	
AWARE_4	X beer brand has a long-standing name in the market.	Lee and Leh (2011)
AWARE_5	X beer brand is famous in the market.	
AWARE_6	Beer of brand X is widely sold in shops and supermarkets.	The results of qualitative research
AWARE_7	X beer brand is widely promoted on internet, TV.	

Table 3. 3: Measurement scale of Brand Awareness

c) Brand Association

Items of Brand association are taken from Jalilvand, M. R., Samiei, N., & Mahdavinia, S. H. (2011) and Dhruva Kumar Gautama, Sajeeb Kumar Shrestha (2018). There are six items. Therein three items are taken from Jalilvand, M. R., Samiei, N., & Mahdavinia, S. H. (2011), the remaining three items are taken from Dhruva Kumar Gautama, Sajeeb Kumar Shrestha (2018).

Code	Items	Reference
ASSO_1	Some characteristics of brand X come to my mind quickly	Jalivand, Samiei and Mahdavinia (2011)
ASSO_2	I can quickly recall the logo or symbol of brand X	
ASSO_3	I easily imagine brand X in my mind	
ASSO_4	Brand X has very unique brand image, compared to competing brands	Gautam and Shrestha (2018)
ASSO_5	I like the brand image of brand X	
ASSO_6	I feel that brand X adds personality to me	

Table 3. 4: Measurement scale of Brand Association

d) Brand Loyalty

Items of Brand Loyalty are taken from Jalilvand, M. R., Samiei, N., & Mahdavinia, S. H. (2011); Thọ, N.D., & Trang N.T.M (2002) and the results of qualitative research. There are five items. Therein three items are taken from Jalilvand, M. R., Samiei, N., & Mahdavinia, S. H. (2011), one item is taken from Thọ, N.D., & Trang N.T.M (2002) and the remaining one item is derived from in-depth interviews.

Code	Items	Reference
LOYAL_1	Brand X would be my first choice	Jalivand, Samiei and Mahdavinia (2011)
LOYAL_2	I consider myself to be loyal to brand X	
LOYAL_3	Brand X is one of the preferred brands I want to buy	
LOYAL_4	I won't buy another brand beer if X brand beer is available at the store	Thọ, N. Đ., & Trang, N. T. M. (2002)
LOYAL_5	My family has been using/choosing only this beer brand for generations	The results of qualitative research

Table 3. 5: Measurement scale of Brand Loyalty

e) Perceived Quality

Items of Perceived Quality are taken from Jalilvand, M. R., Samiei, N., & Mahdavinia, S. H. (2011) and the results of qualitative research. There are six items that are four items are taken from Jalilvand, M. R., Samiei, N., & Mahdavinia, S. H. (2011) and the remaining two items are derived from in-depth interviews.

Code	Items	Reference
PERCEI_1	Brand X is a high quality beer brand	Jalivand, Samiei and Mahdavinia (2011)
PERCEI_2	There is a high probability that X is a quality brand	
PERCEI_3	The likelihood that brand X is reliable is very high	
PERCEI_4	Brand X must be of very good quality	
PERCEI_6	The taste of beer of brand X is very good	The results of qualitative research
PERCEI_6	The alcohol concentration of brand X is suitable for my taste.	

Table 3. 6: Measurement scale of Perceived Quality

f) Brand Desire

Items of Brand Desire are taken from Thọ, N.D., & Trang, N.T.M (2002) and the results of qualitative research. There are four items. Therein three items are taken from Thọ, N.D., & Trang, N.T.M (2002) and the remaining one item is derived from in-depth interviews.

Code	Items	Reference
DESIRE_1	I like X more than other brands	Thọ, N. Đ., & Trang, N. T. M. (2002)
DESIRE_2	I prefer drinking X over other brands	
DESIRE_3	I believe X is worth the money more than other brands	
DESIRE_4	I'm willing to buy X brand beer anywhere.	The results of qualitative research

Table 3. 7: Measurement scale of Brand Desire

3.7 Data analysis method

3.7.1 Qualitative study

In this research, we use content analysis in order to analyze the data. Content Analysis is a method that can find out the presence of certain words, themes, or concepts in data. Content Analysis allows researchers to evaluate and quantify the meanings and relationships of certain words, topics, or concepts. In marketing, Content Analysis is usually used to figure out the purpose, message, impact of the communication content and make relevant assumptions. Through in-depth interviews and open-ended questions, we use Content Analysis to identify consumer habits and behaviors. We deeply exploit different perspectives of customers to understand the buying motivations and buying trends of consumers. From there, we can draw inferences regarding the elements that have a real impact on customer buying intent.

3.7.2 Quantitative study

In this research, we use SPSS to analyze the data. According to Mujis (2010), SPSS is the most popular data analysis. SPSS is designed to measure and analyze data after it has been

collected. Through data processing by SPSS, this thesis will proceed with descriptive analysis, reliability analysis, correlation analysis, and regression analysis.

3.7.2.1 Descriptive analysis

Descriptive analysis is a sort of statistical analysis of data that depicts, displays, or summarizes certain data sets, helping the researcher to depict in common the characteristics of the research sample and the survey results obtained. This is a method of transforming data into information by synthesizing and processing it, calculating sample parameters such as sample mean, median, and variance using data representation: tables, graphs, and data summaries. For example, the survey sample has how many men and how many women; how many people are between the ages of 20 and 30; how many people live in the north and south...

Descriptive statistics have two types: measures of central tendency and measures of variability. Mean and mode are indicators of central tendency measurements. Standard deviation, variance, minimum and maximum variables, ... are indicators of measures of variability.

3.7.2.2 Reliability analysis

Cronbach's Alpha is used by the internal consistency technique to assess the scale's reliability (Nguyễn and Nguyễn, 2009).

When certain observed variables belong to a study variable, the Cronbach's Alpha reliability coefficient can be used to assess their suitability. The dependability coefficient, on the other way, tells whether the metrics are connected or not. Base on Corrected Item - Total Correlation to determine which observed factors do not contribute significantly to the definition of the idea and should be deleted, and which observed variables should be retained (Hoang Trong and Chu Nguyen Mong Ngoc, 2005). The standard of Corrected Item - Total Correlation for evaluating the observed variable that contributes to the factor's value is ≥ 0.3 . If the Corrected Item - Total Correlation is smaller than 0.3, the observed variable is regarded to have no contribution and must be removed from the assessment factor. Furthermore, if the value of Cronbach's Alpha If Item Deleted is bigger than the Cronbach's Alpha coefficient, that variable is removed from the assessment factor.

3.7.2.3 Exploratory factor analysis (EFA)

The Factor Exploratory Analysis (EFA) The method for determining two critical scale values: convergent and discriminant values. The EFA method of component analysis does not have a dependent or independent variable and instead relies on the correlation between variables (interrelationships).

EFA is a quantitative analytic method for condensing a large number of interdependent measures into a smaller number of more relevant variables (factors) while retaining the bulk of the original set's information richness, according to Hair (2009).

Because Exploratory Factor Analysis is dependent on the relationship between measurement variables, we need to analyze the relationship between these measurement variables before deciding to apply it. The correlation matrix can be used to determine the degree of association between variables. If the correlation coefficients are smaller than 0.30, EFA should not be used (Hair, 2009).

Hair (1998) defines factor loading as the criterion for establishing the practical importance of EFA. A factor loading of higher than 0.3 is regarded as the bare minimum. A factor loading greater than 0.4 is considered significant. Factor loadings greater than 0.5 are thought to be of practical importance.

EFA Output:

a) Sampling adequacy

The Kaiser-Meyer-Olkin (KMO) test is used in research to assess data sampling adequacy for Factor Analysis. The KMO test enables us to assess whether the data we have is suitable for a Factor Analysis and whether we have defined what we want to measure. The Kaiser-Meyer-Olkin coefficient (KMO) is a value between 0.5 and 1.

Bartlett's test of sphericity evaluates the hypothesis that your correlation matrix is an identity matrix. The statistical significance of the Bartlett test is 0.05. This is a statistic that is used to test the hypothesis that variables in the population have no association. The observed variables in the population are correlated if this test is statistically significant.

b) Communalities

The degree to which an item t is correlated with all other items is measured by its communality value. Communalities are equal to proportions of variance accounted for by selected components. If the Communalities value of a variable has a low value (lower than 0.40), that variable has the effect of loading multiple factors at the same time. The value of Communalities must be larger than or equal to 0.4 to meet the criteria.

c) Total variance explained

The Total column displays the eigenvalue, or the amount of variance in the original variables accounted for by each component. Each component is allocated an Eigenvalue, which is a quality score. Only eigenvalues over a certain threshold are likely to represent actual underlying factors. In the exploratory factor analysis model, factors with an Eigenvalue greater than or equal to 1 are kept.

The percentage of Variation is the percentage representation of the variance accounted for by each component to the overall variance in all variables. The Cumulative percentage indicates how much of the variance is explained by the first n components. The sum of the percentages of variation for the first and second components.

d) Rotated Component Matrix and Principal component analysis

According to Fabrigar *et al.*, (1999), Principal component analysis (PCA) is used to summarize information on observed variables included in factor analysis and to help demote the number of observations to a smaller number of key factors. These key factors explain the most informative characteristics of all the original observed variables. In the PCA extraction, the observed variables of the latent variables have been performed, and the use of PCA emphasizes reducing the number of observed variables to obtain the least number of factors but the most representation for the characteristics of all observed variables.

Rotated Component Matrix, based to Bryant and Yarnold (1995), is a process by which observed variables are rotated on axes to achieve a simple factor structure. The simple structure means that the observed variables will be rotated to the point where each observed variable only has a strong load on one factor, a very weak load on the other factors. If the observed variable has a high loading factor at a factor, that variable will reflect the characteristics of the factor well. If there is a low load factor for other factors, it means that the observed variable has little to do with these factors.

The rotations in exploratory factor analysis are divided into two main groups: Orthogonal Methods including Varimax, Equimax, Quartimax, and Oblique Methods including Promax, Oblimin, Orthoblique. In which, Varimax and Promax represent 2 groups of perpendicular and non-perpendicular rotations. These are two commonly used rotations in studies.

The Promax method rotates not perpendicularly, after rotating the axis the elements will move to the most suitable position. This rotation assumes the factors are correlated with each other. The Promax method is widely applied in topics with the appearance of intermediate variables, at this time there will be variables that both play an independent role and play a dependent role.

Varimax method rotates perpendicularly, after rotating the axis the elements are still in a perpendicular position to each other. This rotation assumes that the factors are not correlated with each other. The varimax method is largely applied in topics with only two types of independent and dependent variables. When the primary purpose is to reduce the number of observed variables to the representative factors with the maximum extracted variance, the Varimax rotation will be more suitable for the Principal Component Analysis extraction. Therefore, the Varimax method was used in our study.

3.7.2.4 Correlation analysis

The Pearson correlation coefficient (r) is a measurement of the degree of linear correlation between two variables. To see if the independent and dependent variables have a close linear connection, the Pearson correlation coefficient test is utilized. The Pearson correlation coefficient (r) will range between +1 and -1. A Sig value of less than 0.05 is required for meaningful correlation.

Although the Pearson correlation coefficient can be used to examine the linear relationship between two variables, according to Field (2009), we need to test the hypothesis that this correlation coefficient is statistically significant or not. Hypothesis is made $H_0: r=0$. The T test was used to test this hypothesis. If Sig is smaller than 0.05, the hypothesis H_0 will be rejected, the two variables are linearly correlated. If Sig is bigger than 0.05, hypothesis H_0 is accepted, the two variables are not linearly correlated with each other.

Once we have identified two variables with a linear correlation, we will consider the strength/weakness of this correlation. According to Field (2009), the strength/weakness of a linear correlation is measured through the absolute value of r . If the absolute value of r is smaller than 0.1, the correlation is very weak. If the absolute value of r is smaller than 0.3, the correlation is weak. If the absolute value of r is smaller than 0.5, the correlation is mean. The correlation is high if the absolute value of r is bigger than or equal to 0.5.

3.7.2.5 Regression analysis

Regression analysis is a statistical technique for assessing if an equation is appropriate for a collection of dependent and independent variable data. It enables the most precise assessment of the real connection between the variables. Using this estimable equation, we may determine the degree of influence of each independent variable on the dependent variable.

According to Bates and Watts (2007), regression analysis explicitly clarifies that if any one of the independent factors do differ when other factors are held constant, the typical value of dependencies instead changes how.

Multiple Regression analysis output:

a) Variables entered/removed:

The table shows the variables in our analysis. It means Selfprotection_m, Impactful_m, Meaning_m, and Confidence_m are useful to predict Engagement_m.

b) Model summary and overall fit statistics

R Square, Adjusted R Square: display the percentage variation of the dependent variable that is interpreted by the independent variables acting on it. R² has the drawback that when additional variables are added to the model, this value increases. As a result, if one or more variables are omitted from the model, Adjusted R-square should be utilized for identification. The range is from 0 to 1, the closer to 1, the more significant the regression model, the weaker the regression model the weaker the closer it gets to 0, the weaker the regression model. However, in some cases, R-square < 0.5 is still considered significant.

Autocorrelation: Durbin Watson coefficient allows checking autocorrelation between independent variables. Durbin Watson coefficient has a value from 0 to 4. According to Field (2009), if Durbin Watson is smaller than 1 and bigger than 3, there is a very high possibility of autocorrelation. According to Yahua Qiao (1999), Durbin Watson values between 1.5 and 2.5 will not occur autocorrelation.

c) ANOVA table

The linear regression's the F-test has H₀ that the model interpret zero variance in the dependent variable, it means H₀: R² = 0. The p-value found in the ANOVA table applies to R and R².

In the F-Test, Sig value is used to assess the fit of the regression model. If Sig is smaller than 0.05, the multiple linear regression model is appropriate for the data set and can be utilized.

d) Multiple linear regression: The Coefficients table

P-value of beta-coefficient: The “Sig.” in the coefficients table contains the (2- tailed) p-value for each beta-coefficient. B-coefficient is has p-value is less than 0.05 (Sig.), it is statistically significant.

The unstandardized b-coefficients: are used to write regression equations. The unstandardized regression equation has the form: $Y = B_0 + B_1X_1 + B_2X_2 + \dots + B_iX_i + \varepsilon$

When one independent variable changes while the remaining independent variables stay constant, the regression coefficients represent the change in the dependent variable. When X_1 changes by one unit, Y changes B_1 by one unit as long as the other variables stay constant.

The standardized beta-coefficients: are used to determine the order of the effects of independent factors on the dependent factor based on the uniformity of units and standard deviations of factors in the regression model. The standardized regression equation is written as: $Y = \text{Beta}_1 X_1 + \text{Beta}_2 X_2 + \dots + \text{Beta}_i X_i + \varepsilon$

According to absolute value of the normalized regression coefficient from the standardized regression equation, we may determine which factor X has a strong or weak influence on the variable Y . The bigger the absolute value of Beta, the more important the variable is for Y .

When the regression coefficient B or Beta has a positive sign, it indicates that the independent variable has a positive influence on the dependent variable; when it has a negative value, it indicates that the independent variable has a negative effect on the dependent variable.

T-Test: In the T-Test, Sig value is used to determine the significance of the regression coefficient. If the p-value of an independent variable's T-Test is smaller than 0.05, that independent factors has an effect on the dependent factor. If the p-value of an independent factors in the T-Test is larger than 0.05, that independent factors has no influence on the dependent factor.

Multicollinearity: The amplification factor of variation The VIF method is used to test for multicollinearity. If the VIF of an independent factor is bigger than 10, it indicates that the independent factor is multicollinear. For the Likert scale, if the VIF coefficient is bigger than 2, the possibility of multicollinearity between the independent variables is very high.

3.7.2.6 One-way Anova and Independent sample T-Test analysis

Independent Samples T-Test in order to test whether there is a distinct in the mean of a quantitative variable for different values of a qualitative variable. As an example, it is important to compare the Gender variable (male, female) and the Purchase Intention variable to know between these two age groups, which group has a higher purchase intention. However, the limitation of Independent Samples T-Test is that it can only compare 2 groups with each other.

In the Independent-samples T-test, we need to rely on the results of testing the equality of the two population variances (the Levene test). Variance depicts the degree of uniformity or nonuniformity (dispersion) of observed data.

First, we analyze the Levene test. If the p-value in the Levene test (F test) is smaller than 0.05, the variances of the two populations are different and we use the sig T-Test findings in Equal variances not assumed. If Sig. is bigger than or equal to 0.05, the variances of the two populations are not different; hence, we apply the T-Test findings with identical variances assumed. The Independent samples T-test will be examined next. If the sig T-Test score is smaller than 0.05, we infer that the mean of the two populations differs statistically significantly. We conclude that there is no statistically significant difference in the mean of the two populations if the sig T-Test result is 0.05.

One-way analysis of variance (also known as One-way Anova) is used to test the hypothesis of equal mean of sample groups with a chance of error of only 5%. This method compares the mean of 3 or more groups, so it can overcome the disadvantage of Independent samples T-test. Example: Analyze the difference between customer attributes (gender, age, occupation, income...) and intention to buy beer.

The test results consist of two parts. Part 1 is Homogeneity Variance Test. Levene test is used to check if variance is equal between groups. Hypothesis H0 is "Equal Variance". If Sig is less than or equal to 0.05, H0 will be rejected. If Sig is large 0.05, H0 will be accepted, eligible for further anova analysis. Part 2 is the Aova Test. Hypothesis H0 is "Equal Mean." If Sig is less than or equal to 0.05, H0 will be rejected, enough to confirm that there is a

difference between groups for the dependent variable. 0.05, H0 will be accepted, not qualified to validate the difference in groups for the dependent variable.

3.8 Ethical

Ethical considerations are perhaps the most crucial aspect of research. The main objective of this section is to present some of the principles that participants and group members follow when conducting research. Voluntary participation based on the consent of the respondents for the study is required. At the heart of informed consent is that researchers must give sufficient information, the purpose of the survey, the reasons for which they were selected to participate, so that individuals understand the implications of participation and consider and allow freedom as to whether to do so without any pressure or pressure, from anyone. It is essential to avoid using discriminatory offensive language against respondents. It is necessary to ensure the privacy and anonymity of respondents. The data and results given should be based on the respondents' responses. No data is fabricated or misrepresented. In summary, the researcher undertakes that there will not be any adverse effects on any individual or organization participating in the study.

The author will be solely responsible for the article or any information related to the research.

CHAPTER 4: ANALYSIS AND FINDINGS

4.1. Qualitative analysis

4.1.1 Participants characteristics

Demographic data of 15 focused in-depth interviewees are presented in Table 4.1. From observational data (N = 15), 33.3% in-depth interview participants are female and 66.7% are male. There are 53.4% respondents currently between the ages of 18-25 years old, 33.3% of people who participate in an in-depth interview between the ages of 26-35 years old, the remaining 13.3% respondents are over 55 years old. Out of a total of 100% in-depth interviews, 73.4% respondents lived in the North, just 13.3% respondents lived in the Central region and the remaining 13.3% respondents lived in the South. The occupations of 15 in-depth interviewees including Civil servant and office staff have the same number of participants as 40%. In addition, 13.3% respondents are currently freelance business and a minority respondent is a student.

Of the 15 respondents, 86.7% respondents are interested in the brand when buying beer, the remaining 13.3% people answered that they don't pay much attention to the brand when buying beer. According to the interview results, the maximum frequency of buying beer was 4-5 times per week and only 6.7% participant in the in-depth interview bought beer with the above frequency. Next, 60% people answered that on average, they buy beer about 3-4 times per month. Frequency of buying beer at least 1-2 times per month including 33.3% respondents.

	Frequency	Percentage (%)
Gender		
Male	10	66.7
Female	5	33.3
Total	15	100
Age		
18-25 years old	8	53.4
26-35 years old	5	33.3
over 55 years old	2	13.3
Total	15	100
Region		
North	11	73.4
Central	2	13.3
Southern	2	13.3
Total	15	100
Occupation		
Civil servant	6	40
Office staff	6	40
Freelance business	2	13.3
Student	1	6.7
Total	15	100
Frequency of buying beer		
1-2 times per month	5	33.3
3-4 times per month	9	60
4-5 times a week	1	6.7
Total	15	100
Pay attention to the brand when buying beer		
Yes	13	86.7
No	2	13.3
Total	15	100

Table 4. 1: Demographics Characteristics of In-depth Interviewees (N=15)

Respondents	Gender	Age	Region	Occupation
Respondents 1 (R1)	Male	20 years old	North	Student
Respondents 2 (R2)	Female	25 years old	North	Freelance
Respondents 3 (R3)	Female	25 years old	North	Office staff
Respondents 4 (R4)	Male	26 years old	North	Civil servant
Respondents 5 (R5)	Male	22 years old	North	Office staff
Respondents 6 (R6)	Male	21 years old	North	Civil servant
Respondents 7 (R7)	Male	65 years old	North	Civil servant
Respondents 8 (R8)	Male	23 years old	North	Office staff
Respondents 9 (R9)	Male	25 years old	North	Office staff
Respondents 10 (R10)	Male	26 years old	North	Office staff
Respondents 11 (R11)	Female	22 years old	North	Civil servant
Respondents 12 (R12)	Male	30 years old	Central	Freelance
Respondents 13 (R13)	Male	57 years old	Central	Civil servant
Respondents 14 (R14)	Female	28 years old	Southern	Civil servant
Respondents 15 (R15)	Female	30 years old	Southern	Office staff

Table 4. 2: Respondents' Background

4.1.2 Results

4.1.2.1. Adjust the scale

To better define the dimensions of brand equity, we first asked a few questions to 15 in-depth interviewees: “What beer brands do you know about on the market? Why do you know those brands? Can you tell the difference between beer brands? If so, what are the points?” There are 66.7% respondents who said that they know these beer brands because they are sold a lot in supermarkets and shops and 20% of these respondents also said that they also know about beer brands because they see ads on them TV and internet. Out of the remaining

33.3% people, 20% respondents know about beer brands because these beer brands are very famous and have a long-standing reputation in the Vietnamese market. The other two said that they only noticed and knew the beer brand they often drank because their family had a habit of buying this beer brand for a long time.

"I pay attention to beer brands because in supermarkets, shops sell a lot." _R2, Female, 25 years old, North.

"He knows these beer brands because it is widely advertised on TV, the internet and is sold a lot in supermarkets." _R10, Male, 26 years old, North

"The beer brands I know are all famous and long-standing beer brands in the market." _R5, Male, 22 years old, North.

Through the answers of the interviewees, we can see that in the Vietnamese market, the definition of brand awareness is also the popularity, long-standing of that brand and the widespread popularity of the brand on the market. Since then, we have drawn some new items to build a Brand Awareness variable scale such as:

- X beer brand has a long-standing name in the market
- X beer brand is famous in the market.
- Beer of brand X is widely sold in shops and supermarkets
- X beer brand is widely promoted on internet, TV

In addition, after analyzing the above qualitative answers, in the Vietnamese beer market, brand loyalty is defined as the habit of buying a certain brand for many generations in a family. We added an item in the Brand Loyalty variable scale:

- My family has been using/selecting this beer brand for generations

Next, when answering the question "When mentioning a certain beer brand, what do you immediately think of?" all respondents (100%) have the same opinion that when mentioning a certain brand, they all associate the logo, symbol and image of that beer brand. This further confirms that the items in our quantitative scale are adequate and suitable for customers in the Vietnamese market.

"When it comes to a certain beer brand, I will immediately think of the logo and image of that beer brand." _R1, Male, 20 years old, North

"When it comes to a beer brand, I can imagine the color packaging, the logo of that brand." _R10, Male, 26 years old, North

For the question "When you feel like a certain brand of beer, are you ready to buy beer of that brand?". 100% respondents continue to have the same answer that they will definitely buy their favorite beer brand, especially 33.3% respondents also confirm that they will be willing to buy their favorite beer brand anywhere. anywhere if the stores near them do not sell.

"When the shops around don't sell the beer I like, I'll gladly go to the stores farther away to buy it."

_R4, Male, 26 years old, North.

"I think when I like a certain type of beer, I will definitely go to buy the beer I like to buy even though the shops around me don't sell it." **_R3, Female, 25 years old, North.**

This demonstrates that customer purchase intent in Vietnam is influenced by brand desire. Consumers in Vietnam believe that liking a brand is the willingness to buy products of that brand wherever they are. We also pulled out a new item to build the Brand Desire scale:

- I am willing to buy beer of brand X anywhere.

In addition, when analyzing the results of the two questions "In your opinion, what are the characteristics of the beer brand that you consider the most important? Why?" And "What brand of beer do you buy most often? Will you continue to buy beer from that brand in the future? Why?". In the beer market in Vietnam, perceived quality is further defined through the taste and alcohol content of the beer. we've pulled out a few new items for the Perceived Quality scale:

- The taste of brand X beer is very good
- The alcohol content of brand X beer suits my taste.

"I think the alcohol concentration of beer is the most important, I will often choose beers with a concentration that is not too low and not too high like Hanoi canned beer" **_R3, Female, 25 years old, North.**

"I care about the alcohol concentration and taste of the beer the most. I usually choose beers with low alcohol concentration and fruit flavors like Strongbow, I think such beers will be more suitable for women" **_R15, Female, 30 years old, Southern.**

"I think the alcohol concentration is more suitable for me to feel. In addition, the reputation of the beer brand must be large, I will be assured of my health when drinking beer of that brand" **_R12, Male, 30 years old, Central.**

4.1.2.2 Important role of perceived quality and brand loyalty

When receiving the question: "In your opinion, what characteristics of the beer brand do you consider the most important? Why?", all respondents (100%) said that the alcohol concentration in beer and the taste of beer is the most important. All beers have different production processes, so the alcohol content of the beer as well as the taste of the beer will

be different. The "heavy" and "light" of beer depends on the alcohol content of the beer, most women tend to choose beer brands with lower alcohol content than men. Besides, the taste of beer is also quite important, each type of beer will have a different taste, strength, and bitterness. Especially, now on the market, there are countless types of beer with unique flavors such as fruit flavor, honey, ... consumers will be able to choose the type of beer that suits their preferences. In addition, there are 40% of respondents added that they are also very interested in whether the beer brand has a high reputation because when the beer brand has a high reputation, they will feel more secure about their health when drinking beer of that brand.

With the question "Which beer brand do you most often buy? Will you continue to buy beer of that brand in the future? Why?" Out of 15 people interviewed, 53.2% confirmed that they would continue to support their favorite brand's beer in the future because of the quality of that brand's beer. If the quality of those brewers in the future has more improvement in quality or is not reduced, they will certainly become loyal customers. The remaining 40% of respondents want to continue buying beer from their chosen brewery because they are so familiar with this brewery and now they are loyal customer of this brewery and 6.8% of respondents wants to continue buying with the reason to see a reputable beer brand in the market.

"I am a loyal customer of Hanoi beer. There are many reasons for me to continue to support Hanoi beer in which the biggest reason is the long-term loyalty because from past to present, for generations, my family has only believed and used Hanoi beer" **_R4, Male, 26 years old, North.**

"I will continue to buy and use my favorite beer because its quality is quite stable" **_R13, Male, 57 years old, Central.**

"I'm used to this beer and I find its taste very suitable for me, so I will continue to buy and support this beer brand in the future" **_R11, Female, 22 years old, North.**

4.1.2.3 Idea to improve beer brand in Vietnam

According to the interview results, there are a lot of people that believe that their favorite beer brand needs further improvement. Specifically, several respondents (33%) think the design and packaging of their favorite beer brand wish to have more eye-catching and attractive improvements. Next, the minority of 12% respondents say the beer taste was a bit bitter compared to a part of others. They hope the beer brand will do more research and come up with a different beer, suitable for everyone. Besides, they also recommend a suitable non-alcoholic beer for road users. Some next others (12%) complained that sometimes it's hard to buy their favorite beer (Ha Noi beer and Heineken beer). There are also 20% respondents who believe that the improvement and innovation of the brand is still slow. They expect new products, faster improvement according to social trends. The rest are still satisfied with their favorite beer brand.

"I think the beers should be improved in terms of packaging and samples, but because there are many beers with similar designs and colors on the market, it is difficult for customers to distinguish them." _

R1, Male, 20 years old, North

"I hope that many breweries will launch new types of beer such as 0-degree beer to suit those who often have to travel in traffic." _

R4, Male, 26 years old, North

"In my opinion, beer companies like Hanoi and Saigon are still a bit slow to improve their products. These two breweries should be invested in further improvement to be able to compete with foreign beer brands." _

R13, Male, 57 years old, Central.

4.2 Quantitative data analysis

The survey was collected in seven days (from 23 October to 30 October 2021). The total collected sample is 471 online survey samples. After rejecting invalid samples, there are 458 samples accepted for analysis.

4.2.1 Respondent profile

There is a total of 458 responses to this survey. In which, the proportion accounted for the most is 70.09% for Male, equivalent to 321 people. Female accounted for 29.91%, corresponding to 137 people.

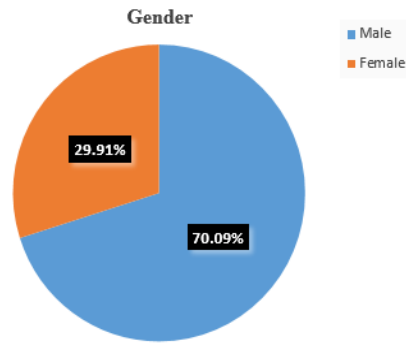


Chart 4. 1: Gender of respondent profile

There was a total of 458 responses to this survey. In which, the highest proportion is 46.07% in the age group of 26-35, equivalent to 211 people. Second is the age group 36-45 with 34.50%. The age group of 18 to 25 years old is next, accounting for 12.23% of the total. The remaining two age groups with the number of survey participants at least 46-55 years old and over 55 years old with percentages of 4.15% and 3.06% respectively.

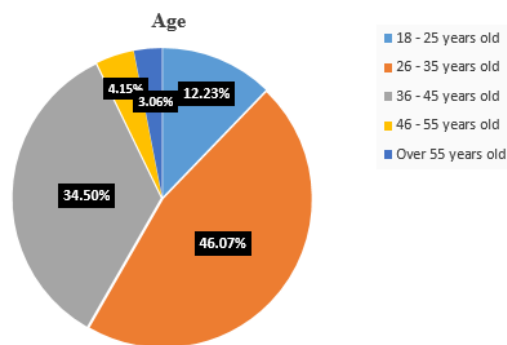


Chart 4. 2: Age of respondent profile

The report is made in 3 regions of Vietnam. The North accounted for the highest proportion with 44.98%, corresponding to 355 people. Next, 28.60% of the total is the South. Finally, the Central region accounts for 26.42%.

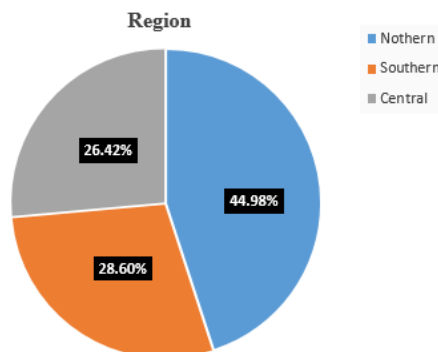


Chart 4. 3: Region of respondent profile

458 respondents belonged to different occupational groups. In which, the largest proportion is office staff 29.48%. Followed by civil servants with 24.67%. In third place is "Freelance" with 18.56%, including industries such as small businesses, motorbike taxi drivers, shippers, etc. In fourth place are workers with 16.59%. 5th place is students with 6.99%. The last is "Other" with only 3.71% including people who are currently retired, housewives,...

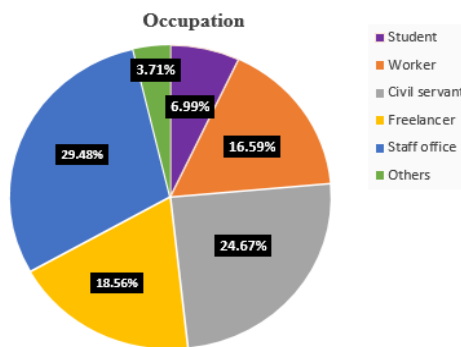


Chart 4. 4: Occupation of respondent profile

There is a total of 458 responses to this survey. In which, the proportion that accounts for the most is 45.41% for people with income from 5 to 10 million dong. Next are those with income from more than 10 million dong to 20 million dong, accounting for 42.58. In third place are those with income less than 5 million dong with 6.33%. Finally, those with incomes greater than 20 million dong with 5.68%.

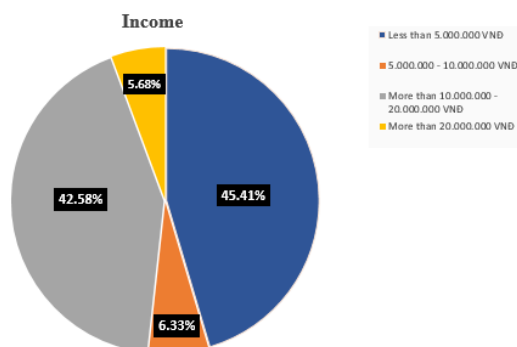


Chart 4. 5: Income of respondent profile

In the survey, the frequency of buying beer is divided by month and by week. The number of people who have the habit of buying beer only 1-2 times per month accounts for 26.20%.

Next is the majority of respondents who have the habit of buying beer 3-4 times per month, accounting for 43.67%. There are 26.42% of the total respondents have the habit of buying beer 2-4 times per week. Finally, the number of people who buy beer more than 5 times a week accounted for only 3.71%.

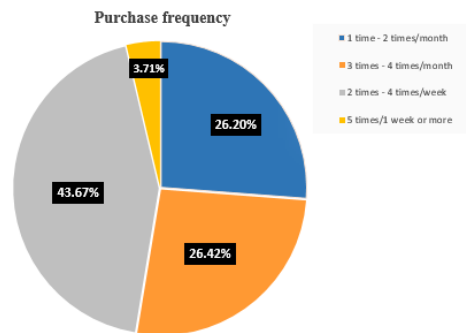


Chart 4. 6: Purchase frequency of respondent profile

4.2.2 Descriptive analysis

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
INTEN_1	458	2	5	3.64	0.689
INTEN_2	458	1	5	3.7	0.618
INTEN_3	458	2	5	3.71	0.621
AWARE_1	458	2	5	3.64	0.748
AWARE_2	458	1	5	3.57	0.802
AWARE_3	458	1	5	3.38	0.829
AWARE_4	458	1	5	3.36	0.875
AWARE_5	458	1	5	3.57	0.791
AWARE_6	458	1	5	3.34	0.843
AWARE_7	458	1	5	3.38	0.872
ASSO_1	458	2	5	3.76	0.992
ASSO_2	458	1	5	3.69	1.044
ASSO_3	458	2	5	3.83	1.011
ASSO_4	458	2	5	3.74	1.009
ASSO_5	458	1	5	3.73	1.003
ASSO_6	458	1	5	3.67	0.983
LOYAL_1	458	1	5	3.66	1.095
LOYAL_2	458	1	5	3.69	1.032
LOYAL_3	458	1	5	3.68	0.973
LOYAL_4	458	1	5	3.68	1.057
LOYAL_5	458	1	5	3.7	0.965
PERCEL_1	458	1	5	3.71	1.081
PERCEL_2	458	1	5	3.72	1.011
PERCEL_3	458	1	5	3.83	1.023
PERCEL_4	458	1	5	3.85	1.015
PERCEL_5	458	2	5	3.92	0.722
PERCEL_6	458	1	5	3.85	1.064
DESIRE_1	458	1	5	3.33	0.993
DESIRE_2	458	1	5	3.33	1.063
DESIRE_3	458	1	5	3.43	0.999
DESIRE_4	458	1	5	3.44	0.957
Valid N (listwise)	458				

Table 4. 3: Descriptive Statistics

Following the study of 458 data sets, it was discovered that all elements have a mean value larger than 3. In which the highest mean is PERCEL_5 (The beer taste of brand X is very good), equal to 3.92. In the second place, items PERCEL_4 (Brand X must be of very good

quality) and PERCEL_6 (The alcohol content of brand X beer suits my taste) continued with an average of 3.85. These average results show that the respondents agree with these items higher than other items. The lowest mean value is AWARE_6 (Beer of brand X is widely sold in shops and supermarkets), with a mean value is 3.34, indicating that people agree with the item. This is lower than all other items. In general, most variables with mean values between more than 3 and 4 are closed with the neutral option. As can be observed, none of these elements of brand equity have a substantial impact on customers' buy intentions in the Vietnamese market for beer products.

4.2.3 Reliability Test

4.2.3.1 Measurement scales of “Purchase Intention” factor (INTEN)

Reliability Statistics

Cronbach's Alpha	N of Items
0.781	3

Table 4. 4: Reliability statistics of INTEN

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
INTEN_1	7.410	1.222	0.588	0.744
INTEN_2	7.360	1.263	0.682	0.638
INTEN_3	7.340	1.350	0.595	0.730

Table 4. 5: Item-total statistic of INTEN

Cronbach’s Alpha coefficient of INTEN is 0.781 (greater than 0.7), which indicates a high level of internal consistency. The scale of the component, which includes INTEN _1, INTEN_2, INTEN _3, shows a relatively high outcome in Corrected item-total Correlation (greater than 0.3). As result, these variables meet two criterion and can be used in this research.

4.2.3.2 Measurement scales of “Awareness” factor (AWARE)

Reliability Statistics

Cronbach's Alpha	N of Items
0.854	7

Table 4. 6: Reliability Statistics of AWARE

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
AWARE_1	20.610	13.582	0.649	0.829
AWARE_2	20.680	13.260	0.652	0.828
AWARE_3	20.870	13.350	0.607	0.834
AWARE_4	20.890	13.177	0.594	0.837
AWARE_5	20.680	13.234	0.670	0.826
AWARE_6	20.910	13.578	0.551	0.843
AWARE_7	20.870	13.152	0.601	0.836

Table 4. 7: Item-total statistic of AWARE

Cronbach's Alpha coefficient of AWARE is 0.854 (greater than 0.7), which indicates a high level of internal consistency. The scale of the component, which includes AWARE _1, AWARE _2, AWARE _3, AWARE _4, AWARE _5, AWARE_6, AWARE_7 shows a relatively high outcome in Corrected item-total Correlation (greater than 0.3). As result, these variables meet two criterion and can be used in this research.

4.2.3.3 Measurement scales of "Association" factor (ASSO)

Reliability Statistics

Cronbach's Alpha	N of Items
0.872	6

Table 4. 8: Reliability statistics of ASSO

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ASSO_1	18.650	15.658	0.714	0.843
ASSO_2	18.720	15.460	0.693	0.846
ASSO_3	18.590	15.893	0.661	0.852
ASSO_4	18.680	16.219	0.616	0.859
ASSO_5	18.680	15.899	0.668	0.851
ASSO_6	18.740	15.928	0.682	0.848

Table 4. 9: Item-total statistic of ASSO

Cronbach's Alpha coefficient of ASSO is 0.872 (greater than 0.6), which indicates a high level of internal consistency. The scale of the component, which includes ASSO _1, ASSO _2, ASSO _3, ASSO _4, ASSO _5, ASSO_6, ASSO_7 shows a relatively high outcome in Corrected item-total Correlation (greater than 0.3). As result, these variables meet two criterion and can be used in this research

4.2.3.4 Measurement scales of "Loyalty" factor (LOYAL)

Reliability Statistics

Cronbach's Alpha	N of Items
0.798	5

Table 4. 10: Reliability statistics of LOYAL

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
LOYAL_1	14.750	9.138	0.634	0.741
LOYAL_2	14.720	9.292	0.663	0.732
LOYAL_3	14.720	10.482	0.492	0.785
LOYAL_4	14.730	9.691	0.566	0.763
LOYAL_5	14.700	10.245	0.543	0.770

Table 4. 11: Item-total statistic of LOYAL

Cronbach's Alpha coefficient of LOYAL is 0.798 (greater than 0.7), which indicates a high level of internal consistency. The scale of the component, which includes LOYAL 1, LOYAL 2, LOYAL 3, LOYAL 4, LOYAL 5 shows a relatively high outcome in Corrected item-total Correlation (greater than 0.3). As result, these variables meet two criterion and can be used in this research.

4.2.3.5 Measurement scales of "Perceived quality" factor (PERCEI)

Reliability Statistics

Cronbach's Alpha	N of Items
0.852	6

Table 4. 12: Reliability statistics of PERCEI

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PERCEI_1	15.26	11.572	0.575	0.846
PERCEI_2	15.16	11.510	0.612	0.811
PERCEI_3	15.14	11.435	0.649	0.826
PERCEI_4	15.12	11.281	0.683	0.817
PERCEI_5	15.25	11.617	0.629	0.831
PERCEI_6	15.12	10.415	0.790	0.787

Table 4. 13: Item-total statistic of PERCEI

Cronbach's Alpha coefficient of PERCEI is 0.852 (greater than 0.7), which indicates a high level of internal consistency. The scale of the component, which includes PERCEI 1, PERCEI_2, PERCEI 3, PERCEI 4, PERCEI 5, PERCEI 6, shows a relatively high

outcome in Corrected item-total Correlation (greater than 0.3). As result, these variables meet two criterion and can be used in this research.

4.2.3.6 Measurement scales of “Desire” factor (DESIRE)

Reliability Statistics

Cronbach's Alpha	N of Items
0.787	4

Table 4. 14: Reliability statistics of DESIRE

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
DESIRE_1	10.190	5.930	0.603	0.730
DESIRE_2	10.190	5.511	0.640	0.711
DESIRE_3	10.090	5.911	0.602	0.730
DESIRE_4	10.080	6.348	0.533	0.764

Table 4. 15: Item-total statistic of DESIRE

Cronbach’s Alpha coefficient of DESIRE is 0.787 (greater than 0.7), which indicates a high level of internal consistency. The scale of the component, which includes DESIRE 1, DESIRE 2, DESIRE 3, DESIRE 4 shows a relatively high outcome in Corrected item-total Correlation (greater than 0.3). As result, these variables meet two criterion and can be used in this research.

4.2.4 Exploratory Factor Analysis

EFA FIRST TIME

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.719
Bartlett's Test of Sphericity	Approx. Chi-Square
	df
	Sig.
	9.026.896
	378
	0

Table 4. 16: KMO and Barlett’s Test

Table 4. 16 shows the KMO value is .719 (higher than 0.50), which is satisfied the requirements to implement EFA According to Hair *et al.* (2010). Besides, the p-value is 0.000 <0.05 which means that the variables are related interconnected. Thus, this data is suitable for EFA implementation

Rotated Component Matrix^a

	Component				
	1	2	3	4	5
AWARE_5	0.795				
AWARE_2	0.783				
AWARE_1	0.763				
AWARE_3	0.715				
AWARE_7	0.696				
AWARE_4	0.689				
AWARE_6	0.672				
ASSO_2		0.812			
ASSO_6		0.802			
ASSO_1		0.785			
ASSO_3		0.752			
ASSO_5		0.746			
ASSO_4		0.694			
PERCEI_6			0.858		
PERCEI_4			0.797		
PERCEI_3			0.760		
PERCEI_5			0.738		
PERCEI_1			0.710		
PERCEI_2			0.590	0.529	
LOYAL_2				0.772	
LOYAL_1				0.758	
LOYAL_4				0.747	
LOYAL_5				0.718	
LOYAL_3				0.680	
DESIRE_2					0.810
DESIRE_1					0.792
DESIRE_3					0.772
DESIRE_4					0.724

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Table 4. 17: Rotated Component Matrix

The variable PERCEI 2 appears in both factors, and the difference is less than 0.3, so we remove the PERCEI 2 variable and run EFA again.

EFA THE SECOND TIMES

Items	Component					Communalities
	1	2	3	4	5	
AWARE_5	0.795					0.642
AWARE_2	0.783					0.624
AWARE_1	0.763					0.583
AWARE_3	0.714					0.519
AWARE_7	0.696					0.515
AWARE_4	0.690					0.509
AWARE_6	0.671					0.461
ASSO_2		0.811				0.662
ASSO_6		0.802				0.648
ASSO_1		0.788				0.653
ASSO_3		0.754				0.599
ASSO_5		0.748				0.605
ASSO_4		0.689				0.537
PERCEI_6			0.865			0.523
PERCEI_4			0.778			0.464
PERCEI_3			0.777			0.674
PERCEI_5			0.765			0.552
PERCEI_1			0.675			0.635
LOYAL_2				0.816		0.609
LOYAL_1				0.788		0.505
LOYAL_4				0.730		0.611
LOYAL_5				0.697		0.781
LOYAL_3				0.659		0.653
DESIRE_2					0.812	0.672
DESIRE_1					0.791	0.631
DESIRE_3					0.774	0.613
DESIRE_4					0.723	0.550
% of variance	17.688	13.967	10.400	9.268	8.053	
Cumulative %	17.688	31.655	42.055	51.323	59.376	
KMO	0.721					
Bartlett's Test (Sig.)	0.000					

Table 4. 18: Exploratory Factor Analysis

Table 4. 18 shows the KMO value is .721 (higher than 0.50), which is satisfied the requirements to implement EFA According to Hair *et al.* (2010). Besides, the p-value is 0.000 < 0.05 which means that the variables are related interconnected. Thus, this data is suitable for EFA implementation

The table 4. 18 show that Variables having communalities > 0.4. All variables have high communalities. It means that they contribute much to measuring the underlying factors.

The total variance explained for the factors is 59.376% (greater than 50%) implying that the model is suitable for the study. Five factors were extracted to explain 59.376% of data variation of 30 observed variables participating in EFA.

The rotated component matrix shows that:

- The first component [1] is measured by: AWARE_1, AWARE_2, AWARE_3, AWARE_4, AWARE_5, AWARE_6, AWARE_7 => We interpret component [1] as “Brand Awareness”
- The second component [2] is measured by: ASSO_1, ASSO_2, ASSO_3, ASSO_4, ASSO_5, ASSO_6 => We interpret component [2] as “Brand Association”
- The third component [3] is measured by: PERCEI_1, PERCEI_3, PERCEI_4, PERCEI_5, PERCEI_6 => We interpret component [3] as “Perceived Quality”
- The fourth component [4] is measured by: LOYAL_1, LOYAL_2, LOYAL_3, LOYAL_4, LOYAL_5 => We interpret component [4] as “Brand Loyalty”
- The fifth component [5] is measured by: DESIRE_1, DESIRE_2, DESIRE_3, DESIRE_4 => We interpret component [5] as “Brand desire”

According to the results of the rotation matrix, 30 observed variables are classified into 5 factors and all have Factor Loading coefficients bigger than 0.5. Variables of each factor meet requirements of convergent validity and discriminant validity

In conclusion, the research model in the next analyzing test will obtain all variables.

4.2.5 Correlations test

		Correlations					
		INTEN	AWARE	ASSO	LOYAL	PERCEI	DESIRE
INTEN	Pearson Correlation	1	-0.005	.518**	.456**	.552**	.349**
	Sig. (2-tailed)		0.918	0.000	0.000	0.000	0.000
	N	458	458	458	458	458	458
AWARE	Pearson Correlation	-0.005	1	0.044	-0.036	0.031	0.006
	SSig. (2-tailed)	0.918		0.346	0.446	0.505	0.902
	N	458	458	458	458	458	458
ASSO	Pearson Correlation	.518**	0.044	1	.125**	.348**	0.046
	Sig. (2-tailed)	0.000	0.346		0.007	0.000	0.33
	N	458	458	458	458	458	458
LOYAL	Pearson Correlation	.456**	-0.036	.125**	1	0.016	-0.022
	Sig. (2-tailed)	0.000	0.446	0.007		0.736	0.638
	N	458	458	458	458	458	458
PERCEI	Pearson Correlation	.552**	0.031	.348**	0.016	1	-0.004
	Sig. (2-tailed)	0.000	0.505	0.000	0.736		0.933
	N	458	458	458	458	458	458
DESIRE	Pearson Correlation	.349**	0.006	0.046	-0.022	-0.004	1
	Sig. (2-tailed)	0.000	0.902	0.330	0.638	0.933	
	N	458	458	458	458	458	458

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

Table 4. 19: Correlations

The relationship betwixt of purchase intention (INTEN) and awareness (AWARE), Association (ASSO), Loyalty (LOYAL), Perceived Quality (PERCEI), Desire (DESIRE), were described as follow:

- Pearson Correlation of PERCEI, ASSO is 0.552, 0.518, respectively. Indicators that are both greater than 0.5 (between 0.5 and 1) are said to be strongly correlated.
- Pearson Correlation of LOYAL, DESIRE is 0.456, 0.349, respectively. Indicators that are both greater than 0.3 (between 0.3 and 0.49) are said to be mean correlated.
- AWARE has p-value = 0.918 > 0.05 so it is not correlated.

After analyzing the results of the correlation, four valid variables (ASSO, PERCEI, LOYAL, DESIRE) continued to be included in the regression analysis. We remove the variable Brand Awareness (AWARE) because there is no correlation with the dependent variable Purchase Intention (INTEN).

4.2.6 Regression Analysis

There are four dimensions of brand equity that are intended to impact Customer purchase intention: Brand Association (ASSO), Perceived quality (PERCEI), Brand Loyalty (LOYAL), Brand Desire (DESIRE). The linear relationship between independent and dependent variables will be discovered using entering approach, regression analysis. After regression analysis, the hypothesis model can also be tested and concluded. By using variance inflation factors (VIF), the multiple collinearity phenomena among variables will be tested.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.835 ^a	0.697	0.694	0.297	2.073

a. Predictors: (Constant), DESIRE, LOYAL, PERCEI, ASSO

b. Dependent Variable: INTEN

Table 4. 20: Model Summary

The model has an R square of 0.697 and an adjusted R square of 0.694, according to the results of multiple linear regression. Adjusted R square equals 0.694 in this situation, indicating that the model has a high correlation and it predicts Comment precisely. This mean 69.4% of the variation in the dependent variable is as stated by the independent variable in the model.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	91.689	4	22.922	259.923	.000 ^b
	Residual	39.949	453	0.088		
	Total	131.638	457			

a. Dependent Variable: INTEN

b. Predictors: (Constant), DESIRE, LOYAL, PERCEI, ASSO

Table 4. 21: ANOVA

In this case, p-value of F test is 0.000 less than 0.05. Thence, the variables of four independent components can explain the dependent component.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-0.052	0.118		-0.443	0.658		
	ASSO	0.204	0.019	0.299	10.711	0.000	0.860	1.163
	LOYAL	0.274	0.018	0.389	14.903	0.000	0.982	1.019
	PERCEI	0.298	0.019	0.429	15.454	0.000	0.868	1.152
	DESIRE	0.244	0.018	0.356	13.712	0.000	0.995	1.005

a. Dependent Variable: INTEN

Table 4. 22: Coefficients

Table 4. 22 show that multiple collinearities are not present in this situation because these factor's VIF scores are less than 2. All four independent factors (ASSO, LOYAL, PERCEI, DESIRE) have a p-value of less than 0.05. That suggests the study model's four measures of brand equity are more than 95 percent reliable and match the criteria. These B values show the regression equation for predicting the dependent factors from the independent factors. The linear regression equation is generated from the result of Coefficients.

$$\text{INTEN} = -0.052 + 0.204 * \text{ASSO} + 0.274 * \text{LOYAL} + 0.298 * \text{PERCEI} + 0.244 * \text{DESIRE}$$

Among four dimensions of brand equity, PERCEI is the factor that has the most influence on INTEN with B Standardized Coefficients = 0.429. The next values with influence levels are LOYAL (0.389), DESIRE (0.356), ASSO (0.299).

4.2.7 Control variable test

To check whether the control variables such as gender, age, income, region, occupation, purchase frequency have differences in purchase intention in the variable's value groups, we conduct independent T-test and One-way ANOVA.

Factor		Mean	One way ANOVA (Sig.)	Independent t T-test (Sig.)
Gender	Male	3.701		0.940
	Female	3.645		
Age	18-25 years old	3.667	0.425	
	26-35 years old	3.692		
	36-45 years old	3.713		
	46-55 years old	3.474		
	Over 55 years old	3.595		
Region	North	3.655	0.084	
	Central	3.777		
	South	3.644		
Occupation	Students	3.688	0.902	
	Civil servant	3.729		
	Workers	3.706		
	Freelance	3.651		
	Office staff	3.659		
Income	Others	3.647	0.948	
	Less than 5.000.000 VNĐ	3.701		
	5.000.000 - 10.000.000 VNĐ	3.697		
	More than 10.000.000- 20.000.000 VNĐ	3.667		
Frequency	More than 20.000.000 VNĐ	3.692	0.000	
	1 time - 2 times / 1 month	3.433		
	3 times - 4 times / 1 month	3.772		
	2 times - 4 times / 1 week	3.749		
	5 times / 1 week or more	3.961		

Table 4. 23: Independent T-test and One-way ANOVA of control variable

Table 4.23 demonstrates the demographic factors including: gender, age, region, income, occupation have p-value more than 0.05. That mean the deep tests for the assumption of equal variance are accepted. To put it another way, there is no difference in variance across the groups of variable values. Besides, the purchase frequency is the only factor with p-value=000 showing that there is a difference in variance between the groups of values in the variable.

Multiple Comparisons
Dependent Variable: INTEN
Tukey HSD

(I) FREQUENCY	(J) FREQUENCY	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-.33833*	0.060	0.000	-0.492	-0.185
	3	-.31598*	0.066	0.000	-0.487	-0.145
	4	-.52745*	0.134	0.001	-0.872	-0.183
2	1	.33833*	0.060	0.000	0.185	0.492
	3	0.02236	0.059	0.982	-0.131	0.176
	4	-0.18912	0.130	0.468	-0.525	0.147
3	1	.31598*	0.066	0.000	0.145	0.487
	2	-0.02236	0.059	0.982	-0.176	0.131
	4	-0.21147	0.134	0.389	-0.556	0.133
4	1	.52745*	0.134	0.001	0.183	0.872
	2	0.18912	0.130	0.468	-0.147	0.525
	3	0.21147	0.134	0.389	-0.133	0.556

*. The mean difference is significant at the 0.05 level.

- 1: 1 time - 2 times / 1 month
- 2: 3 times - 4 times / 1 month
- 3: 2 times - 4 times / 1 week
- 4: 5 times / 1 week or more

Table 4. 24: Multiple Comparisons of purchase frequency variable

We can see that between groups 2,3,4 there is no difference in variance because of p-value greater than 0.05 but group 1 compared with the other three groups has p-value less than 0.05. Therefore, it can be affirmed that the difference in variance between the value groups in the variable frequency of beer purchase is the difference between group 1 (1-2 times per month) and groups 2 (3-4 times per month), 3 (2-4 times a week), 4 (5 times a week or more). From here, we divided these 4 groups of values into 2 groups: Groups with low frequency of beer purchase including group 1 and group with high frequency of beer purchases including group 2, 3 and 4 to be able to run independent T-test.

Group Statistics					
	FREQUENCY_RECODE	N	Mean	Std. Deviation	Std. Error Mean
INTEN	Low frequency	120	3.433	0.556	0.051
	High frequency	338	3.773	0.501	0.027

Table 4. 25: Group Statistics of purchase frequency variable

Independent Samples Test										
		Levene's Test for Equality of		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
INTEN	Equal variances assumed	4.906	0.027	-6.198	456	0.000	-0.340	0.055	-0.448	-0.232
	Equal variances not assumed			-5.898	191.86	0.000	-0.340	0.058	-0.453	-0.226

Table 4. 26: Independent Sample Test of purchase frequency variable

Table 4. 26 show that p-value = 0.027 < 0.05 in Levene test (F test) and p-value (2-tailed) = 0.000 is less than the significance level $\alpha = 0.05$, which means that the variances of the group of values are different. There is a considerable difference in purchasing intention between persons who buy beer infrequently and those who buy beer frequently. People who buy beer with low frequency (1-2 times per month) have lower intention to buy beer than those who buy beer with high frequency (more than 3 times per month).

We continue to run the regression analysis to find out the difference in the impact of the dimensions of brand equity on the purchase intention for the two frequency groups

Group	Adjusted R Square	ANOVA (Sig.)	Coefficients							
			ASSO		LOYAL		PERCEI		DESIRE	
			Standardized Coefficients Beta	Sig.	Standardized Coefficients Beta	Sig.	Standardized Coefficients Beta	Sig.	Standardized Coefficients Beta	Sig.
Low frequency	0.693	0.000	0.385	0.000	0.362	0.000	0.371	0.000	0.363	0.000
High frequency	0.704	0.000	0.241	0.000	0.430	0.000	0.488	0.000	0.349	0.000

Dependent Variable: INTEN

Table 4. 27: Regression analysis of purchase frequency variable

According to the table above, the dimension of brand equity that has the strongest influent on the purchase intention of people with a low frequency of buying beer is Brand Association (ASSO) with a Standardized Beta of 0.385. Next is Perceived Quality (PERCEI) with a Standardized Beta of 0.371. Meanwhile, for the group of people with a high frequency of beer buying, the dimension that has the strongest influence on their purchase intention is Perceived quality (PERCEI) with a Standardized Beta of 0.488 and next is Loyalty (LOYAL) with a Standardized Beta is 0.430. In general, there is a considerable disparity in the frequency variable's two groupings of values.

4.3 Discussion

The previous sections of the study classified and evaluated the factors of Brand Equity affecting Purchase Intention in the beer sector in the Vietnam market. The factors discussed in the study include Brand Awareness, Perceived Quality, Brand Association, Brand Desire, Brand Loyalty, and Control Variables (gender, age, income, occupation, purchase frequency). The results of chapter four have shown that four out of five dimensions of brand equity affect purchase intention and one out of five control variables has a difference in Purchase Intention. The data analyzed in chapter four is quantitative and reliable.

4.3.1. Impact of Brand Equity's dimensions on Purchase Intention

H1: Brand Awareness has an influence on Purchase Intention of consumer

Based on table 4.19, the result showed that Brand Awareness variable is not correlated with Purchase Intention variable with Pearson Correlation = -0.005, p-value = 0.918 > 0,05 . Therefore, Brand Awareness has no significant influence on Purchase Intention. In Vietnam, consumers think that Brand Loyalty, Perceived Quality, Brand Association, Brand Desire are much more important than Brand Awareness. This finding is similar to the previous finding of Vitor Azzari, Anderson Pelissari (2020) and this contradicts the findings of the research Jalilvand, Samiei and Mahdavinia (2011). This hypothesis is rejected and similar to the customer in-deep interview results. Research results only show

that these factors represent the level of Brand Awareness, but do not affect Purchase Intention.

H2: Perceived Quality has an influence on Purchase Intention of consumer

Based on table 4.22, the result showed that Perceived Quality factor has a significant impact on Purchase Intention, ranking first among the five dimensions with Beta Standardized Coefficient = 0.429, p-value = 0.00. This hypothesis is accepted and in line with the results of qualitative in-deep interviews. This is reasonable because beer is a commodity like other goods, so to decide to buy beer, the quality of that beer must meet the expectations of consumers. Perceived Quality accounts for the largest proportion of the factors. This result was found to be similar to the study of Le Thanh Tuan (2015) and Vitor Azzari, Anderson Pelissari (2020).

H3: Brand Association has an influence on the Purchase Intention of consumers

Based on table 4.22, the result showed that Brand Association factor has a significant impact on Purchase Intention with Beta Standardized Coefficient = 0.299, p-value = 0.00. This hypothesis is accepted. The more obvious the brand signs such as logo, color, packaging design, the higher the brand equity will be. This was also found in the study of Jalilvand, Samiei and Mahdavinia (2011)

H4: Brand Loyalty has an influence on the Purchase Intention of consumers

Based on table 4.22, the result showed that the Brand Loyalty factor has a significant impact on Purchase Intention, ranking second among the five factors with Beta Standardized Coefficient = 0.389, p-value = 0.00. Once a product is used by customers, there is a tendency to be loyal to that brand because of its good quality. In some previous studies, Brand Loyalty only had a weak effect on purchase intention, but here Brand Loyalty strongly influences purchase intention. Brand Loyalty is a significant role in a brand's success. The more loyal the brand is, the higher the profit it brings to the company, which means that this brand has a high value. This is understandable, when customers use and products that give them a good experience and reputation, they will feel secure and loyal to that brand. This hypothesis is accepted and supported by both qualitative and quantitative methods. This result is also consistent with the study of DK Gautam, SK Shrestha (2018) and Vitor Azzari, Anderson Pelissari (2020).

H5: Brand desire has an influence on the purchase intention of consumers

Based on table 4.22, the result showed that the Brand Desire factor has a significant impact ranked three out of five factor effect on Purchase Intention with Beta Standardized Coefficient = 0.356, p-value = 0.00. That shows the level of interest and consumption trends of people. Customers always want to feel the freshness of the beer brand they trust. This result is found for the same as the study of Le Thanh Tuan (2015) and qualitative research found in interviewing 15 customers also supports this view.

4.3.2 Control Variables

H6.1: There is a difference in customer Purchase Intention by gender

Based on table 4.23, after running T-test with SPSS in the gender variable, the results showed index $p\text{-value} = 0.940 > 0.05$. The results show that there is almost no difference between these groups in terms of purchase intention. In the gender variable, this result is different from the study of DK Gautam, SK Shrestha (2018) but consistent with the study of Le Thanh Tuan (2015). In the study of DK Gautam, SK Shrestha (2018), the author chose to study smartphone products, with two control variables: gender and qualification. The target group that the author used to collect research data is those who bought a phone at the center in Kathmandu. In that study, women were significantly more influential than men on purchase intention. As for the study of Le Thanh Tuan (2015), the author analyzes the control variables including age, gender, income for the intention to buy smartphone products in Vietnam market. And the results show that there is not enough data to conclude that there is a difference in the gender variable in terms of purchase intention.

H6.2: There is a difference in customer Purchase Intention by age

Based on table 4.23, after running ANOVA in the age variable, the results showed index $p\text{-value} = 0.425 > 0.05$. The results show that there is almost no difference between these groups in terms of purchase intention. In the field of beer consumption, the intention to buy beer is the same across age groups. Most people are only interested in beer quality and product loyalty, which is understandable in the beverage industry. This result is found for the same as the study of Le Thanh Tuan (2015).

H6.3: There is a difference in customer Purchase Intention by region

Based on table 4.23, after running ANOVA in the region variable, the results showed index $p\text{-value} = 0.084 > 0.05$. This shows that there is no difference between the purchase intention to buy beer in the region. In the beer market in Vietnam, the intention to buy beer is the same across region.

H6.4: There is a difference in customer Purchase Intention by monthly income

Based on table 4.23, after running ANOVA in the monthly income variable, the results showed index $p\text{-value} = 0.948 > 0.05$. This result shows that intention to buy beer is not affected by income variable. In the market, the price of beer is not much different, and everyone can easily buy it, whether they have a low or high income. So income does not affect purchase intention, which is quite understandable. This result was found to be different from the results of Le Thanh Tuan (2015) by the author of the study on mobile phones and these two products have a difference in price.

H6.5: There is a difference in customer Purchase Intention by occupation

Based on table 4.23, after running ANOVA in the occupation variable, the results showed index $p\text{-value} = 0.9020 > 0.05$. This result shows that intention to buy beer is not affected by occupation variable. Beer as a daily refreshing drink and about the intention to buy beer in different jobs of all people equally there is no difference.

H6.6: There is a difference in customer Purchase Intention by purchase frequency

Based on table 4.23, after running a T-test and ANOVA for the purchase frequency variable, the results show that there is a difference in purchasing frequency for beer products in the Vietnamese market. There is a difference between group 1 (1-2 times per month) and group 2 (3-4 times per month), 3 (2-4 times a week), 4 (5 times a week or more) in the frequency of purchases beer. Therefore, the 4 groups are divided into 2 main groups: the group with a low frequency of buying beer including group 1, and the group with a high frequency of buying beer including groups 2, 3, and 4. Those who buy beer with low frequency. (1-2 times/month) have lower intention to buy beer than those who buy beer with high frequency (more than 3 times/month). The factors affecting the low frequency of beer purchase are Association and Desire. The factors that affect the group of the high frequency of buying beer are Perceived quality and Loyalty.

Hypothesis	
H1: Brand awareness has an influence on purchase intention of customers	Rejected
H2: Perceived quality has an influence on the purchase intention of consumers	Accepted
H3: Brand association has an influence on the purchase intention of consumers.	Accepted
H4: Brand loyalty has an influence on the purchase intention of consumers.	Accepted
H5: Brand desire has an influence on the purchase intention of consumers	Accepted
H6.1: There is a difference in customer purchase intention by gender	Accepted
H6.2: There is a difference in customer purchase intention by age	Rejected
H6.3: There is a difference in customer purchase intention by region	Rejected
H6.4: There is a difference in customer purchase intention by monthly income	Rejected
H6.5: There is a difference in customer purchase intention by occupation	Rejected
H6.6: There is a difference in customer purchase intention by purchase frequency	Accepted

Table 4. 28: Results of testing hypotheses

CHAPTER 5: RECOMMENDATIONS & CONCLUSIONS

5.1. Summary of research results

5.1.1 Research Question 1: “What are the dimensions of brand equity?”

This thesis’s primary objective is to explore which dimensions of brand equity affect the intention to buy beer of consumers in Vietnam, thereby providing the most complete model for the study. In fact, there are many factors that affect the dependent variable. However, based on the available research and comparing the relevance to the Vietnamese market, we have selected five dimensions "Brand Awareness, Perceived Quality, Brand Association, Brand Loyalty, Brand Desire" as the best fit. As a result of the study, there are also some changes in the definition of dimensions.

Firstly, Brand Awareness in addition to the definitions taken from MR Jalilvand, N Samiei, SH Mahdavinia (2011); Lee and Leh (2011), from the qualitative results, we find that for buyers in Vietnam, Brand Awareness also includes two more factors, which is because beer brands are sold a lot in Vietnam stores, commercial centers and are widely advertised on the internet and TV. These are two attributes that contribute to clarifying the definition of Brand Awareness in the context of the Vietnamese market.

Secondly, in addition to definitions from MR Jalilvand, N Samiei, SH Mahdavinia (2011); Thọ, N.D., & Trang, N.T.M (2002). In Vietnam, there is one more attribute that contributes to clarifying the definition of Brand Loyalty in Vietnam that makes buyers always loyal to a beer brand that is the influence from family and friends around. Simply because their family has always been drinking beer of this brand, so they also follow the habit of choosing the same beer.

Thirdly, from the qualitative results, buyers said that the taste of beer and the alcohol content are the two attributes they pay attention to most when buying beer. So, in addition to the definitions of Perceived Quality by MR Jalilvand, N Samiei, SH Mahdavinia (2011); we add two more attributes to the definition of Perceived Quality in the context of the Vietnamese market.

Finally, Brand Desire not only includes attributes like Thọ, N.D., & Trang, N.T.M (2002), but qualitative results show that for a favorite beer brand, buyers are willing to buy it anywhere.

5.1.2 Research Question 2: “Investigating the impact of brand equity’s dimensions on purchase intention about beer in Vietnam?”

According to the analysis in chapter 4, we can rank the ratio of the strong and weak effects of the dimensions. Accordingly, "Perceived Quality " are dimensions that have the strongest impact on customers' purchase intention. The second is "Brand Loyalty" has a significant impact. The third is “Brand Desire” and the last is "Brand Association". The results have shown that there are four dimensions affecting the dependent variable except "Brand Awareness".

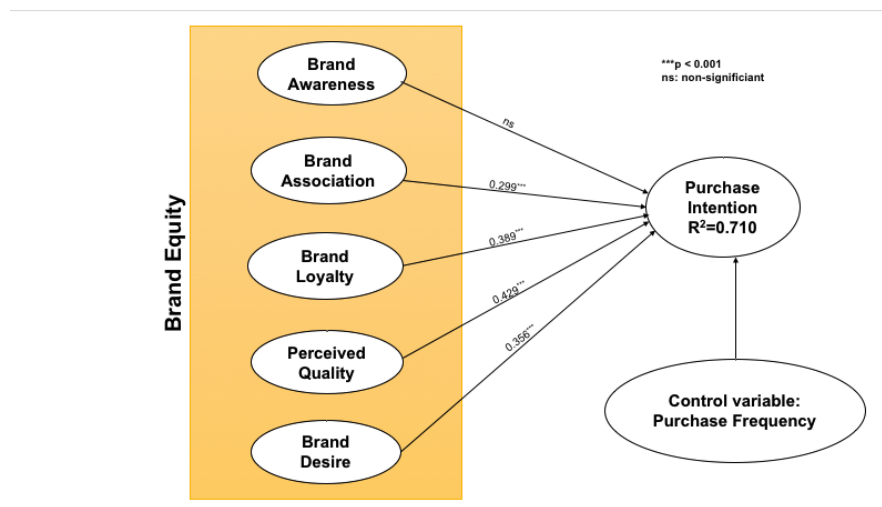


Figure 5. 1: Result model

5.1.3 Research Question 3: “Give useful recommendations and propose some solutions to enhance brand equity about beer in Vietnam?”

The answer of question three is provided in the following part of chapter five.

5.2. Implication and recommendations

5.2.1 Theoretical implication

The beer brand is a new topic in research, especially in the beer market in Vietnam. There are some studies in the past on the beer market, However, the majority of them are used in other countries and have not been thoroughly researched in terms of the effect of dimensions brand equity's on intention to buy of consumers. Therefore, we conducted further in-depth research on the Vietnamese beer market in order to determine the elements that have the most impact on Vietnamese consumers' purchasing intention. After conducting qualitative research, we additional definitions for each dimension of brand

equity. Brand equity consists of five dimensions, of which four are supplemented with question items through qualitative analysis.

In previous studies, Brand Awareness was defined by how to distinguish a brand's image from other brands in the market. However, for beer consumers in Vietnam today, conceive of brand awareness by how to recognize a beer brand through its long-standing name, popularity, widely sold in stores, or widely appearing on TV, internet. Next, Brand Loyalty in previous studies is defined by aspects such as the consumer's own first choice or purchase decision. However, qualitative analysis shows that Vietnamese consumers also show their Brand Loyalty because of their family habit of consuming a beer brand for generations. In previous studies, Perceived Quality was as well as a customer's perception of such an important aspect as the quality of a brand. However, the fact that beer taste and alcohol concentration of beer are the two aspects that Vietnamese consumers are most concerned about Perceived Quality. Finally, Brand Desire has been defined by aspects such as brand liking, liking the quality of a brand, wanting to buy a brand over other competing brands in the market. In Vietnam, beer consumers also perceive Brand Desire by being willing to buy beer of a brand anywhere.

Our research is a combination of the selection of previous studies and new factors suitable for the market in Vietnam. This will be the foundation to help develop research in the same field in the future, and at the same time contribute to providing optimal solutions for businesses.

5.2.2 Managerial implication & Recommendations

The results in chapter 4 have classified, evaluated, and shown that there are in fact four dimensions (Brand Association, Perceived Quality, Brand Desire, Brand Loyalty) of Brand Equity that positively affect the Purchase Intention of consumers in the beer market in Vietnam. In which, Brand Loyalty and Perceived Quality are the two most influential dimensions. Only Brand Awareness did not really affect the purchase intention of beer consumers. However, when we analyze in depth the frequency of buying beer of Vietnamese consumers, we find that the group of consumers who buy beer less and the group of consumers who buy beer a lot have a slightly larger influence on Brand Association and Perceived Quality, respectively.

The penetration of a series of giant beer brands in the world is increasingly making the Vietnamese beer market fiercely competitive. At the same time, in the midst of the Covid-

19 epidemic's current tumultuous circumstances, creating a brand's own mark among countless other brands in the subconscious of customers is a challenge for beer businesses in Vietnam. So, to help managers take a powerful step forward in enhancing the brand equity of their beer brands, we offer the recommendations to help beer businesses improve, compete and develop more in the future.

Perceived Quality

According to the research results, Perceived Quality is not only the dimension of the brand equity that has the most sway on the intention to buy beer of consumers, but also is the first priority of those who buy beer with high frequency. Therefore, beer businesses need to focus the most on the perceived quality of the customer's brand. To improve perceived quality, businesses first need to care about the quality of beer, put consumers at the center of their business strategy and ensure their health of consumers. Strict adherence to quality standards, quality control at each stage of production, and finished products are essential to help customers feel more secure about the quality of the brand. Besides, research results show that consumers tend to care more about beer taste and alcohol concentration in beer. Enterprises should increase investment in research and product development to focus on adjusting the taste and alcohol concentration of beer to meet the tastes of customers. At the same time, businesses should improve and diversify beer lines so that consumers have many new options suitable for many purposes. Enterprises should research, test, apply new techniques and technological processes in order to diversify products and improve product quality. At that time, the brand will easily retain consumers. Beer products with low or no alcohol concentration like Heineken's, Sagota, Oettinger are one of the suitable options not only for those who are concerned about their health but also help avoid the impact of Decree 100 from the government. For women, fruity, low-bitter beers will suit the majority. More options stimulate consumers to make quick buying decisions and help businesses' revenue increase higher.

Brand Loyalty

Brand Loyalty is one of the two dimensions of brand equity that most impact the purchase intention of consumers in the Vietnamese beer market, it's a significant competitive advantage of the business with other competitors in the market. Therefore, beer businesses need to improve brand loyalty by retaining customers so that they stick with their brand for a long time. Businesses should reposition their brands. Ask their consumers' perceptions of their brand? Do your prior marketing efforts get a positive response from

customers? From there, research to come up with a central strategy of the business to suit the needs of customers. Businesses need to keep the right level of brand image so that consumers trust and choose that brand first. In addition, businesses should also have promotional policies and preferential programs for customers on important holidays. Combined with the loyalty card will make customers come back to buy again next time. The beer company can create a loyalty card and instead of a loyalty card that can only exchange beer or discount when buying beer next time, let's link up with many other brands when buying at supermarkets like Vinmart, Big C, ... For loyal customers, it is necessary to have their own incentives such as promotions, gift giving, discount vouchers, special vouchers when launching new products, winning prizes, ... so that they can see that they have a special place for that brand. For customers who buy in bulk, businesses should stimulate demand by offering discount policies such as buy five get one free, 20% discount when buying from three products, ... With Vietnamese beer company, promote the campaign of Vietnamese people using Vietnamese goods. Hit the patriotic mentality of customers. Businesses should also develop a customer care system before and after buying beer. At the same time, complaints or problems that customers encounter need to be resolved quickly, skillfully and in favor of customers to create trust in the brand.

Brand Association

The results show that the group of consumers who buy beer with low frequency (1-2 times/month) tend to pay attention to the brand association the most when they make a decision to buy beer. Therefore, businesses need to make consumers who buy less beer can buy more beer through brand association. To improve the level of customer association with the brand, businesses need to focus on the meaning of the messages that businesses want to convey to consumers. Using storytelling in marketing strategies through viral videos, commercial serials, advertising campaigns, community activities, ... will directly affect customers' emotions and create positive effects when they use brand products. This not only helps the brand to be positioned in the market but also makes it easier for customers to associate with the brand. For example, it is not natural that Heineken is a famous beer brand and is loved by many people. They have been very creative in their advertising campaigns such as “Know the signs” – Heineken’s Social Responsibility Campaign. The campaign aims to provide comprehensive information on all aspects of excessive beer drinking. Through the campaign, Heineken conveys the message of responsible drinking in a whole new way. More than just entertainment, the campaign also

raises awareness about the unforeseen dangers of drinking too much. In addition, in the current complicated situation of the Covid-19 epidemic, businesses should increase brand coverage through online channels such as social networks and e-commerce sites. For example, businesses should combine brand coverage on Facebook to reach more customers by running ads, building communication campaigns about the community, organizing give away gifts, ... In addition, marketing combined with selling products through major e-commerce platforms such as Shopee and Lazada is also considered an important solution to help increase brand image and revenue of businesses. In particular, recently the Tiktok platform is becoming more and more "hot" due to the increasing entertainment needs of people. As a result, Tiktok is a promising content creation tool for businesses looking to promote their products to consumers. This is a social media platform that is being run by other large businesses to implement strong media campaigns. Although Tiktok is growing rapidly, now it is mainly popular with young people. A brand that appears everywhere with a positive effect will help customers have an easy association in their mind and from there they will tend to make a buying decision based on that brand association. Create campaigns, contests with unique rewards on Tik Tok like Colgate, Shopee,...Use as many Kols as possible. Make it a trend make it Viral to create attraction. Today, people will prefer and favor brands with constant creativity and innovation that know how to keep up with trends.

Brand Desire

Although the influent of brand desire on the purchase intention of beer consumers are not high, businesses also need to have optimal solutions to improve this dimension. To improve brand desire, the most important thing that beer businesses need to do is understand customer insight deeply. When knowing the behavior and trends of consumers, businesses need to create things that consumers want and meet their necessary needs. From there, consumers will actively find the brand they really need. If a business knows how to create a brand identity and satisfy as many consumer needs as possible, they will be more likely to purchase that brand's products over those of competitors. Brands should build their reputation by making commitments and keeping promises, thereby increasing customer trust. For example, Domino's Pizza (commit to delivery in 30 minutes, if late, give customers a free pizza), FedEx (commit to deliver the goods to customers the next night)...

In summary, with market trends and tastes of beer consumers in Vietnam, beer businesses should prioritize focusing on marketing 4.0 and perceived quality. These are the two most important factors that help beer businesses improve their brand equity in the fiercely competitive market, at the same time, boost consumer confidence and directly stimulate beer purchase intention of consumers in the future.

5.3 Limitations and perspectives

5.3.1 Limitations

As with any research project, this project also has some limitations, specifically as follows:

Firstly, each research method has its own limitations, and this research method which we use also has certain limitations. One problem of research is that a survey can only produce a certain amount of reliable data because it is difficult to avoid the problem of wrong data or too many sample size details that the respondents do not put much effort into their answers in terms of time. This results in insufficient or incorrect data.

Second, this study only focuses on the impact of five dimensions on beer brand equity in Vietnam. In addition, there are many other factors that also have a powerful impact on brand equity.

Third, the study did not explore the mutual effects of dimensions because it only focused on the effect of brand equity on purchase intention.

Fourth, because of time constraints, the study was communicated for only three months. The relatively short study period resulted in the not-so-common data collection process.

Fifth, the scope of this research is aimed at consumers in Vietnam. However, the large scope makes it impossible for you to control the most detailed and highly reliable online survey.

Finally, in 2021, the world faces the Coronavirus Pandemic, and so does Vietnam. Social distancing is important to prevent the spread of the pandemic. Therefore, all survey collection and in-depth interviews were done online.

5.3.2 Perspective for future research

Learning from the limitations, we propose some points of view for future research:

Firstly, in addition to the four factors that affect the brand as in the research, there are many other factors that also have a powerful impact on brand equity. According to the author R.Sparks (1999), customers' perception of brand equity is different according to their user

experience, sports preferences, and gender. This is also an open direction for further research.

Second, the interaction between dimensions is possible as in the study of Thọ, N.D., & Trang N.T.M (2002). Therefore, this can be another direction of future research to develop the research paper.

Third, research does not focus on a certain group of customers. Therefore, the next research direction is to focus on customer groups such as high-income people, men,...

Fourthly, the study was carried out with an extended scope over the entire territory of Vietnam in a short time, so if it is carried out over a longer period of about 12-18 months, the ability to summarize the results and the value of research value will be higher. This is also a suggestion for further studies.

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APPENDIX

I. Survey

GENERAL INFORMATION

Gender:

- Male Female Others:

How old are you?

- 18 - 25 years old 26 - 35 years old 36 - 45 years old 46 - 55 years old > 55 years old

What region do you live in?

- Nothern Central Southern

What is your occupation?

- Student Worker Civil servant Freelancer Others

What is your monthly income?

- <5.000.000 VND 6-10.000.000 VND 11-20.000.000 VND >20.000.000 VND

Have you ever bought beer?

- Yes No

Who do you buy beer for?

- Yourself Others Both

What kind of beer do you usually buy?

- Draft beer Bottled/canned beer Both

Do you often drink canned beer/bottle beer?

- 1 time - 2 times / 1 month 3 times - 4 times / 1 month
 2 times - 4 times / 1 week 5 times / 1 week or more

What brand of beer do you often buy?

- Heineken Saigon Tiger Hanoi Budweiser
 333 Corona Sapporo Truc Bach Other

ASSESSMENT QUESTIONS

Factors of brand equity affecting the intention to buy beer

Note: “X” in the following statements refers to the brand of beer you usually buy.

For each of the following statements, please choose a level of agreement or disagreement about “X”.

1 = Strongly disagree

2 = Disagree

3 = I have no opinion

4 = Agree

5 = Strongly agree

No.	Encode	Description	Degree				
			1	2	3	4	5
Purchase Intention							
1	INTEN_1	I would buy brand X rather than any other brand available.					
2	INTEN_2	I am willing to recommend others to buy this brand's beer.					
3	INTEN_3	I am willing to purchase this brand's beer in the future					
Brand awareness							
1	AWARE_1	I know what X looks like					
2	AWARE_2	I can recognize X among other competing brands					
3	AWARE_3	I am aware of X					
4	AWARE_4	X beer brand has a long-standing name in the market					
5	AWARE_5	X beer brand is famous in the market					
6	AWARE_6	Beer of brand X is widely sold in shops and supermarkets					
7	AWARE_7	X beer brand is widely promoted on internet, TV					
Brand association							
1	ASSO_1	Some characteristics of brand X come to my mind quickly					
2	ASSO_2	I can quickly recall the logo or symbol of brand X					
3	ASSO_3	I easily imagine brand X in my mind					
4	ASSO_4	Brand X has very unique brand image, compared to competing brands					
5	ASSO_5	I like the brand image of brand X					
6	ASSO_6	I feel that brand X adds personality to me					
Brand Loyal							
1	LOYAL_1	Brand X would be my first choice					
2	LOYAL_2	I consider myself to be loyal to brand X					
3	LOYAL_3	Brand X is one of the preferred brands I want to buy					
4	LOYAL_4	I won't buy another brand beer if X brand beer is available at the store					
5	LOYAL_5	My family has been using/choosing only this beer brand for generations					
Perceived Quality							
1	PERCEI_1	Brand X is a high quality beer brand					
2	PERCEI_2	There is a high probability that X is a quality brand					
3	PERCEI_3	The likelihood that brand X is reliable is very high					
4	PERCEI_4	Brand X must be of very good quality					
5	PERCEI_5	The taste of beer of brand X is very good					
6	PERCEI_6	The alcohol concentration of brand X is suitable for my taste.					
Brand Desire							
1	DESIRE_1	I like X more than other brands					
2	DESIRE_2	I prefer drinking X over other brands					
3	DESIRE_3	I believe X is worth the money more than other brands					
4	DESIRE_4	I'm willing to buy X brand beer anywhere.					