

Applying Aaker's Brand Equity model in a Brand Preference Context

A comparative study between Samsung and Huawei Smartphone users

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ABSTRACT

The smartphone industry is vast and competitive, and it's estimated that almost 90 percent of adults own a smartphone. For companies to remain successful in the long term, they must understand the factors that influence millennial consumers to prefer one brand over another. One effective way of measuring brand preference is through brand equity. A strong brand creates emotions, expectations, and the ability to influence the buying behavior of consumers.

The aim of the study was to examine the brand preferences of millennials between Samsung and Huawei smartphones through the lens of brand equity. To answer the research question, the study employed a literature review and a self-administered online questionnaire. The results indicated that high brand equity leads to a higher brand preference among millennials, with the results showing that the millennials who participated generated an average higher brand equity for Samsung with a total brand equity average of 3.968 out of 5 over Huawei's 3.771. It should be added that a significant difference between these two values cannot be proven.

It's worth noting that the study presented the preferences of a specific and limited group of millennials at a single location. Further research with larger, more diverse samples and multiple locations may be needed to establish a more comprehensive understanding of millennial brand preferences, thus making any significant conclusions. Additionally, the self-administered questionnaire used in the study may not accurately reflect the true preferences and experiences of the respondents.

Keywords: Millennials, Smartphone, Brand, Brand Equity

SAMMANFATTNING

Smartphoneindustrin är enorm och konkurrensintensiv, och det uppskattas att nästan 90 procent av vuxna äger en smartphone. För att företag ska förbli framgångsrika på lång sikt måste de förstå de faktorer som påverkar konsumentgruppen, millennials, att föredra ett varumärke framför ett annat. Ett effektivt sätt att mäta varumärkespreferens är genom varumärkeskapital. Ett starkt varumärke skapar känslor, förväntningar och förmågan att påverka konsumenternas köpbeteende.

Syftet med studien var att undersöka varumärkespreferenserna för millennials mellan Samsung och Huawei's smartphones genom linsen av varumärkeskapital. För att besvara forskningsfrågan använde studien en litteraturöversikt och en självadministrerad online-enkät. Resultaten indikerade att ett högt varumärkeskapital leder till en högre varumärkespreferens bland millennials, där resultaten påvisade att de millennials som deltog genererade ett genomsnittligt högre varumärkeskapital för Samsung med ett totalt varumärkeskapital på 3,968 av 5 över Huawei's 3,771. Det bör tilläggas att en betydande skillnad mellan dessa två värden inte kan bevisas.

Det är värt att notera att studien fokuserade på preferenser för en specifik och begränsad grupp av millennials från ett universitet. Ytterligare forskning med större, mer varierande urval och flera platser kan behövas för att kunna dra några betydande slutsatser. Dessutom kan det hända att det självadministrativa frågeformuläret som används i studien inte exakt återspeglar respondenternas verkliga preferenser och erfarenheter.

Nyckelord: Millennials, Smartphone, Brand, Brand Equity

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1 INTRODUCTION

This chapter consist of five sections that will represent the introduction of the study. The different sections are constructed as follows: background, problem discussion, purpose and objective, delimitations, and previous research.

1.1 Background

Smartphone is today one of the most widely purchased electronic products. Around 1.56 billion smartphones per year are sold globally (Statista, 2019). According to recent studies, there are a total of three billion smartphone consumers, and about nine out of ten of the millennial generation own a smartphone (Pew Research, 2018; Statista, 2019). The number of smartphone owners is expected to continue to increase by a few hundred million over the next few years (Statista, 2019).

The product specifications between smartphones vary depending on the brand and model. The purpose of a smartphone is to be able to replace or rather combine functions a phone possesses with functions a computer has. With that said, being able to call but also surf the internet and read mail (Cassavoy, 2012).

Moreover, the smartphone market is characterized by the presence of leading brands such as Samsung and Huawei (Statscounter, 2019). These two brands share the Android operating system (Coelho, 2019) and are the largest Android-supported smartphones in the market (Statscounter, 2019).

The Android smartphone market is marked by intense competition among brands that release a substantial volume of smartphone models each year, such as Samsung and Huawei. To stay competitive, firms must implement innovative approaches that address the demands and tastes of consumers. Such strategies frequently encompass the provision of cutting-edge technology, visually appealing designs, and pricing models that are deemed competitive by the targeted consumers (Kotler, 2014; Keller, 1993).

Therefore, it is wise for companies to know how to manage their own brand to increase their sales of smartphones and thus be competitive in the smartphone market (Keller, 1993). Keller (1998) defines brand as a tangible or intangible asset, and it is what separates product competitors from one another. A brand could be viewed the same way as a person, where a brand has its own personality. Similarly, as a person, it has a name and appearance but in the form of logos and other visual characteristics (Kapferer, 1992; Kotler, 2017). Furthermore, Aaker (1991) explains how to build a strong brand that will lead consumers to prefer a strong brand over a competitor.

According to Aaker (1991) a strong brand can increase the consumer's preference for a brand. A strong brand is based on brand equity, which creates a long-term sustainable brand that generates positive results in the form of competitiveness and increased sales volumes (ibid). Brand equity is a strategy that aims to create long-term sustainable cooperation between the brand and its consumers (Aaker, 1991; Kotler, 2014). Keegan and Green (2014) describe brand equity as “The reflection of the brands value to the company as an intangible asset” (p.580).

1.2 Problem Discussion

Samsung and Huawei are well-known and therefore likely valuable brands offering smartphone models at varying price ranges. Both brands have a comparable pricing structure within their respective price ranges. However, Huawei usually tends to be slightly lower in price than Samsung (Bloomberg, 2019). As previously explained, the smartphone market is a competitive market that provides consumers with tools to communicate via blogs, vlogs, chat forums and word of mouth (Howe & Strauss, 2000). With these tools, consumers can become well informed about the different phones' appearance, functionality and much more to find the smartphone that best suits their own needs and budget (ibid).

Millennials are known for being well informed and knowledgeable in technology, as are also known for seeking better alternatives (Howe & Strauss, 2000). Since millennials grew up with advanced technology, they have learned from an early age to be mentally agile and flexible (ibid). Therefore, it is important for smartphone manufacturers to adapt to this generation's market group. Otherwise, the smartphone companies will manufacture smartphones that do not meet a sufficiently high standard (McCasland, 2005). If the various brands that make the

smartphone manage to move as fast as the millennials in the development, the companies will create consumer loyalty and preferences (ibid).

Aaker (1991) highlights the significance of companies striving for long-term sustainable brands, which can be accomplished through the analysis of brand equity. Short-term revenue generation is possible for a product, however, long-term success depends on consumer satisfaction, as negative experiences can spread among friends and the public (Kotler, 2014), leading to decreased sales and potentially damaged brand reputation (Aaker, 1991; Kotler 2014). Thus, it is essential for smartphone companies to establish and maintain strong brand equity, particularly to attract millennials, who are a crucial target group in the smartphone market and to differentiate their brand from competitors.

1.3 Purpose

The purpose of this essay is to compare millennials' brand preferences between Samsung and Huawei smartphone by applying brand equity.

1.4 Delimitations

This study analyzes smartphone products and compares two brands, Samsung and Huawei, as these are the most purchased smartphones within the Android phone market. Other brands are not included in this study. Future research could extend the current study by including brands such as Oneplus and Xiaomi, which are also significant smartphone players from China.

Additionally, the thought put in to choosing a comparative analysis is due to it being a well-known method within the academic sphere. Similarly, Aaker is a recognized professor as is Aaker's brand equity, that includes five components of managing brand equity. The higher the data scores for these, the closer the product is to achieving brand equity (Aaker, 1991). Hence, why it was appropriate to use Aaker's for the purpose of the study.

The comparative analysis will be based on a survey study and the population sample will be of millennials from LTU.

1.5 Overview of Entire Study

Table 1 is an overview of the study and has been created with the aim of facilitating the reader by illustrating the number of chapters and their different content. This study will contain five chapters and will be structured as follows, see Table 1.

Table 1: Overview of the entire thesis

Chapter 1, Introduction	The first chapter introduces the study's research area and then proceeds to a problem discussion. Thereafter, the purpose of the study and research issues are raised. The chapter concludes by mentioning the demarcation area and previous research to locate any research gap.
Chapter 2, Literature review	The second chapter presents earlier literary material in the form of definitions, theories, and models relevant to the study. The key areas that are managed to provide enough knowledge to understand the study's research are the following: millennials, smartphone, brand, brand equity. This chapter concludes with a theoretical frame of reference which includes both primary and secondary sources.
Chapter 3, Methodology	The third chapter addresses the methodological framework in which different choices of methods have been selected with care to collect and analyze the collected data in the best way. The chapter contains the following: research purpose, research approach research strategy. Followed by data collection, sample collection and data analysis. Finally, the chapter ends with quality standards such as validity and reliability.
Chapter 4, Presentation and analysis of data	The fourth chapter presents the study's own collected data and an analysis of the data for deeper understanding and possible results that contribute to the research area.
Chapter 5, Findings and conclusion	The fifth chapter presents the study's results followed by a discussion, in addition to the conclusions reached by the author. The last thing this chapter and the study address is discussion of the study's research contribution, proposals for further research and the limitations of the study.

2 LITERATURE REVIEW

This chapter consist of four sections that will represent the literature review of the study. The different sections are constructed as follows: millennials, smartphone, brand, brand equity, brand identity and frame of reference.

2.1 Millennials

There are five generational markets in the western world, which means that there are five generational markets in Sweden. The five different generational markets that Kotler (2007) addresses are the following: Baby Boomer, Generation X, Millennials and Generation Z. Figure 1, provides an overview from the oldest to the youngest generation market with years indicated.

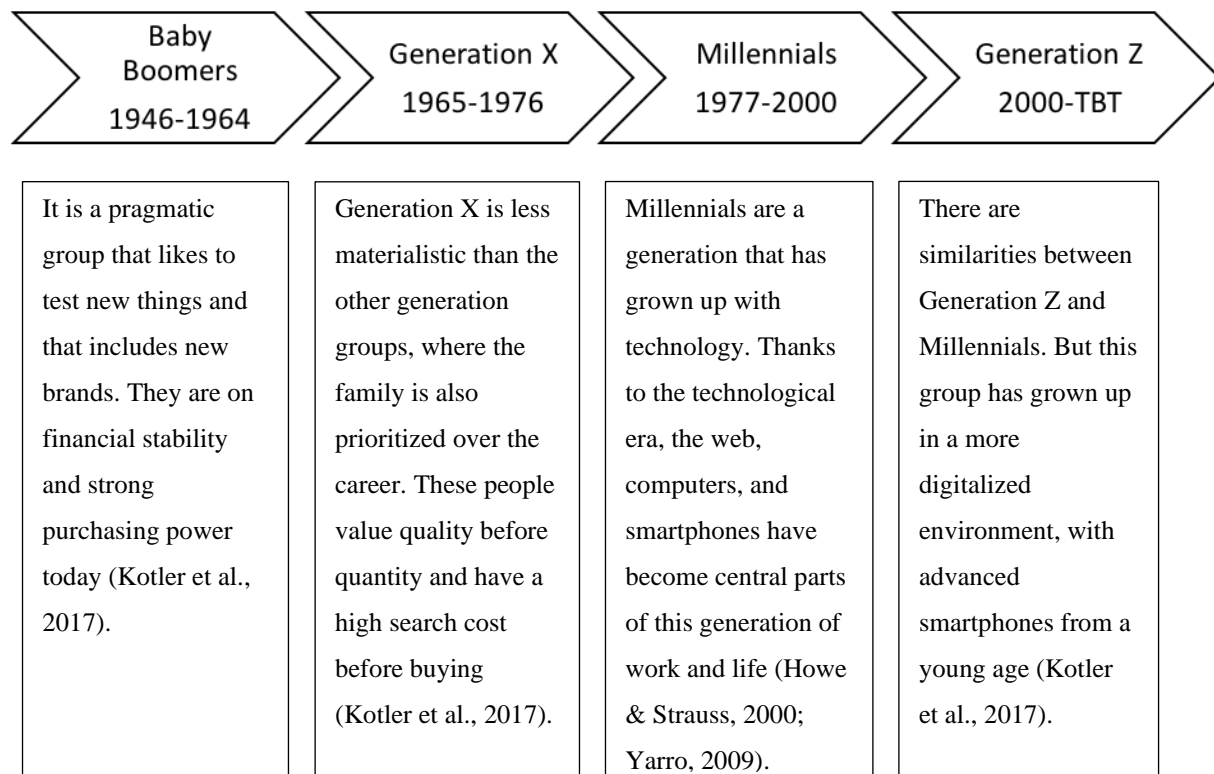


Figure 1. Generational markets

It is worth noting that the age span of the generation market for millennials differs by about one to five years, depending on the author. On the other hand, it is possible to sum up that millennials are the people born between the years 1977-2000. As Figure 1 illustrates, millennials are a generation that actively uses technical products such as web, computer, and

smartphones (Yarro, 2009). In addition, millennials are connected to the Internet more than the other generations (Kotler 2007: Kotler, 2014; Yarro, 2009). They collaborate with brands in a whole new way with the help of smartphones and social media (Howe et al., 2000).

Millennials, as previously pointed out, are a group with a strong willingness to spend, however, they are not known for being loyal in workplaces or when it comes to brands as it is easy to find substitutes using the internet (Der, 1999). Hence, millennials are the generation group with the lowest brand loyalty and not any preferences regarding brands compared to the other generations (Söderlund, 2006).

In addition, millennials' technical habit of being connected to internet contributes to awareness of the available brands that share the same market (ibid). Awareness in the sense that millennials stay up to date by reading reviews on internet, reading product specifications and other things that can help them before a possible brand change (MacCasland, 2015).

Finally, Söderlund (2006) and Keegan (2014) believes that it is important to study this generational market group because millennials are the second largest group of consumers in the world. Therefore, it is both interesting and important for companies to understand what it is that creates brand preference for this generation if companies want to create or maintain a competitive position.

2.2 Smartphone

The first patented idea of smartphone was developed in 1971 by Theodore Paraskevakos, who combined telephone communication functions with computer use and the pioneer of integrating visual display and data processing with telephones (Sciencenode, 2018). However, it was not until the year 1992 that IBM developed the first smartphone as a result of their previous innovation, the Personal Digital Assistant (PDA) (ibid). PDA had features such as voicemail, email, fax postal address, scheduling, world clock and other (Soukup, 2015).

Today, however, the definition of smartphone looks different compared to the first smartphone, Simon (Sciencenode, 2018). Zheng (2006), the smartphone has a mobile operating system, a computer's features, connection to WIFI and the internet and a touch screen. Simply put, a

smartphone is a mobile that combines a computer's functions and capabilities and which at the same time has a mobile operating system (Soukup, 2015; Zheng 2006).

Mobile operating systems enable an environment for apps that can be manufactured and updated out of production (Soukup, 2015). An application can have different functions and can look different, it can be anything from mobile games to scanning QR codes (ibid). Therefore, applications change the user experience for the smartphone owner (Cassavoy, 2012; Soukup, 2015).

In addition, there are different operating systems, but there are two official operating systems, iOS developed and used exclusively by Apple, and Android developed by Google (Zheng, 2006). Meanwhile, Android, the other official operating system compared to iOS is being used by multiple mobile manufacturers. Brands that use Android are, for example, Samsung and Huawei (Cassavoy, 2012). Figure 2 below displays the number of units sold per year and unit price, between the years 2007 to 2019 and a forecast for 2020:

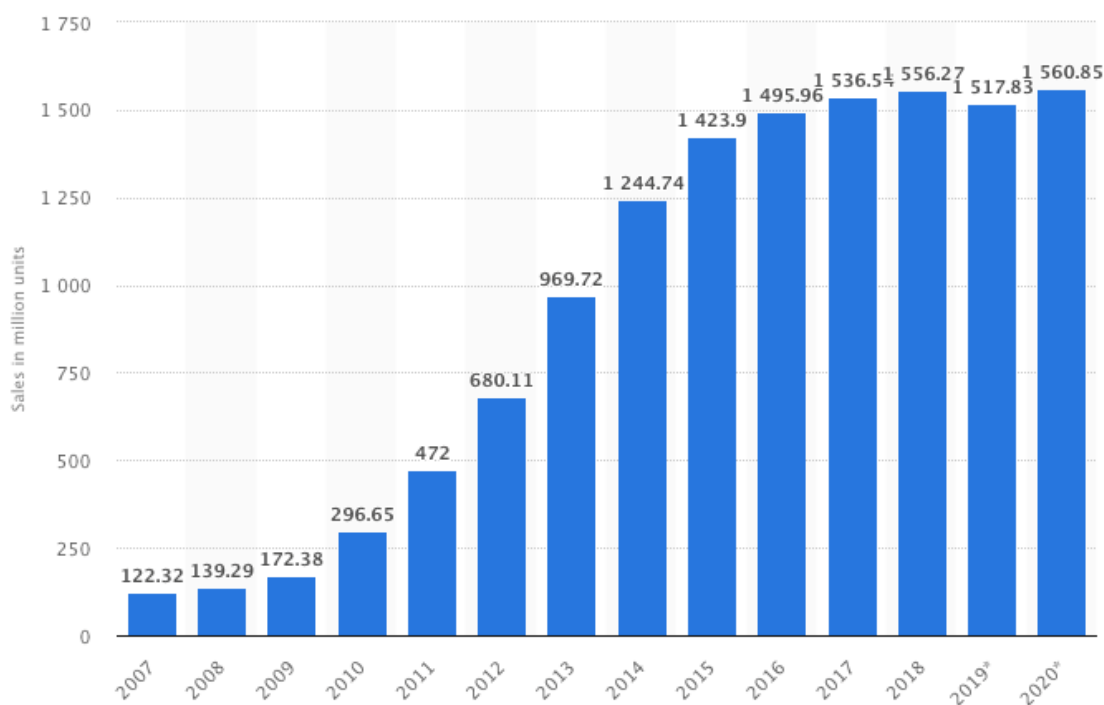


Figure 2. Units sold per year and each year's price in 2019 (Statista, 2019).

Figure 2 illustrates how much the number of smartphones sold has increased. It can be noted that there has been an increase of about 1280% over 13 years, which can be assumed to be a

significant increase in the number of smartphones sold. Moreover, Figure 3 and Figure 4 below, illustrate smartphone market shares by brand spread across the world and Sweden respectively.

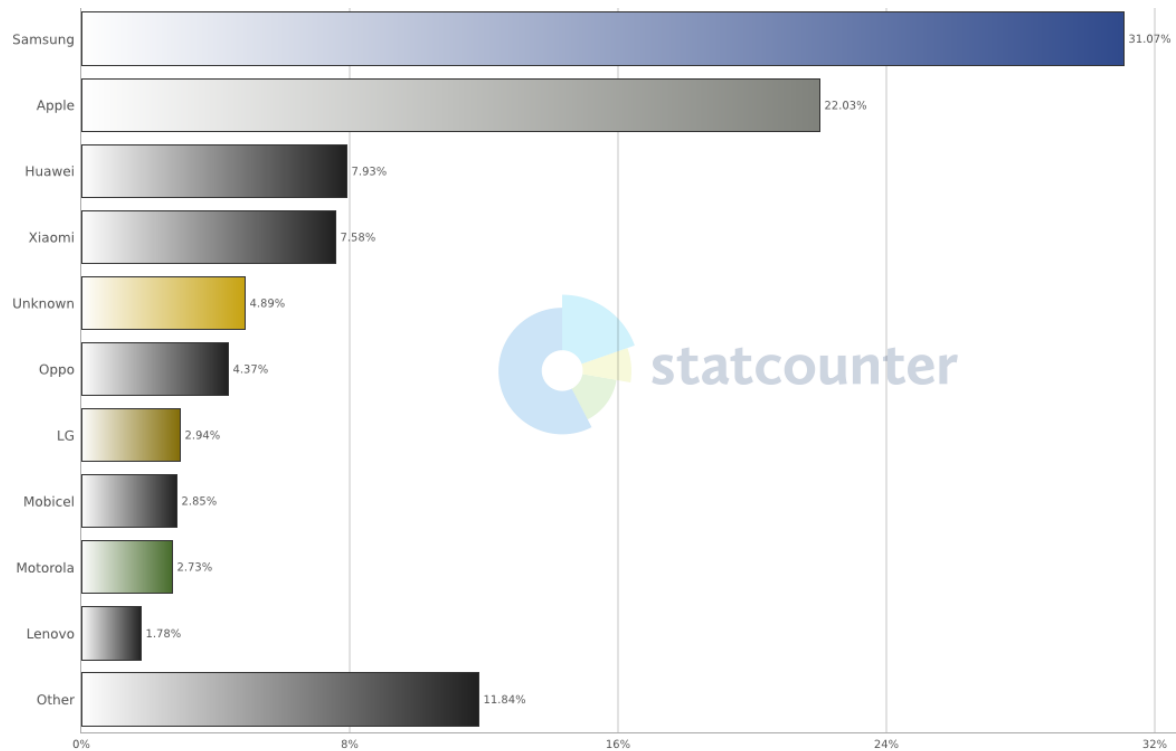


Figure 3. Market share per brand worldwide in 2019 (Statcounter, 2019).

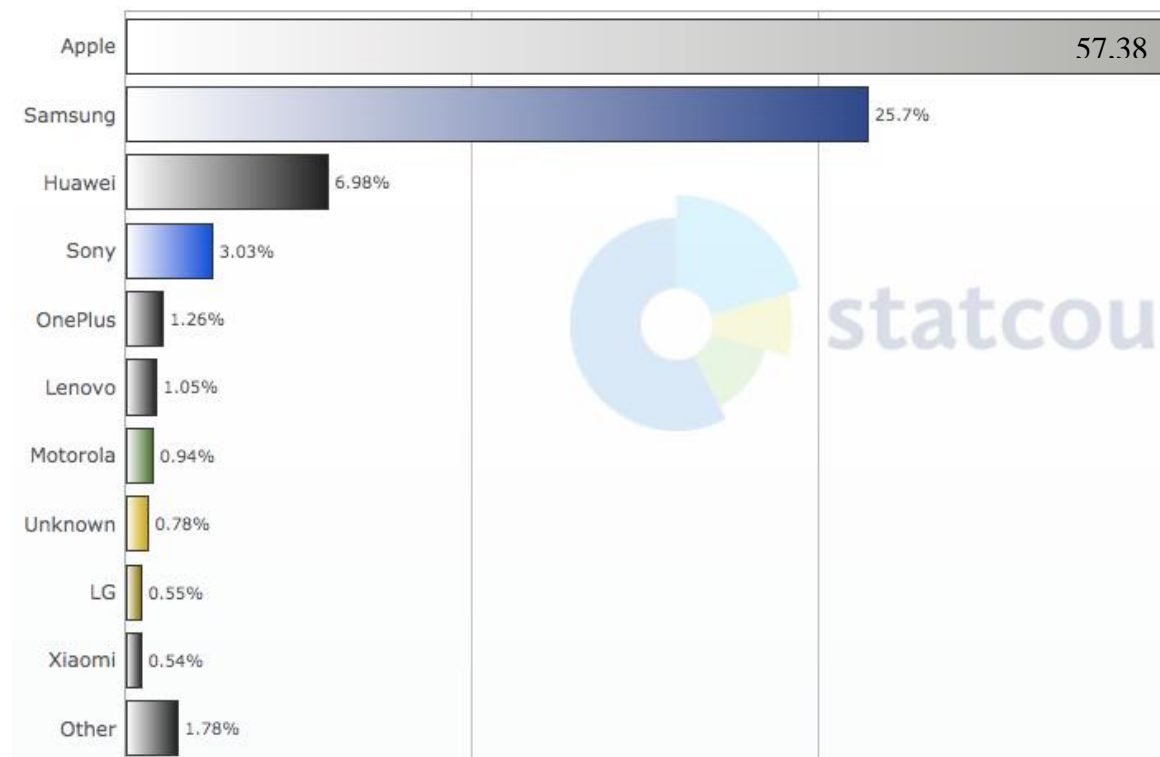


Figure 4. Market share per brand Sweden in 2019 (Statcounter, 2019).

What is noteworthy when comparing Figure 3 and Figure 4 is that there is a larger proportion of consumers using the Apple (57, 38 percent) smartphone in Sweden. At the same time, fewer consumers in Sweden use Samsung and Huawei (25,7 respectively 6,98 percent) compared to the rest of the world.

2.3 Brand

A brand is an important tool seen from a marketing perspective for both companies and consumers (Aaker, 1993). This is because a brand from a business perspective facilitates business and customer relationships. Due to that a brand is a certificate of trust but also a way to protect itself from legal processes because a brand is also a form of ownership (McCarthy, 1990). Similarly, a brand can benefit consumers in the form of indications of service or product standard and a reduced search cost and more (Kotler, 2007; Murphy, 1990).

More than that, a strong brand creates added value for products and or services since a brand offers more than just one name (Kotler, 2017). Kotler (2017) further explains that a brand provides consumers and businesses with assurance. Hence, in terms of quality standards and psychological satisfaction in terms of taste, size, group affiliation and other attributes that can be identified with the brand (ibid).

To refer to Keller (1998), a brand is a tangible or intangible asset, but can also function as both assets simultaneously. It is precisely this flexibility that makes a brand more than just a product. The brand is what differentiates product competitors among themselves (American Marketing Association, 1960). One can see a brand as an individual, a brand has its own personality. Like a person, it has a name, and appearance in the form of logos and other visual characteristics (Kapferer, 1992). Kotler (2017) develops the previous sentence by saying that the name and appearance are combinations that create associations with the brand and the company or seller behind the brand.

The brand has its own values as well as its own way of communicating, which contributes to the brand's personality. Aaker (1996) highlights the phenomenon of brand personality by further developing that brand personality is dynamic and takes new form based on how consumers associate with the brand. The brand personality has the power to differentiate the

brand identity and thus create positive communication between the brand and consumers, thus strengthening brand equity (ibid).

Both Aaker (1991) and Kapferer (1992) place importance on explaining the importance of brand identity. Although they differ somewhat and include different dimensions to explain brand identity, there are similarities as well. Since both Aaker (1991) and Kapferer (1992) agree that brand identity creates differentiation and can benefit the company financially through increased sales. Similarly, the authors consider that brand identity can be an important complement when measuring brand equity (ibid).

It is also explained that consumers prefer to build a relationship with a brand that the consumer can trust, and the likelihood is that there will be a long-term relationship between the consumer and the brand (Kotler et al., 2017; Keller, 1993; Kapferer, 2004). Thus, Keller (1993) believes that a brand is something a consumer can associate with, the better the match between the brand and the consumer, the stronger the brand preference will be for the consumer.

Furthermore, Kapferer (2004) explains that brands should be used to manage long-term product differentiation and market segmentation to create long-term and not short-term brand awareness or other short-term changes. Finally, Moore et al (2008) believe that it is essential that brand research focuses on deepening and developing the understanding of brand by looking at brand loyalty, brand preferences and brand equity.

2.4 Consumer-based Brand Equity

Brand equity has two focus areas: corporate-focused brand equity and consumer-based brand equity (CBBE). Within CBBE, one can find Aaker's brand equity model, as well as Keller's resonance model which is widely recognized in academic research. CBBE aims to analyze the added value a brand brings to a product from the consumer's perspective, providing useful insights for the company or entity responsible for the brand (Aaker, 1991; Keller, 2002)

Aaker highlights five dimensions associated with the brand equity model, which are crucial components for measuring CBBE. The five components are the following: brand loyalty, brand awareness, perceived quality, brand associations and lastly other proprietary brand assets. What primarily distinguishes Aaker's model from Keller's brand equity model is that under Aaker's

CBBE model there is no interrelation between the different dimensions. While brand loyalty is a source of brand equity while Keller believes that brand loyalty is a result of brand equity (Aaker, 1991; Anselmsson, 2007; Keller, 2002).

According to Keller it is possible to find out how much value a brand possesses by measuring brand equity (1998). But it is also required to define brand equity and analyze all dimensions in any recognized brand equity model (Aaker, 1991). It is essential that one does not expect brand equity to improve rapidly (ibid). Considering, brand equity is a process that requires knowledge around brand and brand equity since it seeks to win consumers' trust and added value (ibid).

A strong brand equity means that consumers are willing to choose one brand over the other, in other words a strong brand equity increases the brand preference over that brand instead of a competition brand. Thus, the chance increases that the brand with strong brand equity has a more favorable sales in the form of higher prices to consumers or increased sales volume than the competitor's for both products equally (Aaker, 1991; Keller, 2004).

Kotler (2017) explains that the brand has a monetary value, and that value must be considered when selling the company. Either way, brand equity is not brand valuation, but it is an aggregate of a couple of measures designed to grow the brand stronger in a marketplace (ibid). The various measures can be, for example, preference, interest or awareness of the product or brand (Aaker, 1991).

To analyze the current trend of the brand equity, one has to track the changes with a weighted average. Basically, if the interest or awareness, all else equal, since last time is now greater, then brand equity has increased (Aaker, 1991). However, brand equity may just as well have been unchanged or have had a negative outcome (ibid). Kotler (2017) further emphasizes the importance of brand equity and believes that managers and CEOs should take brand equity seriously and be updated about their brand equity status.

According to Aaker (1991), it is important to remember that the five asset categories in the Aaker brand equity model create value for both customer and company. The model divides brand equity into five different asset categories: brand loyalty, brand awareness, perceived

quality, brand associations and other proprietary brand assets (ibid). The Figure 5 below illustrates how to increase brand equity by increasing one or more of its brand assets.

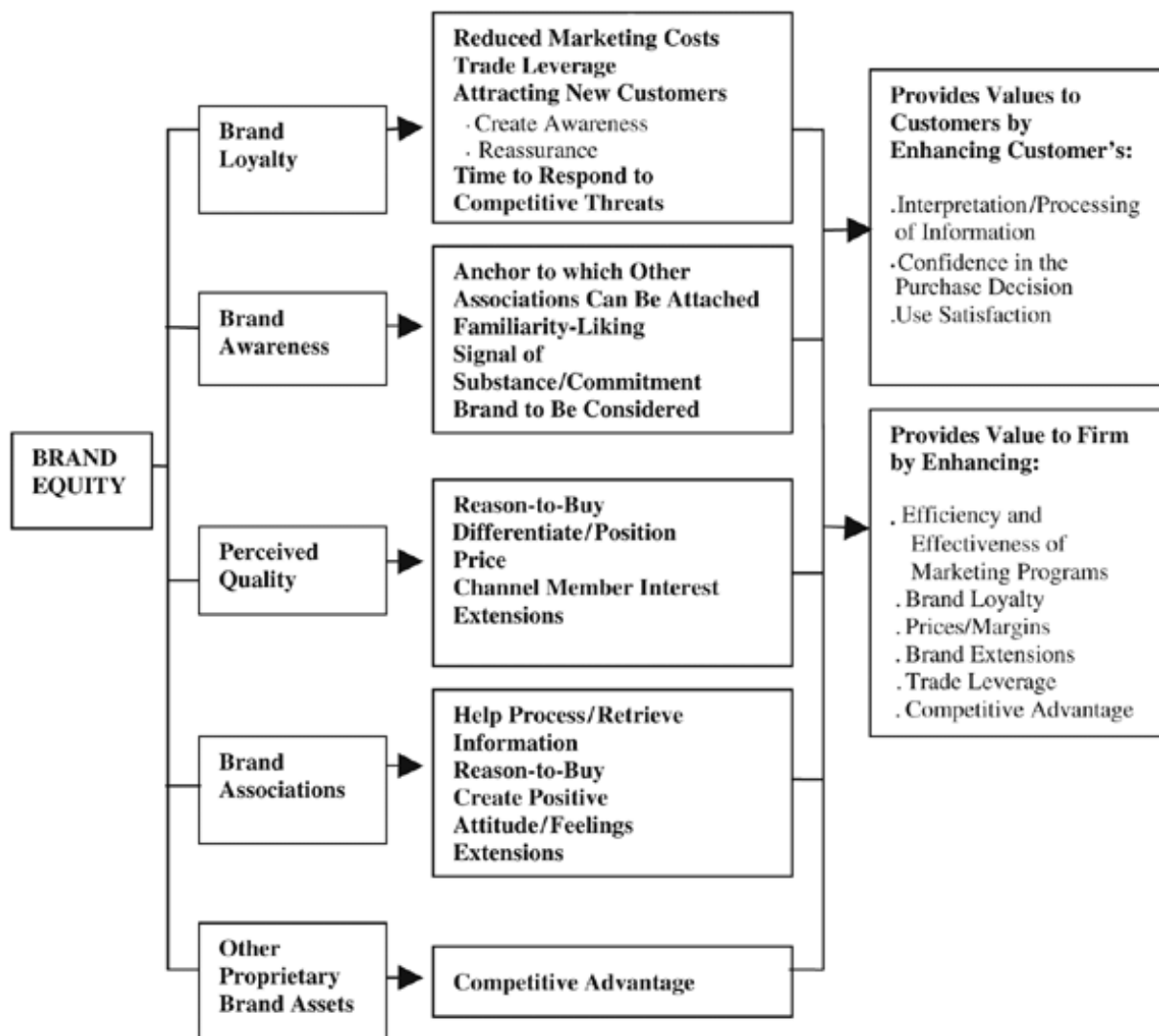


Figure 5: Brand equity model (Aaker, 1991, p. 9).

2.4.1 Brand Loyalty

Brand loyalty is a dimension in Aaker's model that distinguishes itself slightly from the other dimensions. To quote Aaker (1991, p.46) “Brand loyalty is qualitatively different from the other major dimensions of brand equity in that it is tied more closely to the use experience. Brand loyalty cannot exist without prior purchase and use experience. In contrast, awareness, associations, and perceived quality are characteristics on many brands that a person has never used.”

Keller (1993) however, explains that brand loyalty can determine whether the consumer will buy the same service or product, depending on whether the consumer feels a strong or weak brand loyalty. Keller adds that brand loyalty creates competitiveness for a company (1993). Strong brand loyalty could be described as when the preference increases, the consumer begins to choose the competitors' product, service or brand even if it might be inferior to that of a competitor (ibid). According to Aaker (1991), brand loyalty leads to whether a consumer becomes a loyal buyer of the brand over time.

Brand loyalty, which is the first category in Aaker's brand equity model, consists of different levels. From the first level that has the lowest brand loyalty to the fifth level with the highest brand loyalty (Aaker, 1991). The following levels include:

- Level one: At this level, consumers are found who lack brand loyalty and brand preference, resulting in the brand having no impact on the consumer's purchase price.
- Level two: Or with a different name, normal consumers. This level includes consumers who enjoy the product or service. However, these consumers are likely to switch brands if it turns out that a competitor can offer a better product or service.
- Level three: These consumers have not become completely loyal, but they are beginning to enjoy the brand itself and not just the product or service. However, these consumers are prone to switching brands if it turns out that the cost of switching brands is low and there is a direct benefit from switching brands.
- Level four: Or by another name, loyal consumers. This level includes consumers who prefer the brand in terms of its experience with the brand and how the logo looks, among other things.
- Level five: At this level, consumers display brand loyalty and familiarity, characterized by knowledge of the brand, its logo, and its distinct qualities. These consumers exhibit a strong inclination towards the particular brand, making it challenging for rival brands to attract them.

2.4.2 Brand Awareness

Brand awareness arises when the consumer is capable of placing a specific brand in a product category (Aaker, 1991). Which also means that brand awareness can be measured to what extent a brand is known among consumers (Brown, 1992). Furthermore, Aaker believes that brand awareness is how the consumer perceives and remembers the brand, which is based on memories from previous experiences with the brand.

Macdonald (2002) argues that a brand with a strong brand awareness has a positive impact on the consumer, since the consumer generally prefers brands that are already recognized and established in the market. This is due to the consumer having valuable information about the brand about which market the brand operates in and if the consumer has previously had any relationship with the brand (ibid). Aaker adds that exposing the brand name is an effective way to increase brand awareness to differentiate its brand from its competitors (1991; Keller, 1993).

Both Keller (1993) and Aaker (1991) divide brand awareness into two subgroups, brand recall and brand recognition. Brand recall is when the consumer can group the brand within a given industry the brand operates within, based on memory images only (Aaker, 1991). While brand recognition is when the consumer can group the brand into the right industry, but only after the brand has been presented to the consumer (ibid). An example of brand recognition is when putting the brand's logo under a buying context that helps the consumer to remember (ibid).

2.4.3 Perceived Quality

Aaker (1991) describes perceived quality as a measure of a product or service's quality and superiority from the consumer's perspective. The perceived quality can be divided into three different definitions, manufacturing quality, product-based quality, and objective quality. Manufacturing quality is a quality assurance that the product or service maintains the quality it promised in the manufacturing process (ibid).

Manufacturing quality ensures that all parts of the manufacturing process maintain as high a quality level as possible in order to provide the best conditions for the final product. Product quality is about creating customer satisfaction (ibid). All of which in the form of implementing product features that are also free of deficiencies, for example, quality of design or security

(ibid). While the objective quality focuses on differentiation, creating competitiveness and strengthening its brand, one aspect that does this is product innovation (ibid).

There are brands that identify themselves as budget brands, as well as premium brands (Kotler, 2017). Therefore, the perceived quality position is often decisive for these brands and indirectly acts as differentiation against competitors (Kotler, 2017). Moreover, Perceived quality directly impacts brand preference and brand loyalty, which can be crucial when a consumer is not motivated or can make a detailed analysis of a possible purchase (Aaker, 1991; Kotler, 2017, Keller, 1993).

2.4.4 Brand Associations

Brand association can be defined as recalling images associated with a brand, such as color, figure, or a certain person that causes the consumer to associate that person with a brand (Aaker, 1991). According to Keller, brand association can be defined as the extent to which a particular brand causes the consumer to think about the brand's attributes in a general product category (1993).

Aaker talks about brand associations having different degrees of strength (1991). Further on, Aaker (1991) argues that there are more associations for the consumer to be exposed to, if brand names choose to appear, and communicate with their consumers. Examples of this are through advertising and gifts in product or service purchases since these gifts and advertisements can create memory links with the consumer towards the brand (ibid).

2.4.5 Other Proprietary Brand Assets

Other proprietary brand asset includes assets such as channel relationships and patents that can provide a strong competitive advantage. These assets focus on protecting or preventing competitors' influence in a given market. Aaker (1991) highlights the importance of other proprietary brand assets by exemplifying how easily a competitor can abuse one's own brand. This is by stealing the brand, product idea or logo, which is possible if there is no strong patent or other means that can protect the brand (ibid).

Although a patent can prevent direct competition if it is strong and relevant, a distribution channel can be controlled by a brand because of its history of brand performance (Aaker, 1991). Finally, other proprietary brand assets such as intellectual property rights and relationships with trading partners contributes to competitive advantage (ibid). This is because the more ownership a brand has accumulated, the greater the brand's competitiveness and thus favor other assets within its own brand (ibid).

2.5 Conceptual Framework

The conceptual framework addresses the concepts that this study uses to emphasize the purpose of the study. That is, the study's collected and analyzed data. Thus, the study's conceptual framework is consisted by the five dimensions of Aaker's brand equity model. The conceptual framework is shown in Table 2, down below.

Table 2: Conceptual Framework

Subject	Definition	Sources
Brand Equity	Overall added value of a brand	Aaker (1991), Keller (1993)
Brand Loyalty	Willingness to continue purchasing	Aaker (1991), Keller (1993), Anselmsson (2007), Grönroos (1984)
Brand Awareness	Ability to recognize and remember a brand	Aaker (1991), Keller (1993), Macdonald (2002)
	Influence of marketing activities on consumer decision-making	Macdonald (2002),
Perceived Quality	Consumer evaluation of overall quality	Aaker (1991), Keller (1993)
	Impact on brand loyalty	Anselmsson (2007),
Brand Associations	Emotions, feelings, and memories associated with a brand	Aaker (1991), Keller (1993)
	Impact on consumer perceptions of a brand	Brown (1992), Gremler and Brown (1996)

Aaker (1991) and Keller (1993) place strong emphasis on the concept of brand equity and its importance in building and maintaining a successful brand, although the definition varies between one another. Aaker defines brand equity as the added value that a brand brings to a product or service and identifies five main elements that contribute to it: brand loyalty, brand awareness, perceived quality, brand associations, other proprietary brand assets.

Keller (1993) defines brand equity as the added value that a brand brings to a product or service. Additionally, Keller (1993) claims that brand equity is influenced by consumer perceptions and attitudes towards the brand. Moreover, the importance of brand equity in building and maintaining a successful brand is being shared between the other articles, hence providing further insight on the various factors that contribute to it. Other insights: All of the articles provide further insight on the various factors that contribute to brand equity and how it can be built and maintained.

As previously stated in section 2.4.1., according to Aaker (1991), brand loyalty is closely tied to the use experience and cannot exist without prior purchase and use experience. In contrast, other dimensions like awareness, associations, and perceived quality can exist without prior purchase and use experience. On the other hand, Keller (1991) explains that brand loyalty determines whether a consumer will buy the same product or service and can create competitiveness for a company. Moreover, Grönroos (1984) defines loyalty as the consumer's willingness to continue purchasing from a brand and states that it is an important factor in building long-term brand success. Aaker's model consists of five levels of brand loyalty, with the fifth level having the highest brand loyalty.

One significant commonality among the articles is that they all agree on the value of brand equity development through brand awareness. Both Aaker (1991) and Keller (1993) define brand awareness as the consumer's capacity to identify a brand and distinguish it from competitors and stress the importance of this attribute in creating brand equity. Both Macdonald (2002) and Keller (2002) agree on the significance of brand awareness and point out that it is a crucial component of consumer decision-making and is influenced by marketing strategies as advertising and promotion.

Another similarity between the articles is that they all highlight the importance of perceived quality in building brand equity. Aaker (1991) and Keller (1993) both define perceived quality as the consumer's evaluation of the overall quality of a brand and its products and note that it is a critical factor in building brand equity. However, Keller (1993) states that perceived quality is a key determinant of brand equity and is influenced by both functional and emotional aspects of the brand. Anselmsson (2007) also agrees on the importance of perceived quality and note that it is a key factor in building brand loyalty and is influenced by various elements such as product features, performance, and the overall brand experience.

A third similarity between the articles is that they all agree on the role of brand associations in building brand equity. Aaker (1991) and Keller (1993) both define brand associations as the emotions, feelings, and memories that consumers associate with a brand, and agree that they are a critical factor in building brand equity. Moreover, Brown (1992) and Gremler and Brown (1996) agree on the importance of brand associations and stress that it can affect consumers perceptions of a brand which are then influenced by various elements such as advertising, branding, and the overall brand experience.

One key difference between the articles is that they take different approaches to defining and measuring brand equity. As previously stated, Aaker (1991) and Keller (1993) both define brand equity as the added value that a brand brings to a product or service, but Aaker's CBBE model identifies five specific elements that contribute to brand equity (brand loyalty, brand awareness, perceived quality, brand associations and other proprietary brand assets), while Keller (1993) point out that brand equity is influenced by consumer perceptions and attitudes towards the brand.

Kotler (2017) emphasizes the importance of creating a consistent brand experience and delivering high-quality products and services to customers on maintaining brand equity. Grönroos (1984) focuses on the importance of brand loyalty in building long-term brand success. Macdonald (2002) emphasizes the importance of customer satisfaction in building brand equity and notes that it is influenced by various factors such as product performance and the overall brand experience.

Anselmsson (2007) defines perceived quality as the consumer's evaluation of the overall quality of a brand and its products and notes that it is a key factor in building brand loyalty. Brown (1992) defines brand associations as the emotions, feelings, and memories that consumers associate with a brand and notes that they can have a significant impact on consumer perceptions of a brand, putting less weight on its products and notes, compared to Anselmsson (2007). Thus, Anselmsson (2007) focuses on the role of perceived quality in building brand loyalty, while Brown (1992) and Gremler and Brown (1996) focus on the role of brand associations in building brand equity.

Overall, the articles provide a range of perspectives on the various factors that contribute to brand equity and how it can be built and maintained. Aaker's CBBE model provides a comprehensive framework for understanding how these elements work together to create brand equity and how it can be measured and managed, while the other articles provide additional insight on specific aspects of brand management such as perceived quality, brand associations, loyalty, and customer satisfaction.

Figure 5.1. presents the mapping of brand equity indicators to the survey questions. The four brand equity indicators (Brand Loyalty, Brand Awareness, Perceived Quality, and Brand Association) are linked to specific survey questions (Q2-Q3, Q4-Q7, Q8-Q9, and Q10-Q13 respectively) to show the relationship between the indicators and the questions. The arrows flow from the indicators to the questions, indicating that the questions measure the constructs of the indicators.

The scores for each question contribute to the overall measurement of brand equity, as indicated by the connection between the questions and the Brand Equity box. This mapping provides a clear representation of the research design and the relationship between the brand equity indicators and the survey questions.

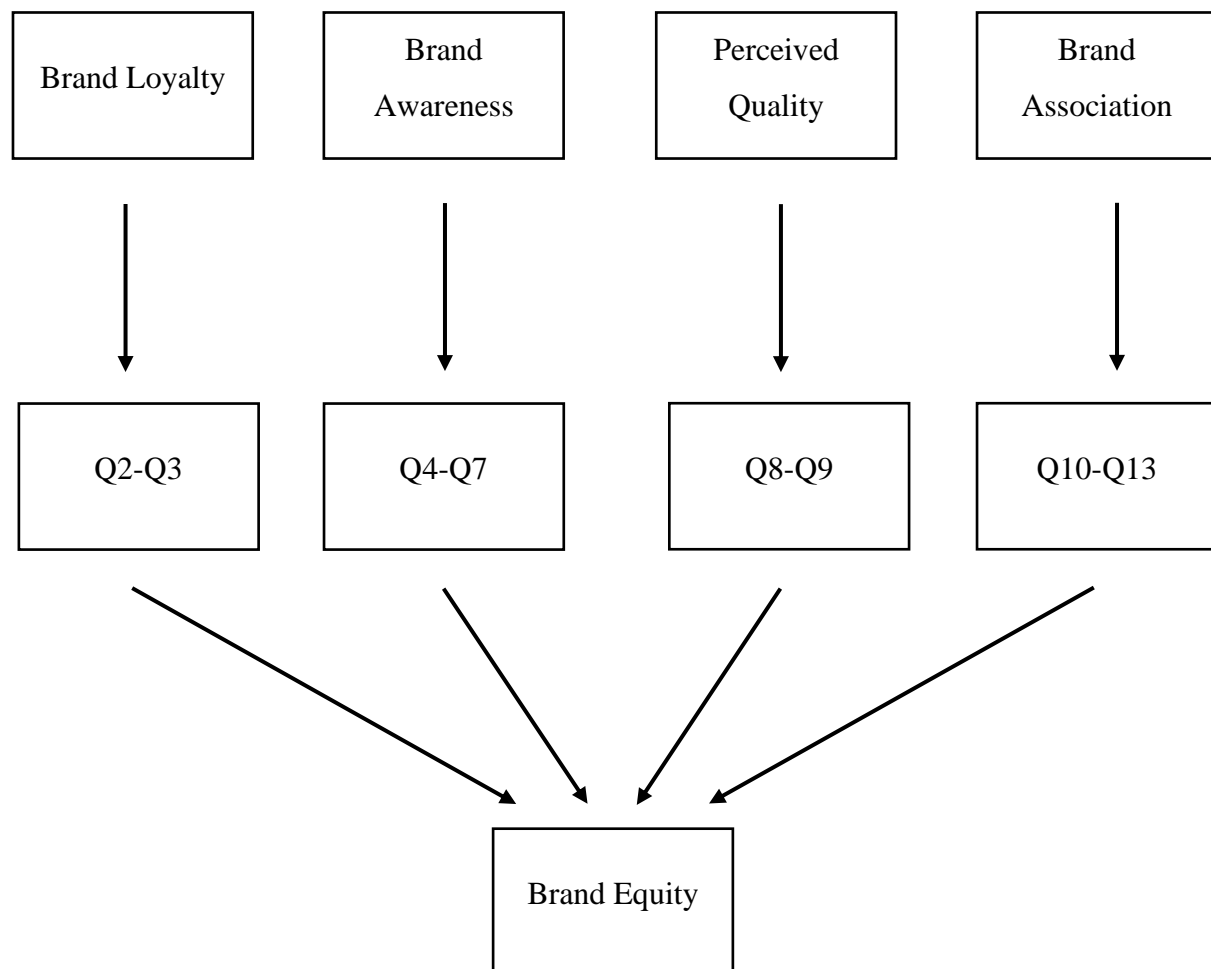


Figure 5.1. Conceptual framework mapping of brand equity indicators to survey questions.

3 METHODOLOGY

This chapter consist of seven sections that will represent this study's methodology framework. The different sections are constructed as follows: research purpose, research approach, research strategy, data collection method, sample selection, data analysis, validity and reliability.

3.1 Research Purpose

The research purpose of this study is to compare millennials' brand preferences between Samsung and Huawei smartphone by applying brand equity. Thus, the purpose is compatible with the title of the thesis research topic, "Applying Aaker's Brand Equity model in a Brand Preference Context: A comparative study between Samsung and Huawei Smartphone". The study will collect data from a survey study built on a population of LTU millennials to understand the millennials' brand preference between Samsung and Huawei.

There has been substantial focus on Aaker's Brand Equity model from previous research. This is due to brand equity being an important branding area, especially within brand management as previously explained under chapter 2. However, as also stated, the Aaker model is an effective model when comparing and differentiating two brands with each other. Furthermore, the goal of the study may also be to describe a new phenomenon, study its characteristics or identify patterns.

The formulation of a research goal usually has three categories: exploratory, descriptive, and explanatory (Saunders, Lewis & Thornhill, 2009). The exploratory seeks to explore a phenomenon for a better understanding and is suitable for a new topic with limited resources, since it is striving to answer what is occurring. Additionally, the explanatory aims to explain the relationship between variables or entities (ibid). Lastly, the descriptive purpose strives to describe and the collected data with the help of previous research. Moreover, a descriptive study does not require any use of hypothesis that needs to be dismissed or proven (ibid).

This study's research purpose is of a descriptive nature since the study provide additional information about the topic. Thus, the research purpose of this study is to compare millennials' brand preferences between Samsung and Huawei smartphone by applying brand equity.

3.2 Research Approach

After conducting comprehensive research, the researcher will have two entities, namely data and theory, that require attention. Theories can be considered as the compiled literature review, while data refers to the information that the researcher aims to gather (Saunders et al., 2009). There are two distinct research approaches that address theory and data, which are the deductive and inductive approaches (ibid).

The inductive approach starts with the reality of the study, where the researcher observes individual cases and formulates a theory based on these observations within a theoretical framework (Saunders et al., 2009). In contrast, the deductive approach involves starting with a defined theory or model, and the researcher aims to draw conclusions by analyzing and examining the theory (Saunders et al., 2009)

The data that has been gathered will either approve or disapprove the applied theories, both outcomes are valuable. Moreover, theories ought to be well-known and defined to be considered appropriate. (Saunders et al., 2009). The next step is to choose between a qualitative or quantitative design based on the deductive or inductive approach. The quantitative data focus on numerical analysis which require formulas and perhaps programming with the goal of transforming raw-to presentable data (ibid).

The quantitative research focus on examining the relationship between variables, meanwhile qualitative data is expressed in words, in terms of sentences and questions (Saunders et al., 2009). Therefore, the qualitative research examines the relationship between entities. The entities could allegedly be relationships between people or groups of people or even objects (ibid).

The research design and approach used for this study is the following, deductive research design with a quantitative research approach. The reason for this was to achieve a quantifiable result that was able to measure brand preference, which led to a quantitative research approach being more appropriate than qualitative. Similarly, the deductive design was more appropriate than the inductive as the study is largely based on measuring brand preference through a proven and recognized model, Aaker's Brand Equity model. Based on the literature and also Aaker's model, a questionnaire was then conducted to collect data.

3.3 Research Strategy

The research strategy consist of five different strategies and the decision of strategy is influenced by the previous choices from research purpose and approach. The five strategies are as followed: experiment, survey, archival analysis, history, and a case study (Yin, 2009). According to Yin there are three aspects that affect the choice of research strategy:

1. The type of the research question
2. Control over behavioral events
3. Focus on contemporary events

The table 3 will illustrate Yin's (2019) five strategies and briefly explain the benefits of each of them.

Table 3: Relevant situations for different research purpose

Research strategy	Form of research question	Required control over behavioral events	Focuses on contemporary events
Experiment	How, why?	Yes	Yes
Survey	Who, what, where, how many, how much?	No	Yes
Archival analysis	Who, what, where, how many, how much?	No	No
History	How, why?	No	No
Case study	How, why?	No	Yes

Source: Yin, 2009, p.8

The study focused on comparing millennials' brand preferences between Samsung and Huawei smartphone by applying brand equity. In this regard, a survey was designed in the form of a questionnaire with the intention of integrating Aaker's brand equity to measure millennials' brand preferences. On another note, according to Keller (1993) one limitation with Aker's

model was the lack of putting them five dimensions against each other, and that brand loyalty is a result of brand equity and not its source as Aaker claimed. However, due to the model's efficiency in terms of being easy to understand and manageable, no adjustments have been made.

A survey strategy was chosen to achieve the purpose of the study, i.e., to compare millennials brand preferences between Samsung and Huawei smartphone by applying brand equity. Thus, the questionnaire enabled the collection of quantitative data which could then be analyzed by quantitative measurement in the form of statistics.

In addition, a questionnaire is generally easy to understand and to complete for respondents. Questionnaire is not influenced by the person who designed the questionnaire or by other respondents, for example in a group interview. Thus, improving the objectivity of the study, since the respondents cannot be influenced by some sort of interviewer (Bryman & Bell, 2013).

3.4 Data Collection

The study's focus was to study millennials brand preference between Samsung and Huawei Smartphone. In this regard a survey study was constructed with the intent of incorporating the different dimensions of Aaker's Brand Equity model, which can then be linked to the brand preference between Samsung and Huawei Smartphone. Moreover, Saunders (2009) states that when constructing the data collection, the author wants to ensure reliability and validity.

A good way to ensure that data collection is reliable and that it is illustratively valid is by providing studies based on a combination of primary and secondary data, which has also been done in this study. This was done through a self-administered Internet questionnaire that became the study's primary data and the collection of literature that served as secondary data (Saunders et al., 2009).

The study's self-administered questionnaire as shown in the appendix at the end of this document, was also created by following Saunders (2009) recommendations. That is, the questions were created before the answer result and have not changed since then. Moreover, the study has used fixed response options as this design was suitable due to the need to be able to specify the questions according to Aaker's CBBE model. At the same time, the questions

were constructed in a clear and objective way to minimize significant differences in interpretation among the respondents.

Furthermore, the data collection in this study was based on a 1-5 linear scale, which was chosen for its appropriateness for the type of measurement being used and its ability to provide a sufficient range of responses to capture the data needed for the research (Gable & Wolf, 1993; McMillan & Schumacher, 2010; Saunders et al., 2009). This scale is also easy for respondents to understand and use, which can increase the accuracy of the responses and reduce the burden on the respondents (Gable & Wolf, 1993). The selection of the 1-5 scale was guided by the research goals of the study and the specific requirements of the measurement being employed.

This study utilized Google Forms to administer the questionnaire, which was distributed to the participants' email addresses via Ladok, an IT system used for documentation of registration and results at colleges and universities in Sweden (Ladok, 2019). Student email addresses were provided by Ladok upon request and filtered to target the millennial generation (those born between 1977 and 2000) at Lulea University of Technology (LTU). This approach ensured that the study reached a specific generational market group and enabled data collection from a targeted sample.

The average per brand was calculated as follow: $((X1 * Y1) + (X2 * Y2) + \dots + Xn * Yn))$ divided by the Total number of respondents, where X represents the score, and Y represents the number of respondents. The calculation of the overall average was done similarly: $((X1 * Y1) + (X2 * Y2) + \dots + (Xn * Yn))$ divided by the Total number of respondents, where X and Y represented the scores and number of respondents for both Samsung and Huawei, and the Total number of respondents was equal to 28.

The Total Brand Equity (BE) Average was calculated by summarise the relevant averages of both Samsung and Huawei and divide the result by 8 (as 8 averages were included in each brand's calculation). This resulted in separate numerical values for the Total Brand Equity (BE) Average of Samsung and Huawei, representing the overall Brand Equity for each brand.

3.5 Sample Selection

Probability and non-probability are the two primary categories of sampling strategies covered by Saunders (2009). While non-probability sampling frequently entails the researcher handpicking individuals and the likelihood of selection is unknown, probability sampling involves randomly selecting participants with an equal chance of being chosen.

To generalize the population based on the data acquired, Saunders (2009) advises utilizing probability sampling, particularly random sampling, which is helpful using a questionnaire. A type of probability sampling known as random sampling gives each member of the population an equal chance of being included in the sample, making it representative of the population and allowing for population inferences.

The study used a random sampling technique to choose a representative and unbiased sample of 1000 participants from the larger population of people born between 1977 and 2000 who were enrolled as students at Lulea Technical University in the academic year of 2019. The goal was to minimize potential biases in the results by guaranteeing that every member of the population would have an equal chance of being included in the sample (Fisher, 2007). The sample was then chosen using a random number generator and entered into an Excel spreadsheet using the Index and Match function.

3.6 Validity

The validity of the study is an important aspect of research, Fisher (2007) argues that it is impossible for a study to be totally objective. However, constructing validity can be used in the form of a questionnaire to strengthen the validity (Fisher, 2007). Thus, this study chose to use a questionnaire with closed multiple-choice questions. This is because an advantage of closed questions avoids the risk of subjective analysis, and the respondents answer the questions in the survey in a structured way (Saunders, 2009).

The questionnaire that has been used has followed the advice from Fisher (2007), and therefore the questionnaire was designed and structured along the study's research material. The link between the questionnaire and research material that was made was to use the brand equity

model presented in Chapter 2, under Figure 5. To create design validity, all questions in the questionnaire represented a dimension in the Aaker brand equity model (Fisher 2007).

3.7 Reliability

In order to increase the validity of the study, it must be reliable and produce similar results when performed by a different author using a different population sample (Bryman, 2011; Saunders, 2009). This study followed Fisher's (2007) guidelines for using correct references, grammar, analysis, and research evidence to meet academic standards. It also used models and studies by recognized authors such as Aaker (1991), Kapferer (1992), Keller (1993), Kotler (2014), and Keegan (2014) that are relevant to the research area.

The material used in the study was assessed for quality based on correctly used references and was further supported by peer-reviewed sources and objective databases. The questionnaire was sent out via Google Forms, and Excel and Power BI were used to analyze the results. The survey was conducted in a consistent manner and the participants were familiarized with the assessment criteria and given clear definitions of relevant terminology.

The 13 questions included in the survey were carefully constructed to measure the various dimensions of brand equity according to Aaker's model (e.g., brand loyalty, brand awareness, perceived quality, brand association), using clear and unbiased response options and ensuring internal consistency among the questions (Dillman, 2014; Sinder, 2016; Saunders, 2009).

While a pilot test was not conducted, the use of established models and techniques can help to increase the reliability of the questions as well as tools such as Cronbach's alpha to provide a deeper understanding and analysis by observing correlations from the graphs (Bryman, 2007; Fischer, 2007).

To achieve a reliable sample, a random sampling method was used to select the respondents from a population of 12609 individuals at Lulea Technical University. As a result, the sample's inclusion rate was the same for every member of the target population. Thus, reducing the potential for biases (Fisher, 2007). The sample size of 1000 respondents were selected using a random number generator from an online website, random.org, which was then plugged in to Excel having used the function, Index and Match.

Furthermore, the study carefully considered the quality of the questions and the sampling method, as well as performing analysis of the data for errors or inconsistencies. Although, it is significant to note the sample's limitations and any possible sources of bias or mistake in the data. Due to the lack of a pilot test and the limited sample size, the results cannot be generalized.

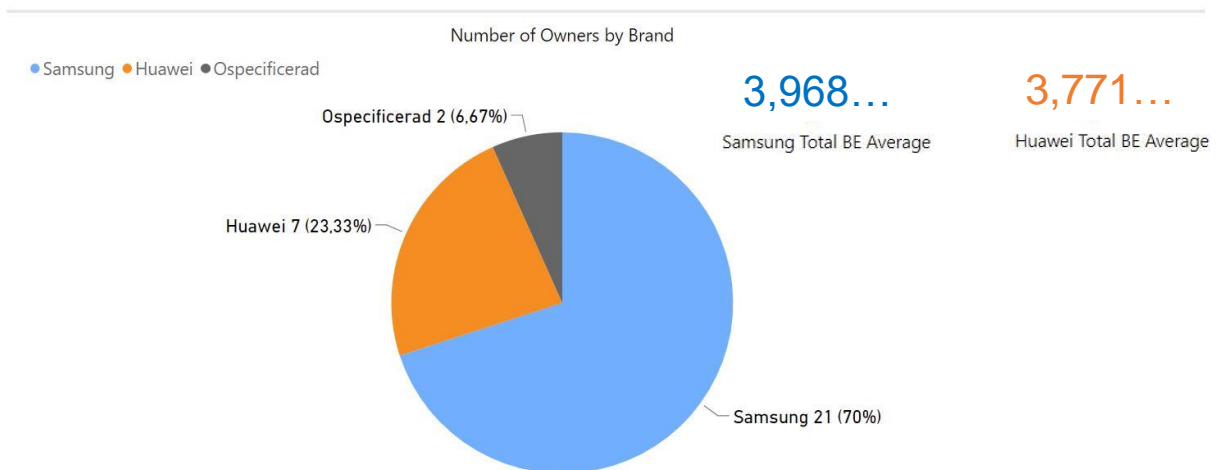
4 PRESENTATION AND ANALYSIS OF DATA

This chapter consists of two main sections and five sub-sections that will represent this study's presentation and analysis of data. The different sections are constructed as follows: presentation of measured population and discussion of the study. The four sub-sections are; brand loyalty analysis, brand awareness analysis, perceived quality analysis, brand association analysis.

4.1 Presentation of Sample

This main section together with its four associated sub-sections will present the results of the study using 13 figures where a summary analysis of the data will be made under each figure. The first of the survey study question to the respondents is illustrated by figure 6, to know whether they owned a smartphone of the brand Samsung, Huawei or unspecified, this to filter the consumers under the respective brand. This was important for the purpose of the study because the follow-up questions presented below are linked to Aaker's four dimensions of CBBE, which is then possible to analyze and distinguish between Samsung and Huawei users.

1. Today I own a smartphone from the following brand (or the latest one i owned)



Source: Google Forms

Figure 6: Number of Owners by Brand.

The survey consisted of 29 respondents out of a total of 1000, resulting in a response rate of 2.9 percent, which is below the recommended. On the other hand, the response rate may be

misleading due to the existence of other smartphone brands in the market. Based on Figure 4 on page 9, which displays the distribution of smartphone market shares by brand in Sweden, the researcher estimates that at least 60 percent of the sample population owns a smartphone that is not from Samsung or Huawei. Thus, approximately 29 out of 400 millennials at LTU who own a Samsung or Huawei smartphone responded to the questionnaire, yielding a response rate of 7.25 percent.

Figure 6 indicates that two respondents did not answer the question regarding their smartphone ownership, and these responses were excluded from the analysis. The average brand equity score for Samsung was 3.968 out of 5, while the average brand equity score for Huawei was 3.771 out of 5. However, these findings should be interpreted with caution and further research is necessary to draw definitive conclusions.

4.1.1 Brand Loyalty



Figure 7: Brand loyalty based on continual smartphone purchase.

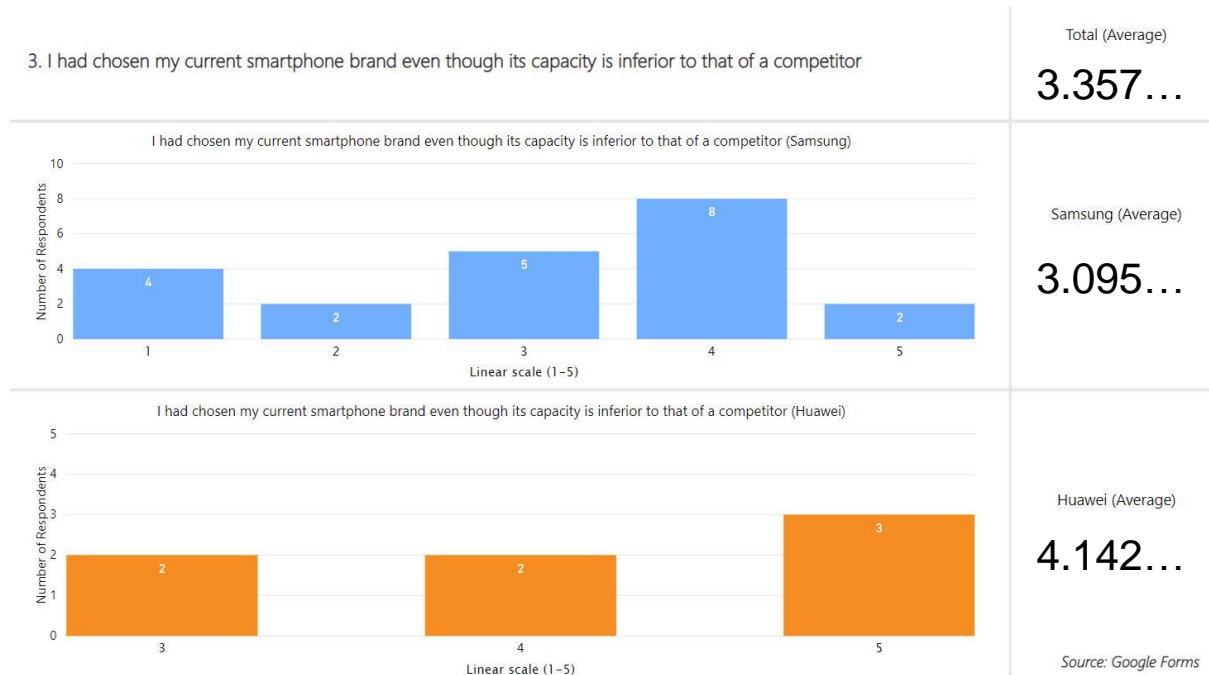


Figure 8: Brand loyalty based on capacity inferiority.

The average between Samsung and Huawei in figure 7, is 3.333 and 3.428 respectively. Samsung respondents have responded more widely, however, if Huawei would had as many respondents as Samsung, it probably would have leveled off. Figure 5 on page 15 illustrates that Samsung users are more willing to change brand if their smartphone is inferior. This means that on the basis of figure 8, Huawei having an average of 4.142 will have stronger brand loyalty overall, when summarizing the average of figure 7 and 8.

4.1.2 Brand Awareness



Figure 9: Brand awareness based on pre-exposure i.e., the logotype of Samsung.



Figure 10: Brand awareness based on pre-exposure i.e., the logotype of Huawei.

Figure 9 gives a total average of 4.751 while Figure 10, gives a total average of 3.678. This means that Samsung has stronger brand recall than Huawei. Both figures fit under brand recall, which is a subcategory of brand awareness as stated in chapter two.



Figure 11: Brand awareness based on post-exposure i.e., the logotype of Samsung.

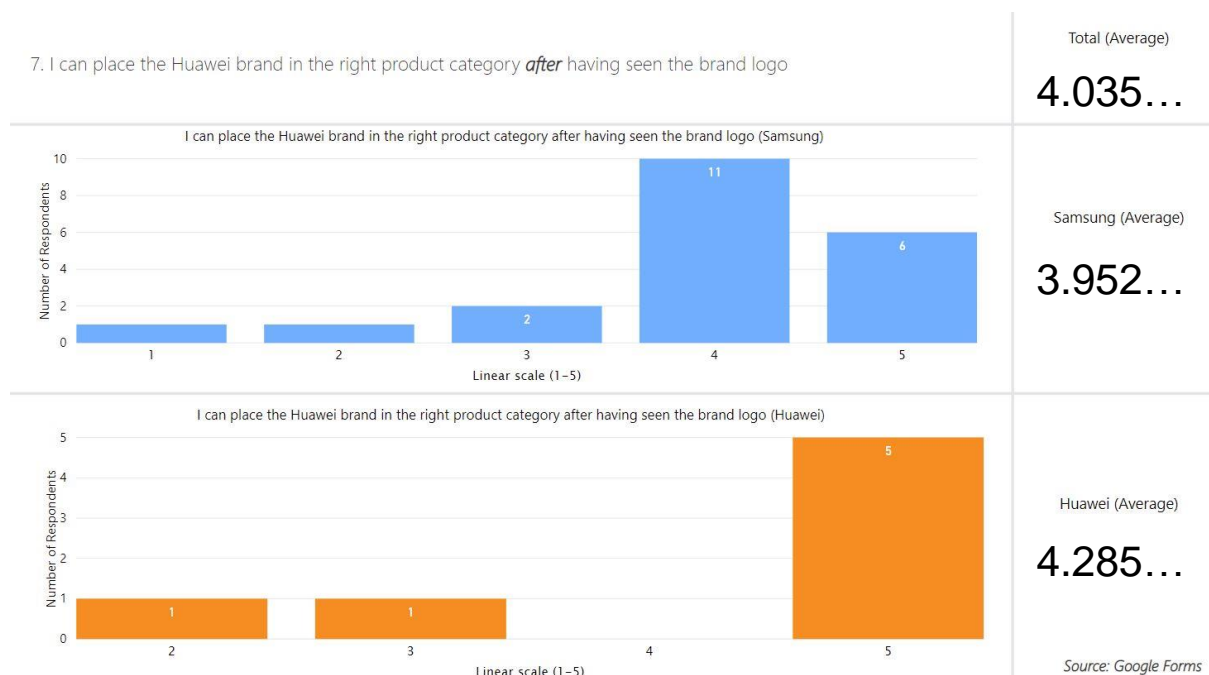


Figure 12: Brand awareness based on post-exposure i.e., the logotype of Huawei.

Figure 11 shows a total average of 4.928 for Samsung's brand recognition, while Figure 12 shows a total average of 4.035 for Huawei's brand recognition. This indicates that Samsung has stronger brand recognition compared to Huawei. It is expected for brand recognition to have a higher average than brand recall as it is easier for consumers to place products in the right

categories after seeing the brand. The increase between Figure 9 and 11 for Samsung is expected to be smaller compared to the increase between Figures 10 and 12 for Huawei, due to Huawei's lower brand recall.

4.1.3 Perceived Quality

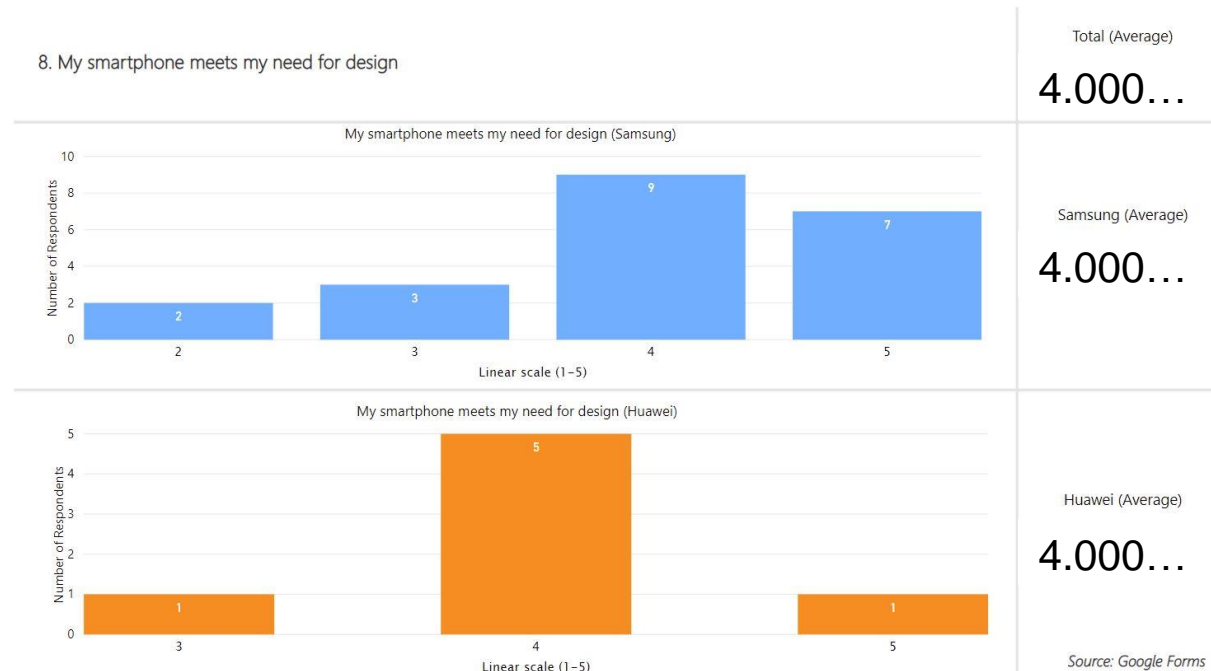


Figure 13: Perceived quality based on design.



Figure 14: Perceived quality based on functionality.

An interesting point between Samsung and Huawei is that the respondents do not differ by much on the respective question in Figure 13 and Figure 14. Figure 13 shows that both group of respondents have an average of 4.000, and Figure 14 shows that both groups have an average of 4.142.

4.1.4 Brand Association

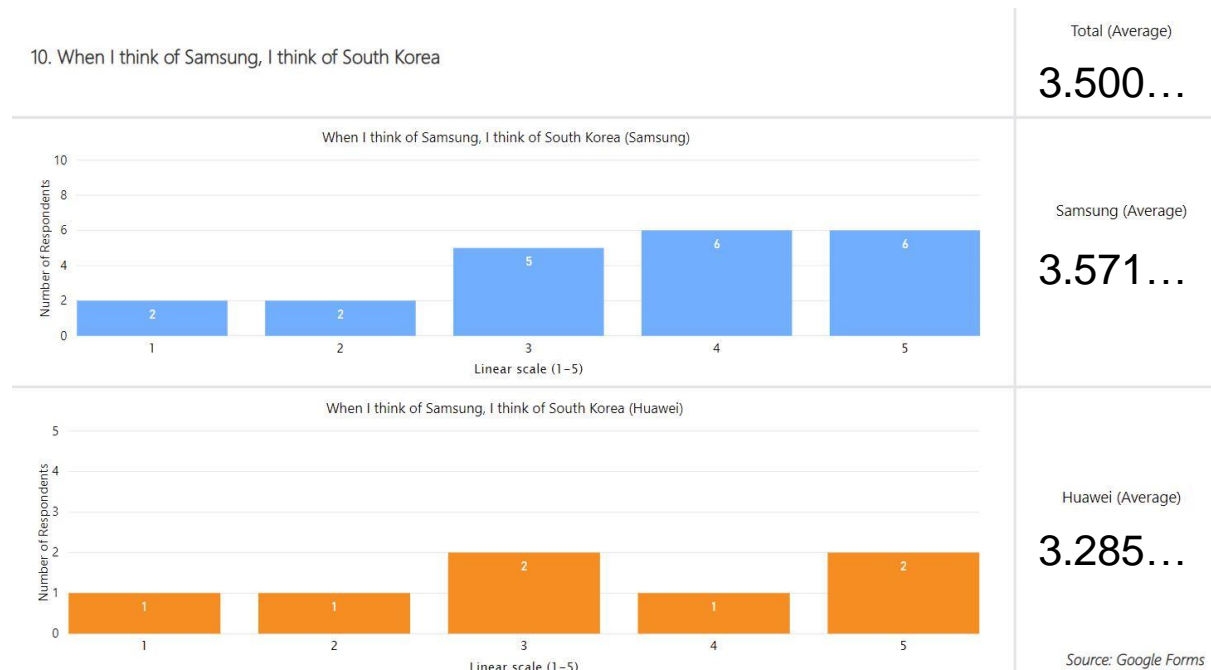


Figure 15: Brand association based on connecting Samsung with South Korea.

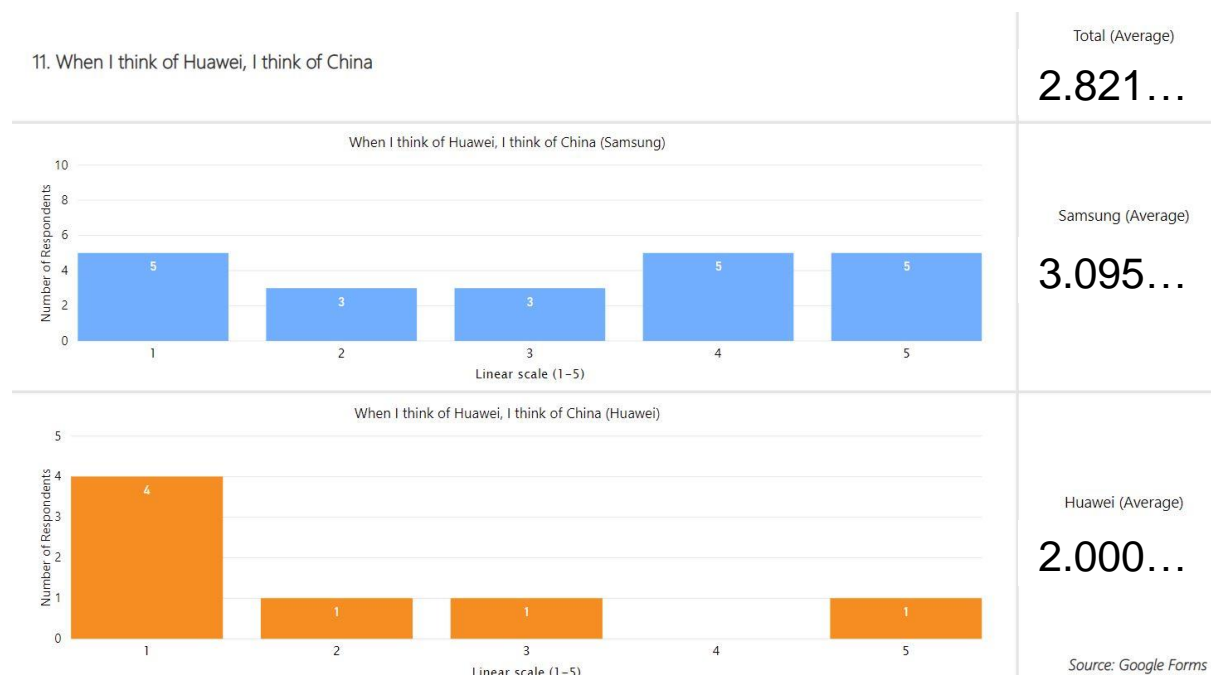


Figure 16: Brand association based on connecting Huawei with China

The results from Figure 15 indicate that Samsung has a total average score of 3.500 in terms of brand nationalism, while Figure 16 reveals that Huawei's total average score is 2.821. The results suggest that Samsung is more strongly associated with its country of origin compared to Huawei, based on the responses of the limited sample size.

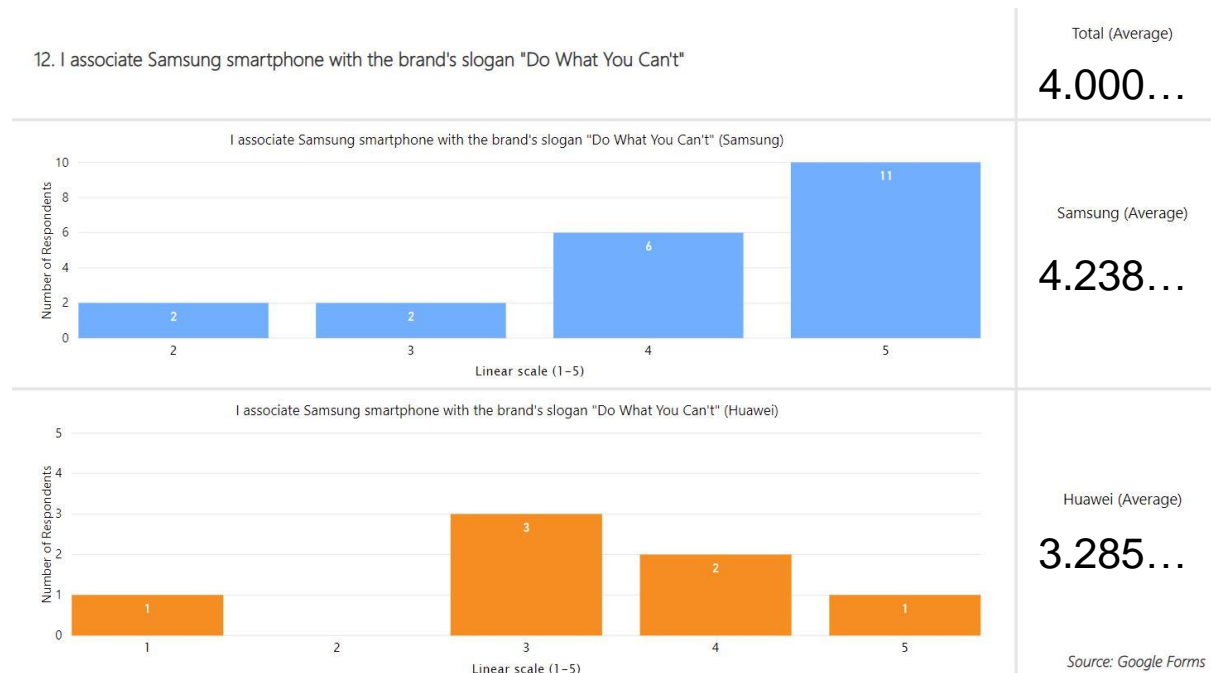


Figure 17: Brand association based on connecting Samsung with its slogan.



Figure 18: Brand association based on connecting Huawei with its slogan.

According to Figure 17, the measurement of the respondents' association with Samsung's slogan was made, yielding a total average score of 4.000. Similarly, Figure 18 presents the measurement of the respondents' association with Huawei's slogan, resulting in a total average of 3.928. A comparison between the results of Figure 15 and 18 reveals that Samsung is the brand with the strongest brand association.

The Total Brand Equity (BE) Average was determined by summarizing the relevant averages of both Samsung and Huawei, based on the information provided. The determination of relevant averages involved scores from both blue and orange charts, as well as scores unique to each brand. The Samsung's relevant averages were 7 (from the Blue chart only), 8 (from the Blue chart only), 9 (from Both charts), 11 (from Both charts), 13 (from the Blue chart only), 14 (from the Blue chart only), 15 (from Both charts), and 17 (from Both charts). While Huawei's relevant averages were 7 (from the Orange chart only), 8 (from the Orange chart only), 10 (from Both charts), 12 (from Both charts), 13 (from the Orange chart only), 14 (from the Orange chart only), 16 (from Both charts), and 18 (from Both charts).

4.2 Discussion

The survey result indicated that Samsung scored higher in brand awareness, perceived quality and brand association being more significant on both questions on brand awareness and perceived quality based on design with the rest being close to equal but given a slightly higher averages to Samsung. In terms of brand equity, the results indicated that Samsung had stronger overall brand equity than Huawei, with a total average of 3.968 out of 5 compared to an average of 3.771 for Huawei.

The finding aligns with the literature on brand equity, which suggests that a range of factors such as perceived quality, brand associations, and customer satisfaction can influence consumers' perceptions and attitudes towards a brand and contribute to its overall added value (Aaker, 1991; Keller, 1993). The higher brand equity of Samsung is likely due to the brand's strong performance on these dimensions, more specific the dimensions found in Aaker's CBBE model. For instance, Samsung may have a reputation for delivering high-quality products and services, building strong customer relationships, and creating positive brand associations through effective marketing and branding strategies.

The results of the brand loyalty demonstrate that Huawei has a higher level of brand loyalty compared to Samsung. The average scores, with 3.428 for Huawei and 3.333 for Samsung, suggest that Huawei users are more likely to remain loyal to the brand based on continual smartphone purchases despite potentially perceiving lower product quality. The conclusion is further strengthened by the question on figure 8, page 35. Hence, analyzing brand loyalty based on capacity inferiority of which the question checks if the respondents would stay with current brand even though its capacity may be inferior to that of a competitor.

This finding supports Aaker's theory, which posits that even though a product or service might be inferior in regard to its capacity compared to that of a competitor, the consumer still might not switch over to the competitor. Thus, five out of seven of the respondents from the sample population (see figure 8) may be level four or five from Aaker's brand loyalty theory level as mentioned in chapter 2.4.1.

On the other hand, the result of the study aligns with established literature on brand loyalty, which emphasizes the influence of customer satisfaction and overall brand experience on consumer loyalty (Anselmsson, 2007; Grönroos, 1984). The higher level of brand loyalty observed in the case of Huawei may be attributed to the brand's capacity to offer quality products and services that meet customer needs and expectations, while also being priced lower in comparison to Samsung on average.

The results of the brand awareness study indicate that Samsung has a higher level of brand recall and recognition compared to Huawei. This aligns with Aaker's theory that brand awareness is a crucial component in constructing brand equity. The higher scores for Samsung suggest that the brand has made a significant impact on consumers' minds and has effectively conveyed its brand image and message.

In terms of brand awareness, the study results showed that Samsung has a stronger brand recall and recognition compared to Huawei, with average scores of 4.750 and 4.928, respectively, compared to 3.678 and 4.035 for Huawei. This is in line with the literature on brand awareness, which suggests that effective marketing and branding strategies can enhance consumer recognition and memory of a brand (Kotler, 2017; Gremler & Brown, 1996) if such conclusion

if one may want to draw that Samsung has been more effective with marketing, even though no such claim can be made from the study.

The higher brand recall and recognition of Samsung can be attributed to the brand's strong brand identity and visibility in the market. For instance, Samsung may have a well-known and distinctive brand logo, slogan, or other branding elements that are easily recognizable and memorable to consumers.

Regarding perceived quality, both Samsung and Huawei are similarly perceived in terms of design and functional quality. This indicates that the respondents view both brands as being of equal quality, which is crucial in establishing brand equity as Aaker's theory highlights perceived quality as a key determinant of brand loyalty and brand awareness.

Finally, concerning perceived quality, the results showed that both Samsung and Huawei had comparable perceived quality scores, with average scores of 4.000 for both brands regarding design and 4.142 for both brands regarding functionality. This is consistent with the literature on perceived quality, which posits that consumers' perceptions of a brand's quality can be impacted by various factors such as product features, performance, and reliability (Brown, 1992).

The results indicate that Samsung has a stronger brand association, both with its country of origin (South Korea) and its slogan, compared to Huawei. This is in line with Aaker's theory that brand associations, such as the country of origin, can significantly influence brand equity. The stronger association with South Korea could be a contributing factor to Samsung's higher scores.

Regarding brand associations, the results revealed that Samsung had stronger brand associations, with average scores of 3.500 and 4.000 for Samsung compared to 2.821 and 3.928 for Huawei on measures of the country of origin and slogan association, respectively. This is consistent with the literature on brand associations, which indicates that consumers may associate a brand with various attributes or concepts that hold meaning or value for them (Keller, 2002; Macdonald, 2002). The stronger brand associations of Samsung may result from

the brand's effective communication and association with certain appealing values, attributes, or emotions for consumers.

To summarize, the study findings indicate that Samsung has higher brand equity compared to Huawei among Swedish millennials. These results partially align with Aaker's framework of the four dimensions of brand equity that was brought up in the survey, which highlights the significance of brand awareness, brand loyalty, perceived quality, and brand association in building brand equity. Further research is necessary to validate these findings and to investigate other potential factors that may impact brand equity among Swedish millennials.

5 CONCLUSION

This chapter consists of four sections that will represent this study's findings and conclusions. The different sections are constructed as follows: conclusion, theoretical and practical implications, limitations and suggestions for further research.

5.1 Conclusion

The purpose of the study was to compare millennials' brand preferences between Samsung and Huawei smartphone by applying brand equity. Therefore, the study focused on managing Aaker's brand equity model, since according to Aaker, a strong brand can increase the consumer's preference for a brand. A strong brand is based on brand equity, which creates a long-term sustainable brand that generates positive results in the form of competitiveness and increased sales volumes.

The study was based on a survey of 29 respondents out of a total of 1000, resulting in a response rate of 2.9 percent, although based on previous explanation one may instead count for approximately 29 out of 400 millennials yielding in a response rate of 7.25 percent. After summing up all the dimensions from Aaker's model on which the questionnaire was based, Samsung received a higher BE average of 3.968 compared to Huawei's 3.771. Moreover, Huawei had stronger brand loyalty overall.

Meanwhile, Samsung scored a higher-or similar average within the other dimensions. Both brands shared almost a similar score in terms of perceived quality based on design and functionality. Samsung had a stronger brand association with its country of origin compared to Huawei, although both scored similarly in terms of brand association with their slogans.

However, it is notable for the transparency of the study to clarify that the weighted value between Samsung and Huawei is not significant, as no independent sample t-test has been performed due to the low number of respondents who participated in the survey study. Thus, the conclusion that can instead be deduced from this result without being completely established, is that millennials at LTU tended to lean towards the Samsung smartphone over the Huawei smartphone.

5.2 Theoretical and Practical Implications

The results of this study contribute to the existing knowledge in the area of brand equity by providing a further empirical examination of Aaker's four dimensions of CBBE. The study adds to the existing literature by focusing on two smartphone brands and comparing the brand equity of each in a context of constructing a comparative study between Samsung and Huawei smartphone. The results provide further evidence of the usefulness of the CBBE model in analyzing brand equity and the four dimensions' impact on brand equity. The study highlights the importance of brand loyalty, brand awareness, perceived quality, and brand association in building and maintaining brand equity.

Nonetheless, it is noteworthy to highlight two models that complement Aaker's model, which are brand identity and brand personality. Kapferer (2004) and Aaker (1996) take up the role of brand personality in a brand context and define it as a reflection between the consumer and the brand. In other words, a further deepening of brand association which is a dimension of Aaker's (1991) brand equity model. Therefore, it may be interesting to research in brand equity and at the same time apply brand identity as well as brand personality models.

Moreover, regarding the findings of this study's practical implications for marketers and managers of Samsung and Huawei. The results suggest that Huawei should focus on increasing brand recall and recognition, while Samsung should focus on maintaining strong brand loyalty and association with its country of origin. Additionally, both brands should focus on maintaining high levels of perceived quality based on design and functionality. The study highlights the need for companies to consider the four dimensions of CBBE in their brand-building and management strategies. The results can serve as a basis for further research in the field of brand equity and the analysis of smartphone brands.

As previously stated, Kotler and Aaker, among others, claim that brand equity is valuable to analyze for managers and CEOs. If the goal is to build a long-term sustainable brand and to measure which brand consumers prefer, then brand equity is an important area to research. This study highlights how a company or person can make effective solutions to measure one's own brand equity by using a CBBE model such as Aaker's.

It is recommended for managers to utilize Aaker's brand equity model as a starting point. This model is simple to handle and provides a clear hierarchy of its dimensions. However, there are other established Consumer-based Brand Equity (CBBE) models, such as Keller's model, which supplements Aaker's model by analyzing the interrelationship between dimensions. Both models have received recognition and testing in both academic and professional settings. This study utilized Aaker's CBBE model.

5.3 Limitations

The main limitations of the study were the low number of responses and the implications it has for analysis and reliability. Moreover, the study could have made use of supplementary models that were previously pointed out in chapter 5.2. If resource availability had been better, then the study would have used a larger population with the aim of being able to generalize the study's results more safely.

5.4 Suggestions for Further Research

For future research, the researcher would desire to extend this study by analysing the trends in brand equity, specifically whether it increases, decreases, or remains constant over time. This would entail conducting the same survey and study but collecting new data for instance on a monthly or quarterly basis. Subsequently, the trends would be analysed using graphs, in an effort to comprehend the outcome and make predictions for the future. The researcher concludes that such analysis is valuable for companies as it enables them to steer their brand in a positive direction.

In addition to gathering data over a longer period, it could be of interest to also take the median into account, as it helps to forecast an outcome. Additionally, a larger sample population can be made, such a population would reasonably be divided into cities, municipalities, and counties or nationwide for instance in Sweden. It may also be interesting for Samsung and Huawei to study the other generational market groups mentioned in Chapter 2.1. Lastly, the study could of course serve as an inspiration to further research on other companies' brand equity, not least within the smartphone industry while using Aaker's CBBE model.

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APPENDIX, QUESTIONNAIRE

Samsung vs Huawei

This study is aimed at those who own a smartphone from either Samsung or Huawei. Therefore, see the question below before you begin the survey.

Have you ever owned an Samsung or Huawei smartphone?

Yes: Please, Continue with this survey.

No: Please, Exit this survey.

This study will take about 4 minutes to complete.

Please answer this questionnaire by selecting the relevant box under each question.

Thank you for choosing to participate!

Definitions of important terms:

- Inferior: When something is worse; lower in rank in comparison. In this context, the smartphone.
- Logo: It is a print type that consists of several merged letters, usually the name of a company.
- Product category: Is a particular group of related products, In this context, smartphone.
- Slogan: It is a short and striking or memorable phrase used in advertising. An example of a slogan is McDonald's, "Lovin 'It".

Today I own a smartphone from the following brand (or the latest one I owned)?

☐ Samsung

☐ Huawei

I would buy the latest model as soon as it is launched.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I had chosen my current smartphone brand even though its capacity is inferior to that of a competitor.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I can place the Samsung brand in the right product category before having seen the brand logo.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I can place the Huawei brand in the right product category before seeing the brand logo.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I can place the Samsung brand in the right product category after seeing the brand logo.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I can place the Huawei brand in the right product category after seeing the brand logo.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

My smartphone meets my need for design.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

My smartphone meets my need for functionality.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

When I think of Samsung, I think of South Korea.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

When I think of Huawei, I think of China.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I associate Samsung smartphone with the brand's slogan "Do What You Can't"

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I associate Huawei smartphone with the brand's slogan "Make it Possible"

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree