

Impact of Apple's Brand Equity Towards Purchase Intentions of Gen Z Thomasians on Secondhand Apple Products

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Abstract — Motivated by the growing multi-platform market of secondhand consumer electronics in the Philippines, this study aims to examine the relationship between the consumer-based brand equity of Generation Z Thomasians towards the global brand, Apple, and the level of purchase intentions of those consumers towards secondhand Apple products. This is a descriptive correlational study following a quantitative research design. The researcher used mean and standard deviation to determine the consumer-based brand equity of Apple and the level of purchase intentions of consumers towards secondhand Apple products, then used regression analysis to find the correlational relationship. This study found that there is a significant relationship between the said two variables. The data for this study was collected from a sample group of 274 respondents from the University of Santo Tomas. The psychometric measures were validated through Cronbach's alpha using SPSS. This study contributes to the existing body of brand management and consumer behavior literature. Furthermore, this study is beneficial towards technology brand managers and technology marketing managers with regards to developing and improving their brand image and consumer acquisition through their strategic initiatives.

Keywords — gen z, second-hand, Apple, consumer electronics, consumer-perceived consumer-based brand equity (CPCBBE)

I. INTRODUCTION

In the Philippines, there is an active, multi-platform market on secondhand consumer electronic items. The consumer electronic brand Apple is prevalent in this said market, as observed by the researchers. The emerging literature on secondhand markets indicates that consumers have access to secondhand purchasing (Chang et al. 2020; Makov et al. 2019; Fernando et al. 2018; Chu and Liao, 2010). Many networking sites and websites developed themselves in providing a platform for secondhand selling through consumer-to-consumer transactions (C2C), auctioning, and a space for online classified ads (Chang et al., 2019). Thus, creating an opportunity for secondhand product consumption includes business models that monetize on extending the product life cycle of "older" models of Apple products regardless of being in the market for a year or less. In 2022, the global market for secondhand smartphones projected a value of \$52.7 billion (Statista, 2021). According to Makov et al. (2019), secondhand iPhones on Ebay.com are valued with a longer economic lifespan compared to secondhand Samsung smartphones due to their intangible quality, which is brand.

Apple has been successful in branding and product development. It achieved its highest ever sales in 2020 despite the challenging global economic situation brought by COVID-19. Despite this observation, previous literature has focused on secondhand buying behavior rather than a branded secondhand product. This research intends to bring light to secondhand apple products in the Philippines. Moreover, due to the growth of alternative consumption in consumer electronics, Marketers are confronted with how impactful brand equity drives customers' purchase intention towards secondhand products.

Past studies have proven that most dimensions of consumer-based brand equity positively affect purchase intention and repurchase intentions. However, these findings are limited to new and branded consumer electronics (Ural & Perk, 2012; Lakshmi & Kavida, 2016; Filieri & Lin, 2016; Özçifçi, 2017). In sum, this study questions the impact of Apple's brand equity on the purchase intentions of Filipinos towards secondhand Apple products, specifically, the group of Generation Z who are next in line to be decision-makers in purchasing. In addition, the researchers question the factors that affect their intention to purchase secondhand goods, such as the proponents' subjective norms, attitude, and perceived behavioral control.

II. LITERATURE REVIEW

A. Secondhand Apple Products

Apple employs an aggressive business strategy. It consistently releases new-generation models at shorter intervals and skims the market for maximum profit (Almeida et al., 2021). These new-generation models upgraded with more advanced technological features and appearance design (i.e., chipset memory, storage capacity, screen resolution, weight, screen size, color variants). Thus, it implicates a shorter life cycle for their products. Apple products, specifically iPhones, iPads, and MacBooks, have been assessed to have three years at most until their product life cycle declines (Ewa et al., 2017). Although sales of used products do not help drive consumer electronics revenues, revenues derived from services (AppStore, Apple Music, and Apple TV) continue to benefit. Moreover, the smartphone brand is found more socially desirable than alternative brands, particularly young consumers according to Sun et al. (2020).

Makov et al. (2019) examined what affects the secondhand value of smartphones. The study examined iPhone and Samsung products sold in Ebay.com, an online secondhand market. The findings of their study indicate that the brand equity of Apple increased the price of a secondhand iPhone compared to a secondhand Samsung smartphone. In other words, brand equity positively increases the economic lifespan of a product that is likely to be in the declining stage of its product life cycle through secondhand markets, which possibly appeal to and motivate consumers. Similarly, the study of Gupta and Zhou (2020) examined the factors that depreciate the value of iPhones and iPads through four categories: market factors, technology factors, appearance factors, and customer attention factors. The study showed the market position of the brand is negatively related to the depreciation of their product. The higher the market positioning is, the lower the depreciation rate will be. This implies that the Apple brand when compared to another brand, it has more economic value in that setting.

B. Purchase Intentions

A study by Chen and Yang (2021) has concluded that customer experience, more so customer satisfaction can have a positive impact on consumer purchase intention and repeated purchase intention. Brand identity and brand image, which are factors that significantly affect a consumer's preference and loyalty, is one of the most critical when it comes to purchasing intention since it serves as the bridge between the marketers and the customers (Dash et al., 2020). According to Matthews et.al. (2020), purchase intention refers to the amount of effort willing to be exerted by a consumer to purchase a good or service according to his or her needs or wants which is greatly influenced by an individual's behavior. This is because according to Lo et al. (2020), consumers are strongly driven by self-interest and cost-benefit analysis wherein perceived utility, savings, and trend feeling influence purchase intention.

Slaton et. al. (2020) has made mention of customer-based brand equity, which is created by a high level of brand awareness and favorable brand equity, having a positive impact on purchase intention. In this research, purchase intention is understood as the degree to which a consumer is willing to purchase a secondhand Apple product. According to Liao et. al. (2021), risk perception is a negative factor when it comes to purchasing intention as it harms the possibility of a consumer acting upon the desired purchase. Relative advantage and design aesthetic are strong attributes that influence the purchase intention of potential customers (Ling, et al., 2021). The positive attribution of a consumer's self-image towards a brand contributes to a favorable purchase intention toward the brand.

The behavior and purchase intention of a consumer can be driven by their perceived benefit as it determines a consumer's psychology. Meaning a consumer who has a preference and has stronger trust towards online purchasing is more likely to have favorable online purchase intentions. However, influencer endorsement also has a positive impact on purchase intention and has proven to have a more significant effect due to the reliability and credibility of the source, compared to mere electronic word of mouth (eWOM) feedback. Peer feedback plays an

important role in strengthening one's purchase intention during instances when a peer has already purchased from the same seller.

Physical markets have the advantage of minimizing this risk through face-to-face interactions of the consumer with the products; however, for online markets, they can transform this risk into an opportunity by encouraging consumers to be involved online. There is a strong correlation between online purchase intentions and engaging in online purchasing behavior. Information from experienced consumers reduces purchase uncertainty and increases purchase confidence. This gives consumers a variety of options when it comes to purchasing which in turn may lead to adverse effects on purchase intentions. For instance, consumer profiles play a large role in purchase intentions (Ertz, 2017).

C. Brand Equity

According to Kotler and Keller (2016), brand equity is the added value to products and services, and that brand equity can be seen in how consumers act, feel, and think about brands and the profitability and market share that it offers to a business. To further substantiate, brand equity is conceptualized as a measurement of the perception of consumers about a brand (Sözer et al., 2017). According to Muqaddas and Ahmad (2016), many approaches may be used to assess the performance and value of a brand of a business, with brand equity being one of the most commonly used methods.

Based on the literature review of Astrid Puspaningrum (2020) on brand equity, if consumers react more positively to the products of a brand or the marketing activities of a brand, it can be said that that brand has a high or positive consumer-based brand equity. In contrast, if consumers react negatively in the same situation, that brand can be said to have a low or negative consumer-based brand equity. The determinants of brand equity were initially presented by Aaker (1991) from the perspective of the consumers in terms of brand name, brand awareness, perceived quality, and brand associations (Muqaddas and Ahmad, 2016). A developed consumer-based brand equity conceptualization of Aaker (1991) was incorporated in a study by Sözer et al. (2017): brand awareness, perceived quality, brand associations, and brand loyalty.

Keller (1993) took Aaker's study one step further, identified consumer-based brand equity measurement methods, and encouraged managers to take a more strategic approach to brand equity (Muqaddas and Ahmad, 2016). However, the contribution of Aaker (1991) and Keller (1993) in the literature concerning consumer-based brand equity was criticized and challenged (Veloutsuo et al., 2020). Chatzipanagiotou et al. (2016; 2019) approached brand equity as a process suggesting that consumer-based brand equity is nonlinear and complex where key consumer behavioral outcomes should be integrated into the consumer-based brand equity formation process. This means that the journal articles of Veloutsuo et al. (2020) and Chatzipanagiotou et al. (2016; 2019) lack agreement with most of the literature that uses a linear consumer-based brand equity model that is purely conceptual. The claim of the studies of Chatzipanagiotou et al. (2016; 2019) is supported by a research article by Baalbaki and Guzmán (2016) that consists of critical points that were missed by the consumer-based brand equity conceptualization found in the works of Aaker (1991) and Keller (1993). Baalbaki and Guzmán (2016) stated that neither author operationalized a scale for measuring brand equity nor considered what is important for consumers, implying that there is a need for empirically validated research based on consumer perceived consumer-based brand equity.

D. Conceptual Framework

The theoretical underpinnings of this study are: (1) Consumer Perceived Consumer Based Brand Equity (2) Theory of Planned Behavior (3) Stimuli Response Model.

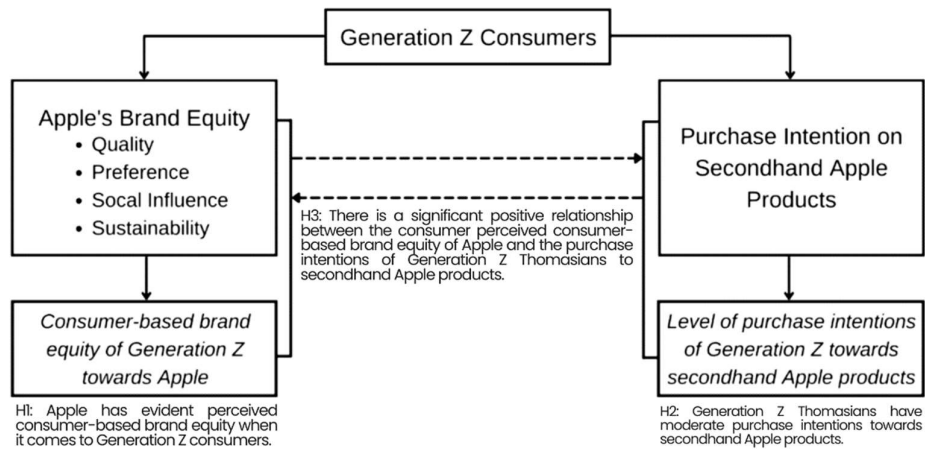


Fig 1: The Conceptual Framework

The conceptual framework shows the interconnection of the variables in this study. Brand equity of Apple is determined by the quality of their products and services, consumer preference, consumer social influence, and sustainability. This implies that consumers' positive association of these factors to Apple leads to an evident brand equity among consumers. Apple continues to possess high brand equity which has been a vital factor in determining not only the general consumer purchase intention but the purchase intentions of consumers towards secondhand Apple products as well. This customer-based brand equity is reflected by the attitude, subjective norms, and perceived behavioral control of the consumers. With these factors and their correlation shed light upon, the researchers were able to study further and test the hypotheses presented.

III. METHOD

A. Research Design

This study used a quantitative research design for the questions that were given to the respondents and were measured through statistical data. This study is a descriptive correlational study method that measured the relationship of Apple's brand equity and purchase intentions of Generation Z Thomasiens to secondhand Apple products.

B. Subjects and Study Sites

The researchers targeted the age demographic of Generation Z for its respondents. Studies show that this age demographic heavily impacts brands (Francis and Hoefel, 2018). Moreover, crucial for brands to understand this group for market growth and having a competitive edge (Pichler et al., 2021). The researchers chose to focus on this demographic because no study has investigated these group of consumers' purchase intention of secondhand consumer electronic brands.

For the sample size of this study, the recommended sample size is 96 students as computed from 44,791 undergraduate population of the University of Santo Tomas with a Raosoft calculator. The researchers chose a confidence level of 95% and a 10% margin of error. The researcher chose this study site for convenience, given that the researchers are also students at the said university

C. Data Gathering Procedure

The first part of the survey consisted of two questions. One demographic question relating to age and one psychographic qualifying question. These are the criteria that were considered for the respondents and their responses to be valid.

The second part of the survey assessed the respondent's pre-existing outlook on the brand Apple. The researchers used twenty (20) close-ended statements based on a 4-point Likert scale which measured the consumer-based brand equity dimensions of Quality, Preference, Sustainability, and Social Influence of the brand Apple among respondents ranging from one (strongly disagree) to four (strongly agree).

The last part of the survey assessed the respondent's purchase intention towards secondhand apple products. The researchers used twenty (20) close-ended statements also based on a 4-point Likert scale.

Taking the fight against the global pandemic brought by COVID-19 into consideration where the mobility of people in the Philippines is highly affected, it is important to use resources that could be easily tapped into that had a wide reach (Go et al., 2020). The researchers incorporated the research instruments into a survey questionnaire utilizing free online software, Google Forms, and Google Sheets. The process of collecting the data was as follows. The survey was launched into the available internet platforms where the presence of the Thomasian community is prevalent. Data from qualified respondents were the only ones that were acknowledged and analyzed by the commissioned professional statistician.

D. Data Validity and Reliability

Prior to administering the survey, 30 university students were pre-tested. From this pre-testing, the psychometric measures of the consumer-based brand equity and purchase intention scales are validated through Cronbach alpha for internal consistency and reliability, and the results indicate very good. The reliability test consumer-based brand equity got a result of .810 reliability. Purchase Intention got a result of .905 reliability. The results indicate very good reliability. Furthermore, one industry expert and two statisticians have assessed whether everything is fit to be deployed. Refinements have also been made based on their feedback.

E. Data Analysis

Employing a non-probability convenience sampling, a total of three hundred sixty students (360) in the University of Santo Tomas within the age bracket of 18-25 years old have responded. Of these, two hundred seventy-four (274) were found to be valid and have considered purchasing secondhand consumer electronics. Then, the researchers interpreted the data gathered with a 4-point Likert Scale for Brand Equity and Purchase Intention. Refer to Table 1 and 2 for the criteria used to quantify the descriptive responses. Mean and Standard Deviation were used to quantify the brand equity of Apple and the level of purchase intention of the respondents and correlation analysis was utilized to assess the relationship between the two variables stated.

TABLE I
LIKERT SCALE FOR BRAND EQUITY

| Numerical Scale | Statistical Limit | Range | Interpretation |
|------------------------|--------------------------|-------------------|-----------------------|
| 4 | 4.00 - 3.25 | Strongly Agree | Very Evident |
| 3 | 3.24 - 2.50 | Agree | Evident |
| 2 | 2.49 - 1.75 | Disagree | Somewhat Evident |
| 1 | 1.74 - 1.00 | Strongly Disagree | Not Evident |

TABLE III
LIKERT SCALE FOR PURCHASE INTENTIONS

| Numerical Scale | Statistical Limit | Range | Interpretation |
|------------------------|--------------------------|----------------|-----------------------|
| 4 | 4.00 - 3.25 | Strongly Agree | Very Evident |

| | | | |
|---|-------------|-------------------|------------------|
| 3 | 3.24 - 2.50 | Agree | Evident |
| 3 | 2.49 - 1.75 | Disagree | Somewhat Evident |
| 1 | 1.74 - 1.00 | Strongly Disagree | Not Evident |

IV. RESULT AND DISCUSSION

TABLE IIIII
BRAND EQUITY AMONG GEN Z THOMASIANS

| Psychometric Measures | Mean | Standard Deviation | Interpretation |
|-----------------------|------|--------------------|------------------|
| Preference | 2.56 | .6696 | Evident |
| Social Influence | 2.69 | .6249 | Evident |
| Quality | 3.26 | .5866 | Very Evident |
| Sustainability | 2.48 | .5849 | Somewhat Evident |
| Overall Brand Equity | 2.75 | .4258 | Evident |

H1: Apple has a high consumer perceived consumer-based brand equity when it comes to Gen Z Thomasians. Table III shows that the mean of the response of the Generation Z consumers on the constructs of Preference (M = 2.56) and Social Influence (M = 2.69) is interpreted as evident. This concludes that the brand Apple is preferred by young consumers and is influential among this cohort. The construct of Quality (M = 3.26) is interpreted as very evident. This shows that young consumers agree that products of the brand Apple are of Quality. However, the construct of sustainability (M = 2.48) is somewhat evident. Therefore, it shows that the brand Apple is viewed as not sustainable among young consumers. In total, the overall brand equity of Apple to young consumers is evident as data shows M = 2.75. This affirms the researchers' first hypothesis.

TABLE IVV
LEVEL OF PURCHASE INTENTIONS OF SECONDHAND APPLE PRODUCTS AMONG GEN Z THOMASIANS

| | Mean | Standard Deviation | Interpretation |
|--------------------|------|--------------------|----------------|
| Purchase Intention | 2.83 | .4785 | Moderate |

H2: Filipinos have moderate purchase intentions towards secondhand Apple products. Table IV shows that the mean of the response of the Generation Z consumers on their purchase intentions towards secondhand Apple products. The response is interpreted as moderate (M = 2.83). The result affirms the researchers' 2nd hypothesis and affirm that the respondents have considered secondhand apple products as a choice to purchase among many products that are currently offered in the present consumer electronics market.

TABLE V
RELATIONSHIP BETWEEN APPLE'S BRAND EQUITY AND THE LEVEL OF PURCHASE INTENTIONS TOWARDS SECONDHAND APPLE PRODUCTS

| **Correlation is significant at the .01 level (2-tailed) | R |
|----------------------------------------------------------|--------|
| Preference | .366** |
| Social Influence | .201** |
| Quality | .447** |

| | |
|-----------------------------|---------------|
| Sustainability | .264** |
| Overall Brand Equity | .462** |

H3: There is a significant positive relationship between the consumer perceived consumer-based brand equity of Apple and the purchase intentions of Filipinos towards secondhand Apple products. Referring to Table V, the analysis reveals that Preference ($r = .366, p < .01$), Social Influence ($r = .201, p < .01$) and Sustainability ($r = .264, p < .01$) have significant low positive relationship to purchase intention. This shows that the brand equity construct of Preference, Social Influence, and Sustainability has little impact on the intentions of Generation Z consumers to purchase secondhand Apple products. Moreover, the analysis further reveals that Quality has a significant moderate positive relationship to purchase intention ($r = .264, p < .01$). This suggests that the brand equity construct of Quality impacts the intentions of Generation Z consumers to purchase secondhand Apple products. Overall, brand equity has a significant moderate positive relationship to purchase intention. This concludes that Apple's overall brand equity impacts the purchase intentions of Generation Z consumers towards secondhand Apple products. It is clear from this result that Apple is known for their quality and this quality motivates consumers to purchase secondhand Apple products. Thus, affirming the researchers' final hypothesis.

V. CONCLUSION

There are studies where consumer-based brand equity is stated as something that is obtained from the consumer's mental associative knowledge networks, which are formed through time by experience, exposure, and word-of-mouth (Mohan et al., 2017; Adetunji, 2018; Koay et al., 2020), and how to measure the consumer-based brand equity. But there are little to no studies about the consumer-based brand equity of consumer electronic brands like the global brand Apple. This study contributes to the dearth of literature about Apple's consumer-based brand equity and presents relative statistical findings among Generation Z Thomasian consumers.

The results of this study concluded that the overall brand equity of Apple to the chosen demographic consumers is evident. In terms of purchase intentions, Yunus & Rashid (2016) did a study on consumer purchase intentions in relation to phone brands from China, defining purchase intention as personal action tendencies according to brand. Similarly, this study also explored studies about purchase intentions of consumers similar to the study of Yunus & Rashid (2016), focusing on the level of purchase intention of Generation Z Thomasian consumers towards secondhand Apple products. The findings of this study revealed that these consumers are open to the idea of purchasing secondhand Apple products. Ultimately, this study presents confirmation that there is a significant relationship between Apple's consumer-based brand equity and the level of purchase intentions of Generation Z towards secondhand Apple products.

A. Recommendations

Due to Apple's evident consumer-perceived consumer-based brand equity, secondhand consumer electronics of Apple will continue to be relevant. With this, it is recommended for sellers of these types of items to continue to leverage on Apple's brand equity, highlighting its renowned quality, social influence, and preference among masses. Doing this further entices potential customers into purchasing these products by allowing them to perceive these as worthwhile investments. Meanwhile Apple also continues to generate revenue from such users through the continued use of their software. As for consumers, secondhand Apple products are still commendable consumer electronics that can serve as worthy options for choosing one's next consumer electronic for more affordable prices.

B. Limitations and Future Direction

For future research, it would bring much-added insight to explore factors beyond those that have been discussed within this study. Having tackled only brand equity and purchase intentions, it is recommended for future research to account for other possible factors that may affect or influence purchase intentions and brand equity such as financial desirability, marketing desirability, and product desirability. A comparison with other leading brands may also be made in order to substantiate the results further. Lastly, future research may expand their target respondents to more than just students from a particular university.

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