

## Conceptual Paper: Factors Affecting the Demand of Smartphone among Young Adult.

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**Abstract**— The term ‘Smartphone’ has commonly discussed among young adult especially students from higher learning institutional. Cell phone has becoming a part of their life-tool eventually. Young adult eventually used their phone to communicate with people, alarming themselves from few reminders, direct ways, downloading songs and games, texting messages and more. According to Rice and Katz (2008), the cell phone can be said as a social medium that developing into a multimedia digital platform which has the ability to provides, obtains, and shares personal and social information. However, the market eventually has a higher technology which is called Smartphone. Several industries have hurriedly espoused mobile devices, such as personal digital assistants (PDAs) which have the capabilities of integrating wireless connections and mobile devices that auxiliary pushed the demand effectively in every industry by having a new buzzword, “Smartphone,” illustrates this popular PDA-phone amalgamation with numerous capabilities (Park and Chen, 2007). The factors affecting consumer demand towards Smartphone are complex in nature and usually there is no single factor or simple reason can be determined. Nowadays, consumers tend to shift their preferences from a basic cell phone to a Smartphone. It is obviously the major lead for mobile phone manufacturers to switch the production towards Smartphone due to high demand. The four independent variables under investigation in this study include product features, brand name, price and social influences. The dependent variable is the demand of Smartphone among young adult. Young adults may include fresh graduates with no working experience, industrial trainee from higher learning institutional or students that study in higher learning institutional. In other words, the target respondents are those youngsters whose age falls between 17 to 25. The main objective of this study is to develop a literature review of factors affecting the demand of Smartphone among young adult. This conceptual paper showed a strong relationship between the variables. A pilot test will be carried out to test the reliability of the variables.

**Keywords**— Smartphone; Product features, Brand name, Price, Social influences

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### I. INTRODUCTION

The issue of industries are moving to globalization has alerted the world since 1990’s and until recently, it is still a booming area of research among educators and society. The significance level of globalisation is swelling throughout the world in the 21st century (Rato, 2006). The enhancement of technologies and succession in communication are causative for companies to import raw materials and also export their product though the pace of improvement can be say as a streak of lightning and therefore telecommunication tools no longer can be mistreated by anyone in this new era (Craig, Samuel and Douglas, 1996).

The most commonly used phone in the market is called as basic phone. Basic phone are chiefly used for voice communication and short text messaging services (SMS) and may support constrained browsing (Subramanian, 2009).

According to Rice and Katz (2008) the cell phone can be say as a social medium that developing into a multimedia digital platform which have the ability to provide, obtain, and share personal and social information. However, the market eventually has a higher technology which is called Smartphone. One of the approaches that can distinguish a Smartphone and a cell phone is to determine whether or not the phone uses a mobile operating system as traditional cell phones do not employ any operating systems while Smartphone are all administrated by systems which including Windows Mobile, iPhone OS, Symbian OS, Google Android or Linux (Sanne, 2009). Smartphone uses an operating system that allows third party applications to run on it. At the same time, it also summarized that a Smartphone will have more innovative wherewithal compared to normal cell phones which concluded both PDA and cell phone in a Smartphone. Therefore, the society has

slowly moved their cell phone purchasing decision to Smartphone.

The key gadgets for accessing the mobile Internet or currently been named as “Smartphone” are powerful new computing devices endowed with traditional wireless voice service as well as native software applications and, perhaps most importantly, the capability to connect to and run an innumerable of Internet-based services including email, geo-location, streaming video, and social networking, while providing a good user experience (Kenny and Pon, 2011). These gadgets attracted consumers to purchase Smartphone. Therefore, this study will emphasize on the factors that affect the demand of Smartphone.

Several industries have hurriedly espoused mobile devices, such as personal digital assistants (PDAs) which have the capabilities of integrating wireless connections and mobile devices that auxiliary pushed the demand effectively in every industry by having a new buzzword, “Smartphone,” illustrates this popular PDA-phone amalgamation with numerous capabilities. (Park and Chen, 2007). According to Gartner (2006), in the first quarter of 2006, worldwide PDA and Smartphone shipments summed out 3.65 million units, increment of 6.6 percent from the first quarter of 2005 while pure PDA shipments were dwindling and consignments of smart mobile devices rose 55 percent year-on-year in Q2 2006. This results shows that the popularity of Smartphone had overcome PDAs.

The advancement in mobile internet technology has created new value positions in the retail industry by having the exponential expansion number of internet-enabled mobile phone subscribers (Yang, 2010). As the market for the technologies and devices accompanying, this tendency as well perk up at a fast pace mobility and becomes an increasingly common force in shaping the lifestyles of consumers (Kumloglu, Nasir and Nasir, 2010). This was also supported by Shankar and Malhotra (2007) by stating that technology developments in mobile communications have begun to foster new platforms for brand-consumer interactions.

Nowadays, consumers tend to shift their preferences from a basic cell phone to a Smartphone is obviously the major lead for mobile phone manufacturers moved their production towards Smartphone. If a comparison is made with other durables goods, the technology-based products will be having a more distinctively brief lifecycle and therefore for those consumers who desire for upgrade will be attracted by firms next generation products which firms intended to earn profit from these consumers, example, older model cell phones are rapidly replaced by newer models with augmented functions (Tseng et al., 2011).

The advancement of science and technology as well giving a hand for mobile phone manufacturers to innovate on their existing product, due to the rapidly advancement technology manufacturers have to persist in improving their phones from time to time in order to catch the pace of others in the industry. Anderson (2010) stated that mobility do not only tolerates us to develop ideas at workspace but it also increase the possibilities for being more productive. As a result, it is crucial for manufacturers to improve on new technologies and dump the old; the pace of changing is unpredictable, what is today, might not be the same

tomorrow. Therefore, consumers are keeping themselves with high concern with technologies might change their devices from time to time. In other words, devices can be easily be replaced due to the fast pace of advancement in technology.

The main objective of this study is to develop a literature review of factors affecting the demand of Smartphone among young adult. By conducting this study, adequate knowledge can be generated to fill out the existing research gap. Also, through this research, each and every mobile phones producers, designers and programmers are able to gain more insights about how consumers perceive on mobile phones and therefore take any corresponding actions needed. Last but not least, this research may contribute towards the Malaysian Plan 2011-2015; The Big 10 ideas.

## II. LITERATURE REVIEW

### A. Demand

Demand can be defined as “the willingness and the ability to pay a price for a specified product and service” (Sexton, 2007). Intention to purchase depends on the degree to which consumers expect the product to satisfy them when they consume it (Kupiec and Revell, 2001). When a consumer wanted to make the purchase decision, they will pass through the process through recognition, search information, evaluation, purchase, feedback (Blackwell, Miniard, and Engel, 1995). Therefore, the consumer will choose a product or brand to consume from various choices in the market. According to Bettman, Johnson and Payne (2000), different situation will be affected by different factors.

Consumer has different tastes, needs, motivation and lifestyle when they want to purchase a product (Chisnall, 1985). Some of them preferred high quality and willing to pay high price, some of them are not (Monroe, 2003). Furthermore, the consumer behaviour towards purchasing a product can be investigating through the consumer characteristics. It include brand conscious, price conscious, quality conscious, recreation conscious, innovation conscious, confused by over choice, impulsive and brand (Leo, Bennett, and Hartel, 2005). Therefore, it is important to study the factors that affect t consumer’s decision towards buying a Smartphone. The variables under investigation in this study include product features, brand name, price and social influences.

### B. Product Features

A feature is an attribute of a product that to meet with the satisfaction level of consumers’ needs and wants through the owning of the product, usage, and utilization for a product (Kotler, Philip, Armstrong, and Gary, 2007). In such modern technology days, consumers have come to realisation that different feature will bring a diverse level of satisfaction towards Smartphone. In this new era, Oulasvirta et al. (2011) stated that the phones now feature with wireless connectivity, a built-in Web browser, application installation, full programmability, a file management system, multimedia presentation and capture, high-resolution displays, several gigabytes of storage and location and movement sensors. Besides, operation system and camera are the features that most Smartphone users focus on. The most popular

operation system for mobile phone are Symbian, RIM Blackberry, Apple iPhone, Windows mobile, Google Android and Linux (Gowind, 2010). According to Chang and Chen (2005) each operating systems has its own exclusive personalities and backgrounds.

Wickliffe and Psyarchik (2001) suggested that consumers select products based on attributes which create specific benefits that engender specific outcomes that are supportive of personal values. Products with attributes that enhance these factors are therefore selected based in the importance of integration. According to Puth et. al. (1999) consumers' uses attributes to make a comparison between competitive brands and marketers therefore use attributes in advertising to influence the consumer's evaluation of substitution by featuring the product's significant attributes.

### *C. Brand Name*

In recent changing global environment, competitive advantage, profitable ways and efficiencies are the most important gears that companies are force to seek for in order to differentiate among them in the business world (Mei, Dean and White, 1999). Brand names are valuable assets that help correspond quality and suggest precise knowledge structures which related to the brand (Srinivasan and Till, 2002). Researchers have distinguished that brand name as an important tool in improving a product's value (Dodds, Monroe and Grewal, 1991). According to Rotfled (2009), brand name is an exclusive and is to indicate product itself to the market. Besides according to the American Marketing Association, they defined the brand as "name, term, symbol, or design, or a combination of them intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competition" (Khasawneh and Hasounneh, 2010). Haigh (2007) has proposed three definitions: "trademark" is a logo with associated visual elements, "brand" is a trademark with associated intellectual property rights, and "branded business" covers the whole organization.

According to Rao and Ruekert (1994), they stated that one of the major objectives of a brand name is to provide information on the quality of a product. The value of a brand name adds to the product is named as brand equity (Farquhar, 1989). Developing brand equity is thought to be an important component of brand building (Keller, 1998). Brand equity is assumed to convey several benefits to a firm (Pappu, Quester and Cooksey, 2005). Brands might develop sustainable competitive advantage for firms (Aaker, 1989). As a result, if consumers perceive a particular brand favourably, then the firm may have a competitive advantage (Pappu, et. al, 2005).

More and more companies realized that one of their most priceless assets is the brand names that related with their products or services (Cornelis, 2010). In recent aggressive competitive market place, the most critical success element for companies is the brand name that were being used by a product, and further stated that the brand names are consider as the last source of differentiation for the companies' products and services (Lim and O'Cass, 2001). According to Khasawneh and Hasounneh (2010), the product's brand name will influence consumers' evaluation and subsequently, affect the buying decision.

Brand extension is a strategy that many companies follow with the aim of benefiting from the brand knowledge achieved in the current markets (Aaker and Keller, 1990). When a new product is marketed under a well-known brand name, failure rates and marketing costs are reduced (Martinez and Pina, 2010). Benefits of a great brand include a short-term gain on recognition to long-term competitive advantage on loyalty, which are ultimately translated into revenues and profits.

### *D. Price*

Nagle and Holden (2002) stated that price can play a role as a monetary value whereby the consumers to trade it with the services or products that were being sold by the sellers. Price will always be the key concern of consumers' before making any purchasing decision (Smith and Carsky, 1996).

The level of price is found to positively affect behavioral intentions mainly because price establishes image of the brand in the eyes of the consumers (Aaker, 1991). In a consumer's heuristics, a high (low) price connotes a high (low) quality and image. For a conceptual convenience, there are two types of products by price: high-priced brands and low priced brands (Kunal et al., 2010). High-priced brands are brands on the market whose image is seen as the key factor. Consumers of these brands often purchase them mainly for image and are willing to pay a premium price for their perceived high quality and status, which make them price-inelastic (Bolton, 1989). Low-priced brands tend to be purchased for utilitarian value, with the consumer relying on the perceived value for price. Consumers would typically look for low prices of these brands or substitutes to get the best value (Kunal et al., 2010). Consumers tend to interpret higher prices with higher quality, and low prices are perceived as an indication of inferior quality (Rao and Monroe, 1988). Rao and Monroe (1988) studies is consistent with Etgar and Malhotra's (1981) findings. Etgar and Malhotra's (1981) explained that most of the consumers will regard high price goods and services equals to high quality. Thus, if the price level is at a peak but the quality or features are comply with the consumers' expectation; they might perceive as fair and are more willing to pay a at a higher price to owns a better quality goods or services (Monroe, 2003).

According to Thaler (1985), there is more than couple of brand of mobile phone that consumer will find in today's market, this will most likely influence the consumers' indicator on the pricing that being sold. Price is no longer an element that can be ignore for investigation whether or not it is an crucial factor that affects consumers' behaviour in products and services. Recently, most of the consumers are pursuing a high quality services, though service is an important factor, yet the unwillingness of consumers to pay for obtaining a higher level of service by sacrificing an extra amount can still be seen (Tse, 2001). On the other hand, price might not be part of their considerations especially when dealing with web shopping, which the major concern falls on convenience, security and store offer (So, Wong and Sculli, 2005).

According to Kenning, Evanschitzky, Voegl and Ahlert (2007), over 90 percent of retailers in this market screen the prices of their competitors on a regular basis. Price

knowledge is a psychological construct that relevant to retailer success, since it influences both a consumer's buying decision and the sales margin. At the same time, it can help the retailer to exploit consumer "willingness to pay." The price of a product is one of the most important marketing-mix tools which are currently used excessively to attract consumers to a certain product or store (Evanschitzky, Kenning and Vogel, 2004).

#### E. Social Influences

Social influences means one person causes in another to make a change on his/her feelings, attitudes, thoughts and behaviour, intentionally or unintentionally (Rashotte, 2007). It resulted from interacting with each other. Social influence includes the influence of media, parents and peers (Nelson and McLeod, 2005). Social Influence is defined as the degree to which an individual perceives that important others believe he or she should use the new system (Venkatesh et al., 2003). Generally, peer are the primary influences, followed by media and parents, at a research in United States. According to Nevenzahl and Secunda (1993), social influences are concerned with how individuals learn the skills, knowledge and attitude relevant for consumption.

According to Rashotte(2007), conformity, power and authority are different with social influence. Conformity will occur when a person expresses an opinion in order to meet the expectation of others. Power means one person force another person in order to control his/her outcomes. Furthermore, authority is the power that is believed to be legitimate by those who are responsible to it (Rachotte, 2007).

Many researchers have found that the social influences play a vital role when the consumers are making decision on purchasing (Murali, Laroche and Pons, 2007). People tend to be easier influenced by the word of others (Kelman, 1961). In a survey of teenager, both male and female reported that they always seek for advice and opinions of their friends based on fashion-related items and tend to purchase the similar clothes that their friends wear (Nelson and McLeod,2005).

In recent research from NAR's Center for Realtor (2009), reported that the most smart phone application category they used is Social Media application e.g. Twitter, Facebook and etc. Consequently, smart phone users decide to use smart phone to keep contacting with their friends, colleagues or others in social network sites. This shows that people will influence by their friends when they are making decision on buying a product. According to Rashotte (2007), social has a great influence on an individual, especially when a large portion of an individual holds a particular thought, attitude, feeling or behaviour. It is likely that the individual will adopt the particular thought, attitude, feeling and behaviour as well.

### III. METHODOLOGY

#### A. Theoretical Framework

The theoretical framework of the study is constructed at Fig. 1.

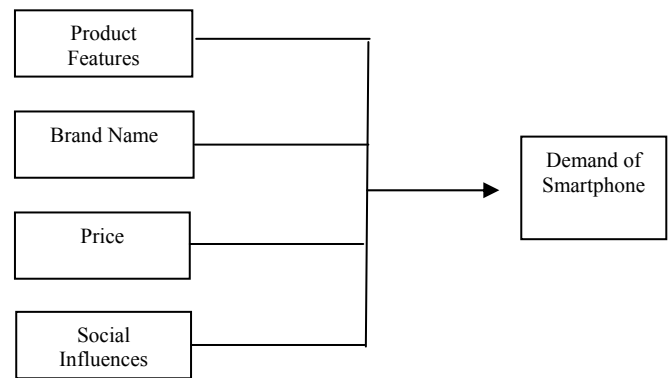


Fig. 1: Theoretical Framework of Factors Affecting Demand of Smartphone

#### B. Hypotheses Development

This paper studies the association between the four independent variables, such as product features, brand name, price and social influences, and demand of Smartphone among young adults. With this goal, we propose to test the following hypotheses:

- H1: There is a relationship between product features and demand of Smartphone among young adults.
- H2: There is a relationship between brand name and demand of Smartphone among young adults.
- H3: There is a relationship between price and demand of Smartphone among young adults.
- H4: There is a relationship between social influences and demand of Smartphone among young adults.

#### C. Sample

This study focuses on students at Multimedia University, Melaka. The target respondents are those undergraduate and post graduate students who aged between 17 to 25 and 300 students will be targeted in this study. The convenience sampling method will be employed to identify the respondents for the purpose of study.

#### D. Measurement

The study used a self-administered questionnaire to obtain information related to the study topic. The variables under investigation in this study were product features, brand name, price, social influences and demand of Smartphone. The items were identified and adapted by the researchers after a review of selected literature available such as Market Analysis and Consumer Research Organization (MACRO); Rio, Vazquez, and Iglesias , 2001; Cheong and Park, 2005; Pederson, n.d; Bouwman, Reuver, and Visser, n.d; Park and Chen, 2007; Venkatesh, Morris, Davis, and davis, 2003, Cheong and Park, 2005. TABLE 1 provides the key variables, items used to operationalize the variables, and their respective sources.

TABLE 1  
KEY VARIABLE AND ITS SOURCES

Variable	Item	Source
<b>Product Features</b>	1. I like smartphone's design. 2. Smartphone has more applications than basic hand phone. 3. Smartphone provide high quality of games. 4. Smartphone's internet accessibility is speedier than basic hand phone. 5. I use smartphone due to its operation system (Apple iPhone, RIM Blackberry, Google Android or others).	Market Analysis and Consumer Research Organization (MACRO)
<b>Brand Name</b>	1. I prefer to buy an international recognized smartphone. 2. I prefer to buy a trustworthy brand of smartphone. 3. I will only buy my favorite brand of smartphone. 4. Brand name is a major factor that will influence my decision towards buying a smartphone.	Rio, Vazquez, and Iglesias, 2001
<b>Price</b>	1. I am willing to buy smartphone even though the price is higher. 2. I will only buy smartphone during price deduction period. 3. I think that using smartphone is expensive in overall. 4. Price is my main consideration when deciding whether to buy a smartphone.	Cheong and Park, 2005
<b>Social Influences</b>	1. Almost all of my friends/family members are using smartphone. 2. My friends/family members think that we should all use smartphone. 3. My friends/family members influenced me to buy smartphone. 4. People around me have stimulated me in using smartphone.	Pederson, n.d (Item 1,2,3); Bouwman, Reuver, and Visser, n.d (Item 4)
<b>Demand of Smartphone</b>	1. I intend to use smartphone continuously although there is new hand phone in the market. 2. I intend to increase my use of the smartphone in the future. 3. I intend to use smartphone to do e-commerce.	Park and Chen, 2007 (Item 1,2,3); Venkatesh, Morris, Davis, and Davis, 2003 (Item 4), Cheong and Park, 2005

	4. I will find out more details about smartphone. 5. I intend to recommend others to use smartphone.	(Item 5).
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The questionnaire was relatively short (consisting of only 22 items) and easy to understand. There were three sections in the questionnaire. Section A of the questionnaire included information pertaining respondents' background such as gender, race, age, education background. Five point Likert scale (5=strongly agree, 4=agree, 3=neither agree nor disagree, 2=disagree and 1=strongly disagree) was used in Section B to measure the five variables, namely product features, brand name, price, social influences and demand of Smartphone. While the last section of the questionnaire, Section C was an open-ended question which attempted to seek additional comments from the respondents.

Prior to release of the survey, researchers conducted a pilot test to refine the questions in the survey. Questionnaires were given to 55 students from the targeted pool of respondents and 41 questionnaires were collected and were used for pilot test. They were asked to answer the questionnaires which were subsequently carried out to check whether the respondents could understand all the questions. Comments and feedbacks given were gathered and some items considered vague by these respondents were later reworded before the final data collection.

#### REFERENCES

- [1] Aaker, D. A. (1989). Managing Assets and Skills: The Key to Sustainable Competitive Advantage. California Management Review, 31(2), 91-106.
- [2] Aaker, D.A. (1991), Managing Brand Equity. Capitalizing on the Value of Brand Name, Free Press, New York, NY.
- [3] Aaker, D. A. and Keller, K. L. (1990). Consumer evaluations of brand extensions. Journal of Marketing, 54(1), 27-41.
- [4] Anderson, S., (2010). Rise of Smartphone. Retrieved March 14, 2011, from <http://www.switzer.com.au/technology/feature/rise-of-the-smartphone/>
- [5] Bettman, J.R., Johnson, E.J., and Payne, J.W. (2000). Consumer Decision Making. Annual review of Psychology, 43(Spring), 50-79.
- [6] Blackwell, R. D., Miniard, P. W., and Engel, J.F. (1995). Consumer Behavior (10th ed), U.S: South-Western.
- [7] Bolton, R.N. (1989). The relationship between market characteristics and promotional price elasticities. Marketing Science, 8(2), 153-69.
- [8] Bouwman, H., Reuver, M.D. and Visser, A. (n.d). Understanding trends in mobile service bundles. Retrieved June 15, 2011 from [http://www.tbm.tudelft.nl/fileadmin/Faculteit/TBM/Over\\_de\\_Faculteit/Afdelingen/Afdeling\\_Infrastructure\\_Systems\\_and\\_Services/Sectie\\_Informatie\\_en\\_Communicatie\\_Technologie/medewerkers/mark\\_de\\_reuver/Publications/doc/Bouwman\\_et\\_al\\_-\\_Understanding\\_trends\\_in\\_mobile\\_service\\_bundles.pdf](http://www.tbm.tudelft.nl/fileadmin/Faculteit/TBM/Over_de_Faculteit/Afdelingen/Afdeling_Infrastructure_Systems_and_Services/Sectie_Informatie_en_Communicatie_Technologie/medewerkers/mark_de_reuver/Publications/doc/Bouwman_et_al_-_Understanding_trends_in_mobile_service_bundles.pdf)
- [9] Chang, Y. F. and Chen, C. S. (2005). Smart phone – the choice of client platform for mobile commerce. Computer Standards & Interfaces, 27, 329-336.
- [10] Cheong, J.H. and Park, M.C. (2005). Mobile internet acceptance in Korea. Internet Research, 15(2), 125-140.
- [11] Chisnall, P.M. (1985). Marketing: A Behavioural Analysis, New York: McGraw-Hill, Maidenhead.
- [12] Cornelis, P. C. M. (2010). Effects of co-branding in the theme park industry: a preliminary study. International Journal of Contemporary Hospitality Management, 22(6), 775-796.
- [13] Craig, Samuel, C., and Douglas, S.P. (1996). Developing Strategies for Global Markets: An Evolutionary Perspective. Columbia Journal of World Business, 31(spring), 70-81.
- [14] Dodds, W. B., Monroe, K. B. and Gerwal, D. (1991). Effects of price, brand and store information on buyers' product evaluations. Journal of Marketing Research, 28, 307-19.

- [15] Evanschitzky, H., Kenning, P. and Vogel, V. (2004). Consumer price knowledge in the German retail market. *Journal of Product and Brand Management*, 13(6), 390-405.
- [16] Etgar, M. and Malhotra, N.K. (1981). Determinants of price dependency: Personal and perceptual factors. *Journal of Consumer Research*, 8 (2), 217-222.
- [17] Farquhar, P. H. (1989). Managing Brand Equity. *Marketing Research*, 1, September, 24-33.
- [18] Gartner (2006). "Gartner says research in motion led worldwide PDA industry to 7 percents growth in first quarter of 2006", Retrieved June 2, 2011 from [www.gartner.com/press\\_releases/asset\\_151\\_801\\_11.html](http://www.gartner.com/press_releases/asset_151_801_11.html)
- [19] Gowind (2010). Mobile operating system market. Retrieve April 18, 2011, from <http://www.vattal.com/mobile-operating-systems-market/>
- [20] Haigh, D. (2007). Brand Valuation: What it Means and Why it Matters. Retrieved 12 April, 2011 from [http://www.4hoteliers.com/4hots\\_fshw.php?mwi=2246](http://www.4hoteliers.com/4hots_fshw.php?mwi=2246).
- [21] Kelman, H. (1961). Processing of Opinion change. *The Public Opinion Quarterly*, 25(3), 57-78
- [22] Kenning, P., Evanschitzky, H., Vogel, V. and Ahlert, D. (2007). Consumer price knowledge in the market for apparel. *International Journal of Retail and Distribution Management*, 35(2), 97-119.
- [23] Kenny, M. and Pon, B. (2011). Structuring the Smartphone industry: Is the Mobile Internet OS Platform the Key? *The Research Institute Of The Finnish Economy*, 1238.
- [24] Khasawneh K and Hasounah A. B. I. (2010). The effect of familiar brand names on consumer behaviour: A Jordanian Perspective. *International Research Journal of Finance Economics*, 43.
- [25] Kotler, P., and Armstrong, G. (2007). *Principles of Marketing* (12th ed.). Boston: Pearson Education.
- [26] Kumloglu, H., Nasir, V. A. And Nasir, S. (2010). Discovering behavioural segments in the mobile phone market. *Journal of Consumer Marketing*, 27(5), 410-413.
- [27] Kunal, S. and Yoo, B.H (2010). Interaction between price and price deal. *Journal of Product & Brand Management*, 19(2), 143-152.
- [28] Kupiec, B., and Revell, B. (2001). Measuring consumer quality judgement. *British Food Journal*, 103(1), 1-22.
- [29] Leo, C., Bennett, R., and Hartel, C.E.J. (2005). Cross-Cultural Differences in Consumer Decision-Making Styles. *Cross Cultural Management*, 12(3), 32-61.
- [30] Lim, K. and O'Cass, A., (2001). Consumer Brand Classifications: An assessment of Culture-of-Origin versus Country-of-Origin. *Journal of Product and Brand Management*, 10(2), 120-136.
- [31] Market Analysis and Consumer Research Organization (2004). Study of mobile phone among the teenagers and youth in Mumbai. Retrieved March 14, 2011, from <http://www.itu.int/osg/spu/ni/futuremobile/socialaspects/IndiaMacroMobileYouthStudy04.pdf>
- [32] Martinez, E. and Pina, J. M. (2010). Consumer responses to brand extensions: a comprehensive model. *European Journal of Marketing*, 44(7/8), 1182-1205.
- [33] Mei, W. O., Dean, A. M. and White, C. J. (1999). Analysing service quality in hospitality industry. *Managing Service Quality*, 9(2), 138-143.
- [34] Monroe, K.B. (2003). *Pricing: Making Profitable Decisions. Satisfaction: A Behavioural Perspective on the Consumer* (3rd ed). Boston: McGraw-Hill.
- [35] Murali M., Loroche M., and Pons F. (2005). Individualistic orientation and consumer susceptibility to interpersonal influence. *Journal of services marketing*, 19(3), 164-173.
- [36] Nagle, T.T., and Holden, R.K. (2002). *The Strategy and Tactics of Pricing: A Guide to Profitable Decision Making*, 3rd ed., New Jersey: Prentice-Hall, Inc.
- [37] Nebenzahl I.D., and McLeod L.E. (2005) Adolescent brand consciousness and product placements: awareness, liking and perceived effects on self and others. *International Journal of Consumer Studies*, 29(6), 515-528.
- [38] Nelson, M. R. & L.E. McLeod. 2005. Adolescents brand consciousness and product placement: Awareness, liking and perceived effects on self and others. *International Journal of Consumer Studies*, 25 (1): 1-13.
- [39] Oulasvirta, A., Wahlstrom, M. and Ericsson K. A. (2011). What does it mean to be good at using mobile device? An investigation of three levels of experience and skill. *International Journal of Human-Computer Studies*, 69, 155-169.
- [40] Pappu, R., Quester, P. G. and Cooksey, R. W. (2005). Consumer-based brand equity: improving the measurement - empirical evidence. *Journal of Product & Brand Management*, 14(3), 143-154.
- [41] Park, Y. and Chen, J. V. (2007). Acceptance and adoption of the innovative use of Smartphone. *Industrial Management and Data Systems*, 107(9), 1349-1365.
- [42] Pederson, P.E. (n.d). Adoption of mobile internet services: an exploratory study of mobile commerce early adopters. Retrieved July 17, 2011 from [http://ikt.hia.no/percep/earlyadopt\\_paper2.pdf](http://ikt.hia.no/percep/earlyadopt_paper2.pdf)
- [43] Puth, G., Mostert, P. and Ewing, M. (1999). Consumer perceptions of mentioned product and brand attributes in magazine advertising. *Journal of product and brand management*, 8(1), 38-49.
- [44] Rao, A. and Monroe, K.B. (1988), "The moderating effect of prior knowledge on cue utilizations in product evaluations", *Journal of Consumer Research*, 19 (2), 253-64.
- [45] Rao, A. R. and Ruekert, R. W. (1994). Brand alliances as signals of product quality. *Sloan Management Review*, 4, Fall, 87-97.
- [46] Rashotte L. (2007). Social Influences. Retrieved July 17, 2011 from [http://www.blackwellpublishing.com/443/sociologt/docs/BEOS\\_S1413.pdf](http://www.blackwellpublishing.com/443/sociologt/docs/BEOS_S1413.pdf)
- [47] Rato, R. (2006). Meeting the Challenges of 21st Century Globalization: The Medium-Term Strategy of the IMF. Retrieved January 20, 2011, from <http://www.imf.org/external/np/speeches/2006/090806.htm>
- [48] Rice, R. E. and Katz, J. E. (2008). Assessing new cell phones text and video services. *Telecommunication Policy*, 32, 455-467.
- [49] Rashotte L. (2007). Social Influences. Retrieved July 17, 2011 from [http://www.blackwellpublishing.com/443/sociologt/docs/BEOS\\_S1413.pdf](http://www.blackwellpublishing.com/443/sociologt/docs/BEOS_S1413.pdf)
- [50] Rio, A.B., Vazquez, R. and Iglesias, V. (2001). The role of the brand name in obtaining differential advantages. *Journal of Product and Brand Management*, 10(7), 452-465.
- [51] Sanne (2009). What is the difference between a smartphone and a traditional cellphone? Retrieved March 3, 2011, from <http://www.mycs.com/mobile-phones/faq/what-is-the-difference-between-a-smartphone-and-a-traditional-cellphone-21963/>
- [52] Sexton, R.L. (2007). *Essentials of Economics* (4th Ed.). Thomson South-Western Publishers.
- [53] Shankar, V. and Malhotra, E.C. (2007). Moving interactive marketing forward. *Journal of Interactive Marketing*, 20(1), 2-4.
- [54] Smith, M.F., and Carsky, M.L. (1996). Grocery Shopping Behaviour: A Comparison of Involved and Uninvolved Consumers. *Journal of Retailing and Consumer Services*, 39 (2), 73-80.
- [55] So, W. C. M., Wong, T.N. D. and Sculli D. (2005). Factors affecting intentions to purchase via the internet. *Industrial and management data systems*, 105(9), 1225-1244.
- [56] Srinivasan, S. S. and Till B. D. (2002). Evaluation of search, experience and credence attributes: role of brand name and product trial. *Journal Of Product & Management*, 11(7), 417-431.
- [57] Subramanian, S. (2009). Dynamically Adapting Design and Usability in Consumer Technology Products to Technology and Market Life-Cycles: A Case Study of Smartphones.
- [58] Thaler, R. (1985). Mental accounting and consumer choice. *Marketing Science*, 4(3), 199-214.
- [59] Tse, C.B. (2001). How much more are consumers willing to pay for a higher level of service? *Journal of Services Marketing*, 15(1), 11-18.
- [60] Tseng, F. M. and Lo, H. Y. (2011). Antecedents of consumers' intentions to upgrade their mobile phones. *Telecommunications Policy*, 35, 74-86.
- [61] Venkatesh, V., Morris, M.G., Davis, G.B., and Davis, F.D. (2003). User acceptance of information technology: Toward a unified view, *MIS Quarterly* 27(3), 425-478.
- [62] Wickliffe, V. P. and Pysarchik, D. T. (2001). A look at product attributes as enhancers of group intergration among US and Korean consumers. *International Journal of Retail & Distribution Management*, 29(2), 99-108.
- [63] Yang, K. (2010). Determinants of US consumer mobile shopping services adoption: implications for designing mobile shopping services. *Journal of consumer marketing*, 27(3), 262-270.