ANALYSIS OF INFLUENCE OF BRAND EQUITY TOWARD CONSUMER BUYING DECISION ON SAMSUNG SMARTPHONE

(A CASE STUDY IN PRESIDENT UNIVERSITY, CIKARANG)

By

Alfin Fellialnyoo

014200900200

A thesis presented to the

Faculty of Economic President University

In partial fulfillment of the requirement for

Bachelor Degree in Economics Major in Management

January 2013
THESIS ADVISER
RECOMMENDATION
LETTER

This thesis entitled “ANALYSIS OF INFLUENCE OF BRAND EQUITY TOWARD CONSUMER BUYING DECISION ON SAMSUNG SMARTPHONE (A Case Study in President University, Cikarang)” prepared and submitted by AlfiN Fellialnyoo in partial fulfillment of the requirements for the degree of Bachelor in the Faculty of Economics has been reviewed and found to have satisfied the requirements for a thesis fit to be examined. I therefore recommend this thesis for Oral Defense.

Cikarang, Indonesia, 25th January 2013

Acknowledge by, Recommended by,

Irfan Habsjah, MBA, CMA Erny Hutabarat, MBA
Head of Management Thesis Adviser 1
Study Program
DECLARATION OF ORIGINALITY

I declare that this thesis, entitled “ANALYSIS OF INFLUENCE OF BRAND EQUITY TOWARD CONSUMER BUYING DECISION ON SAMSUNG SMARTPHONE (Case Study in President University, Cikarang)” is, to the best of my knowledge and belief, an original piece of work that has not been submitted, either in whole or in part, to another university to obtain a degree.

Cikarang, Indonesia, 23rd January 2013

Alfin Fellialnyoo
The Panel of Examiners declared that the thesis entitled “ANALYSIS OF INFLUENCE OF BRAND EQUITY TOWARD CONSUMER PURCHASING DECISION ON SAMSUNG SMARTPHONE (Case Study in President University, Cikarang)” that was submitted by Alfin Fellialnyoo majoring in International Business from the Faculty of Economic was assessed and approved to have passed the oral examinations on

I.G.N.P Luhur Korsika, B.Sc, MIB
Chair – Panel Examiners

Dr.DEA.Erwin Ramedhan
Examiner I

Ir.Erny Hutabarat, MBA
Examiner II
ABSTRACT

This research aims to determine how much influence the brand awareness, perceived quality, brand association and brand loyalty to buying decision on Samsung Smartphone. Population used in this research is that consumers who own Samsung Smartphone at President University. Sample in this research is 70 respondents, which spread in President University and Student Housing, Cikarang. Using Quantitative method, The data that have met the test: validity, reliability, classical assumption, F test and T test, coefficient determination, and multiple regression analysis to produce the regression equation as follows: \( Y = 0.250 \, X2 + 0.259 \, X3 + 0.253 \, X4 \). Where Y is the buying decision, X2 is the perceived quality, X3 is the brand association, and X3 is the brand loyalty. T test showed that the three independent variables researched proved to have positive and significant impact on consumer purchasing decision as dependent variables. F test showed that the four independent variables is simultaneously influence the dependent variable. From the T-test, it shows that three independent variable has partially influence to purchasing decision with brand association gives the most significance influence. Based on the adjusted \( R^2 \), it indicates that 34.0% of the consumer purchasing decision variables can be explained by three independent variables in the regression equation. The remaining 66% percent is explained by other variables outside of the four variables used in this research.

Keywords: brand equity, buying decision, brand awareness, perceived quality, brand association, brand loyalty and Samsung Smartphone
ACKNOWLEDGEMENT

First of all I would like to thank to God who give me strength and patience to do the thesis work. I would like to deliver my appreciation to all people that always given me support to finish my study in President University, especially to:

1. All of my family, my mom, my dad, my sisters, and my grandmother. Thank you very much for supporting and loving me all the time.
2. My thesis adviser, I would like to say Thank you very much Mrs. Erny Hutabarat for her patience to give me direction, advices, supports and revisions to finish my thesis.
3. All of my best friends in dormitory, especially: Najib Maulidan, Lie Willy Andrew, Andrea Saputra, Danny Wijaya, Wirryanto Eko, Advart Sutanto, Fredy Hermanto, William Wijaya, Ndaru Guritno, and Adyanto Mendila, Sugi, Dana Ferriyus Mudzakir Hakiki, Suriansen Wirianito. Thank you for spending a great time together.
4. All of my friends in International Business and other majors which I cannot mention one by one.
5. For all people who have spent their time, think and contribution for filling my questionnaire, without your contribution I will not be able to finish this thesis, therefore through this opportunity I would like to say thank you very much and I appreciate for all people that already answer my quetionnaire.

Cikarang, January 2013

Alfin Fellialnyoo
TABLE OF CONTENTS

THESIS ADVISER RECOMMENDATION LETTER ........................................ i
DECLARATION OF ORIGINALITY .......................................................... ii
PANEL OF EXAMINERS APPROVAL SHEETS ....................................... iii
ABSTRACT ......................................................................................... iv
ACKNOWLEDGEMENT ....................................................................... v
TABLE OF CONTENTS ....................................................................... vi
LIST OF TABLES .............................................................................. x
LIST OF FIGURES ........................................................................... xi
LIST OF ACRONYMS ........................................................................ xii

CHAPTER I: INTRODUCTION ............................................................. 1
  1.1. Background of Study .................................................................. 1
  1.2. Company Profile ....................................................................... 16
      1.1.1. Samsung ............................................................................ 16
      1.1.2. Samsung Mobile Phone .................................................... 17
      1.1.3. Samsung Company History .............................................. 14
  1.3. Problem Identified ..................................................................... 19
  1.4. Statement of Problem ............................................................... 20
  1.5. Research Objectives .................................................................. 20
  1.6. Significance of Study .................................................................. 20
1.7. Theoretical Frameworks ................................................................. 21
1.8. Scope and Limitation ................................................................. 22
1.9. Assumption and Hypothesis ....................................................... 22
1.10. Definition of Terms ................................................................. 23
1.11. Thesis Outline ......................................................................... 21

CHAPTER II: LITERATURE REVIEW ..................................................... 24

2.1. Brand ....................................................................................... 23
2.2. Brand Equity .......................................................................... 37
   2.2.1. Brand Awareness ............................................................. 25
   2.2.2. Perceived Quality ............................................................ 27
   2.2.3. Brand Association ........................................................... 28
   2.2.4. Brand Loyalty ................................................................. 30
2.3. Consumer Buying Decision Decision Process ............................. 31
2.4. Previous Research Table ........................................................... 47

CHAPTER III: METHODOLOGY .......................................................... 38

3.1. Research Method ..................................................................... 38
3.2. Research Instrument ............................................................... 39
3.3. Measurement scale and Data analysis ....................................... 40
3.4. Sampling Design .................................................................... 41
3.5. Validity and Reliability ............................................................ 43
CHAPTER IV: ANALYSIS OF DATA AND INTERPRETATION OF RESULT

4.1. Validity .............................................................................................................. 49
4.2. Reliability ........................................................................................................... 50
4.3. Descriptive statistics .......................................................................................... 51
4.4. Variable Frequencies .......................................................................................... 61
4.5. Classical Assumption test ..................................................................................... 67
4.6. Interpretation of result ........................................................................................ 67

CHAPTER V: CONCLUSION AND RECOMMENDATION ........................................ 73
5.1. Conclusions .......................................................................................................... 74
5.2. Recommendations ............................................................................................... 75

REFERENCES ........................................................................................................... 87
LIST OF TABLES

Table 1.1 Smartphone Classifications................................................................. 4
Table 1.3 Mobile phone shipments and market share......................................... 6
Table 1.4 Percentage of housewifery that use telephone and mobile phone ....... 7
Table 2.4 Previous researches ......................................................................... 37
Table 3.3.1 Likert Scale .................................................................................... 40
Table 4.1 Validity results .................................................................................. 40
Table 4.2 Reliability results .............................................................................. 51
Table 4.5.2 VIF table ....................................................................................... 64
Table 4.6.1 F test results .................................................................................. 69
Table 4.6.2 T test and table of significant results ............................................. 70
Table 4.6.3 Model Summary ............................................................................ 71
Table 4.6.4 Standardized Coefficient............................................................... 72
LIST OF FIGURES

Figure 1.2 Samsung Smartphone Products .......................................................... 8
Figure 1.5 Smartphone market overview ............................................................. 8
Figure 1.6 Smartphone penetration based on brands 2011 ................................. 10
Figure 1.1.1 Samsung Products........................................................................... 17
Figure 1.1.2 Samsung Mobile Phone ................................................................. 18
Table 1.7 Theoretical Frameworks ..................................................................... 22
Figure 2.2.1 Level of awareness......................................................................... 27
Figure 2.3 Purchase Decision processes ............................................................ 51
Figure 4.3 Demographic statistics .................................................................... 52
Figure 4.4 Variable Frequencies ....................................................................... 56
Figure 4.5 Classic Assumption tests .................................................................. 62
LIST OF ACRONYMS

OS : Operation Systems
SPSS : Statistical Packages for Social Science
VIF : Variance Inflation Factors
I. INTRODUCTION

1.1 Background of the study

As we already know that Technology has affected society and its surroundings in a number of ways. And yet, one of the greatest impact of technology was the economy itself to get innovation in changing the business activity which explained According to Brian Arthur (2009) said that the standard way to define the economy—whether in dictionaries or economics textbooks—is as a “system of production and distribution and consumption” of goods and services. And we picture this system, “the economy,” as something that exists in itself as a backdrop to the events and adjustments that occur within it. Seen this way, the economy becomes something like a gigantic container for its technologies, a huge machine with many modules or parts that are its technologies—its means of production. To support this opinion, Kotler (2008) said that Technology is also helping companies to distribute product more efficiently and effectively. And it’s helping them communicate with costumer in large groups or one-by-one.

Technology has an important part that defines how the business is going on. According to Kotler (2008), Many Company and Industry use technology as their basis to their Business activity. Today, Almost every company, large or small, is touched in some way by global competitions. According to Miller and Muir (2004) a final driver is simply that companies are looking for new markets, which often means following a competitor into a new market. No one wants to get left behind by the competition, and because of e-commerce, today the competition includes companies halfway around the world.

In this term, it is clear that whether it is in the domestic and also globally, Companies and Industries are strengthening themselves to be the best for the costumers. According to Keller (2003), More and more firms have come to the realization that
one of their most valuable assets is the brand name associated with their product or services. According to Kapferer (2008) there are no brands without products or services to carry them. This will have great consequences for the method of measuring financial value. Although many people claim that brands are all and everything, brands cannot exist without a support (product or service).

According to American Market Association (2011), A Brand is Name, term, design, symbol, or any other feature that identifies one seller's good or service as distinct from those of other sellers. According to Brian and Fjelddhal (2007) A brand is a promise: it contains a set of emotional attributes for which a customer to pay a premium. Every aspect of company’s message, product and service needs to be aligned with the brand promise. That promise must be unique, valued and consistently delivered. And whereas may once have been the primary domain of marketers, it is now the concern of everyone at the company. According to Leslie and Malcolm (2003) knowing a brand is giving customer more advantage; Brands offer consumers a means of minimizing information search and evaluation. According to Keller (2003) the relationship between a brand and the customer can be seen as a type of bond or pact. Customers offer their trust and loyalty with the implicit understanding that the brand will behave in certain way and provide them utility through consistent product performance and appropriate pricing, promotion, and distribution programs and actions. To the extent that customer realize advantages and benefits in purchasing the brand, and as long as they derive with satisfaction from product consumption, customer are likely to continue to buy it.

According to Mellisa (2009) The value of a brand referred to as its equity is determined by a number of influences and factors. In combination, these increase both the market value of a brand as well as the measurable value to the business. The value is called Brand Equity and the first step in identifying the value of brand equity is to understand what it is, what really contributes to the value of a brand. According to Aaker (1991) Brand Equity is a set of brand assets and liabilities associated with a
brand, name and symbol, that add to or diminish the value provided by a goods or services to the company or its customers. The purpose of brand equity is to measure the value of a brand. A brand encompasses the name, logo, image, design and perceptions that identify a product, service, or provider in the minds of customers. It takes shape in advertising, packaging, and other marketing communications, and becomes a focus of the relationship with consumers. Brand equity got the benefit to endow to products and services. According to Keller (2003) that although brand equity is one of the most crucial concepts in brand management, there is not a commonly accepted definition for it. As the points of view differ, so do the explanations. Therefore, there are a variety of definitions of brand equity and its methods to measure. From a financial point of view, brand equity is a valuable asset for a firm, which is beneficial for cash flow. On the other hand, from a marketer point of view, the concept implies the importance of a brand to its customers. This means that brand equity is the something that pushes the willingness for customers to continue to purchase the brand or not. And most importantly a successful brand building helps profitability by adding value that entices customers to buy. According to Aaker (1991) the basic concept of brand equity can be grouped into 4 elements, namely brand awareness, perceived quality, association of the brand, brand loyalty.

The rapid change of technological changes creating the computer systems, data, hardware and software, and the development of communication. With this development, people try to re-adapt and adjust in line with these developments. Technology also endemic to the network information, thus making the development of communication technology in the utilization changes. Without realizing the development of more advanced network of existing and perceived experiencing rapid development. As the example of the changes of communication in terms of technology is a device called telephone. A telephone is 2 connected devices that can transmit voices to be heard to other people. People used telephone when they want to talk to others. Now, technology changed telephone to something better. People cannot easily bring telephone because telephone has a wire connected to the source that will
connect to another telephone. So, people make a device that can helps to talked to other people and you can bring it anywhere you want which is the Mobile Phone. A mobile phone (also known as a cellular phone, cell phone and a hand phone) is a device that can make and receive telephone calls over a radio link while moving around a wide geographic area. By connecting to a cellular network provided by a mobile phone operator, allowing access to the public telephone network. And yet there are 2 types of mobile phone, which is the Feature phone and Smartphone. A feature phone is a mobile phone, which at the time of manufacture is not considered to be a Smartphone due to it lacking in several features, but nevertheless has additional functions over and above standard mobile services. It is intended for customers who want a lower-price phone without all the features of a Smartphone. And Smartphone is a mobile phone built on a mobile operating system, with more advanced computing capability and connectivity than a feature phone. Many modern Smartphone also include high-resolution touch screens and web browsers that display standard web pages as well as mobile-optimized sites. Wi-Fi and Mobile Broadband provide high-speed data access. Two of them were the innovation of communication technology that is change the way of communicates.

Table 1.1: Nielsen Mobile Classification

<table>
<thead>
<tr>
<th>MOBILE PHONE CLASS</th>
<th>SMARTPHONES</th>
<th>NON-SMARTPHONES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Touchscreen Smartphones</td>
<td>Non Touchscreen Smartphones</td>
</tr>
<tr>
<td>DEFINITION</td>
<td>Open OS* allows installation of applications. Features touchscreen. (May also feature QWERTY or alpha-numeric keypads alongside touchscreen). * Open OS* includes: iOS, Android, BlackBerry, Symbian, Maemo, Windows, Linux (Web OS), Bada</td>
<td>Open OS* allows installation of applications. No touchscreen. (Only devices with QWERTY or alpha-numeric keypads are included).</td>
</tr>
</tbody>
</table>

To see the differences between Smartphone and non-Smartphone According to Nielsen (2010), this is the mobile phone classification of Smartphone and non-Smartphone. In the non-Smartphone column, there are 2 types of phone, which are the Feature phone, and Multimedia phone. The Feature is the first model of hand phone and based on the explanation there are no touch screen, QWERTY, keypad and no Open OS too. For Multimedia phone, there are touch screen and/or QWERTY but the big difference is it does not have an Open OS. To Explain about Open OS, According to Gartner (2011), An open OS is supported by third-party applications written by a notable developer community. Third-party applications can be installed and removed, and they can be created for the device’s OS and Application Programming Interfaces. The OS must support a multitasking environment and user interface that can handle multiple applications simultaneously. For example, it can display e-mail while playing music, and for the example of its OS itself is iOS from Apple, Android for Samsung, Symbian for Nokia, etc. And the next is a Non Touch screen Smartphone, which has an Open OS, QWERTY keypad and no touch screen. And the last is the Touch screen Smartphone, which has Open OS, QWERTY, Touch screen. These are the explanation for the different between Smartphone and Non Smartphone.

The brand that the researcher wants to focus is Samsung in terms to its Smartphone that related to the problems that the researcher identified. Samsung is a South Korean multi-national company that headquartered in Samsung City. Samsung has a mission make a better world through a variety of business today include technology high level, semiconductor, skyscrapers and construction, petrochemicals, fashion, medicine, finance, hotels and much more. Samsung Electronics, leads the global market in the manufacture of goods high-tech electronics and digital media and Smartphone is one of their products that determine how they have changed from a featured phone. And even after changing it from featured phone, there is a new innovation of Smartphone, which called a Phablet that allows people to have a Smartphone with a big-screened like tablets. According to Ron (2012) that Phablet is
a word that you will be seeing more often as a new breed of hybrid Smartphone makes its way to the marketplace. The term has been coined to describe a device that fills the gap between a cell phone and a tablet computer, taking the first two letters of the word phone, ph, and adding them to the last five letters of tablet to form the word Phablet. According to Techpinions.com (2013) One of the more unique Smartphone designs in the market are ones that sport a 5.3” to 6.1” screen and are called Phablets by some in the industry. The author calls them tweeners, a cross between a large smartphone and a small tablet but in a single package. Up to now, the market for these Phablet’s has mainly been in Korea and other parts of Asia and while available in the US, the market for it over here is quite small compared to its demand in Asia. The bigger of the phone of course needs more things related to its hardware and Phablets gets in into the hardware. According to Techradar.com (2013) Growing awareness of larger phones is helping move sales upward, he explained, while at the same time manufacturers are taking an experimental approach, throwing phones of varying sizes on the market to see what sticks. Combine that with a perfect storm of chipmakers piling on CPUs with greater graphics performance for phones - chips that were once only imaginable in tablets - and the move to bigger screens starts to make sense. To consider what Phablets that Samsung has, the researcher listed some of them.

The first product is Samsung Galaxy Note with variants of Galaxy Note 2. According to Samsung.com, Galaxy note is a new type of Smartphone, borne insight and innovation. Samsung Galaxy Note is the ultimate on-the-go device, which consolidate core benefits of diverse mobile devices while maintaining Smartphone portability. Customer research indicates that people always want to do more tasks much better, even on the go, whether it is web browsing, email, games, or viewing photos and videos. Customers usually carry multiple devices, because each device has unique benefits that work best in a particular situation. Therefore, consumers constantly switch devices to use the right device at the right time. Even for customers with multiple smart devices, they still carry around a notepad for writing down ideas.
There is an emerging desire for a primary device for on-the-go use that could consolidate the core tasks of multiple devices as well as recreate the ease and simplicity of using a pen and paper. And some features that Samsung Galaxy Note gives to customer there are;

1. **Multi Window**: do Multiple task at the same time with no screen transition

2. **Popup Note**: which allows users to instantly conveniently write down directions, phone numbers, and other information while on a call. Popup Note will intuitively open when you pull out S Pen or double tap the screen. Popup Video and Browser allow users to watch video or browse the web while performing other tasks

3. **Photo Note**: Treasure your memories with handwritten notes on the front or back of your photos

4. **Easy Clip**: Crop an image from any screen to save or share easily. And, just draw a line to select text. You can easily capture the instant inspiration.

5. **Paper Artist**: Provides an emotional & aesthetic photo editing experience. Choose from various picture-editing effects.

6. **Handwriting on Email**: Send handwritten notes via Email or handwrite memos to yourself in S Planner. Like a post card, you can send your emotional feeling now via Email with handwritten notes. Like your paper planner, you can write down your tasks in a more personal and intuitive way.

7. **Enchanted S Note**: More amusing effects & new templates were added. Use Sketch effect for various photo effect and image filters with Color Picker, you can pick any color you want directly from any images and draw with it

8. **Upgraded with Android™4.1, Jelly Bean**: With the fastest and smoothest version of Android™ yet, everything feels fast, fluid, and smooth.

The second product is Samsung Galaxy Tab with other variants 10.1, 7 Plus and Tab 2. Samsung Galaxy Tab is the world’s thinnest and lightest 10-inch tablet. Experience the ultimate in entertainment with a Dual Core processor, the latest Android
Honeycomb platform 3.1, the latest Flash player and Samsung’s intuitive Touch wiz interface. The new tab is not only incredibly bright; it’s also the fastest and lightest 10-inch tablet around. The Galaxy Tab 10.1 takes web browsing, gaming, entertainment and multi-tasking on the go to a new level. And what Galaxy Tab focuses here is better in Design, Screen, Home screen, Multi-tasking, Web Browsing, Speed, Reading, Music, Communication, Office, Multimedia, Imaging, Accessories, Messaging and Security.

And the third is the Samsung Galaxy S with variants of SII and SIII. Samsung Galaxy S provides a powerful mix of advanced hardware for a mobile experience that simply outperforms the competitors. The slim 9.9mm Samsung Galaxy S is packed with an over-sized 4.0” Super AMOLED display, 1GHz processor, ultra-fast data transfer, and generous 8 or 16GB memory plus Micro SD supported application. The SII giving it more specific application and features like Allshare where the Smartphone can be integrated with TV, laptop or even audio systems. 8 Megapixels HD where you can take a picture with a decent result, HD recording & playback videos. And for SIII also got some improvements like giving a feature named Smart Stay, where the phone will be automatically off when people doesn’t look at the phone (giving them an eye censor so the phone can automatically off), more advanced text a message as well as sending a video with it, giving them much more stronger signals and Faster downloads compared to the 3G network.

From all the explanation, Samsung Products are using the AMOLED display. According to Wisegeek.com (2012) AMOLED is the commonly used acronym for the electronic display technology known as Active-Matrix Organic Light-Emitting Diode. AMOLED displays build on organic light-emitting diode (OLED) passive-matrix technology to produce a bright display that does not require a backlight, and consumes extremely low levels of power. And Samsung also put HD (High Definition) to it’s display, giving the picture seems to more-like real and crystal-clear for it’s view and for the camera is measured around 3 MP to 8 MP (Megapixels)
Camera that suited in the back of the Smartphone were excellent to give some extra features for the phone. And what interesting is now Smartphone is having something that CPU has which is the GPU or graphics processing unit. This can help the Smartphone graphical and visual data, like displaying a 3D graphics. As for the software, one of their systems that Samsung use is Android. Android itself is an interesting name. According to Peter (2012) the word “android” is a name for a robot that is very human looking and acting. The symbol for the Android operating system is a little robot, and it’s quite possible that someone on the development team had a sense of humor and figured the little guy was hungry. Of course, the development team may have wanted to see if they could “one up” Apple, which names its operating systems after cats.

Some of Android OS name’s were a name of a food like for example Ice Cream Sandwich, Honey Comb, etc were made because maybe this can help the consumer remember it’s operating systems rather than creating some of other names that is not really attractive to be remembered. Android offers an Open-Source Application that the researcher already explained it before that it can helps people to do a multi-tasking in their phone without afraid being disturb by lag when opening more than 1 applications in their phone. Not only that, Android also give many awesome features like smart touch-screen keyboard, Sharing media (photos, video, etc), browsing the internet, accessing email, playing music, etc. According to Peter (2012) When asked why desserts, Google doesn’t really give any kind of specific explanation. When Randall Sarafa, a Google spokesman, was asked that question, Google answered, “It’s kind of like an internal team thing, and Google prefer to be a little bit — how should The author say — a bit inscrutable in the matter, the author will say… The obvious thing is that, yeah, the Android platform releases, they go by dessert names and by alphabetical order for the most part.” These are the figures of Samsung products;
Samsung GALAXY Note

Specifications

Network
- HSPA+ up to 21Mbps 850/900/1900/2100
- 4G LTE
- EDGE/GPRS 850/900/1800/1900
 ※ Network differs by country

Processor
- 1.4GHz Dual Core Processor

Display
- 5.3” WXGA (1280 x 800) screen*
- HD Super AMOLED

S Pen Optimized Features
- S Pen Experience
  - S Note*, S Planner and Email with handwriting integration
- Popup Note / Video / Browser**, Photo Note / Frame**, Paper Artist*

Video
- 1080p Full HD video recording & playback
  - Recording: 1080p@24~30fps
  - Playback: 1080p@30fps

Value-added Features
- Samsung Touchwiz Samsung Live Panel UX
- S Memo & S Planner & S Choice (Apps for GALAXY Note)
- Samsung Apps
- Samsung Kies 2.0/ Samsung Kies air
- Upgraded Samsung Hubs: Users can enjoy all the benefits of Samsung Hubs, including new versions of Reader Hub, Video Hub, Music Hub and, for the first time for GALAXY Note users, Learning Hub.
- New Samsung Gallery
- Google™ Mobile Services : Gmail™, Google Talk™, Google Search™, YouTube™, Android™ Market, Google Maps™ with Google Places™ and Google-Latitude™
- A-GPS, Gionass
Samsung GALAXY Tab

Size and Weight
- Size: 256.7 x 175.3 x 8.6 mm
- Weight: 565g

Display
- 10.1” widescreen
- 1280x800 WXGA TFT LCD
- 149 pixels per inch (ppi)
- 4-way rotation

Memory
- 1GB (RAM), 16/32/64 GB (ROM)

Cellular and Wireless
- HSPA+ 21, 850/900/1900/2100
- EDGE/GPRS 850/900/1800/1900
- Wi-Fi 802.11 a/b/g/n, Dual-band support (2.4GHz, 5GHz)
- Bluetooth 3.0
- Wi-Fi Direct

Processor
- 1GHz dual-core NVIDIA® Tegra™ 2 processor

Operating System
- Honeycomb, Android’s latest for tablets
- Multitasking & Split View support

Camera
- Back camera: HD(720p) Video recording,
  3MP auto-focus camera with LED flash
- Front camera: 2MP camera
- Instant SNS sharing: Email™, Messaging, Picasa
<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS</td>
<td>Android OS, V2.1 - Eclair or V2.2 - Froyo (downloadable via Kies)</td>
</tr>
<tr>
<td>Processor</td>
<td>S5PC111 (1GHZ)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>122.4 x 64.2 x 9.9 mm</td>
</tr>
<tr>
<td>Data Speed</td>
<td>HSDPA 7.2, HSUPA 5.76</td>
</tr>
<tr>
<td>Band 2G</td>
<td>850/900/1800/1900</td>
</tr>
<tr>
<td>Band 3G</td>
<td>850/1900/2100 for Telstra, 900/1900/2100 for other variant</td>
</tr>
<tr>
<td>LCD</td>
<td>4.0&quot; WVGA SUPER AMOLED</td>
</tr>
<tr>
<td>Camera</td>
<td>5MP AF w/o Flash</td>
</tr>
<tr>
<td>Battery</td>
<td>1500mAh</td>
</tr>
<tr>
<td>Memory / Internal</td>
<td>16GB/8GB</td>
</tr>
<tr>
<td><strong>Network</strong></td>
<td><strong>Battery</strong></td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>HSPA+ 21Mbps/HSUPA 5.76Mbps</td>
<td>1650mAh</td>
</tr>
<tr>
<td>HSDPA</td>
<td>Android Platform 4.0</td>
</tr>
<tr>
<td>HSUPA</td>
<td></td>
</tr>
<tr>
<td>Quad band GSM 850/900/1800/1900</td>
<td></td>
</tr>
<tr>
<td>UMTS 850/900/1900/2100</td>
<td></td>
</tr>
<tr>
<td><strong>AP</strong></td>
<td><strong>Message</strong></td>
</tr>
<tr>
<td>Dual Core Application Processor</td>
<td>SMS/IM/Email (XMPP, email)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td><strong>Audio</strong></td>
</tr>
<tr>
<td>125.3x69.8x9mm</td>
<td>MP3, OGG, AAC, AAC+, eAAC+, AMR-NB</td>
</tr>
<tr>
<td></td>
<td>AMR-WB, VMA, WAV, MID, AC3, M4A, WMA, XMF</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td><strong>Video</strong></td>
</tr>
<tr>
<td>4.3” WVGA SUPER AMOLED Plus</td>
<td>MPEG4, H.264, H.263, WMV, DivX, VC-1</td>
</tr>
<tr>
<td></td>
<td>Recording &amp; Playback 1080p30fps</td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td><strong>Image</strong></td>
</tr>
<tr>
<td>16GB/32GB</td>
<td>JPEG, PNG, GIF, WMIP, BMP, AGIF</td>
</tr>
<tr>
<td>MicroSD (up to 32GB)</td>
<td></td>
</tr>
<tr>
<td>MicroSD</td>
<td><strong>GPS</strong></td>
</tr>
<tr>
<td></td>
<td>A-GPS</td>
</tr>
<tr>
<td>Wi-Fi 2.4GHz &amp; 5GHz</td>
<td><strong>Convergence</strong></td>
</tr>
<tr>
<td></td>
<td>Easy WPBA (WPBA/WinPC, Wi-Fi Direct)</td>
</tr>
<tr>
<td></td>
<td>AllShare (DLNA 1.3)</td>
</tr>
<tr>
<td></td>
<td>Samsung Kies 2.0, Samsung Kies AIR</td>
</tr>
</tbody>
</table>
Figure 1.2: Samsung Smartphone Products

Source: Samsung.com/global
To see how Samsung can compete with other Brands in terms of Smartphone this picture these are how the competition resulting in year 2010 and 2011.

Table 1.3: Table of Smartphone Shipments and Market share

<table>
<thead>
<tr>
<th>Vendor</th>
<th>2Q11 Shipments</th>
<th>2Q11 Market Share</th>
<th>2Q10 Shipments</th>
<th>2Q10 Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>20.3</td>
<td>19.1%</td>
<td>8.4</td>
<td>13.0%</td>
</tr>
<tr>
<td>Samsung</td>
<td>17.3</td>
<td>16.2%</td>
<td>3.6</td>
<td>5.6%</td>
</tr>
<tr>
<td>Nokia</td>
<td>16.7</td>
<td>15.7%</td>
<td>24.0</td>
<td>37.3%</td>
</tr>
<tr>
<td>Research In Motion</td>
<td>12.4</td>
<td>11.6%</td>
<td>11.2</td>
<td>17.4%</td>
</tr>
<tr>
<td>HTC</td>
<td>11.7</td>
<td>11.0%</td>
<td>4.4</td>
<td>6.8%</td>
</tr>
<tr>
<td>Others</td>
<td>28.1</td>
<td>26.4%</td>
<td>12.8</td>
<td>19.9%</td>
</tr>
<tr>
<td>Total</td>
<td>106.5</td>
<td>100.0%</td>
<td>64.4</td>
<td>100.0%</td>
</tr>
</tbody>
</table>


The next picture explains about the Global market share of Smartphone brands. Apple still is the one who hold the market share. It increase 6,1%. And the second is Samsung. Samsung market share is increasing from 10,6% and the third is Blackberry which decreasing comparing to Blackberry with got decrease for it’s market share from 5,8 %. Samsung getting a good market growth this year comparing to other Brands. And comparing to Blackberry, Samsung is getting a lead, meaning that globally, many people buy and use Samsung as their Smartphone. The problem occurs when it comes to Indonesia, where it should be a good market for Samsung to get more consumers to use their Smartphone. As one of the oldest company in Indonesia, Samsung must be really understand about Indonesia’s market in terms of phone as the user of mobile phone is increasing each year and the telephone user is decreasing each year.
Table 1.4: Percentage of housewifery that has Telephone and Cellular Phone

<table>
<thead>
<tr>
<th>Provinsi/Province</th>
<th>Telepon/Telephone</th>
<th>Telepon Selular/Handphone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
<td>2009</td>
</tr>
<tr>
<td>Aceh</td>
<td>5.15</td>
<td>4.54</td>
</tr>
<tr>
<td>Sumatera Utara</td>
<td>10.36</td>
<td>9.54</td>
</tr>
<tr>
<td>Sumatera Barat</td>
<td>12.79</td>
<td>10.36</td>
</tr>
<tr>
<td>Riau</td>
<td>9.57</td>
<td>8.72</td>
</tr>
<tr>
<td>Kepulauan Riau</td>
<td>13.26</td>
<td>10.05</td>
</tr>
<tr>
<td>Jambi</td>
<td>8.11</td>
<td>5.54</td>
</tr>
<tr>
<td>Sumatera Selatan</td>
<td>9.15</td>
<td>8.26</td>
</tr>
<tr>
<td>Kepulauan Bangka Belitung</td>
<td>8.41</td>
<td>6.80</td>
</tr>
<tr>
<td>Bengkulu</td>
<td>7.01</td>
<td>6.75</td>
</tr>
<tr>
<td>Lampung</td>
<td>6.92</td>
<td>6.34</td>
</tr>
<tr>
<td>DKI Jakarta</td>
<td>35.42</td>
<td>32.68</td>
</tr>
<tr>
<td>Jawa Barat</td>
<td>13.46</td>
<td>12.24</td>
</tr>
<tr>
<td>Banten</td>
<td>16.80</td>
<td>12.17</td>
</tr>
<tr>
<td>Jawa Tengah</td>
<td>7.74</td>
<td>6.98</td>
</tr>
<tr>
<td>DI Yogyakarta</td>
<td>10.76</td>
<td>13.05</td>
</tr>
<tr>
<td>Jawa Timur</td>
<td>12.55</td>
<td>10.76</td>
</tr>
<tr>
<td>Bali</td>
<td>16.17</td>
<td>14.42</td>
</tr>
<tr>
<td>Nusa Tenggara Barat</td>
<td>4.06</td>
<td>4.07</td>
</tr>
<tr>
<td>Nusa Tenggara Timur</td>
<td>4.59</td>
<td>3.72</td>
</tr>
<tr>
<td>Kalimantan Barat</td>
<td>7.46</td>
<td>6.27</td>
</tr>
<tr>
<td>Kalimantan Tengah</td>
<td>6.77</td>
<td>7.65</td>
</tr>
<tr>
<td>Kalimantan Selatan</td>
<td>8.93</td>
<td>8.35</td>
</tr>
<tr>
<td>Kalimantan Timur</td>
<td>19.25</td>
<td>15.38</td>
</tr>
<tr>
<td>Sulawesi Utara</td>
<td>13.19</td>
<td>10.22</td>
</tr>
<tr>
<td>Gorontalo</td>
<td>6.75</td>
<td>7.19</td>
</tr>
</tbody>
</table>

Source: Trends of Selected Socio-Economic Indicators of Indonesia of BPS (2012)
Figure 1.5: Indonesia Market Overview


Seeing from all big cities in Indonesia, from 2008 the telephone users of DKI Jakarta is decreasing to 2.78% in 2009 and 5.45% in 2010. But for Smartphone users it was increasing from 4.30% in 2009 and 4.52% in 2010. This means that people now got more interest in mobile phone rather than telephone. To support the BPS table of how the mobile phone users are increasing, According to InMobi (2011) Estimated the mobile advertising impression on the InMobi Network is up to 26 millions impressions. The information from the picture tells that Indonesia’s Smartphone Impression is increasing from 19% up to 22%. The growth of Mobile phone impression in Indonesia is 99% past 1 year from may 2011 to May 2012 and the Smart phone impression growth is increasing even more, up to 123%. From second picture we can see that these are the Brands of Smartphone that penetrates Indonesia markets in 2011. And for second picture, here some explanation on each Smartphone that support the penetration of Smartphone Brand.

In Indonesian people especially those living in urban areas began to change lifestyle. For people, Cell Phone or Mobile Phone are not only used for call or text a SMS, but they also pay attention to other features that began there in all kinds, types and brands of mobile phones on the market. And now many people use a Smartphone more than
the Cell phone itself. Smartphone gives more advantage, attractive and more usage. And now the prices of Smartphone even cheaper, so more people can buy it. There are many brands that offer a good Smartphone for the costumers. Many famous brands like Apple, Samsung, SonyErricson, Windows, and LG. Each of these brand has it’s own specialty and different OS, Smartphone use an OS to synchronize with it’s application. According to BPS (Badan Pusat Statistik), from the table we can see that from year 2008 to 2010 there are some changes for the Telephone users and the Mobile Phone users. These changes are applied to all of the cities respectively, like DKI Jakarta for example. From 2008 the telephone users of DKI Jakarta is decreasing to 2.78% in 2009 and 5,45% in 2010. But for Smartphone users it was increasing from 4,30% in 2009 and 4,52% in 2010. This means that people now got more interest in mobile phone rather than telephone and even more to Smartphone.

As the consumer of Smartphone increasing, from second picture we can see how is the brand of Smartphone that penetrates Indonesia markets in 2011. According to Ika (2011) that high Internet drives the increase in Smartphone ownership in Indonesia access via Smartphone. In the survey for the past four weeks since October, as many as 73% of respondents access the Internet via Smartphone. This means that three out of four consumers in Indonesia to access the Internet via a Smartphone. While the Internet accessed via the desktop by 82% and 36% through the laptop. And for second picture, here some explanation on each Smartphone that support the penetration of Smartphone Brand.
A. Nokia

Symbian is a mobile operating system (OS) and computing platform designed for smartphones. As one of the oldest phone company, Nokia create the latest version of OS, Symbian 3, was officially released in Q4 2010, and first used in the Nokia N8. In May 2011 an update, Symbian Anna, was officially announced, followed by Nokia Belle (previously Symbian Belle) in August 2011. The latest phone with Symbian is the Nokia 808 PureView, and in developing nations, the Nokia 801T. In 2011, Nokia is still taking the lead with 41% of penetration with its Nokia N8 a non-touchsreen Smartphone. Nokia N8 runs on Symbian 3 OS. N8 provides a great user experience with an incredible screen; the screen is to position under the keyboard, increasing the velocity to type.
B. **Blackberry**

Blackberry is a brand of wireless handheld devices and services developed by Research In Motion (RIM). The operating system called Blackberry OS that is used by Blackberry devices is a proprietary multitasking environment developed by RIM. The operating system is designed for use of input devices such as the track wheel, track ball, and track pad. Blackberry devices use the proprietary Blackberry Messenger; also known as BBM, software for sending and receiving encrypted instant messages, voice notes, images and videos via Blackberry PIN. As long as your cell phone has a data plan these messages are all free of charge. Some of the features of BBM include groups, bar-code scanning, lists, shared calendars, BBM Music and integration with apps and games using the BBM social platform. As one of the new competitor in Indonesia, Blackberry is getting a good penetration up to 21%. And the Best product for Blackberry is Blackberry Bold 9780 and Blackberry Torch 9800. Blackberry giving a 21% penetration in 2011.

C. **Samsung**

Samsung is a South Korean multi-national company that headquartered in Samsung City. Samsung has many Industrial subsidiaries including the Samsung Electronics that creates a brand also for Mobile Phone. For it’s OS, Samsung creates Bada is an operating system for mobile devices such as Smartphone and tablet computers that Samsung Electronics develops it and in parallel with Android OS and Windows Phone, for Smartphone they develop. Samsung announced in June 2012 it may merge Bada into the Tizen project, but it is not confirmed. The most favorite product of Samsung is Samsung Galaxy S a Touch screen Smartphone that first launched on June 2010. Samsung Penetration was not significant in 2011 with only 9% of penetration.
D. Nexian

Nexian is a mobile phone company in Indonesia. Nexian creates QWERTY phones supported by Indonesian mobile operators. Phones with two SIM card slots retail at a price between Indonesian rupiah 299,000 to 1,299,000. Nexian Android A890 Journey is Nexian's first Android Smartphone. It has a single SIM card slot. The Nexian Journey NX-A890 debuted at the Indonesia Cellular Show (ICS) in 2011. Having a cheap price is one on the advantage of Nexian Touch screen Smartphone and yet the Nexian Android A890 using Android as its OS penetrates 7%.

E. Sony Ericsson

Sony Mobile Communications AB (formerly Sony Ericsson Mobile Communications AB) is a multinational mobile phone manufacturing company headquartered in Tokyo, Japan, and a wholly owned subsidiary of Sony Corporation. It was founded on October 1, 2001 as a joint venture between Sony and the Swedish telecommunications equipment company Ericsson, under the name Sony Ericsson. The best product of Sony is Sony Xperia. The Sony Xperia X10 is a previously high-end Smartphone in the Xperia series designed by Sony Ericsson. It was the first Sony Ericsson Smartphone to utilize the Android operating system. The phone was shipped with Android 1.6 (Donut), but an upgrade to 2.1 (Eclair) was made available starting 31 October 2010, with a gradual international rollout. Originally, Sony Ericsson stated that the X10 would not receive an upgrade to Android 2.2 (Froyo) or beyond, but the phone was later upgraded to 2.3.3 (Gingerbread) with the updates starting on 29 July 2011.

F. Cross

Cross Mobile Phone is one local company that has created a variety of telecommunications products with the quality that is on offer to the public. Many consumers who use Cross are gaining artificial result of the Smartphone. The company was founded in Jakarta in 2011. Since its establishment the company has
various types of mobile phones have an introduction to the people of Indonesia and for sale as well they are trying to compete with the biggest companies such as Samsung and Blackberry. The price of Cross Product is relatively cheap like Nexian. Even the penetration of it’s brand hasn’t grown so well is only 5% but Cross Smartphone product like Cross A8T and Cross Andromeda A7 is giving its benefit to the costumer as a cheap and nice Android Smartphone.

G. Apple

Apple formerly Apple Computer, Inc is an American multinational corporation headquartered in Cupertino, California that designs, develops, and sells consumer electronics, computer software, and personal computers. Its best-known hardware products are the Mac line of computers, the iPod, the iPhone, and the iPad. The iPhone is a line of Smartphone designed and marketed by Apple Inc. It runs Apple's iOS mobile operating system, known as the "iPhone OS" until mid-2010, shortly after the release of the iPad. Same with Blackberry, Apple is a new competitor in Phone Industry. The first iPhone was released on June 29, 2007. IPhone OS cannot get inflicted with virus and some other features that implemented in the Mac book Track pad motion giving the costumer the comfort of touching Smartphone. But still it hasn't got a good penetration only 2% maybe because of the expensive price of the IPhone.

H. LG

LG Electronics is a South Korean multinational electronics company headquartered in Yeouido-dong, Seoul, South Korea and the flagship subsidiary of the LG Group. LG Electronics was established in 1958 and has since led the way into the advanced digital era thanks to the technological expertise acquired by manufacturing many home appliances such as radios and TVs. LG Electronics has unveiled many new products, applied new technologies in the form of mobile devices and digital TVs in the 21st century and continues to reinforce its status as a global company. For
Smartphone, one of their best products is LG Optimus. This product brings a new standard in smart phone products issued by LG Electronics. Excellent screen quality and long battery life are the two main features of the power of this product with having Android as its OS.

I. Motorola

Motorola, Inc. Was an American multinational telecommunications company and was divided into two independent public companies, Motorola Mobility and Motorola Solutions on January 4, 2011. The Motorola Mobility handles Motorola Smartphone, where the best Smartphone product of Motorola is Motorola RAZR. After Motorola and Google join, they immediately made a new breakthrough by the end of this year. Namely, by launching a new Smartphone product that claims the thinnest among several other mobile products, namely Motorola RAZR. With an attractive design and luxury, as well as sophisticated features and Android as it’s OS.

J. HTC and Dopod

HTC Corporation formerly High Tech Computer Corporation, is a Taiwanese manufacturer of Smartphone and tablets. Founded in 1997, HTC built its reputation as the behind-the-scenes designer and manufacturer of many of the most popular OEM-branded mobile devices on the market. Since 2006, HTC have regularly introduced many critically acclaimed mobile devices under our own brand, and our portfolio includes Smartphone and tablets powered by the Android and Windows Phone operating systems. In 2007, HTC acquired mobile device company Dopod International. According to ZDnet .com, the acquisition of Dopod International proved the determination of investing in own-brand business as well as its channel expansion, Ann Liang, principal analyst for mobile devices and consumer services at Gartner Dataquest Research. The best HTC Smartphone for 2011 is HTC Sesnsation XL with features having a 4,7 inch monitor, 8 Megapixel back camera and 1,3 Megapixel front camera and 16 GB storage and Android OS.
And for Dopod, one of the best products of Dopod is the Dopod 838 with Windows OS.

Based on the picture tells that Samsung hasn’t make any good progress from 2011 from it’s brand penetration And in 2012, RIM's Blackberry Smartphone is still and became the king, at least in Indonesia. This conclusion is at least reinforcing to what was said by the official RIM Blackberry long time ago that RIM controlled most of the market share of Smartphone in Indonesia. It is estimated there are at least 10 million Blackberry users in Indonesia, and continues to grow. The Author trying to fathom what the official RIM raised. Yesterday (Sunday, June 3, 2012) the author did a small survey at a mall in Bogor. Mall, the author thinks it represents lower-middle-class residents who shop Smartphone Bogor. In a store, while offering Blackberry used old phone (the review will be made by the author) he did a short interview with the shopkeeper. The author question revolves around what are the most phones bought by consumers. Shopkeepers say without a doubt, the best selling mobile phone in the store is the Blackberry. There is an average of 10 units per day Blackberry is changing hands to the consumer. Blackberry types that consumers purchased were varied, ranging from second-hand Blackberry, new Blackberry such as Davis and Armstrong to such expensive Blackberry Torch, Dakota, and the Bellagio. The shopkeeper also informed, best-selling Blackberry is not just in his shop only, the other store are also experiencing the same thing. When the author asked why so many people buy a Blackberry, the clerk replied that the Blackberry is booming. It's like time repeating Nokia as well liked, the shopkeeper said. This means that once dubbed as the Nokia phones a million people, now the title is changed to Blackberry. While he was wondering, in the shop next door, there are at least three to four consumers who also want to buy a Blackberry. The author thinks the shopkeepers claim a point. Before conducting a small survey to the store, He also done a survey of mobile phone users in the city of Bogor transports the services he use most often. Most of employees (marked with a neat appearance and attributes of the company) using the Blackberry. Very few are using Android or iPhone. Other
users such as students also are using a Blackberry, although sometimes there are Nokia and local phone. It's just a fleeting observation. Maybe if explored in a more systematic manner, will get a clearer picture. Two of the above, to prove that the Blackberry Smartphone is still king, at least in Bogor or maybe even in Indonesia. Well of course we ask why so many people of Indonesia using a Blackberry?

From this Information, the researcher identifies a problem regarding to the Brand and Consumer Buying Decision. The consumer buying decision that referred to this research is a consumer behavior that based on faith and a strong sense of confidence in making a decision to purchase the Samsung Smartphone brand products and believe that the buying decisions is the right thing. The first picture explains that in the global market, Samsung market share is increasing from 5% to 16% in year 2010 and year 2011 comparing to Blackberry with got decrease for it’s market share. But in Indonesia, even the mobile phone user increasing based on BPS table and based on Inmobi the Smartphone Impression is increasing, but still Samsung penetration by its brand is low comparing to Blackberry and in the second information is also giving it more explanation that people still choose Blackberry as their Smartphone better than Android. This means that the Consumer buying decision to Samsung is also low.

From the explanation above, the researcher get interest for doing some research about the Influence of brand equity toward consumer buying decision on Samsung Smartphone. In this research, the researcher tried to analyze about the influence between those variables. The researcher will use Brand Awareness, perceived quality, association of the brand and brand loyalty toward customer buying decision on Samsung Smartphone.
1.2 Company Profile

1.1.1 Samsung

Samsung is a South Korean multi-national company that headquartered in Samsung City. Samsung has a mission to make a better world through a variety of business today include technology high level, semiconductor, skyscrapers and construction, petrochemicals, fashion, medicine, finance, hotels and much more. Samsung Electronics, leads the global market in the manufacture of goods high-tech electronics and digital media. Through innovative, reliable products and services, people talented, responsible approach to business and global citizens, as well as collaboration with our partners and customers, Samsung is bringing the world the imaginative new directions.

Samsung has many Industrial subsidiaries including the Samsung Electronics that creates many electronic products. These are the products.

Figure 1.1.1: Samsung Electronic Products

Source: Samsung.com (2012)

Through innovative technology, distinctive design and a dual focus on convenience and value, Samsung developing the products includes household appliances are designed with trendy and stylish, equipped with digital features that make it easy and environmentally friendly. The products that Samsung make, including refrigerators,
air conditioners, washing equipment, ovens, vacuum cleaners and other household appliances are very necessary nowadays. The Image quality brands have driven the growth of Samsung in the telecommunications category. Samsung was at the forefront of global telecommunication industry with so many and various models of mobile phones on the market today - including 3G and multimedia phones and Operation systems - in addition to telecommunication systems. Our goal is to be a leading company in the world by making the technology convergence to the next level. For the next explanation, these are the type of mobile phone that Samsung has including the Smartphone as well and Samsung timeline company history.

1.1.2 Samsung mobile phone products

![Smartphone Products](image1)

Figure 1.1.2: Smartphone Products

![Feature Phone](image2)

Figure 1.1.2.1: Feature Phone

Samsung has created 3 types of Mobile Phone Products. The First is the Smartphone Products, which being integrated with Bada and Android. And the second is the Feature Phone with has variety design and type. From this picture is explained that these are the look of Samsung Smartphone and Feature Phone. And the Smartphone product example that the researcher already explained before.
1.1.3 Samsung Timeline History

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1938</td>
<td>Byung-Chull Lee started a business to become known as Samsung, meaning “three stars” in Korean. It was a grocery trading company with 40 employees.</td>
</tr>
<tr>
<td>1954-1960</td>
<td>Samsung diversified and entered a number of different industries including insurance, securities, and retail.</td>
</tr>
<tr>
<td>1980</td>
<td>Samsung acquired Hanguk Jeonja Tongsin and started making telecommunications equipment including switchboards.</td>
</tr>
<tr>
<td>1983</td>
<td>Samsung Mobile gets its start in Korea.</td>
</tr>
<tr>
<td>1986</td>
<td>Samsung introduces a line of car phones.</td>
</tr>
<tr>
<td>1993</td>
<td>Samsung releases the SH-700 series, with favorable lightweight design.</td>
</tr>
<tr>
<td>1995</td>
<td>Samsung develops world’s first MPEG III, or MP3.</td>
</tr>
<tr>
<td>1996</td>
<td>Samsung partners with Sprint and breaks into the American market. The SCH-100 was Samsung’s first digital handset; the SCH-1100 it’s first PCS phone.</td>
</tr>
<tr>
<td>1997</td>
<td>Samsung becomes the leader in the Personal Communications Service (PCS) market and signs up as Worldwide Olympic Partner Worldwide (TOP) in the wireless communications category.</td>
</tr>
<tr>
<td>1999</td>
<td>Samsung introduces its wireless internet “Smartphone”, and produces first phone that doubles as an MP3 player.</td>
</tr>
<tr>
<td>2001</td>
<td>Samsung produces its 50 millionth mobile phone.</td>
</tr>
<tr>
<td>2010</td>
<td>Some of Samsung’s most successful phones include the Blade, the Monte, and Wave, the Jet Ultra, and the Galaxy S.</td>
</tr>
<tr>
<td>2011</td>
<td>Samsung launches Galaxy Tab – rival.</td>
</tr>
<tr>
<td>2012</td>
<td>Samsung is launched the Galaxy SIII.</td>
</tr>
</tbody>
</table>
1.3 Problems Identified

From the pictures above, in Indonesia Samsung has a low result on its 9% of penetration on Smartphone Samsung according to the Nielsen (Picture 1.4) comparing to Blackberry that has 21% penetration. The reason why the researcher wants to compare Samsung with Blackberry will be explained in the second information about Blackberry still the king of Smartphone in Indonesia. According to kompasiana.com, the author that doing a survey on Bogor about what Smartphone did people used and the result are *Most of employees (marked with a neat appearance and attributes of the company) is using the Blackberry as their Smartphone. Very few are using Android or iPhone.* This means, The Consumer buying decision on Android Smartphone is also still low because some variants of Samsung Smartphone is using Android as it’s Operation systems this will impact the brand as well. And to support that statement, Firman Nugraha (2010) stated as the first picture explain IDC released some interesting data about the growth of the Smartphone market in the world. Samsung Android and Bada-based Smartphone it’s became global success came second rank and the growth of market share greater than most others. Based on Mellisa (2009) a brand’s market share is a figure that highlights the brand’s purchasing power. The research and analysis of the market, as well as of the brand’s competitors and its audiences are critical to any brand development. Based on Keller that more and more firms have come to the realization that one of their most valuable assets is the brand name associated with their product or services. There is no company that does not want its brand success in the market, so does Samsung. Based on Astuti and Cahyadi (2007) Companies need to identify the elements of brand equity (brand equity) that can affect customer confidence in buying decisions. So, the researcher wants to know about *the Influence of brand equity toward consumer buying decision on Samsung Smartphone.*
1.4 Statement of the Problem

The problem statements that are tested and evaluated in this study can be formulated in the form of questions as stated below:

1. Does brand equity has influence towards consumer buying decision on Samsung Smartphone products?
2. What is the most significant variable of brand equity that influence consumer buying decision on Samsung Smartphone products?

1.5 Research Objective

The main objectives of this research is to know whether the Brand equity has influence towards the Consumer buying behavior with 4 variables, Brand Awareness, Perceived quality, Brand Association and Brand Loyalty on Samsung Smartphone

1.6 Significant of the study

1.6.1 The Researcher

This research is has an important meaning for the researcher. Beside for one of the requirement that researcher have to fulfill in order to get bachelor degree and to graduate from university, through this research also give chance for researcher to apply and implement what researcher have learned from the class into practical study. This research also gives researcher more knowledge and information about the development and situation of Smartphone market in Indonesia.

1.6.2 Samsung Company

This research is expects to be able to give more contribution and additional information about the Smartphone consumer decision through analysis of Brand equity for the Samsung Electronic. This study also gives information for Samsung electronic company about which factor of Brand equity which giving significant
effect to the choice of Smartphone. So that through this study it can help Samsung
electronic company to have more understanding about their consumer and to deliver
more valued and benefits in order to achieve higher customer satisfaction of
Smartphone.

1.6.3 The Reader

Through this study the researcher hope that this research is able to give more
information and knowledge for reader and as for reference to other researcher and to
solve the problem that is related to analysis of Brand equity toward the Smartphone
consumer decision.

1.7 Theoretical Framework

![Figure 1.7: Independent and Dependent variables](image)

**Figure 1.7: Independent and Dependent variables**

*Source: David A. Acker (1991)*
According to Keller (2003), By far the most comprehensive and well-known academic treatment of brand equity, with aspect relevant to both financial and strategic perspective, is by David Aeker from University of California at Brekeley. Aeker defines brand equity as a set of four categories of brand assets and liabilities linked to a brand, its name, and symbol, that add to subtract from the value provided by a product or service to a firm and/or to that firm’s costumers. Consists of 4 categories; Brand Awareness, Perceived Quality, Brand Association and Brand Loyalty.

1.8 Scope and Limitation

In this research the researcher spread the questionnaire from 3 December 2012 to 4 December 2012 in President University and President University student housing. The content of the questioner is based on the Brand equity and consumer buying decision theory and previous research with total respondents of 100 students.

The researcher limited the range of the respondents to 100 because the researcher does not know the exact population of the one who own Samsung Smartphone in President University.

1.9 Assumption and Hypothesis

According to what researcher stated on statement of problem of this research, the researcher take the hypothesis as the follow:

1. $H_{0,1}$: Brand Awareness has no influence on the Samsung Smartphone consumer buying decision

$H_{1,1}$: Brand Awareness has influence on the Samsung consumer buying decision
2. $H_{0.2}$: Perceived Quality has no influence on the Samsung consumer buying decision

   $H_{1.2}$: Perceived Quality has influence on the Samsung consumer buying decision

3. $H_{0.3}$: Brand Association has no influence on the Samsung consumer buying decision

   $H_{1.3}$: Brand Association has influence on the Samsung consumer buying decision

4. $H_{0.4}$: Brand Loyalty has no influence on the Samsung consumer buying decision

   $H_{1.4}$: Brand Loyalty has influence on the Samsung consumer buying decision

1.10 Definition of Terms

Brand: it refers to a Name, term, design, symbol, or any other feature that identifies one seller's good or service as distinct from those of other sellers.

Brand Equity: it refers to a set of brand assets and liabilities associated with a brand, name and symbol, that add to or diminish the value provided by a goods or services to the company or its customers.

Consumer: it refers to a person who purchases goods and services for personal use.

Buy: It refers to Obtain in exchange of payment

Purchase: It refers to Acquire by paying for it

Smartphone: it refers to mobile phone built on a mobile operating system, with more advanced computing capability and connectivity.
II. LITERATURE REVIEW

2.1 Brand

Based on American Marketing Association (2011) A Brand is Name, term, design, symbol, or any other feature that identifies one seller's good or service as distinct from those of other sellers. According to Brian and Fjelddhal (2007) A brand is a promise: it contains a set of emotional attributes for which a costumer to pay a premium. Every aspect of company’s message, product and service needs to be aligned with the brand promise. That promise must be unique, valued and consistently delivered.

According to Kapferer (2008) there are no brands without products or services to carry them. This will have great consequences for the method of measuring financial value. Knowing a brand is giving costumer more advantage; Brands offer consumers a means of minimizing information search and evaluation. According to Leslie and Malcom (2003) Through seeing a brand name, which has been supported by continual marketing activity, consumers can use this as a rapid means of interrogating memory and if sufficient relevant information can be recalled, only minimal effort is needed to make a purchase decision.

2.2 Brand Equity

According to David A. Aaker (1991) Brand Equity is a set of brand assets and liabilities associated with a brand, name and symbol, that add to or diminish the value provided by a goods or services to the company or its customers. The purpose of brand equity is to measure the value of a brand. A brand encompasses the name, logo, image, design and perceptions that identify a product, service, or provider in the minds of customers. It takes shape in advertising, packaging, and other marketing communications, and becomes a focus of the relationship with consumers. Brand
equity got the benefit to endow to products and services. (Keller) And he also define that although brand equity is one of the most crucial concepts in brand management, there is not a commonly accepted definition for it. As the points of view differ, so do the explanations. Therefore, there are a variety of definitions of brand equity and its methods to measure. From a financial point of view, brand equity is a valuable asset for a firm, which is beneficial for cash flow. On the other hand, from a marketer point of view, the concept implies the importance of a brand to its customers. This means that brand equity is the something that pushes the willingness for customers to continue to purchase the brand or not. According to Aeker (1991) Brand equity will usually allow higher margins by permitting both premium pricing and reduced reliance upon promotions. In many contexts the elements of brand equity serve to support premium pricing. Further, a brand with a disadvantage in brand equity will have to invest more in promotional activity, sometimes just to maintain its position in the distribution channel. According to Aeker (1991) that for costumer, Brand-equity assets generally add or subtract the value. They can help them interpret, process, and store huge quantities of information about products and brands. They also can affect costumer confidence in the purchase decision (due to either past-use experience or familiarity with the brand and its characteristics). Potentially more important is the fact that both perceived quality and brand associations can enhance costumer satisfaction with the use experience.

2.2.1 Brand Awareness

According to David A. Aaker (1997), brand awareness is the ability of a potential buyer to recognize or recall that a brand is a part of a particular product category. According to Kapferer (2008), when a brand is known, each individual knows it is known. According to Keller (2003), Brand Awareness is consists of brand recognition, reflecting the ability of consumer to confirm prior exposure to the brand. And brand recall, reflecting the ability of consumer to retrieve the brand when given
the product category, the needs of fulfilled by the category, or some other of probe as a cue.

According to Astuti and Cahyadi (2007) Brand Awareness can help associating the brand to what the company expected. Creating Familiarity, and showing consumer the commitments to its brand. Consumer tends to buy a product when that they aware to it’s brand because they feel save with something that is familiar for them and they assume that the brand that they know is reliable and has quality.

According to Sadat (2009) define that Brand awareness is dependent upon both the situation and the level of achieved awareness.

1. Unaware of Brand: In this position, consumer does not aware the brand, which has been stated even with something that can help them to know, like seeing the picture or named the brand.
2. Brand Recognition: In this level, consumer will remember a brand when a picture or a certain characteristic that can stimulates them.
3. Brand Recall: In this level, consumer will remember it we without any stimulus.
that reflects to the brand.

4. Top of Mind: In this level, consumer really knows and recognizes elements that a brand has. Consumer will be able to mention the brand for the first time, when they asked about the product category. In other words, a brand becomes the most remembered brand in their minds.

In this research, What Brand Awareness means is how strong people can recall Samsung Smartphone in their mind. The indicators for brand awareness are:
1. Ability to remember Samsung Smartphone when they first see the mobile phone.
2. Ability to identify Samsung Smartphone logo.
3. The ability of the customer to know the model variant of the Samsung Smartphone.
4. The ability of consumer to remember Samsung Smartphone advertising, which aired on television.

2.2.2 Perceived quality

According to David A. Aaker (1997), perceived quality is a customer perception of the attributes that is important. Customer perception is a judgment, which is certainly not always the same among customers to each other. The perception of quality will influence purchasing decisions and brand loyalty directly, especially when the buyer is not motivated or able to conduct a detailed analysis. Consumers will prefer brands that they are familiar with because of the perception of consumers that the brand is reliable. According to Aeker (1991, cited in Pekka, 1999) Perceived quality is valuable in several ways. In many contexts, the perceived quality of a brand provides a pivotal reason to buy. It is influencing, which brands are included and excluded from the consideration set and which brand is to be selected. A principal positioning characteristic of a brand is its location within the dimension of perceived quality. A perceived quality advantage provides the option of charging a premium price. The price premium can increase profits and/or provide resources with which to reinvest in
the brand. Perceived quality can also be meaningful to retailers, distributors and other channel members and thus aid in gaining distribution. Channel members are motivated to carry brands that are well regarded. In addition, the perceived quality can be exploited by introducing brand extensions, using the brand name to enter new product categories. Perceived quality makes the consumers satisfied which make them repurchase the product, which leads to loyalty Lin & Chang (2003, cited in Bornmark, Göransson & Svensson, 2005).

In this research, What Perceived Quality means is the consumer perception with the Samsung Smartphone attribute. The indicators for perceived quality are:
1. Overall quality, including the customer's perception to the appearance of the Samsung Smartphone as a quality product.
2. Reliability, including the customer's perception of the reliability of the Samsung Smartphone.
3. Functional, covering the perception of customer to the ease of operating the phone features of Samsung Smartphone.
4. Durability, including the consumer perception of the durability of Samsung Smartphone

2.2.3 Brand Association

According to Aeker (1991) Brand Association is everything related to the memory about a brand and brand is a set of associations, usually strung in various forms meaningful. Among the ways in which associations create value to the firm and its customers are: helping to process/retrieve information, differentiating the brand, generating a reason to buy, and creating positive attitudes/feelings. According to Keller (2003), Brand Association is the other informational nodes linked to the brand in memory and contain the meaning of the brand for costumers. According to Rangkutti (2005, cited in Aeker, 1991) many elements association that the consumer remember can be arranged, so it creates the impression of the brand or the brand
image on consumer’s mind. The definition of Brand Image is the group of elements of Brand Association in Consumer’s mind. In this research, what brand association means is how consumer about the Samsung Smartphone in their mind. According to Humdiana (2005, cited in Handika, 2005) Brand association can give value to a brand for the company and consumer. These are the function of brand association:

1. Helping finding Information
2. Differentiate between brands to another brand
3. Reason to buy
4. Creating positive feeling or attitude based on experience on using the product.
5. Company platform to do a brand extension.

According to Aeker (1997, cited in Handika, 2005) there are 11 type associations that related to a brand in general can be explained as:
1. Product attribute, like the characteristic of the products.
2. Non-product related attribute, like it’s innovation, quality perception, services, experiences, etc
3. Benefit for costumer, rational and psychology
4. Relative Price, brand associated with it’s price
5. Brand Associated with its application
8. Lifestyle of the user
9. Product class,
10. Know the competitor,
11. Geographical situation
The indicators for Brand Association are: The indicators are:

1. Product attribute is identical to the more innovative products, Such as: Samsung Smartphone is a mobile phone with highly innovated design and technology.
2. Non-Product attribute, Such as: Samsung Smartphone is a well-known brand.
3. Benefit for costumer, Such as: Samsung Smartphone is a mobile phone manufactured by companies whose has high credibility. Credibility is the quality of being trusted and believed in.
4. Relative price, such as: Samsung Smartphone easily to sell it back with a high resale value.
5. Product class, such as: Samsung Smartphone is a middle-class product.

2.2.4 Brand Loyalty

Brand loyalty David A. Aaker (1991), brand loyalty is the measurement of a customer relationship in a brand. For any business it is expensive to gain new customers and relatively inexpensive to exist ones, especially when the existing customers are satisfied with—or even like—the brand. In fact, in many markets there is substantial inertia among customers even if there is very low switching costs and low customer commitment to the existing brand. Thus, an installed customer base has the customer acquisition investment largely in its past. Further, at least some existing customers provide brand exposure and reassurance to new customers. The loyalty of the customer base reduces the vulnerability to competitive action. Competitors may be discouraged from spending resources to attract satisfied customers. Further, higher loyalty means greater trade leverage, since customers expect the brand to be always available. The indicators;

1. Commitment from customers, including customers are likely to continue to use the Samsung Smartphone without being influenced by any other brand cell phones promotion.
2. Recommendation to other customers, including customers are likely to recommend Samsung Smartphone to others.
3. Optimum price, including the possibility for customers willing to buy the Samsung Smartphone with a higher price than other brand mobile phones.

4. Relationship consumer with it’s brand – about satisfaction, such as I personally satisfied using Samsung as my Smartphone

2.3 Consumer Buying Decision

Consumer buying decisions are effected by consumer behavior. According to Uggla (2001, cited in Bornmark, Göransson & Svensson, 2005) explains two different types of consumer behavior: cognitive and experience oriented. The consumers who have cognitive behavior are rational and logical consumers while the experience-oriented consumers have more emotional motives for buying a product. According to Peter and Olson (2005) that Behavior refers to the physical actions of consumers that can be directly observed and measured by others. Example, shopping at the stores, buying products and using a credit card.

According to Kotler, Armstrong, Saunders and Wong (1999, cited in Bornmark, Göransson, Svensson, 2005) there are more than just cultural factors that influence consumer behavior. Other factors are: social (groups of the consumers, the consumers, family and the consumers, role and status), personal (age and lifecycle status of the consumers, in other words, the occupation, economic circumstances, lifestyle, personality and self-concept that the consumers have), and psychological factors (motivation, perception, learning, the beliefs and the attitudes of the consumers).

Consumer behavior according to The American Marketing Association (2010) is the dynamic interaction of affect and cognition, behavior and the environment by which human beings conduct the exchange aspects of their lives. In other words, consumer behavior involves the thoughts and feelings people experience and the actions they perform in consumption processes.
Kotler (2008) defines that a person might have a different role in any purchasing decision. Various roles that may occur are as follows:

1. User is the one who use the product of services. In many cases, users initiate the buying proposal and help define the product specifications.
2. Influencers are the one who help to define specifications and also provide information for evaluating alternatives.
3. Buyer is the one who have a formal authority to select the supplier and arrange terms of purchase.
4. Deciders are the one who have formal or informal power to select or approve. In routine buying, the buyers are often the deciders.

And Kotler also defines that there are 4 types of buying decision behavior. There are;

1. Complex buying behavior

Complex buying behavior is occurring when they are highly involved in purchase and perceive significant differences among brands. Consumer may be highly involved when the product to be purchased is expensive, risky, purchased infrequently, and highly self-expressive. Typically, a consumer has much to learn about the product category. The buyer will pass through a learning process, first is developing beliefs about the product, then attitudes, and then making a thoughtful purchase choice. The Marketers of high-involvement products need to help buyers to learn about product-class attributes and their relative important. They need to differentiate their brand features, perhaps by describing the brand benefits using print media with a long copy.

2. Dissonance-Reducing buying behavior

When Consumer is having a Dissonance-Reducing buying behavior, they also highly involved with an expensive, infrequent or risky purchase, but they see a little bit difference on brands. Meaning that consumers will make the process of buying faster because they aren’t considered with the differences in terms of the brand. When they
do that, they might experience post-purchased dissonance, where they will notice a certain disadvantage of the purchased brand. To counter this, the marketer’s after-sale communication should provide evidence and support to help consumer feels good about their brand choices.

3. Habitual buying behavior

Habitual buying behavior happens under condition of low consumer involvement and little significant brand difference. Consumers do not search extensively for information about the brands, evaluate the brands characteristics, and make weighty decisions about which brand to buy. Consumer appears to have low involvement with most low-cost products, frequently purchased product. Marketers of low-involvement products with few brand differences often use price and sales promotion to stimulate the product.

4. Variety-Seeking buying behavior

Consumer undertakes variety-seeking buying behavior in situation characterized by low consumer involvement but significant perceived brand differences. Significant perceived brand differences means that they likely switching brands because consumers want to seek variety, not because consumers are not satisfied with the product. The marketers of variety-seeking products will encourage it by offering lower prices, special deals, coupons, free sample, and advertising that present the reason for trying something new.

Based on Kotler (2008) Purchase decision process will be conducted by consumers will go through several stages, as follows:
Figure 2.3: Purchase Decision process

Source: Kotler (2008)

1. The buying process begins with Need Recognition stage-The buyer recognize a problem or a need. Internal Stimuli (hunger, thirst, etc) and External Stimuli (Advertisement, friends, family, etc) can trigger the need of consumer. At this stage, marketers should research consumer to find out what kinds of needs or problem arise, what brought them about, and how they led the costumer to this particular product.

2. Interested consumer may or may not search for more information. If the costumer’s drive is strong and a satisfying product is near at hand, the consumer is likely to buy it then. But if it is not, the consumer may store the need in memory or undertake an information search related to the need. Consumer can obtain information from any several sources (family, friends, advertisement, salespeople, neighbor, Web sites or handling, examining and using the product). As the information is obtained, the consumer’s awareness and knowledge of the available brands and features increases.

3. After searching for information, now it arrives at a set of final brand choices. This called the alternative evaluation, where consumer processes information and arrives at choosing the brand.
After doing the alternative evaluation, the consumer-purchasing decisions are to buy the most preferred brand. But two factors can come between the purchase intention and purchase decision. First is the attitude of others. For example, if someone important thinks that you should buy the lowest-priced car, and then the chances of buying a more expensive car is reduce. The second factor is unexpected situational factors. A consumer may form a purchase intention based on the factors such as expected income, expected price, expected products benefits. However, the unexpected events may change the purchase intention as well for example the economy got worse, the competitor may drop the price of the car or a friend might report to you that he/she is disappointed with the car that you preferred. Those two factors can change your purchase intention and purchase decision of a product and brand.

After purchasing the product, the consumer will be satisfied or dissatisfied with the product that they buy. This is called the Post-purchase behavior. What determines the buyer is satisfied or not satisfied with the purchase? It’s from the relationship between consumer expectations and perceived performance. If the product far from the expectations, the consumer is disappointed. But if it is meet expectations, the consumer is satisfied and if it is exceeds from the expectations, the consumer is delighted with the products.

The Indicators for Consumer buying decision is:

1. Stability to buy, Consumers purchase Samsung Smartphone with quick decisions and steady.
2. Consideration of the purchase, Customers or consumers buys Samsung Smartphone without considering any other Smartphone brands.
3. Compliance with the wishes and needs of attributes, Customer buys Samsung Smartphone because it fits according to their own desires and needs.
4. Right Decision, Consumer feels Samsung Smartphone is the right mobile phone that they choose for Smartphone.
2.4 Previous Research

Table 2.4: Previous Research Table

<table>
<thead>
<tr>
<th>Research Title</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sri Wahjuni Astuti dan I Gde Cahyadi (2007) \nTHE EFFECT OF BRAND EQUITY TOWARDS CONSUMER CONFIDENT OF BUYING DECISION IN SURABAYA FOR HONDA MOTORCYCLE</td>
<td>Using multiple regressions, with four independent variables and one dependent. It can be concluded that the four independent variables have a significant effect both together and individually to the costumer’s confidence in purchase decision.</td>
</tr>
<tr>
<td>Hardian Hanggadika (2010) \nANALYSIS OF EFFECT OF BRAND EQUITY TOWARDS CONSUMER PURCHASE DECISION ON NOKIA BRAND MOBILE PRODUCTS IN SEMARANG</td>
<td>Using multiple regressions with four independent variables and one dependent. Hypothesis testing using t-test showed that the four independent researched variables shown significantly affect the dependent variable Purchasing Decisions.</td>
</tr>
<tr>
<td>Blegoh Kurnia Widi (2010) \nANALYSIS OF PERCEIVED QUALITY AND BRAND ASSOCIATION ON LG TERMINATOR AS HEALTH PRODUCT TO CONSUMER BUYING INTEREST.</td>
<td>Using multiple regressions with two independent variables and one dependent. The Hypothesis testing can be concluded that the perceived quality and brand association have a significant result to consumer buying interest.</td>
</tr>
</tbody>
</table>
III. METHODOLOGY

3.1 Research Method

In this research, there are two methods that applied to analyze the data. There are Qualitative analysis and Quantitative analysis. According to Richie and Luwis (2003) Qualitative research is a naturalistic, interpretative approach concerned with understanding the meanings of certain observed phenomena or actions. It examines, analyzes and interprets observations for the purpose of discovering underlying meanings and patterns of relationships in a manner that does not involve mathematical models. According Michael Hanna (2009, Quantitative analysis for management) that Quantitative analysis is the scientific approach of managerial decision-making. The quantitative analysis approach consists of defining a problem, developing a model, acquiring input data, developing solution, testing the solution, analyzing the result and implementing the result.

According to Ross (1999) Quantitative research on the other hand uses numbers to prove or disprove a notion or hypothesis. The process of measurement is central to quantitative research because it provides the fundamental connection between empirical observation and mathematical expression of quantitative relationships. Qualitative method is often used with aim to gain understanding of underlying reasons and motivations, to provide insights into the setting of a problem, generating idea or hypotheses for later or future research, and the last is to uncover prevalent trends in thought and opinion. The researcher using quantitative analysis because after defining the problem that Samsung has, the scientific approach for managerial decision-making is to develop a model, acquiring input data, developing solution, testing it, analyzed the result and implementing the result.
3.2 Research Instrument

3.2.1 Data Collection

In this study the researcher use two sources to collect data and information. Those are primary data and secondary data. Primary data is data which consists all the information that the researcher needs for conduct the study; it collected and gathered through questionnaire that given to the respondents. And for secondary data, it is information that collected and gathered by the researcher for conduct the study; the process of gathering secondary data is could from internet, books, or any other resources that can be used for this study purpose. In order to produce accurate, valid and reliable data, the researcher needs to do an appropriate data collection process.

1. Primary Data

According to Donald Currie (2005) primary data definition is “data that were previously unknown and which have been obtained directly by the researcher for a particular research object” on the other side Malhotra (2010) define primary data as data originated by the researcher for the specific purpose of addressing the research problem. The method that the researcher used to collect and gathered primary data by using survey method in which the researcher distribute and spread questionnaire to third party who qualified and fulfill the requirement that researcher set for to this study.

The questionnaire as the primary data is designed and constructed by the researcher with guidance from previous research. The questionnaire is consists of two part which first part is consist of questions that asked related to respondent profile or demographic status. The second part is consisting of statements that represent the Independent Brand equity (Brand Awareness, Perceived Quality, Brand Association and Brand Loyalty) and one dependent variable (Consumer Buying Decision). The questionnaire is print and copy in the form of papers in which distributed to all
students that has Samsung Smartphone in President University despite of major, batch and gender.

2. Secondary data
According to Malhotra (2002) secondary data is “data collected for some purpose other than the problem at had”. In this study the researcher collect and get the secondary data from Internet, Journals, Articles, Previous studies.

3.3 Measurement Scale and Data analysis
3.3.1 Measurement Scale

Measurement scale that used is for measure the Indicator of Dependent Variable Independent variable is using Likert Scale. The Answer Criteria (1-5) is indicates by Likert Scale. According to President University Quantitative Slide (2012) Likert Scale’s measurement is for Interval scale. After the questionnaire is completed, each item may be analyzed separately or in some cases item responses may be summed to create a score for a group of items. Hence, Likert scales are often called summative scales.

<table>
<thead>
<tr>
<th>Answer Criteria</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>SD</td>
</tr>
<tr>
<td>Disagree</td>
<td>D</td>
</tr>
<tr>
<td>Neutral</td>
<td>N</td>
</tr>
<tr>
<td>Agree</td>
<td>A</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>SA</td>
</tr>
</tbody>
</table>

Source: President University Quantitative Slide (2012)
3.3.2 Data Analysis

This research is use SPSS V.16 for all of the data analysis. According to Julia (Computing Variable for SPSS, an SPSS Tutorial for Windows). It computes the value for variable based on numeric transformation of variable. It can use over 70 built-in functions, including arithmetic function, statistical function, distribution function and string function. And Microsoft excels to input and manage the raw data so that can be later on being inputted on SPSS.

3.4 Sampling Design

In this research, the questionnaire was distributed to the all of researcher friend and junior in President University that own Samsung Smartphone despite of their major, gender and batch.

3.4.1 Sample Size

The sample size or number sample of respondent that researcher have to take is an important issues when in this research; the researcher used the quantitative analysis. According to Roscoe (1975, President University Quantitative slide, 2012) that the determination of sample size number should be among 30 to 500 elements. The sample size is greater than 30 and less than 500 is enough for most research. If the sample will be split into sub-samples, the minimum number of samples in each category is 30. In the multivariate study, the sample size should be several times (preferably 10X or more) than the number of variables in the study.

Therefore in this research, the researchers take 100 respondents based on those criteria for its sample size. The researcher take 20 respondent’s sub-sample for pilot test and the rest are used for the real test, which the researcher gets questionnaires, administered 70 respondent questionnaires usable for this thesis. And 10
questionnaire can’t be used as a valid data because some of the respondents, isn’t answer all of the statements, forgot to write the batch and other mistakes that they made.

3.4.2 Margin of Error

The margin of error is the percentage of allowance for no precision or error that occurs due to the use of sample instead of population. In the margin of error, there are two level of percentage that usually many people used which is the confidence and sampling error. According to Brenson, Levine and Krehbiel, Sample size are determined prior to data collection to ensure that the confidence interval is narrow enough to be useful in making decision. It is not easy to specify the two factors to determine the sample size. The level confidence are (90%, 95 or 99). Although 95% is the most common confidence level used, if more confidence desired, then 99% might more appropriate; if less confidence is deemed acceptable, then 90% might be used. The researcher is using 95% level of confidence and 5%, since the higher the level of confidence, lower sampling error. If the sampling error is to low, it the standard become narrow, and the researcher need more respondents.

3.4.3 Sample Technique Applied

According to Bornmark, Göransson & Svensson (2005), There are two sorts of sample techniques; probability and non-probability sampling. In probability samples all cases from the population have the chance to be selected whereas in non-probability samples the probability of being selected from the total population is not known. In non-probability sampling, members are selected from the population in some non-random manner. Because the researcher does not know the total population of people whom owns the Samsung Smartphone in President University, the researcher used snowball-sampling method to conduct the research. The snowball sampling method is a sampling method that required researcher to ask helped his or her friends that have friends who also fulfill the requirement to fill the questionnaire.
“Snowball sampling is a non probability sampling technique that is used by the researcher to identify potential subjects in studies where subjects are hard to locate”. By using snowball sampling method, there are some advantages that researcher can obtain, such as the process is cheap, simple, and cost efficient, it allow the researcher to be able to reach populations that are difficult to sample when using other sampling method. The researcher then observes the nominated subjects and continues in the same way until the obtaining sufficient number of subjects.

3.5 Validity and Reliability

3.5.1 Validity Test

The validity test show how far questionnaire able to measure what the researcher want measure in this study. Based on Quantitative Approaches slide (2012, President University) that Measurement of construct validity using correlation coefficients between each of the statements in the questionnaire with a total score. The validity test help the researcher to ensure that each of question that asked in the questionnaire is the right and appropriate question which each of question able to measure what the researcher want to measure.

According to Ghozali (2005, cited in Hardian, 2010) if r counts > r table and the value are positive, so the statement or indicator is valid. To measure the validity of the questionnaire, each of questionnaires is calculated by using the coefficient of correlation of Pearson Product Moment, the formula is:

\[ r = \frac{N(\Sigma xy) - (\Sigma x\Sigma y)}{\sqrt{[N\Sigma x^2 - (\Sigma x)^2][N\Sigma y^2 - (\Sigma y)^2]}} \]

Where:

r = coefficient of correlation
x = x’s summed score  
y = y’s summed score  
N = total respondent  
∑xy = sum of x and y

The researcher take 20 respondent’s sub-sample pilot test, so the df is 18. For its validity. The researcher use based on the r table for df = 18 is 0.44 for the significance level in the validity test. So if the r < 0.44 is recognize invalid.

3.5.2 Reliability Test

According to Cooper & Schindler (2006) reliability is a characteristic of measurement concerned with accuracy, precision, and consistency. According to Ghozali (2005, cited in Hardian 2010) Reliability test is a measure of data from questionnaire, which indicates the variables or constructs. A questionnaire can be reliable, if someone answers the statements are consistent or stable over time. Reliability concerns consistency reply if tested repeatedly on different samples. SPSS provides the facility to measure reliability with Cronbach Alpha statistical test (α). A construct or variable said to be reliable if it delivers value Cronbach Alpha > 0.60.

3.6 Classic Assumption Test

3.6.1 Normality Test

Normality test aims to test whether the regression model, the variable Residual confounding or have a normal distribution or not. According to Ghozali (2005, cited in Hardian, 2010) there are 2 ways to detect whether or not the residuals are normally distributed with graph analysis and statistical analysis. The first graph analysis is to look at the histogram graph, if the graph gives a normal distribution pattern (symmetrical / not skewed) then showed that the regression model to meet the assumptions of normality. Another way is to look at the spread of the data (dots) on the axis of the graph diagonal normal probability plot (Normal PP Plot). If the graph
normal probability plot shows that the points (which describe the real data) seems to spread around the diagonal line and follow the direction of the diagonal line indicate that the regression model to meet the assumptions of normality. Mark, David & Timothy (2009), a normal distribution has bell shaped in its appearance. According to Ghozali (2005, cited in Hardian, 2010), if the residual data distribution is normal, then the line that describes the real data will follow the diagonal line.

3.6.2 Multicollinearity Test

Multicollinearity test is a test that used to know or detect whether any independent variable that correlated strongly to each other’s in the multiple regression models. According to Hardian (2010) multicollinearity test can be seen from the value of tolerance and the value of Variance Inflation Factor (VIF). If the value of Tolerance > 0.10 or equal to the value of VIF < 10. In order to measure multicollinearity, variance inflation factor (VIF) is used to measure. Normally, VIF measure how much the variance of the estimated coefficients is increased over the case of no correlation among the X variables.

3.6.3 Heterocedasticity Test

According to Ghozali (2005, cited in Hardian, 2010) the Basic analysis for Heterocedasticity analysis

If there is a specific pattern, such as the existing dots form a pattern that Regular (corrugated, wide then narrows), it indicates has occurred heteroscedasticity and If there is no clear pattern, and the points are spread above and below 0 on the Y-axis, heteroskedasticity does not occur.

Heteroskedasticity test is used for knowing whether the data is not normally distributed and it also use to know if the variance terms of errors are difference across observations. Whether there is inequality of variance of the residual from one observation to other observations. It can be seen from the scatter plot by looking at distribution of residual value toward the predicted value. If the distribution is spread
randomly without any systematic pattern, then the data is passed the heteroskedasticity test.

3.7 Testing the hypothesis

3.7.1 F Test

According to President University Quantitative slide (2012) F-test is used to know all independent variable (X) toward dependent variable (Y).

According to Ghozali (2005, cited in Hardian, 2010), F statistic test shows whether all the independent variables that included in the model have an influence on the dependent variable. This test is done by comparing the value of F calculated by the value of F table using a significant level of 5%. If the count value of F is > F table then the independent variables is affecting the dependent variable. The hypothesis

1. If the F table > F count, then Ho is accepted and H1 rejected.
   If the F table < F count, then Ho is rejected and H1 accepted.

2. If the probability of significance > 0.05, Ho is accepted and H1 rejected.
   If the probability of significance < 0.05, Ho is rejected and H1 accepted.

3.7.2 T Test

According to Ghozali (2005, cited in Hardian, 2010) T statistic test shows how much influence the individual independent variables (partial) in explaining the variation in the dependent variable. The criteria in T test are to compare the T count and T table using 5% level of significance. If T counts > T table so Individually the independent variable is affecting the dependent the hypothesis used is:

1. $H_{0,1}$: Brand Awareness has no influence on the Samsung Smartphone consumer buying decision
H₁.₁: Brand Awareness has influence on the Samsung consumer buying decision

2. H₀.₂: Perceived Quality has no influence on the Samsung consumer buying decision
   
   H₁.₂: Perceived Quality has influence on the Samsung consumer buying decision

3. H₀.₃: Brand Association has no influence on the Samsung consumer buying decision
   
   H₁.₃: Brand Association has influence on the Samsung consumer buying decision

4. H₀.₄: Brand Loyalty has no influence on the Samsung consumer buying decision
   
   H₁.₄: Brand Loyalty has influence on the Samsung consumer buying decision

3.7.3 Coefficient of Determination Test (R square)

According to Ghozali (2005, cited in Hardian, 2010), Coefficient of determination is how the independent can explain the variation the dependent because in order to know about the proportion of dependent variable can be explained by the dependent variable. This test will focus on the adjusted R square where it is arranged from 0 – 1. If the value of R Square is close to 0, it means that the capability of independent variable to explain dependent variable is weak. But if the value of R Square is close to 1, it means that the capability of independent explain the dependent is strong and can provide nearly complete information about the dependent variable.

3.7.4 Sample Technique Applied

In this study, the researcher uses multiple regression tools to conduct the research. According to Barry, Stair, and Hanna, (2009), “multiple regression models is a practical extension of simple regression in which it allow user to build a model with several independent variables”.

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \]
Where:
Y = Consumer buying Decision (Dependent Variable)
$\beta_0 = Y$ intercept
$\beta_1 - \beta_4 = Regression$ Coefficient
$X_1 =$Brand Awareness (independent variable)
$X_2 =$ Perceived Quality (Independent Variable)
$X_3 =$ Brand Association (Independent Variable)
$X_4 =$ Brand Loyalty (Independent Variable)
$\varepsilon =$ Random Error

In order to see the correlation between dependent variable and independent variables in this study, there are three tests or requirements that have to pass in the regression model. There are normality test, multicollinearity test and heteroscedasticity test.

**3.8 Limitation**

1. There are many factor which affect consumer buying decision but for this research, the researcher focus on brand awareness, perceived quality, brand association and brand loyalty.
2. The respondent in this research were the students that have Samsung Smartphone.
3. Research distributed at the President University and President University student housing with total respondent 70 people.
4. The theory for this research is Brand equity and Consumer Purchasing decision where some theory of Consumer buying decision is from Marketing Mix.
IV. ANALYSIS OF THE DATA AND INTERPRETATION OF THE RESULT

4.1 Validity Test

Validity test helps the researcher to ensure that each of question that asked in the questionnaire is the right and appropriate question which each of question able to measure what the researcher want to measure. To measure the Validity test, the researcher using SPSS to measure it.

Table 4.1: Validity Test Table

<table>
<thead>
<tr>
<th>Variable</th>
<th>Statements</th>
<th>Corrected Item-Total Correlation</th>
<th>r table</th>
<th>Valid/Invalid</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1.1</td>
<td>When I am asked a name of Smartphone brand, Samsung is the first brand that comes in my mind.</td>
<td>.767</td>
<td>0.44</td>
<td>Valid</td>
</tr>
<tr>
<td>X1.2</td>
<td>I can instantly recognize Samsung Smartphone with only see the model variants / type</td>
<td>.684</td>
<td>0.44</td>
<td>Valid</td>
</tr>
<tr>
<td>X1.3</td>
<td>I remember one of the Samsung Smartphone brand ads aired on the television.</td>
<td>.146</td>
<td>0.44</td>
<td>Invalid</td>
</tr>
<tr>
<td>X1.4</td>
<td>I am Familiar with Samsung when I see it from it’s logo</td>
<td>.706</td>
<td>0.44</td>
<td>Valid</td>
</tr>
<tr>
<td>X2.1</td>
<td>Samsung Smartphone is a qualified Smartphone</td>
<td>.472</td>
<td>0.44</td>
<td>Valid</td>
</tr>
<tr>
<td>X2.2</td>
<td>Samsung Smartphone has reliable features and qualified materials.</td>
<td>.558</td>
<td>0.44</td>
<td>Valid</td>
</tr>
<tr>
<td>X2.3</td>
<td>Samsung Smartphone is a mobile phone that is easy to be operated</td>
<td>.452</td>
<td>0.44</td>
<td>Valid</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>X2.4</td>
<td>Samsung Smartphone is a Smartphone with good durability</td>
<td>.440</td>
<td>0.44</td>
<td>Valid</td>
</tr>
<tr>
<td>X3.1</td>
<td>Samsung Smartphone is a mobile phone with innovative design</td>
<td>.555</td>
<td>0.44</td>
<td>Valid</td>
</tr>
<tr>
<td>X3.2</td>
<td>Samsung Smartphone is a well-known brand</td>
<td>.663</td>
<td>0.44</td>
<td>Valid</td>
</tr>
<tr>
<td>X3.3</td>
<td>Samsung Smartphone is a mobile phone that manufactured by the company that has high credibility (Credibility means reliable).</td>
<td>.540</td>
<td>0.44</td>
<td>Valid</td>
</tr>
<tr>
<td>X3.4</td>
<td>Samsung Smartphone is a medium-class product</td>
<td>.458</td>
<td>0.44</td>
<td>Valid</td>
</tr>
<tr>
<td>X3.5</td>
<td>Samsung Smartphone is easy to resell and got a high return on it’s price</td>
<td>.306</td>
<td>0.44</td>
<td>Invalid</td>
</tr>
<tr>
<td>X4.1</td>
<td>I will buy Samsung Smartphone and not going be affected by any other Smartphone brand promotion</td>
<td>.732</td>
<td>0.44</td>
<td>Valid</td>
</tr>
<tr>
<td>X4.2</td>
<td>I would recommend the Samsung Smartphone to others.</td>
<td>.684</td>
<td>0.44</td>
<td>Valid</td>
</tr>
<tr>
<td>X4.3</td>
<td>I will buy Samsung Smartphone even the price increases and higher than other similar brands of Smartphone</td>
<td>.715</td>
<td>0.44</td>
<td>Valid</td>
</tr>
<tr>
<td>X4.4</td>
<td>I personally satisfied using Samsung as my Smartphone</td>
<td>.684</td>
<td>0.44</td>
<td>Valid</td>
</tr>
<tr>
<td>Y1.1</td>
<td>I firmly choose Samsung Smartphone as the first choice when deciding to buy a Smartphone</td>
<td>.700</td>
<td>0.44</td>
<td>Valid</td>
</tr>
</tbody>
</table>
Y1.2 | Other Alternative of Smartphone brands are less considerate when I decided to buy Samsung Smartphone | .713 | 0.44 | Valid

Y1.3 | I bought the Samsung Smartphone because of my own desires and because Smartphone is according to what I need | .774 | 0.44 | Valid

Y1.4 | It is a good decision to buy Samsung as my Smartphone | .656 | 0.44 | Valid

Source: SPSS Application

In the survey, the researcher use 20 respondents as sample for the validity test. Figure 4.1 above has show that from 21 statements there are 2 statements that got criterion as invalid statements, which means that they have to be removed from this research. As it has been stated in chapter three about validity test that the r counts > r table and certain variable are not fulfill the requirement to be valid and it has to be eliminate from the research. Based on r table that for 20 respondents, the r = 0.44. So it must be higher than 0.44 to say that the statement is valid. From table 4.1 above variable X1.3 r=0.146, X3.5 r=0.306, these two statements is invalid because they cannot fulfill the requirement of r-value have to be at least 0.44.
4.2 Reliability Test

Table 4.2: Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.926</td>
<td>.932</td>
</tr>
<tr>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>

Source: SPSS Application

According to Ghozali (2005) Reliability test is a measure of data from questionnaire, which indicates the variables or constructs. A questionnaire can be reliable, if someone answers the statements are consistent or stable over time. Reliability concerns consistency reply if tested repeatedly on different samples. SPSS provides the facility to measure reliability with Cronbach Alpha statistical test ($\alpha$). A construct or variable said to be reliable if it delivers value Cronbach Alpha > 0.60. The variables that the researcher found for the test is reliable. Because it is greater than 0.60 which is 0.926.

4.3 Classic Assumption Test

4.3.1 Normality Test

In every research or study which using multiple regression as it statistical tools it is necessary to test the normality of the data that used in the research. In this research, the researcher used histogram and P-P plot (Probability-Probability plot) to test the normality of each data.
Figure 4.5.1: Histogram Residual

Source: SPSS Application
From figure 4.4.1, it can be seen that the data is normally distributed, as the line on histogram is depicts in the form bell shape, which means that the data is normally distributed. From figure 4.4.2, shows that the plot is line close to the diagonal line and lining up along with the diagonal line, which goes from lower left to upper right. It means that the data in the regressions model is fulfilling the requirement in the normality test.

4.3.2 Multicollinearity Test
In order to do the Multicollinearity test, the researcher used variance inflation factor or (VIF) to check. Variance inflation factor or (VIF) has function to measure how much the variance of the estimated coefficients is increased over the case of no
correlation among the variables. According to Hardian (2010) Multicollinearity test can be seen from the value of tolerance and the value of Variance Inflation Factor (VIF). If the value of Tolerance > 0.10 or equal to the value of VIF < 10, it can be concluded that there is no multicollinearity among the independent variables in the regression model in this study. The test whether a regression model found a correlation between the independent variables Multicollinearity is situation that researcher have to avoid, because it will not good for independent variable correlated strongly to each others.

<table>
<thead>
<tr>
<th>No</th>
<th>Model Or Variable</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>X1</td>
<td>1.054</td>
</tr>
<tr>
<td>2.</td>
<td>X2</td>
<td>1.511</td>
</tr>
<tr>
<td>3.</td>
<td>X3</td>
<td>1.069</td>
</tr>
<tr>
<td>4.</td>
<td>X4</td>
<td>1.503</td>
</tr>
</tbody>
</table>

Source: SPSS Application

From table 4.5.2 shows that all the variables have variance inflation factor (VIF) values which less than 10. It means that in this regressions model there is no multicollinearity exists.

4.3.3 Heteroskedascity Test

Heteroskedasticity often occurs in the process of analysis if the data is not normally distributed or if the variance of the error term differs across observations. The data will fulfill the heteroskedasticity assumption test if the distribution of residual values toward the predicted values in the scatter plot is spread randomly and does not make certain pattern such as decreasing or increasing pattern.

From figure 4.4.3, it shows that there is no pattern that occurs inside. The plots were spread randomly without creating a certain or systematic pattern such as decreasing
or increasing pattern, it means there was no heteroskedasticity exist or occurs between independent variables and dependent variable.

**Figure 4.5.3: Hetercedascity Test**

Source: SPSS Application

### 4.3.4 Partial Regression Plot

Partial regression plot is used to know if there is any heteroscedasticity exist in each of independent variable (Brand Awareness, Perceived Quality, Brand Association, Brand Loyalty) toward the consumer buying decision or dependent variable. This test is used by the researcher because of the scatter plot of heteroscedasticity only show the heteroscedasticity result from all of independent variables toward the independent variable directly, so that in order to assure that there is not heteroskedasticity exist or occurs in each of independent variable toward the dependent variable, this partial regression plot was used in this study.
4.4 Interpretation of result

4.4.1 F Test

F test is used to test the effect of all independent variables toward independent variable simultaneously. These are the hypothesis for F Test:

If the F table > F count, then Ho is accepted and H1 rejected, this means if the probability values have more than 0.05 with the confidence level of 95%. (The significant level will be = 5%), the brand equity is not affecting the Consumer buying decision.

If the F table < F count, then Ho is rejected and H1, this means if the probability values have less than 0.05 with the confidence level of 95%. (The significant level will be = 5%), the brand equity is affecting Consumer buying decision.

In this study, the researcher used SPSS V.16 to do the f test, and it showed in table below:

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>4.620</td>
<td>4</td>
<td>1.155</td>
<td>9.880</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>7.598</td>
<td>65</td>
<td>.117</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12.218</td>
<td>69</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: SPSS Application

The requirement value that has to achieve in this F test is the significance value has to be less than 0.05 and F value has to be greater than 2.53. From table 4.5 above, it can be seen that the significance value is 0.00, which is less than 0.05, and the f value is
greater than 2.53, which is 9,880. From those results, it can be conclude that all of the independent variable of Brand Equity (Brand Awareness (X1), Perceived Quality (X2), Brand Association (X3), Brand Loyalty (X4)) has significant influence toward independent variable of Samsung consumer buying decision. It means in this study the researcher will accept the $H_1$ and reject $H_0$.

4.4.2 T Test

T test is used to examine whether each independent each variables of Brand Equity; Brand Awareness (X1), Perceived Quality (X2), Brand Association (X3), Brand Loyalty (X4) has influence toward dependent variable of Samsung consumer buying decision. Each of independent variable will be significance toward the dependent variable if each value of $p$ of each independent variable is less than 0.05.
Table 4.6.2: T Test Significant Value

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.313</td>
<td>.599</td>
<td>.523</td>
<td>.602</td>
</tr>
<tr>
<td></td>
<td>X1</td>
<td>.126</td>
<td>.082</td>
<td>.154</td>
<td>1.532</td>
</tr>
<tr>
<td></td>
<td>X2</td>
<td>.265</td>
<td>.127</td>
<td>.250</td>
<td>2.081</td>
</tr>
<tr>
<td></td>
<td>X3</td>
<td>.307</td>
<td>.120</td>
<td>.259</td>
<td>2.559</td>
</tr>
<tr>
<td></td>
<td>X4</td>
<td>.230</td>
<td>.109</td>
<td>.253</td>
<td>2.110</td>
</tr>
</tbody>
</table>

Source: SPSS Application

Table 4.6.2: Significant value Table

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Significant of the value</th>
<th>Standard value of 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Awareness (X1)</td>
<td>.130</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Perceived Quality (X2)</td>
<td>.041</td>
<td>Significant</td>
</tr>
<tr>
<td>Brand Association (X3)</td>
<td>.013</td>
<td>Significant</td>
</tr>
<tr>
<td>Brand Loyalty (X4)</td>
<td>.039</td>
<td>Significant</td>
</tr>
</tbody>
</table>
Based on the table above, the result is:

1. The significance value of Brand Awareness is more than 0.05 and the t value is lower than 1.9977. This means this variable is not pass with the requirements of the T-test. So Ho is accepted where it stated that Brand awareness has no influence toward consumer buying decision.

2. The significance value of perceived quality is lower than 0.05 and the t value is more than 1.977. This means this variable is passing the requirement of the T-test. H1 is accepted where perceived quality has influence toward consumer buying decision.

3. The significance value of brand association is lower than 0.05 and the t value is more than 1.977. This means this variable is passing the requirement of the T-test. H1 is accepted where perceived quality has influence toward consumer buying decision.

4. The significance value of brand loyalty is lower than 0.05 and the t value is more than 1.977. This means this variable is passing the requirement of the T-test. H1 is accepted where brand loyalty has influence toward consumer buying decision.

4.4.3 Measuring the variable regression model

This measurement is used to examine whether this multiple regression models able to help in predicting the Samsung consumer buying decision on buying Samsung Smartphone based on Brand Equity (Brand Awareness, Perceived Quality, Brand Association and Brand Loyalty).
Table 4.6.3: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.615(^a)</td>
<td>.378</td>
<td>.340</td>
<td>.34190</td>
</tr>
</tbody>
</table>

\(a\). Predictors: (Constant), X4, X1, X3, X2  
\(b\). Dependent Variable: Y

Source: SPSS Application

Table 4.8 showed that R value which to describe the coefficient of determination, where the R value is 0.615 which means that there is a quite strong influence between independent variables and independent variable of consumer buying decision. The adjusted R square is to show how far or large these all independent variables can describe or affecting the independent variable. From table 4.6.5 it show that adjusted R square value is only 0.340, which means that the Brand Equity which consists of brand awareness, perceived quality, brand association and brand loyalty only can describe and affecting 34% to Samsung consumers buying decision and the rest of 66% is explained or describe by another factors which not discussed in this research.

### 4.4.4 Multiple Regression

There are more than one independent variables that used in this study, because of that the researcher used multiple regression models in order to explain relationship between dependent variable and those independent variables.

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon \]

From table 4.7, it has showed each significance value of each independent variable and it showed that there are three independent variable which not significance and it cannot be used in the multiple regression model.
Table 4.6.4: Standardized Coefficients

<table>
<thead>
<tr>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beta</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>.154</td>
</tr>
<tr>
<td>.250</td>
</tr>
<tr>
<td>.259</td>
</tr>
<tr>
<td>.253</td>
</tr>
</tbody>
</table>

Source: SPSS Application

There are three independent variable, which eliminated, Brand Awareness (X1), Perceived Quality (X2), and Brand Loyalty (X4). The remaining variables will be put in the multiple regression models.

\[ Y = 0.250X_2 + 0.259X_3 + 0.253X_4 + \varepsilon \]

Where:

- \( X_1 \) = Brand Awareness
- \( X_2 \) = Perceived Quality
- \( X_4 \) = Brand Loyalty
- \( \varepsilon \) = Random Error term/ Residual

According to Danang, independent variables that do not have same denomination or the denomination is unknown will use standardize coefficient. But if the denomination is known, so it should be used the unstandardize.

From the data above, it can be know that the coefficient from the regression is positive, these can be explain below:
1. Independent Variable Perceived Quality (X2) has positive influence toward Consumer Buying Decision (Y) with coefficient of 0.250.
2. Independent Variable Brand Association (X3) has positive influence toward Consumer Buying Decision (Y) with coefficient of 0.259.
3. Independent Variable Brand Loyalty (X4) has positive influence toward Consumer Buying Behavior (y) with coefficient 0.253.
V. CONCLUSION and RECOMMENDATION

5.1 Conclusion

Regarding to the statement of the problem, the researcher wants to make a conclusion to this research.

1. According to the F test result which derived form chapter four, it show that all of independent variables of brand equity (brand awareness (X1), perceived quality (X2), brand association (X3) and brand loyalty (X4) has significance influence toward the Samsung Smartphone buying decision among students at President University. It can be proven by look at the F value and significance value at table 4.6.2, which presents that F value is 9.880 greater than 2.53 and significance value is 0.00 lower than 0.05.

2. According to the T test result which derived from chapter four, showed that among of four independent variables in brand equity, there are only three independent variables which have significance influence toward which are the Perceived quality (t value 2.81 and significant level 0.41), Brand Association (t value 2.559 and significant level 0.13) and Brand loyalty (t value 2.110 and significant level 0.39) the Samsung Smartphone buying decision among students at President University. Only one independent, which is now, fulfill the criteria of T-Test, which is the brand awareness (t value 1.532 and significant level 0.132). This means that brand awareness has no influence toward the Samsung Smartphone buying decision among student at President University.

3. Third, among all of the three independent variables, which have significance influence toward the Samsung Smartphone buying decision among students at President University is the brand association. Most significance independent
variable of brand equity, which can give the most influence toward the Samsung Smartphone consumer-buying decision among students at President University.

5.2 Recommendation

1. For Brand awareness, the problem regarding to brand awareness is from variable X1.3 with statement “I remember Samsung advertisement on television” that’s already stated invalid in validity test. This means that Samsung needs to consider about the advertisements. Why advertisements? It is important to create familiarity in customer mind’s, which can lead to the Top of mind. Familiarity is the reason why people will buy the product, they will feel that this product is save and reliable.

2. For Perceived quality, Samsung need to maintain the quality of the product because perceived quality is a customer perception of the attributes that is important. Meaning that Samsung must keep maintaining quality of the Smartphone in term of its attributes like, making good systems and application, durability of the battery, etc. by offering the quality to the customer for Smartphone is having a will create a positive influence to the consumer. By offering them a good quality, people having a reason to buy Samsung Smartphone again.

3. Brand Association is everything related to the memory about a brand and brand is a set of associations, usually strung in various forms meaningful. Among the ways in which associations create value to the firm and its customers are: helping to process/retrieve information, differentiating the brand, generating a reason to buy, and creating positive attitudes/feelings. One of the problems of brand association is about the price. Having a collaborative pricing is one of the solutions. Having two or more company to collaborate to create a benefit for firms and costumer, example; Simpati and Samsung offer a discount and bonuses to phone cash.
4. Brand loyalty is the measurement of a customer relationship in a brand. To create brand loyalty, Samsung needs offer more to the customer that can make the costumer deserve to be loyal with. This means that Samsung must make the consumer satisfied with its product. For example by offering a new Smartphone product to the new costumer and gives a special privilege for Samsung loyal customer to get first information of the new product. Gaining a new customer is expensive rather than the existing that already satisfied with the product. The existing is already known and satisfied one will buy the product. So, Samsung brand loyalty has a good impact in attracting new customer and keeps the existing consumer buying their product.

In the end there are four factors of brand equity that Samsung Electronic Company has to takes as consideration if Samsung want to increase their Smartphone sales. The perceived quality, brand association or the brand loyalty; all of these can contribute and give significance influence on consumer buying decision among students of President University.
LIST OF REFERENCES

Books:


Bornmark, Hanna, Göransson, Åsa & Svensson, Christina. (2009), A Study to indicate the importance of brand awareness in brand choice -A Cultural Perspective. Kristianstad University.


Donald, Currie. (2005), Developing and Applying Study Skills: Writing Assignments, Dissertations and Managements Reports, Broadway, London: Chartered Institute of Personal and Development.


Hanggadhika, Hardian. (2010), ANALISIS PENGARUH EKUITAS MEREK TERHADAP KEPUTUSAN PEMBELIAN KONSUMEN
PADA PRODUK HANDPHONE MEREK NOKIA DI SEMARANG, Semarang: Universitas Diponegoro.


Keller. (2003), Strategic Brand Management : building, measuring and managing brand equity. The University of California: Prentice Hall.


Sadat, A.M (2009), Brand Belief, Jakarta: Salemba Empat.


Journals


Internet or Electrical Publication:


APPENDICES
Gender

- Women
- Man

Age

- 22 - 24
- 19 - 21
- 16 - 18
Batch

- 2012
- 2011
- 2010
- 2009

Samsung Smartphone type

- Bada
- Galaxy Ace DUO
- Galaxy 550
- Galaxy Nexus
- Galaxy W
- Galaxy Pocket
- Galaxy Y
- Galaxy Mini
- Galaxy Gio
- Galaxy S III
- Galaxy S II
- Galaxy S
- Galaxy Ace
- Galaxy Note
<table>
<thead>
<tr>
<th>Brand Awareness</th>
<th>Perceived Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1.1</td>
<td>X1.2 X1.4 X1</td>
</tr>
<tr>
<td>3</td>
<td>3 5 3.666666667</td>
</tr>
<tr>
<td>2</td>
<td>3 4 3</td>
</tr>
<tr>
<td>2</td>
<td>4 4 3.3333333333</td>
</tr>
<tr>
<td>4</td>
<td>4 4 4</td>
</tr>
<tr>
<td>3</td>
<td>3 5 3.666666667</td>
</tr>
<tr>
<td>3</td>
<td>3 4 3.3333333333</td>
</tr>
<tr>
<td>2</td>
<td>3 5 3.3333333333</td>
</tr>
<tr>
<td>2</td>
<td>3 5 3.3333333333</td>
</tr>
<tr>
<td>4</td>
<td>3 4 3.666666667</td>
</tr>
<tr>
<td>3</td>
<td>2 4 3</td>
</tr>
<tr>
<td>3</td>
<td>3 5 3.666666667</td>
</tr>
<tr>
<td>2</td>
<td>3 4 3</td>
</tr>
<tr>
<td>2</td>
<td>2 4 2.6666666667</td>
</tr>
<tr>
<td>2</td>
<td>2 4 2.6666666667</td>
</tr>
<tr>
<td>2</td>
<td>3 5 3.3333333333</td>
</tr>
<tr>
<td>2</td>
<td>3 4 3</td>
</tr>
<tr>
<td>2</td>
<td>3 4 3</td>
</tr>
<tr>
<td>4</td>
<td>3 4 3.6666666667</td>
</tr>
<tr>
<td>4</td>
<td>2 4 3.3333333333</td>
</tr>
<tr>
<td>3</td>
<td>2 5 3.3333333333</td>
</tr>
<tr>
<td>4</td>
<td>2 5 3.6666666667</td>
</tr>
<tr>
<td>4</td>
<td>5 5 4.6666666667</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
| 3 | 4 | 5 | 4 | 5 | 3 | 2 | 3.75