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Customer-Perceived Value on Samsung and Apple Smartphone: A Comparative Study on Japanese and Bangladesh University Students

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Abstract

Customer-perceived value constitutes at the core of competition of brands. This analysis is done in light of the case between Apple and Samsung over customer perceived value (CPV) on brands among the students of Japan and Bangladesh. Therefore, the main research question of this study is to compare brand preferences between Apple and Samsung among students of two countries. This study is followed by quantitative research approach. Both primary and secondary data were used in this research. Primary data were obtained through structured questionnaires given to respondents for in depth interview. Data were analyzed using statistical software: SPSS. The research result revealed that the brand loyalty is high among Apple users; hence Apple has a strong brand preference over Samsung among the students of Japan. In contrast, brand loyalty is high among Samsung users in Bangladesh since it has a strong brand preference over Apple because of open-sourced Android operating system and cheaper price of the product. The study has shown that the customer perceived value of Apple is higher than that of Samsung. The study also found that the brand image of Apple was relatively better as compared to that of Samsung in most of the traits studied especially in quality, price, operating system, and after sales service. This paper provides a comparative analysis on customer perceived value on brand of two giant smartphone companies and through this analysis it can be concluded that at present Samsung is the best brand for smartphone users in Bangladesh, in contrast, Apple is the leading brand in Japan to smartphone users.

Keywords: Customer-Perceived Value, Brand Dentity, Value Chain, Competitive Analysis, Smartphone

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Introduction

In this contemporary world, Smartphone has become one of the most important personal information–processing interfaces because of its distinctive features and availability in the market. Users realize the increasing value of smartphone devices and swiftly change and upgrade to innovative brands with cutting edge features getting easily access to available applications and operating systems. Today smartphone has taken the role of computer, making it possible to do a lot with this small hand-held device. It has a broad use such as sharing information, paying for products, browsing, studying, and shopping. Virtually, smartphones are keeping applications for every activity

of people (Mackenzie, 2011). Cassavoy (2012) defined smartphone as a device that enables the user to make telephone call and at the same time has some features that allow the user to do some activities that in the past was not possible unless using a computer or a personal digital assistant, such as sending and receiving e-mails, amending an office document. For this reason, a strong brand provides orientation and risk reduction benefits to consumers as well as a means by which individuals can express their personality (Fournier et. al., 2012). In addition, consumers are strongly influenced by brand when it comes to choosing Smartphone. Consumers' buying patterns have begun to change more rapidly and product life cycles have shortened since markets have become increasingly competitive and saturated. Technical advancement and hasty innovation is another reason, besides competitive and saturated markets, for rapid change of consumers' buying patterns. In response to this competitive environment, a paradigm shift of smartphone devices to a relational approach has emerged in marketing and replaced the hitherto prevailing transaction – based marketing principle. Marketers now appreciate that strong long – term relationships between consumers and brands are advantageous compared to the short – term focus of transaction marketing in terms of ease of access, lower marketing costs, higher brand equity and profits (Fournier, 1998; Smit et al., 2007).

Why is Apple and Samsung?

Samsung and Apple Smartphone brands are chosen for this study as these two brands are most competitive in the globe and they are competing head to head over the world (Vijaya & Vidyashree, 2016). Almeida et. al. (2021) concluded that Apple smartphones are preferable to customers than Samsung smartphones. In this regard, advertisements and word of mouth are more influential than other factors to choose smartphone brands. In addition, Schechner (2014) opined that this is somewhat surprising given that both Apple and Samsung are two giants in the consumer electronics, or more specifically, the smart phone industry, of which the products offered by these companies have been affecting the lifestyles of people around the world. Apple focused on designing innovative products using recycle materials and this World-reputed brand is committed to manufacture carbon free products in 2030 (Apple, 2020) whereas Samsung focused on creating top world-class products, earning its place as a leader in digital technologies, remaining nowadays in the top 10 in global brand rankings (Samsung 2020). According to McCabe (2014), Apple and Samsung are the two largest Smartphone brands producers, who are constantly competing and challenging each other and in result of this competition they are providing consumers with best quality and cheaper products. In this regard, Yufang et. al., 2014 stated that the smartphone market is dominated by Samsung and Apple. In china's mobile market, foreign brands dominate in brand strength and appealing, such as Samsung, Apple. Nonetheless, a review of the literature found that there are not sufficient study on comparative study for exploring consumer behavior and outcomes of Apple versus Samsung.

Why is Bangladesh and Japan?

Consumers of developed countries, generally, pay much attention on social value, whereas the consumers of developing country, like – Bangladesh, pay much attention on economy value. As a result, students of Japan and Bangladesh are chosen for this study because students of Japan don't pay attention about cost performance of the product rather they are more concerned about brand image and country of origin. On the contrary, cost performance is an important variable to students for choosing smartphones in developing countries, like – Bangladesh. In addition, people pay attention in open source applications in developing countries whereas consumers of developed country less concern about the open-sourced application rather they emphasize on product reputation and brand image. Therefore, Bangladesh, as a developing country, and Japan, as a developed country, are considered for this study.

Why is Student?

The reason to choose students for this study is because most student purchases Smartphone, they are enthusiastic about technology. In addition to that, another reason to write about student preference is that they can be accessed easily for interview and questionnaires. Smartphone is considered one of the best tools that enhance the academic performance of students. There are many research work on

technology adoption and its impact on students' behaviors and how they use it, its impact on performance and satisfaction (Bakon & Hassan, 2013; Bodker et al., 2009; Helmreich, 2009; Jin, 2011; Yeh et al., 2016). Peterson & Merunka (2014) commented that college students increasingly seem to be the subjects of choice in social psychology and consumer behavior research. Moreover, Peterson (2001) identified that college students constituted 86% of the research subjects in empirical studies appearing in Volume 26 of Journal of Consumer Research, whereas Simonson et. al., (2001) pointed out that 75% of the research subjects in Journal of Consumer Research and Journal of Marketing Research articles were college students.

However, there are different smartphone brands available in the world, so are in Bangladesh and Japan. Although there are handsome number of smartphone brands in the mobile phone market of Bangladesh and Japan, Apple and Samsung are recognized as most profitable and well known as popular. So, the main purpose of this study is to examine consumer perceived value (CPV) on Samsung and Apple smartphone brands among students of Japan and Bangladesh. To understand the impact of four dimensions of CPV on Smartphone brand preference of students in Japan and Bangladesh, a survey was conducted. This research also compared the reasons of two smartphone brands preference of male and female students in Japan and Bangladesh.

The reminder of the research work is organized as follows. Section two includes the literature review that helps to validate the research framework and sets out the research hypothesis. The research methodology is discussed in third section. Analysis of results and discussion are presented in section four followed by conclusion and research limitation.

Objectives

1. To examine smartphone brand preferences among students of Japan and Bangladesh.
2. To verify and understand whether four dimensions of consumer-perceived value have an effect on smartphone brand preference of students in Japan and Bangladesh.
3. To determine which dimension of consumer-perceived value has the largest effect on students' preference towards smartphone brand.
4. To compare the reasons of smartphone brand preference of male and female students in Japan and Bangladesh.

Literature Review

Brand and Brand Competency

Nowadays, consumers are eager to pay high prices for different experience causing different brand experience can reduce consumer sensitivity to price. For this reason, product differentiation and diversification are increasing rapidly and in consequences companies begin to realize the value of brand. Kotler (2009) cited that the American Marketing Association defines brand as a name, term, sign, symbol, or design, or a combination of them, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors. Brand is invisible, not a separate physical entity, and the core is the added value, obtained from the consumer subjective feeling which is a psychological evaluation (Chang and Wang, 2008). Brand of products presents not only the physical properties, but also some humanity properties, social effects (Kotler, 2009). Aaker (1995) defines a brand on different levels, stating that a brand is not merely the physical product, but is also composed of brand attributes, symbols, brand – consumer relationships, benefits of self–expression, consumer profiles, associations with the culture of the country of origin and corporate identity. Thus, in a precise sense, Brand comes to be an expression, customer use the brand culture, culture connotation to express views and appeals, to establish their own unique image. So, this paper intends to perceive competitive smartphone brand preferences among students of Bangladesh and Japan.

However, companies would provide strategic brand experience that is different from competitors and satisfy the customers' heterogeneous demands, thus obtaining the competition advantage. And, this advantage is hard to imitate, because it is invisible and permeating in all aspects of business products and services, which will not only be a tough challenge for competitors, but also effectively block new entrants' threats and enhance the brand market bargaining power to get higher

returns. Customers are willing to pay higher prices for different experience causing different brand experience can reduce customer sensitivity to price (Liu and Sun, 2015).

Customer – Perceived Value (CPV)

Pan and Kang (2017) opined that customer-perceived depends on stating causal relationship between credibility, satisfaction, brand loyalty, and switching intention, while study on comparing and elaborating causal relationship of each brand and that of switching intention, credibility, satisfaction, brand loyalty of clients in China. Zeithaml (1988) cited that customer perceived value is as "the customer's overall assessment of the utility of a product based on perceptions of what is received and what is given". CPV is recognized by terms of value (Monroe, 1990; Zeithaml, 1988) or customer value (Butz & Goodstein, 1996). CPV is a process from pre-purchase, transaction, and post purchase aspect in use situations (Woodruff, 1997). Ulaga and Chacour (2001) also commented that the analyses of CPV is not only a market research tool, but also a powerful competing and measuring one. Consequently, transferring customer value is the manner to building a firm's competitive advantage (Lee & Overby, 2004; Ulaga & Chacour, 2001; Woodruff, 1997). Moreover, Slater and Narver (2000) conceptualized that when providing more value than the competitors, enterprise could obtain more customer perceived values, which can be deemed as competitive advantage to develop market ability that is relative with sales growth measured by CPV.

Consumer preference is a function of multiple value dimensions that make different contributions in different preferred situations. These dimensions are comprehensive, encompass a variety of fields and form a solid foundation for the extension of existing value constructs. Petrick (2002) opined that customer perceived value comprises five dimensions including quality, emotional response, monetary price, behavioral price and reputation. Ma et. al., (2010) seemed consumer perceived value as the four – dimensional structure, that is functional performance, perceived cost, emotional and social value. Lim et al., (2006) adopted the framework of measuring customers' perceived value of mobile services. According to them, three value dimensions – economic, emotional and social values are treated as the most relevant to mobile service experience. This research study is concentrated on four dimensions of Sheth et al., (1991) consumption framework that explained the reasons for consuming a product based on five values. Sheth et al., (1991) proposed five dimensions' model which is as follows: functional, emotional, social, epistemic, and conditional value. Since conditional value refers to the situation in which the value judgment is made, measuring consumer perceive value for smartphone brand is not rational in this case. Therefore, this research only takes first four value dimensions of Sheth et al., (1991) for measuring the consumer perceived value of smartphone between Bangladesh and Japan. Also, this research establishes inner relationship among the multidimensional constructs of CPV on Apple and Samsung.

CPV Associated with Smartphone

According to Sweeney and Soutar (2001) defined consumer value – economic value is related to perceived economic benefits received by users of mobile phone services in comparison to the monetary cost of the services; emotional value is the utility derived from the feelings of affective states that a product/service generates; social value is the utility derived from the product's or service's ability to enhance social self–concept. Functional value, which is analogous to utilitarian value, is the benefits gained from a product brand based on its functional performance and value for money (Yeh et al., 2016). Specifically, the definitional scope of functional value covers the get–give trade–off idea of perceived value. Emotional value, which is equivalent to hedonic value, refers to the feelings or the affective status aroused by a product/brand (Kim et al., 2011). In general, emotional value is generated from product usage/exploration and product appearance. Social value is the extent to which a product/brand enhances consumers' social well-being and interpersonal relationships, and it is rooted in the symbolic meanings of the product/brand (Rintamaki et. al., 2006).

Functional Values: Functional value of a smartphone can be derived from its characteristics or attributes; including reliability, durability, and price, and is measured through a profile of choice attributes. Traditionally, functional value is presumed to be the principle driver of consumer choice

(Kim et al., 2011). However, functional values are based on economic utility theory and value derived by comparing costs and performance (Gimpel, 2011). Low price or reasonable price is considered to be one of the most influential factors that derives functional value in consumption decision of a smartphone among the users (Khan and Hyunwoo, 2009; and Tuominen, 2011). In addition, price derives more functional value if the price of smartphone is relatively cheaper compare to alternative offerings (You et al., 2011; Pihlqvist et al., 2011). If the price is high, functional value derives from smartphone consumption reduces and demand for such products may decrease in the future (Sand and Tseng, 2010). Some previous studies emphasized on battery life, applications, speed and connectivity, and screen display as the factors of functional value. J. D Power Associates (2011) revealed out that customer satisfaction and brand loyalty towards smartphone are based on battery performance or length of battery life. Bakon and Hasan (2013), pointed out speed and connectivity as one of important attributes that derives functional value from purchase and consumption of smartphone. Prior studies have found evidence of relationship between functional benefit and consumer perceived values and they reported that a product that offers high functional value earns high consumers' preference.

Emotional Value: In addition to functional value, consumers can experience emotional value; such as – playfulness and pleasure from smartphone usage and exploration (Alba & Williams, 2013; Arruda – Filho et al., 2010). Emotional value refers to the feelings or the affective status aroused by a product or brand (Kim et al., 2011; Sweeney and Soutar, 2010). Gimpel (2011); Liao and Hsieh (2013) found that "aesthetics, such as beauty and artistry, can add emotional value to smartphone". Similarly, many other researches also indicated that ease of use is the key factor that makes customer to buy smartphone (Crother, 2011; Gartner, 2011; Park and Chen, 2007; Tuominen, 2011; Heilmreich, 2009).

You et al., (2011) stated that if the user experience is positive and enjoyable, it creates an emotional attachment and positively impact on smartphone repurchase intentions. Many research findings found that there is a positive relationship between customer perceived usefulness and customer adaptation of smartphone (Chung and Chun, 2011; Park and Chen, 2007; Jongepier, 2011). Pihlstrom and Brush (2008) revealed when customers show greater positive perception on a product or brand, they expose more emotional value as measured by repurchase intensions, willingness to pay, and positive word – of – mouth.

Social Value: Social value is the extent to which a product or brand enhances consumers' social wellbeing and interpersonal relationships, and it is rooted in the symbolic meanings of the product or brand (Rintamaki et. al., 2006). Sheth et al (1991) argued that social value is measured on a profile of choice imagery. Gimpel (2011) found social value as the symbolic importance of an artifacts. Arruda – Filho et al (2010) conducted a netnographic analysis on i-phone and found that consumers' may experience social value from the possession and usage of smartphones. They may view the possession of an iphone as a symbol of luxury and higher social status (Liao & Hsieh, 2013). In addition, Bodker et al., (2012) pointed that the most crucial social values which are derived from smartphone purchase and consumption includes conveying image. Moreover, some research shows that consumer buy smartphone due to enhance the social networking, and always wanted to connect with their friends, family and working groups (Tuominen, 2011). Ting et al., (2011) revealed an important positive relationship between smartphone adaptation and social influences such as society and escalating technology advances. Pihlstrom and Brush, (2008) argued that when consumer perceive higher social value from a product or brand, they show greater positive behaviors to purchase further that product.

Epistemic Value: Sheth et. al., (1991) stated that epistemic value refers to the surprise or novelty aspect of a product, a product's capacity to arouse curiosity, offer novelty or satisfy a desire for knowledge. Khan and Hyunwoo (2009) argued that many customers purchase smartphones in order to mitigate the intrinsic motivations such as new features or functions. Constant streams and developments also arouse curiosity and leads to smartphone purchase decision (Bakon & Hasan,

2013). Pura and Gummerus (2007) argued that in mobile content service use, novelty value gradually vanishes after trial, and the service may not be used in the long term if the primary motivation is curiosity or novelty – seeking. The absence of an influence of epistemic value on the monetary value of entertainment services indicates that people who use entertainment mobile services mainly for their novelty value are not very concerned about price when services are used for the first time (Pihlstrom and Brush, 2008). In the psychology literature, novelty – seeking has also been referred to as experiential behavior, which in technological environments can be browsing the Internet without a specific goal in mind (Novak et al. 2003) or using mobile services due to spend time and entertain oneself. Some previous studies have found positive relationship between epistemic value and CPV, and they reported that a brand that offers high epistemic value earns high consumers' preference (Novak et al., 2003).

From the above discussion, this research intends to compare CPV on Samsung and Apple smartphone brand between two countries – Japan and Bangladesh. Thus, the relationship among four dimensions of CPV in terms of smartphone brand preferences of students in Japan and Bangladesh can be hypothesized as follows:

H_{1a}: There is significant impact of overall CPV on smartphone brand preferences among students in Japan and Bangladesh.
H_{1b}: There is significant impact of functional value on smartphone brand preferences among students in Japan and Bangladesh.
H_{1c}: There is significant impact of emotional value on smartphone brand preferences among students in Japan and Bangladesh.
H_{1d}: There is significant impact of social value on smartphone brand preferences among students in Japan and Bangladesh.
H_{1e}: There is significant impact of epistemic value on smartphone brand preferences among students in Japan and Bangladesh.

The Effect of Gender

Venkatesh and Morris (2000) argued that gender variation processes information using different socially – constructed cognitive structures, and they exposed that the effect of perceived usefulness on behavioral intention was greater for men than for women because men are more task – oriented. Prior studies have shown the relationship between gender, consumer values, preferences, and behaviors. Walsh and White (2007) explained that male and female consumers may have different value preferences and identification needs. Dittmar (2005) argued that emotional value and identity – related factors are more important for women than for men while choosing a product or brand. In context of Smartphone, Syed and Nurrullah (2011) concluded that men tended to treat smartphones as toys, which means the functional and emotional value that men gain from mobile phone usage is more closely linked to product exploration and experience than woman. In this context, this research proposes the following hypotheses precisely:

H_{2a}: Functional value of Smartphone brands is higher for male students than for female students.
H_{2b}: Emotional value of Smartphone brands is higher for male students than for female students.
H_{2c}: Social value of Smartphone brands is higher for male students than for female students.
H_{2d}: Epistemic value of Smartphone brands is higher for male students than for female students.
H_{2e}: Overall CPV of Smartphone brands is higher for male students than for female students.

Research Methodology

Both descriptive and empirical study was conducted to identify different dimensions of consumer perceived value, like – Functional value, Emotional value, Social Value, and Epistemic Value. This study is based on both primary and secondary data and the research covers the undergraduate and graduate level university students of Shiga Prefecture in Japan and Dhaka City in Bangladesh. The primary data was collected through a structure questionnaire emphasizing the purpose of the study. The questionnaire was designed by 27 items to measure the above mentioned four dimensions of CPV. In structure questionnaire, 5 point Likert Scale has been used to measure agreeableness of the students where Strongly agree (SA), Agree(A), Neutral(N), Disagree (D)and Strongly Disagree(SD) denotes the value – 5, 4, 3, 2, 1 respectively. Convenience sampling is adopted for this research work. In this study, a total of 400 questionnaires were distributed among the university students of Japan and Bangladesh.

More specifically, questionnaire was distributed among the 190 students of the department of economics in Ritsumeikan university of Japan and 210 students of the department of business administration in Bangladesh university of professionals and university of Dhaka in Bangladesh. A total of 392 questionnaires were returned where the response rate is 98%. But, some questionnaires were retrenched due to the incompleteness of the questionnaire and inconsistencies among opinions. So, this research only used 332 completed questionnaires. SPSS and Excel were used to analyze and tabulate data. ANOVA test is done to justify the different hypothesis of this research. Also, regression analysis is performed to compare the variance of students' opinion between Bangladesh and Japan.

Results and Discussions

It was possible to examine a variety of sub samples because of the data availability. However, for this research, only the main finding from the frequency analysis based on the respondent's feedback, statistical means and standard deviation, T-test, ANOVA test and regression analysis are presented.

Respondent's Profile

The following table shows the respondents profile. 63.3% of respondents are male while 36.7% are female. In terms of country, 50.9% respondents are from Japan and 49.1% respondents are from Bangladesh. Most of the respondents are studying in second year which proportion is 62.7%. 55.1% respondents are the user of Apple smartphone whereas 35.5% respondents are Samsung smartphone users. And, rest of 9.4% respondents are using other smartphone brand.

Table 1: Profile of Respondents

Profile	Items	Frequency	Percent
Gender	Male	210	63.3
	Female	122	36.7
Country	Japan	169	50.9
	Bangladesh	163	49.1
Level of Study	First year	1	.3
	Second year	208	62.7
	Third year	96	28.9
	Fourth Year	21	6.3
	Master's and above	6	1.8
Smart Phone Brand	Apple	183	55.1
	Samsung	118	35.5
	Others	31	9.3

Reliability and Validity

Testing reliability of the scale is important since it shows the extent to which a scale produces consistent result if measurements are made repeatedly. And, this can be done by determining the association in between scores obtained from different administrations of the scales. If the association is high, the scale produces compatible result. So, the results can be reliable. Cronbach's alpha is most

widely used method in this case. According to Malhotra (2002) and Cronbach (1951), alpha value varies from 0 to 1, but, satisfactory value is required to be more than 0.6 for the scale to be reliable. If we compare our reliable value with the standard value alpha of 0.6 suggested by Cronbach (1951), a more accurate recommendation is produced. The Cronbach alpha results listed in the following table were based on all the retained items and offered strong support for reliability in four customer perceived value dimensions.

Table 2: Reliability Analysis

Variable	Number of items	Cronbach Alpha
Functional Value (FV)	8	.818
Emotional Value (EV)	7	.822
Social Value (SV)	6	.833
Epistemic Value (ECV)	6	.804
Overall CPV	27	.915

Cronbach's alpha is mostly used method for testing the reliability of the scale. It may be mentioned that its value varies from 0 to 1 but, satisfactory value is required to be more than 0.6 for the scale to be reliable (Malhotra, 2002; Cronbach, 1951). A more accurate value is shown in the above table for the reliability of dataset in this research context.

Table 3: Descriptive Statistics

Dimensions of CPV	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
FV	332	1.00	5.00	3.6762	.67808	.923	0.748
EV	332	1.00	5.00	3.5964	.72597	-.811	0.075
SV	332	1.00	5.00	3.2164	.81028	-.247	-.209
ECV	332	1.00	5.00	3.5492	.74056	-.578	.805
Valid N	332						

Prior to discuss which dimensions of CPV is mostly concerned with smartphone preference or which dimensions of CPV is mostly associated with the gender preference of smartphone, we will justify the normality of dataset. Normality, often refers to shape of the data distribution (Hair et al, 2010, p.71). One of the areas we consider is Kurtosis, being whether the curve is peaked or flat (Hair et al, 2010). The skewness of data set exists between -.247 to -.923 considering that this range falls between -1 to +1 indicating that skewness of this data set is in an acceptable range. Moreover, dataset is normal in case of Kurtosis as its value falls between -1 to +1.

The above table show the statistical mean and standard deviation of each CPV dimension in the measurement construct. Over the 27 items the average mean is 3.5095 which means that most of the respondent agreed that perceived value is associated with their purchasing and consumption decisions. The means ranged from 3.2164 to 3.6762 indicating that functional value (M=3.6762) is the highest CPV associated with smartphone purchases and consumption among Japanese and Bangladeshi students, followed by emotional value (M=3.5964). This finding is closely related with Bakon and Hasan (2013), Price Grabber Survey (2011), Philqvist (2011), Tuominen (2011) where they found functional values such as price, quality, performance of smartphone, Apps, operating system, SMS are most important features of a smartphone. In addition, results of this research is consistent in context of emotional value with the previous research such as Bakon and Hasan (2013), Crother (2011), Gartner (2011), Park and Chen (2007), Tuominen (2011), and Heilmreich (2009).

On the other hand, this research shown that social value of smartphone consumption in both Bangladesh and Japan scored lowest (M=3.2164) which indicates that this is the least reason why students consume smartphone. This result is also consistent with the findings of Bakon and Hasan (2013). But, Ting et al (2011) shown a significant relationship between smartphone adaptation and social influences such as society and escalating technology advances. In addition, previous research works show that consumers buy smartphone as it is compatible with their life style, work pattern and

habits (Khan and Hyunwoo, 2009). It can be said that functional value is the key variable associated with preference of consumer smartphone, followed by emotional value. And, third most important factor associated with smartphone is epistemic value.

Hypothesis Testing

Research proposes the following hypotheses precisely:

H_{1a}: There is significant impact of overall CPV on smartphone brand preferences among students in Japan and Bangladesh.

H_{1b}: There is significant impact of functional value on smartphone brand preferences among students in Japan and Bangladesh.

H_{1c}: There is significant impact of emotional value on smartphone brand preferences among students in Japan and Bangladesh.

H_{1d}: There is significant impact of social value on smartphone brand preferences among students in Japan and Bangladesh.

H_{1e}: There is significant impact of epistemic value on smartphone brand preferences among students in Japan and Bangladesh.

Table 4: Group Statistics

Dimensions of CPV	Country	N	Mean	Std. Deviation	Std. Error Mean
FV	BD	163	3.6311	.63689	.04989
	JP	169	3.7197	.71476	.05498
EV	BD	163	3.5443	.66431	.05203
	JP	169	3.6467	.77952	.05996
SV	BD	163	3.3272	.77178	.06045
	JP	169	3.1095	.83414	.06416
ECV	BD	163	3.6984	.62568	.04901
	JP	169	3.4053	.81279	.06252
Overall CPV	BD	163	3.5502	.49365	.03867
	JP	169	3.4703	.66765	.05136

It is shown from the above table that the mean of functional value and emotional value for Japan is higher than the mean of functional and emotional value for Bangladesh whereas the mean of social value, epistemic value, and overall CPV are vice versa. It means that functional value and emotional value work as effective tools for students' buying preferences towards smartphone brand in Japan. On the contrary, social value and epistemic value are more operative instruments for students' preferences towards smartphone brands in Bangladesh.

Table 5 shows that there is a significant impact of social value and epistemic value of smartphone brand preferences among students in Japan and Bangladesh. This means that social value and epistemic value have impact on students' smartphone brand preference both in Japan and Bangladesh. On the other hand, students are not influenced by functional value, emotional value and overall CPV to purchase smartphone in Bangladesh and Japan.

The Effect of Gender

Research proposes the following hypotheses precisely

H_{2a}: Functional value of Smartphone brands is higher for male students than for female students.

H_{2b}: Emotional value of Smartphone brands is higher for male students than for female students.

H_{2c}: Social value of Smartphone brands is higher for male students than for female students.

H_{2d}: Epistemic value of Smartphone brands is higher for male students than for female students.

H_{2e}: Overall CPV of Smartphone brands is higher for male students than for female students.

Table 6: T-Test – Group Statistics

Dimensions of CPV	Gender	N	Mean	Std. Deviation	Std. Error Mean
FV	Male	210	3.6738	.70223	.04846
	Female	122	3.6803	.63718	.05769
EV	Male	210	3.5252	.76670	.05291
	Female	122	3.7190	.63436	.05743
SV	Male	210	3.1532	.81777	.05643
	Female	122	3.3251	.78871	.07141
ECV	Male	210	3.5214	.77846	.05372
	Female	122	3.5970	.67073	.06073
Overall CPV	Male	210	3.4684	.63360	.04372
	Female	122	3.5804	.49815	.04510

It is shown from the above table that the mean of functional, emotional, social, epistemic value and overall CPV for female is higher than the mean of functional, emotional, social, epistemic value and overall CPV for male. So, this research suggests that the female students are more influenced by the value categories for choosing smartphone brands than the male students.

It is shown in Table 7 that male students are more motivated by emotional value than female students to choose their smartphone brand. On the contrary, female students are influenced by functional value, social value and epistemic value to select their smartphone brands. So, this research hypothesis suggests that factors of emotional value attract male students to prefer smartphone brands while male students emphasize on the variables of functional, social and epistemic value for choosing their preferable smartphone brands.

Table 8: Descriptive statistics

Descriptive										
						95% Confidence Interval for Mean				
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum	Between-Component Variance
FV	**Apple**	**183**	**3.7234**	**.72062**	**.05327**	**3.6183**	**3.8285**	**1.00**	**5.00**	
	Samsung	**118**	**3.5985**	**.58192**	**.05357**	**3.4924**	**3.7046**	**1.75**	**5.00**	
	Others	**31**	**3.6935**	**.75128**	**.13493**	**3.4180**	**3.9691**	**1.50**	**5.00**	
	Total	**332**	**3.6762**	**.67808**	**.03721**	**3.6030**	**3.7494**	**1.00**	**5.00**	
EV	**Apple**	**183**	**3.7190**	**.73026**	**.05398**	**3.6125**	**3.8255**	**1.14**	**5.00**	
	Samsung	**118**	**3.4552**	**.67213**	**.06187**	**3.3327**	**3.5777**	**1.43**	**4.86**	
	Others	**31**	**3.4101**	**.78224**	**.14049**	**3.1232**	**3.6971**	**1.00**	**4.57**	
	Total	**332**	**3.5964**	**.72597**	**.03984**	**3.5180**	**3.6748**	**1.00**	**5.00**	
SV	**Apple**	**183**	**3.2404**	**.81716**	**.06041**	**3.1213**	**3.3596**	**1.00**	**5.00**	
	Samsung	**118**	**3.2782**	**.75832**	**.06981**	**3.1400**	**3.4165**	**1.67**	**4.83**	
	Others	**31**	**2.8387**	**.88557**	**.15905**	**2.5139**	**3.1635**	**1.00**	**4.67**	
	Total	**332**	**3.2164**	**.81028**	**.04447**	**3.1289**	**3.3038**	**1.00**	**5.00**	
ECV	**Apple**	**183**	**3.5173**	**.75905**	**.05611**	**3.4066**	**3.6280**	**1.00**	**5.00**	
	Samsung	**118**	**3.6836**	**.63806**	**.05874**	**3.5673**	**3.7999**	**2.17**	**5.00**	
	Others	**31**	**3.2258**	**.88459**	**.15888**	**2.9013**	**3.5503**	**1.00**	**5.00**	
	Total	**332**	**3.5492**	**.74056**	**.04064**	**3.4692**	**3.6291**	**1.00**	**5.00**	
Overall CPV	**Apple**	**183**	**3.5500**	**.61900**	**.04576**	**3.4597**	**3.6403**	**1.31**	**5.00**	
	Samsung	**118**	**3.5039**	**.48837**	**.04496**	**3.4149**	**3.5929**	**2.06**	**4.56**	
	Others	**31**	**3.2921**	**.71842**	**.12903**	**3.0285**	**3.5556**	**1.16**	**4.53**	

	Total	**332**	**3.5095**	**.58917**	**.03233**	**3.4459**	**3.5731**	**1.16**	**5.00**	
Overall_CPV0	**Apple**	**183**	**3.5691**	**.61741**	**.04564**	**3.4791**	**3.6592**	**1.30**	**5.00**	
	Samsung	**118**	**3.5091**	**.48223**	**.04439**	**3.4212**	**3.5970**	**2.04**	**4.59**	
	Others	**31**	**3.3262**	**.71181**	**.12784**	**3.0651**	**3.5873**	**1.19**	**4.56**	
	Total	**332**	**3.5251**	**.58531**	**.03212**	**3.4619**	**3.5883**	**1.19**	**5.00**	

The above table is a comparative picture between smartphone brands which clearly defines that mean of functional, emotional value and overall CPV for Apple brand is higher than the mean of those values for Samsung and other smartphone brands. Moreover, the mean of social and epistemic value for Samsung is slightly higher than the mean of these value for Apple and other smartphone brand. Therefore, this research, in this context, can suggests that Apple users are persuaded by functional and emotional value to prefer their smartphone brands whereas social and epistemic value provoke Samsung users to use and keep this brand for future.

ANOVA Test

When this research is run for comparative study among Apple, Samsung, and other smartphone brands, the result of hypothesis test **(Table 9)** differs from the previous independent test. The ANOVA test shows that the p-value of emotional, social, and epistemic value are lower than the level of significance (0.05) which means that $p<0.05$ in terms of emotional, social and epistemic value. So, this indicate that social, emotional and epistemic value have significant impact on smartphone brand preferences among students in Japan and Bangladesh. But, functional value doesn't have significant impact on smartphone brand preferences among students in Bangladesh and Japan.

Regression Analysis

Table 10: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.403[a]	.162	.144	.611

a. Predictors: (Constant), Education, Functional Value, Gender, Social Value, Country, Epistemic Value, Emotional Value

The above table shows that R is .403 which means that 40% of the variance in students' brand preference can be predicted by independent variables of functional, emotional, social, and epistemic values which suggest that the regression model is not very good fit to predict students' smartphone brand preference.

The result of regression analysis (Table 11) shows that emotional value and country have significant impact on smartphone brand preference. But, it is notable that emotional value and country have negative significant impact on smartphone brand preference since the correlation value of smartphone for emotional value and country is -.181 and -.425 respectively.

Table 12: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.473[a]	.224	.157	.606

a. Predictors: (Constant), gender qa2 qbf1 qbf2 qbf3 qbf4 qbf5 qbf6 qbf7 qbf8 qbe9 qbe10 qbe11 qbe12 qbe13 qbe14 qbe15 qbs16 qbs17 qbs18 qbs19 qbs20 qbs21 qbep22 qbep23 qbep24 qbep25 qbep26 qbep27 Country

When this research considers smartphone brand as dependent variable and items of four CPV as independent variable, the R value is .473 which indicate that the relationship between dependent variable and independent variable is 47% which is also not very good fit to predict the smartphone brand preference.

It is shown from the regression analysis that P-value of the test statistic is lower than the level of significance (0.05) in terms of education, reasonable price, country's culture, self-study and research work, students' imagination. Therefore, this research work suggest that these four variables have significant impact on students' smartphone brand preferences in Japan and Bangladesh. However, this study defines that education and students' imagination negatively affect smartphone

brand preference whereas reasonable price, country's culture, self-study and research work positively affect students' brand preference. Therefore, this research suggest that market strategist of smartphone brands should emphasize on the variables which have positive impact on students' brand preference for further strategic goal.

Conclusions and Implications

Based on consumer value theory, this study identified functional value, emotional value, social value, and epistemic value as the determinants of consumer perceptions towards smartphone brand preferences. To understand which brand is mostly preferable among the students of Japan and Bangladesh, how these four dimensions of CPV affect students in choosing smartphone brands in Bangladesh and Japan, which dimension of CPV has the largest effect on student's preference towards smartphone brand and how the smartphone brand preference change in context of gender, the research model of this study was tested in the context of smartphone consumption with a surveyed sample of 332 respondents.

The result showed that there is a significant impact of social value on smartphone brand preference among students in Japan and Bangladesh. Epistemic value, also, has a significant influence on smartphone brand preferences among the students of Bangladesh and Japan. These results are supported by Leong, Ooi, Chong, and Lin's (2013). Haba et. al. (2017) found that social and perceived value do not impact on purchase intention of customers whereas economy value and brand image influence customers in smartphone buying decision and this result is contradictory with our findings. On the other hand, functional, emotional and overall consumer perceived value has no effect towards smartphone brand preference of students in Japan and Bangladesh. In addition, these positive relationships changed while taking students' gender into consideration. It is found that emotional value work as a higher motivation for male students than rest of three dimensions of CPV for choosing smartphone brand. In the contrary, female students emphasize on functional value, social value and epistemic value for selecting preferable smartphone brands while these results contradict with Syed and Nurullah (2011) and Albert et. al. (2013).

Moreover, functional value and emotional value are the effective tools for Japanese students towards the Smartphone brand preferences. On the contrary, social value and epistemic value work as the operative motivator for students' preferences towards smartphone brands in Bangladesh. In conclusion, as various theoretical and quantitative perspectives are used to investigate students' brand preference, this study finds that individual-oriented factors (i.e., functional, emotional, epistemic value) may have better predictability of smartphone brand preference than for interpersonal factors (i.e., social value). Gender appears to be more influential in the segmentation of smartphone consumers while building brand preferences. This research findings can be helpful for practitioners in smartphone industry for further develop or revise their marketing strategies.

Limitations and Future Research

There are limitations, as in any empirical research, with the study which open opportunities for future research. First, this study adopted non-probability sampling and recruited participants from two countries. Thus, the research model is validated using data collected from Japan and Bangladesh consumers' hodiernal experiences on smartphone brand preferences. So, caution should be observed in generalizing the findings beyond countries with similar characteristics (technology, retail environment, culture etc.) at this stage. Nonetheless, this research has provided some useful insights into consumers' value perception on smartphone brands. However, more research is needed in different types of smartphone brands and in different product categories (e.g. tourism, service industries, electronics products etc.). Second, this study has collected samples from higher education institutions which may lead to biased results. Thus, if this research study is to be applied, one should be aware of the sampling bias. Third, this research is confined between two counties which demographics characteristics, culture, and technological pattern is totally different. So, researchers could extend their knowledge conducting research on similar cultural people, specially, who have cross boarder relationship.

Reference

Aaker, D.A., (1995) "Strategic Marketing Management." New York: John Wiley & Sons, Inc.

Koladeajilore, M. S. A. (2016). Smartphone brand personality as a predictor of brand value among undergraduates of Babcock University. *Global Journal of Management And Business Research*. *16*(1), pp. 33-43.

Alba, J. W., & Williams, E. F. (2013). Pleasure principles: A review of research on hedonic consumption. *Journal of consumer psychology*, *23*(1), 2-18.

Albert, N., Merunka, D., & Valette-Florence, P. (2013). Brand passion: Antecedents and consequences. *Journal of Business Research*, *66*(7), 904-909.

Almeida, M., Sousa, E., Rodrigues, C., Candeias, M. B., & Au-Yong-Oliveira, M. (2021). Samsung vs. Apple: How Different Communication Strategies Affect Consumers in Portugal. *Administrative Sciences*, *11*(1), 19.

Apple. (2020). Apple Site Map. Available online: https://www.apple.com/sitemap/ (accessed on 20 May 2020).

Arruda-Filho, J. M. E., Cabusas, J. A., & Dholakia, N., (2010) "Social Behavior and Brand Devotion among iPhone Innovators." *International Journal of Information Management*, *30*(6), pp. 475-480.

Bakon, K., & Hassan, Z. (2013). Perceived value of smartphone and its impact on deviant behaviour: An investigation on higher education students in Malaysia. *International Journal of Information System and Engineering*. *1*(1), pp. 1-17.

Bodker, M., Gimpel, G., and Hedman, J., (2016) "The user experience of Smart Phones: A consumption values approach," 2014, Retrieved from - https://www.researchgate.net/publication/245586941_The_User_Experience_of_Smart_Phones_A_Consumption_Values_Approach (accessed at November 13th, 2016).

Butz Jr, H. E., & Goodstein, L. D. (1996). Measuring customer value: gaining the strategic advantage. *Organizational dynamics*, *24*(3), 63-77.

Cassavoy, L., (2016) "What makes a smartphone smart," www.lifewire.com: https://www.lifewire.com/what-makes-a-smartphone-smart-579597 (Accessed on December 12, 2016)

Chang, C. Y., & Wang, F. H. (2008). Analysis of Strategies for the Mainland China Mobile Phone Industry. *Int. J. Electron. Bus. Manag.*, *6*(2), 93-98.

Chung, D., & Chun, S. G. (2011). An exploratory study on determining factors for the Smartphone selection decisions. *Issues in Information Systems*, *12*(1), 291-300.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika*, *16*(3), 297-334.

Crother, B., (2020) "Apple, Samsung top J.D. Power satisfaction survey," 2011, Retrieved from http://news.cnet.com/8301-13924_3-20103501-64/apple-samsung-top-j.d-power-satisfactionsurvey/?tag=mncol;txt (accessed at November 10, 2020).

Dittmar, H. (2005). Compulsive buying–a growing concern? An examination of gender, age, and endorsement of materialistic values as predictors. *British journal of psychology*, *96*(4), 467-491.

Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of consumer research*, *24*(4), 343-373.

Fournier, S., Breazeale, M., and Fetscherin M., (2012) "Consumer-brand relationships: theory and practice," *Routledge: Abingdon*. 1st edition, pp. 55-59.

Gartner, (2020) "Press Releases: Gartner survey shows U.S. consumers more likely to

purchase Smartphone than other consumer devices in 2011," 2011, Retrieved from http://www.gartner.com/it/page.jsp?id=1550814 (accessed at December 3, 2020).

Gimpel G., (2020) "Value-driven adoption and consumption of technology: Understanding Technology Decision Making," PhD Thesis, pp.1-295. Retrieved from http://openarchive.cbs.dk/bitstream/handle/10398/8326/Gregory%20Gimpel.pdf?sequence=1 (accessed at December 15, 2020).

Haba, H., Hassan, Z., & Dastane, O. (2017). Factors leading to consumer perceived value of smartphones and its impact on purchase intention. *Global Business and Management Research: An International Journal*, *9*(1). pp. 42-71.

Hair Jr., J.F., Black, W.C., Babin, B.J. and Anderson, R.E., (2010) "Multivariate Data Analysis: A Global Perspective" Pearson Education, Upper Saddle River, 7th Edition,

Helmreich, D., (2016) "CFI Group Smartphone Satisfaction Study 2009: Smartphones, providers, and the customers who love (and loathe) them," 2009, pp.1-24. Retrieved from http://blog.seattlepi.com/microsoft/files/library/20090930smartphone.pdf (accessed at December 14, 2016).

Jin, R and Punpanich, W., (2016) "Influence of gender difference in reference group on Smartphone users' purchasing decision-making process," *Master Thesis,* pp.1-85. Retrieved from http://lup.lub.lu.se/luur/download?func=downloadFile&recordOId=1982671&fileOId=2436220 (accessed at December 19, 2016).

Jongepier, J., (2016) "Young adopter of Smartphones: Examining determinants of the adoption decisions," *Master Thesis,* pp.1-77. Retrieved from http://oaithesis.eur.nl/ir/repub/asset/10879/EUR%20Master%20Thesis%20JJongepier.pdf (accessed at December 10, 2016).

Khan, K., and Hyunwoo, K., (2009) "Factors affecting consumer resistance to innovation-A study of Smartphones" *Master Thesis*, pp.1-68. Retrieved from http://hj.divaportal.org/smash/get/diva2:223332/FULLTEXT02 (accessed at December 18, 2016)

Kim, H. W., Gupta, S., & Koh, J. (2011). Investigating the intention to purchase digital items in social networking communities: A customer value perspective. *Information & Management*, *48*(6), 228-234.

Kotler, P., (2009) "Marketing management," 13th edition, Pearson Prentice Hall, pp. 121-129.

Lee E. J. and Overby J. W., (2004) "Creating value for online shoppers: Implications for satisfaction and loyalty," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, *17*,(4), pp. 54-67.

Leong, L. Y., Ooi, K. B., Chong, A. Y. L., & Lin, B. (2013). Modeling the stimulators of the behavioral intention to use mobile entertainment: does gender really matter?. *Computers in Human Behavior*, *29*(5), 2109-2121.

Lim H. J., Widdows R. and Park F., (2006) "M-loyalty: Winning Strategies for Mobile Carriers," *Journal of Consumer Marketing*, *23*(4), pp. 208-218.

Liu, Y., & Sun, Q. (2015). A Comparative Study of Competitive Brand Based on Customer-Perceived Value—Evidences from IAT. *Open Journal of Social Sciences*, *3*(7), 275.

Liao, C. H., & Hsieh, I. Y. (2013). Determinants of consumer's willingness to purchase gray-market smartphones. *Journal of business ethics*, *114*(3), 409-424.

Mackenzie, R., (2011) "How consumers with smartphones will impact the retail experience," Rob Mackenzie's Post, *Quora.* Retrieved: from www.quora.com: https://www.quora.com/profile/Rob-Mackenzie/Posts/How-consumers-with-

smartphones-will-impact-the-retail-experience (accessed on January 17, 2017)
Ma, B., Zhang, L., Li, F., & Wang, G. (2010). The effects of product-harm crisis on brand performance. *International Journal of Market Research*, *52*(4), 443-458. http://dx.doi.org/10.2501/s1470785309201399.
Malhotra, N. K., (2002) "Marketing research: an applied orientation," 3rd edition, New Delhi: Pearson Education Asia.
McCabe, S., (2014) "The great smartphone war," *Vanity Fair Hive,* 3 May 2014, Retrieved from: https://www.vanityfair.com/news/business/2014/06/apple-samsung-smartphone-patent-war (accessed on January 17, 2017)
Monroe K. B., (1990) "Pricing: Making Profitable Decisions," 2nd edition, 1990, New York: McGraw-Hill.
Novak, T. P., Hoffman, D. L., & Duhachek, A. (2003). The influence of goal-directed and experiential activities on online flow experiences. *Journal of consumer psychology*, *13*(1-2), 3-16.
Park Y. and Chen, J.V., (2007) "Acceptance and adoption of the innovative use of Smartphone," *Industrial Management & Data System*, *107*(9), pp. 1349-1365.
Peterson, R. A. (2001). On the use of college students in social science research: Insights from a second-order meta-analysis. *Journal of consumer research*, *28*(3), 450-461.
Peterson, R. A., & Merunka, D. R. (2014). Convenience samples of college students and research reproducibility. *Journal of Business Research*, *67*(5), 1035-1041.
Petrick, J. F. (2002). Development of a multi-dimensional scale for measuring the perceived value of a service. *Journal of leisure research*, *34*(2), 119-134.
Pihlqvist M., Sundqvist C. and Steien, W., (2011) "A journey in Smartphone landscape: how and why market share is moving between different Smartphone platforms," *Master Thesis,* pp. 1-78.
Pihlstrom, M., and Brush, G. J., (2008). "Comparing the Perceived Value of Information and Entertainment Mobile Services," *Psychology and Marketing*, Vol. 25, No. 8, 2008, pp.732-755.
PriceGrabber., (2011). "Thirty five percent of consumers will purchase iPhone 5 following its releases," *PriceGrabber Survey,* 25 July 2011, Retrieved from: https://www.prnewswire.com/news-releases/thirty-five-percent-of-consumers-will-purchase-iphone-5-following-its-release-according-to-pricegrabber-survey-126109483.html (accessed at December 17, 2016).
Pura, M., & Gummerus, J. (2007). Discovering value perceptions of mobile services with critical incident technique (CIT). *Marketing theory and applications*, *35*. pp. 59–65.
Rintamaki, T., Kanto, A., Kuusela, H., and Spence M.T., (2006) "Decomposing the value of department store shopping into utilitarian, hedonic and social dimensions: evidence from Finland," *International Journal of Retail & Distribution Management, 34*(1), pp. 6-24.
Samsung. (2020). Samsung Site Map. Available online: https://www.samsung.com/pt/aboutsamsung/home/ (accessed on 20 May 2020).
Sand, A., and Tseng, V., (2017) "Smart Phone reliability: Apple iPhones with fewest failures, and major Android manufactures not far behind," *Square Trade Inc,* 2010, pp. 1-9. Retrieved from: http://www.wired.com/images_blogs/gadgetlab/2010/11/SquareTrade_Cell_Phone_Comparison_Study.pdf (accessed on January 25, 2017).
Schechner, S., (2017) "Huawei Counting on 'Groufies'-Group Selfies-to Boost Market Share. *The Wall Street Journal Asia (Online),"* 7 May 2014, Retrieved from:

https://www.wsj.com/articles/huawei-counting-on-groufiesgroup-selfiesto-boost-market-share-1399467495 (accessed on January 25, 2017)
Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of business research*, *22*(2), 159-170.
Simonson, I., Carmon, Z., Dhar, R., Drolet, A., & Nowlis, S. M. (2001). Consumer research: In search of identity. *Annual review of psychology*, *52*(1), 249-275.
Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of marketing*, *54*(4), 20-35.
Smit, E., Bronner, F., & Tolboom, M. (2007). Brand relationship quality and its value for personal contact. *Journal of business research*, *60*(6), 627-633.
Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of retailing*, *77*(2), 203-220.
Syed, S. F., & Nurullah, A. S. (2012). Use of mobile phones and the social lives of urban adolescents: A review of literature. *Trends in Information Management*, *7*(1).
Ting, D. H., Lim, S. F., Patanmacia, T. S., Low, C. G., & Ker, G. C. (2011). Dependency on smartphone and the impact on purchase behaviour. *Young Consumers*. *12*(3), pp.193-203.
Tuominen, P., (2017) "The Influence of Trip Advisor Consumer-Generated Travel Reviews on Hotel Performance," *University of Hertfordshire Business School, Working Paper*, 2011, retrieved from http://uhra.herts.ac.uk/bitstream/handle/2299/7612/S128.pdf?sequence=1 (accessed on January 05, 2017).
Ulaga, W., & Chacour, S. (2001). Measuring customer-perceived value in business markets: a prerequisite for marketing strategy development and implementation. *Industrial marketing management*, *30*(6), 525-540.
Venkatesh, V., & Morris, M. G. (2000). Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior. *MIS Quarterly*, *24*(1), pp. 115-139.
Vijaya, G. S., & Vidyashree, V. (1819). A Comparative Study between Samsung and Apple Smart Phones-Saudi Arabian Women Student's Preference. *International Journal of Advanced Engineering, Management and Science*, *2*(10).
Walsh, S. P., & White, K. M. (2007). Me, my mobile, and I: The role of self-and prototypical identity influences in the prediction of mobile phone behavior. *Journal of Applied Social Psychology*, *37*(10), 2405-2434.
Woodruff, R. B. (1997). Customer value: the next source for competitive advantage. *Journal of the academy of marketing science*, *25*(2), 139-153.
Yeh, C. H., Wang, Y. S., & Yieh, K. (2016). Predicting smartphone brand loyalty: Consumer value and consumer-brand identification perspectives. *International Journal of Information Management*, *36*(3), 245-257.
You, J. H., Lee, J. H., & Park, C. (2011). Factors influencing adoption and post-adoption of smart phone. In *Proceedings of International Conference on Software and Computer Applications (ICSCA 2011)*.
Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of marketing*, *52*(3), 2-22.

Annexure – 1

Table 5: T-Test – Independent Sample Test

Independent Samples Test										
Dimensions of CPV		**Levene's Test for Equality of Variances**		**t-test for Equality of Means**						
									95% Confidence Interval of the Difference	
		F	**Sig.**	**t**	**df**	**Sig. (2-tailed)**	**Mean Difference**	**Std. Error Difference**	**Lower**	**Upper**
FV	**Equal variances assumed**	.569	.451	-1.190	330	.235	-.08854	.07439	-.23489	.05781
	Equal variances not assumed			-1.193	327.964	.234	-.08854	.07424	-.23459	.05751
EV	**Equal variances assumed**	1.948	.164	-1.286	330	.199	-.10240	.07962	-.25903	.05422
	Equal variances not assumed			-1.290	325.102	.198	-.10240	.07939	-.25859	.05378
SV	**Equal variances assumed**	.660	.417	2.466	330	.014*	.21773	.08828	.04407	.39139
	Equal variances not assumed			2.470	329.436	.014*	.21773	.08815	.04431	.39115
ECV	**Equal variances assumed**	9.361	.002	3.672	330	.000*	.29304	.07981	.13604	.45004
	Equal variances not assumed			3.689	314.672	.000*	.29304	.07944	.13674	.44934
Overall CPV	**Equal variances assumed**	6.507	.011	1.237	330	.217	.07996	.06463	-.04718	.20709
	Equal variances not assumed			1.244	309.355	.215	.07996	.06429	-.04654	.20645

***indicate significant difference at 5% level of significance.**

Table 7: T-Test – Independent Sample Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
FV	**Equal variances assumed**	.810	.369	-.084	330	.933	-.00652	.07731	-.15859	.14556
	Equal variances not assumed			-.087	273.240	.931	-.00652	.07534	-.15484	.14180
EV	**Equal variances assumed**	5.101	.025	-2.361	330	.019*	-.19380	.08208	-.35526	-.03234
	Equal variances not assumed			-2.482	291.834	.014*	-.19380	.07809	-.34748	-.04011
SV	**Equal variances assumed**	.078	.780	-1.871	330	.062	-.17196	.09189	-.35273	.00881
	Equal variances not assumed			-1.889	260.509	.060	-.17196	.09101	-.35118	.00725
ECV	**Equal variances assumed**	1.961	.162	-.896	330	.371	-.07557	.08433	-.24145	.09032
	Equal variances not assumed			-.932	283.843	.352	-.07557	.08108	-.23515	.08402
Overall Consumer Perceived Value	**Equal variances assumed**	3.090	.080	-1.674	330	.095	-.11196	.06689	-.24354	.01962
	Equal variances not assumed			**-1.782**	**301.260**	**.076**	**-.11196**	**.06281**	**-.23557**	**.01165**

*indicate significant difference at 5% level of significance.

Table 9: ANOVA Test

		Sum of Squares	df	Mean Square	F	Sig.
FV	**Between Groups**	**1.128**	**2**	**.564**	**1.229**	**.294**
	Within Groups	**151.064**	**329**	**.459**		
	Total	**152.192**	**331**			
EV	**Between Groups**	**6.177**	**2**	**3.089**	**6.039**	**.003***
	Within Groups	**168.269**	**329**	**.511**		
	Total	**174.446**	**331**			
SV	**Between Groups**	**4.979**	**2**	**2.490**	**3.857**	**.022***
	Within Groups	**212.340**	**329**	**.645**		
	Total	**217.319**	**331**			
ECV	**Between Groups**	**5.560**	**2**	**2.780**	**5.198**	**.006***
	Within Groups	**175.970**	**329**	**.535**		
	Total	**181.530**	**331**			
Overall CPV	**Between Groups**	**1.770**	**2**	**.885**	**2.574**	**.078**
	Within Groups	**113.126**	**329**	**.344**		
	Total	**114.896**	**331**			
Overall_CPV0	**Between Groups**	**1.612**	**2**	**.806**	**2.372**	**.095**
	Within Groups	**111.786**	**329**	**.340**		
	Total	**113.397**	**331**			

Table 11: Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.747	.266		10.330	.000
	Functional Value	.115	.070	.118	1.645	.101
	Emotional Value	-.181	.074	-.199	-2.437	.015
	Social Value	-.062	.054	-.076	-1.147	.252
	Epistemic Value	.006	.064	.007	.100	.920
	Country	-.425	.081	-.322	-5.259	.000
	Gender	-.100	.071	-.073	-1.408	.160
	Education	-.050	.056	-.053	-.887	.376

a. Dependent Variable: Smart Phone Brand

Table 12: Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.085	.285		7.317	.000*
	Gender	-.075	.074	-.055	-1.020	.309
	Education	-.146	.052	-.154	-2.789	.006*
	My smartphone is generally reasonably priced.	.126	.037	.205	3.370	.001*
	My smartphone offer value for money.	-.070	.047	-.107	-1.484	.139
	My smartphone has an acceptable standard of quality.	.032	.061	.043	.515	.607
	My smartphone is reliable in its performance.	-.047	.060	-.067	-.781	.435
	I would choose my current smartphone brand even if the other brands have same functionality as my current smartphone.	-.050	.037	-.091	-1.344	.180
	Apps of my smartphone has enabled me to accomplish my need.	-.035	.046	-.052	-.762	.446
	I would rather choose my smartphone brand as its operating system is easy to use and satisfy my need.	.063	.045	.090	1.402	.162
	I would like to keep using my present smartphone though recently Samsung and iPhone have fire incident in USA and Australia	.039	.038	.066	1.036	.301
	I can enjoy fun with my smartphone.	-.080	.052	-.113	-1.551	.122
	The features and application of my smartphone is interesting to me.	.051	.053	.071	.953	.341
	I like the style and appearance of my smartphone.	-.002	.044	-.004	-.056	.955
	I consider myself to be loyal to my smartphone brand.	-.024	.042	-.041	-.573	.567
	My smartphone band is more than just a product for me.	-.064	.042	-.107	-1.508	.133
	I associate my smartphone brand with my country's culture.	.080	.038	.129	2.092	.037*
	I will recommend my friends to buy my smartphone brand.	-.056	.046	-.089	-1.233	.219
	Using my present brand enhances my self-image to others.	-.040	.047	-.064	-.854	.394
	Using my present brand improves my self-expression to others.	.048	.051	.075	.954	.341
	My smartphone enables me to form interpersonal bonds with others.	-.043	.044	-.070	-.964	.336

	My smartphone helps me maintain my social relationship with others.	.028	.045	.046	.628	.530
	It helps me to make new friends over the time.	.036	.038	.065	.962	.337
	Using my present brand makes me self-respected to others.	-.063	.042	-.108	-1.503	.134
	My device contributes in my self-study and research work.	.100	.044	.160	2.295	.022*
	This device helps me to arouse my imagination.	-.104	.046	-.157	-2.270	.024*
	I feel a strong sense of belongingness with my present device.	-.021	.044	-.034	-.485	.628
	This device is like my part of life.	.045	.040	.075	1.139	.256
	This device helps me to keep updated with the span of fashion and style of life.	.021	.041	.035	.514	.608
	This device helps me more in my present study.	-.001	.047	-.002	-.028	.978
a. Dependent Variable: Smart Phone Brand						