Factors Affecting Mobile Handset (MH) Buying Decision: An Empirical Study

[1]* M. Aftab Uddin, [2] H. Xu, [3] M. Tahlil Azim

[1] *Department of Management Studies, University of Chittagong, Bangladesh*

[2] *School of Management, Wuhan University of Technology, P.R. China*

[3] *Faculty of Economics and Administration, King Abdulaziz University, Saudi Arabia*

ABSTRACT:

Mobile technology is getting changed very fast in commensurate with other technological hyper changes. Buyers' expectation from a new cellular phone is also changing over time. Producers, thereby, have to keep themselves abreast of changes in customer taste and preferences to attract, capture, grow, and retain both existing and potential customers. This study is set to measure factors affecting the buying decision of mobile handsets. A 21-item instrument was developed through an extensive literature survey. Both convenience and snowball sampling techniques were used to select the sample. 432 useable responses from 1375 respondents were used. Reliability, KMO, and Bartletts' tests were run to judge their appropriateness. Through factor loading the findings reveal that seven features i.e., physical attributes, brand image, uniqueness, emotional appeal, ease of operation, social identity, and price, turn out to be the major determinants of purchase decision. Furthermore, recommendation, implication, and future directions have *also been discussed.*

Keywords: *Factor analysis, Mobile handset, Buying decision, Bangladesh*

INTRODUCTION

Technology changes life very fast. Mobile Handset (hereafter referred to as MH), perhaps the most frequently used portable device in today's world, is affecting our way of life in many different dimensions. The first cellular call was aired on April 3, 1973, from a Manhattan street corner by Motorola's Martin Cooper (Cooper, 2001). From then, cellular device did not require itself to look back. Over time mobile device has registered an unparallel technological advancements from 0G (mobile radio telephone) to 1G (analog signal) to 2G (digital signal) to 3G (digital signal and data) and lately to 4G (high speed audio and video streaming) (Bhalla and Bhalla, 2010). Li et al. (2009) predicted the mass usages of 5G (World Wide Wireless Web), 6G (cellular system), and 7G (space roaming system) by 2020, 2030, and 2040 respectively. Each generation encompasses a bundle of features incorporated in it for penetrating into the pockets of billions of customers around the world. More than 95% of all nations have mobile phone networks and cellular phone users have surpassed the landline subscribers (Botelho

*Corresponding Author, Email: *mdaftabuddin@cu.ac.bd*, Md. Aftab Uddin, [2] Hongyi Xu, [3] Mohammad Tahil Azim

and Pinto, 2004).

Customers are at the center of making decisions. This technology driven device has been transformed into pro-customer device since 1980. Competitors in hand-set industry are continuously bringing improvements to their products through innovations so as to make it competitive, smart, aesthetic, lucrative, and fashionable. Enormous advances in hand-set technologies make features of all brands quite similar (Petruzzellis, 2010). Nevertheless, competitors untiringly search for uniqueness in their product in order to distinguish it from that of their competitors. Satisfying the customer is a never ending journey and each player in the market is truly in this battle. Knowing the customers – their tastes and preferences is a prerequisite for serving them better. In this age of fierce competition, competitive intelligence plays a vital role in marketing success. It is more important what you don't know about your customers that your competitors know.

Factors determining the choice of customers in buying MH are important piece of information for preparing product recipe for the competitors in this market. If the expectations of the customers can be perceived truly by the producers, they can come up with right product leading to a win-win situation for both customers and producers. Thus a study identifying the factors affecting the choice of a MH can facilitate both the customers and producers of cellular phone. This paper aims at finding the factors perceived important by the customers in buying MH in the context of Bangladesh.

Literature Review

Mobile phone is more than a technology now a day. It's a sense of security to some people, especially for the old (Loo, 2009) and the kids going to school, it is a toy to play, a tool for entertainment, a device to get connected, a media to the web of wonders, a tutor to the learners, a freer to the monotonous life, and above all, something that always keep people busy doing something. Organizations are investing enormous funds on research to figure out the factors affecting the choice of customers buying decisions. A good volume of research have so far been conducted in this area (Cooper, 2001; Campbell and Russo, 2003; Bina and Giaglis, 2005; Tobin and Bidoli, 2006; Van

Biljon and Kotzé, 2008; Ghorban, 2012; Petruzzellis, 2010; Nguyen Dang, 2013).

Some of the researches focused on linking perceived quality (Hellier et al., 2003), better infrastructure (Dunlop and Brewster, 2002), faster connectivity (Cooper, 2001), and added features and functions (Winters et al., 2004 reviewed by Aldhaban, 2012; Van Biljon and Kotzé, 2008) with the products. On the other hand, physical attributes, i.e., aesthetic design, parts and processes, screen size and storage capacity, battery functionality also observed to affect the choice (Brewster, 2002; Parsons, 2010; Haverila, 2011). In fact, MH has become a source of constant amusements now-a-days.. Today, users buy MH not only for calling and texting, but also to play games, watch movies, listening to music, chat with people around the world through social networking sites (Mallenius et al., 2007; Moon and Kim, 2001).

Cost sets the floor for pricing (Kotler and Armstrong, 2010) and price of the hand set draws the line between the customers who can afford and who can't. It is considered as one of the most powerful factors affecting the choice to buy or not to buy it (Chapman and Wahlers, 1999; Munnukka, 2005; Aldhaban, 2012). However, there are some innovators and early adopters who don't bother much about the price, rather the degree of newness or being the first movers in the offerings are more important to them (Rogers, 1995; Duarte and Raposo, 2010). Young and educated consumers respond faster to the innovative products than others (Gatignon and Robertson, 1985; Ha and Stoel, 2004). Buyers' perceived risk of buying also affect the brand choice. Durability, fragility, and other risks associated to physical device (Woodsid and Wilson, 1985) might negatively affect buying decision. Besides, the extent and quality of after service, sometimes, affect buyers' choice and their recommendation for the product (Shimp and Bearden, 1982).

Most people feel comfortable to buy a phone which is ease to operate and available nearby (Parsons, 2010; Park and Chen, 2007; Dunlop and Brewster, 2002). Utility services, for instances, m-payment, m-trade, m-commerce, m-shopping, TV streaming, banking, internet surfing, signing in e-mail etc. might be considered as added features of MH. These added facilities will enhance the demand of

particular cellular phone (Teng et al., 2009; Haverila, 2011). According to Jiang (2004), brands are perceived as a warranty not only of the quality and performance but also of the difference and emotional relationship with the product. Buying a product, for example, Apple iPhone or Samsung S5, people can get some identity benefits attached to the product. Brand image or image attached to the product plays a meticulous role to choose a product (Xue, 2008; Ghorban, 2012).

Duarte and Raposo (2010) found advertising is one of the five situational factors affecting the brand preferences. A consumer's social group, community feelings, opinion leaders, friends, family members, and other informal groups also limit his/her buying behavior (Jiang, 2004; Bina and Giaglis, 2005; Auter, 2007; Nguyen Dang, 2013). Besides, the origin of the manufacturer (for instance, Apple of USA, Sony Erricson of Japan, Samsung of South Korea, Lenovo of China, and Nokia of Finland) also matters in making purchase decision (Lambert, 1972; Powers and Nonoh, 1999). Furthermore, convincing power of salesman might limit the choice too (Kuusik, 2007).

Brand choice of a consumer is shaped by his own demographic characteristics, economic status, and cultural identity. It varies according to age, gender, education, and the profession the consumer belongs to (Campbell and Russo, 2003; Ha and Stoel, 2004, Economides and Grousopoulou, 2009). Due to its extreme usefulness, the number of cell phone users has been sky rocketing in a rapid fire manner. So far it has already reached 6.8 billion worldwide (http://en.wikipedia.org/wiki/List_of_countries_ by_number_of_mobile_phones_in_use). This is really impossible to keep abreast of frequently changing demands of variety of customers. Other studies prove that most of the users use only less than 20% of all features and function of their mobile sets (Kiljander, 2004). Producers ought to make a choice between what their MH haves and haves not.

The massive growth of mobile users draws attention of the academics and researchers (Park and Yang, 2006). Researchers have paid their attention to the adoption (Katz and Aakhus, 2002), customer satisfaction (Woo and Fock, 1999), and choice of product category (Mehta, 2007). There is plethora of studies pertaining to cellular phones but very few are related to the factors affecting the buying behavior of customers. Besides, no such research was conducted in the context of Bangladesh whereas, in terms of the number of users, Bangladesh ranks 10 in the world with more than 116 million users (http://en.wikipedia.org/wiki/List_of_countries_ by_number_of_mobile_phones_in_use).
Therefore, the present study is set for identifying the factors that the buyers of MH consider important in the context of Bangladesh.

Research Objectives

This study is an exploratory type of research. It aims, primarily, to uncover the factors affecting the brand preferences while buying a MH from a large pool of brands. Following are set to be the Research objectives of the study:

1. To reveal the factors affecting the purchase decision of MH;
2. To find the major dimensions of factors involved in their decision making;
3. To explain the relative impact of each factor to the total variance explained; and
4. To explore age and gender based differences to the choice of *feature phone* and *smart phone*.

RESEARCH METHOD

Participants: The participants of the study were selected by both convenience sampling and snowball sampling. Data was collected from the university students and regular users of the internet through questionnaire survey. Using convenience sampling the questionnaire was distributed among the students of a renowned public university of Bangladesh. Under snowball technique, online questionnaire was sent through email and Facebook designed through Google doc. A total of 1375 survey questionnaires were distributed by all means and 432 useable responses (31.4%) were received. Finally data were entered into SPSS 16 version for analysis. Table 1 indicates the descriptive statistics about the participants.

Survey Instrument and Reliability Test

A 21-item questionnaire (Annexure 1) was designed by the researcher to gather primary data. Each item of the questionnaire was rated on a 5-point Likert scale (5 = strongly agree ~ 1 =

strongly disagree) to identify the relative importance of the factors affecting MH buying decision. In order to test the reliability of the measure, Cronbach's Alpha (∞) was calculated and it turned out to be 0.804 which indicates relatively strong internal consistency of the items. To reveal the major dimensions, Principal Component Varimax Rotated Factor Analysis Method was used.

Data Adequacy Test for Factor Analysis

Before factor analysis, data adequacy is to be tested to make sure that these data are adequate for factor analysis. KMO (Kaiser-Mayer-Olkin) test was run that varies from 0 to 1. The closer the score to1 is, the higher is the adequacy of the data. A KMO score of more than 0.9, 0.8, 0.7, 0.6, and 0.5 indicates marvelous, meritorious, middling, mediocre, and miserable respectively (George and Mallery, 2011).

Bartlett test of Sphericity measures the normality of the distribution. A significance value, $p < 0.05$ indicates that these data won't produce identity matrix, and hence acceptable for factor analysis (George and Mallery, 2011). The calculated KMO score (table 2) is 0.869 and Bartlett's test of Sphericity finds this instrument is perfect, because significant, p <0.01.

Therefore, there is no demarcation to perform factor analysis.

RESULTS AND DISCUSSION

Figure 1 shows the differences of choosing between feature phone and smart phone in terms of age and gender. This graph reveals that the relative proportion of smart phone users are in between 20-30 years of age. It is notable that there is not much difference in genders to choose between smart phone and feature phone.

Principal Component Analysis (PCA)) is a technique for identifying groups or clusters of variables representing phenomenon. It aims at understanding the structure of variables by identifying the underlying variables through open questionnaires and reducing them into a manageable size while retaining original information included in the variables (Field, 2009). Through PCA, the study extracted (annexure 2), seven dimensions (table 3) from 20 items with an Eigen value of nearer to one and more. One variable was dropped from the analysis because of its low loadings and difficulty of interpretation. These new seven components explain 59.60% (annexure 3) of total variance of the dependent variable under consideration.

Table 1: Descriptive statistics

Total Respondents (432)			
Gender	**Female**		**Male**
	148 (34.3%)		284 (65.7%)
Current MH	**Feature Phone**		**Smart Phone**
	154 (35.6%)		278 (64.4%)
Age Group	**Below 20**	**Above 20**	**Above 30**
	13 (3%)	389 (90%)	30 (7%)
Education	**Others**	**Under-grade**	**Master**
	6 (1.4%)	275 (63.6%)	151 (35%)

Table 2: KMO and Bartlett's Test

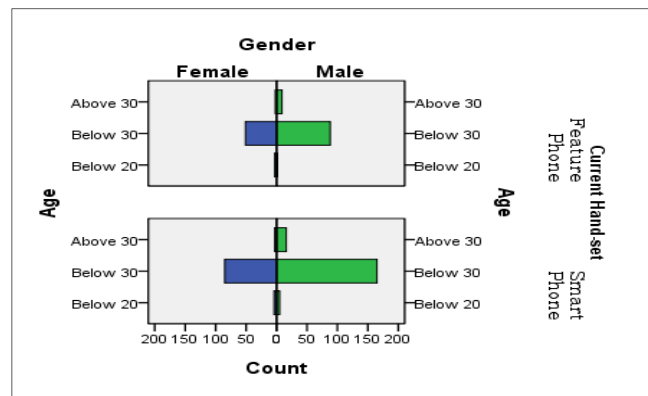| Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.869
Bartlett's Test of Sphericity	Approx. Chi-Square	1968
	Df	210
	Sig.	0.000

Figure 1: Choice of feature phone and smart phone

Dimension 1 – Physical Attributes

Physical attributes comprises quality experience of the existing users (X19), after sales service experiences (X17), high battery functionalities (X15), aesthetic design (X18), better infrastructure (X16), availability of features (X8), and durability and non-fragility (X2). This dimension goes in line with the findings of Young (2003); Aldhaban (2012); and Isiklar and Buyukozkan (2007). It explains 24.8% variance of the dependent variable under consideration.

Dimension 2 – Brand Image

People take pride of using products of specific brand (Duarte and Raposo, 2010). Brand implies not only the warranty of performance, but also the emotional identity with the products (Jiang 2004; Xue 2008). This dimension explores the brand image of a company as a distinct identity to be highlighted and promoted as well. Brand image entails both trustworthiness of the product (X20) and image of the company (X7). This component explains 8.2% of total variance.

Dimension 3 – Unique Features

Customer needs are always changing. Producers' task is to tune their products to the changing requirements of the customers. Unique features consist of origin of manufacturer (X6), utility services (X12), perceived quality (X5), and degrees of newness (X4). It explains 6.2% of the variance. Findings of Winters et al.

(2004), Power and Nonoh (1999); and Zhou and Nakamoto (2007) also portrayed the same scenarios.

Dimension 4 – Emotional Appeal

Advertising proves to be a factor regulating the preference of MH users (Duarte and Raposo, 2010). Television commercial informs and multiplies the appeal of MH among the prospective buyers. MH as a tool of entertainment has been focused by many (Moon and Kim, 2001; Haverila, 2011). In this analysis, emotional appeal includes advertising (X3) and entertaining (X11) which account for 5.4% variance in dependent variables.

Dimension 5 – Ease to Operate

People love to buy a MH which is easily available to their reach and less complexity involves in using. Ease to operate includes the availability (X10) and ease to use (X9). This component explains 5.2% variance. This is consistent with the findings of Parsons (2010) and Park and Chen (2007).

Dimension 6 – Social Identity

Customers' buying intention is affected much by the society and the group they belong or wish to belong to. Apart from that, social status affects them too (Jiang, 2004; Aldhaban, 2012). Hence, social identity incorporates social status (X14) and identification with a group (X13). It accounts for 5% variance in dependent variables under consideration.

Dimension 7 – Price

Price of a product is considered to be one of the most deep-seated catalysts in any purchase decision (Chapman and Wahlers, 1999; Munnukka, 2005; Mallenius et al., 2007). In our model it includes just one factor, "price of the MH" (X1) which explains 4.8% of total variances.

Table 3: Rotated component matrix

Dimensions	Factors	Component 1	2	3	4	5	6	7	Commu-Nalities
1. Physical Attributes	X19	0.712							0.663
	X17	0.701							0.581
	X15	0.662							0.549
	v18	0.586							0.524
	X16	0.570							0.568
	X8	0.523							0.600
	X2	0.377							0.458
2. Brand Image	X20		0.727						0.620
	X7		0.667						0.523
3. Uniqueness	X6			0.746					0.605
	X12			0.612					0.603
	X5			0.546					0.600
	X4			0.466					0.531
4. Emotional Appeal	X3				0.800				0.707
	X11				0.493				0.469
5. Ease of operation	X10					0.809			0.692
	X9					0.615			0.622
6. Social Identity	X14						0.782		0.683
	X13						0.694		0.639
7. Price	X1							0.431	0.496
Eigen values		5.202	1.715	1.312	1.136	1.081	1.054	0.999	12.5
Variance Explained (%)		24.8	8.2	6.2	5.4	5.2	5.0	4.8	59.60%

Table 4: Correlation matrix

Variables	Mean	σ	1	2	3	4	5	6	7
1. Physical Attributes	4.12	0.64	1						
2. Brand Image	3.51	0.92	0.312[**]	1					
3. Uniqueness	3.98	0.74	0.562[**]	0.231[**]	1				
4. Emotional Appeal	3.68	0.82	0.363[**]	0.145[**]	0.365[**]	1			
5. Ease of Operation	3.80	0.87	0.460[**]	0.205[**]	0.340[**]	0.221[**]	1		
6. Social Identity	2.94	1.00	0.030	0.222[**]	0.032	0.100[*]	0.010	1	
7. Price	4.08	1.08	0.339[**]	0.234[**]	0.258[**]	0.212[**]	0.236[**]	0.039	1

**. $p < 0.01$, *. $p < 0.05$

Table 4 shows the correlation matrix, mean value and the standard deviation of components derived through factor analysis. Most of the factors are found to be interrelated with each other significantly. From correlation analysis it is found that all factors are significantly correlated. Therefore, it is strongly advised to consider all factors while designing the marketing mix by the producers.

CONCLUSION

The study is set out to measure the factors affecting the choice of MH buyers in the context of Bangladesh. It reveals that seven factors: Physical Attributes, Brand Image, Uniqueness, Emotional Appeal, Ease of Operation, Social Identity and Price influence the buyers in deciding a particular brand of MH in Bangladesh. Physical features, for instances, aesthetics in looking, display screen, camera quality, operating systems, built-in memory, voice input and output quality, power backup of battery etc. are heavily focused by MH users. A good package accommodating optimum features might make the products more competitive. Customers like to buy from a reputed brand because it assures them not only the consistent performance but also caring their life time customers' perceived value. So the marketers should create a strong brand image in the by investing in their R and D and customer care. Cellular phone is no more a vehicle of communication merely. It is constantly used as a means of entertainment as well as a tool of self management. Producers should tune their products to the changing requirements of end users by launching newer user oriented applications. In buying product like MH is greatly influenced by emotional appeal. In this regards, mass media like TV commercials can play a great role. Producers must inform, persuade, convince, and sell it to the end-users by an appealing commercial. Operating system is to be kept easy and understandable to all. Moreover, convenient availability of the MH to the closest proximity of the mass users has to be checked. Along with quality and other features, the producers must always strive for increasing customers' value with the given price. There are many researches on cellular devices, however, very meager in factors affecting MH buying decision. Factors have been identified in this research will fill up the vacuum pertaining to this aspect. Moreover, producers are expected to emphasize on these factors so as to meet and exceed customers' perceived value from the products.

Limitations and Future Directions

The important limitation of this research is the sampling method it applies. Convenience sampling limits the generalization of the research. Sample size is also another point to mention. It is quite implausible to predict the buying behavior of entire potential customers (156.48 (Bangladesh Bureau of Statistics, 2014) by analyzing only 432 respondents. Moreover, authors cannot claim the instrument employed in the study is a good measure, because it can only explain 59.60% variances in dependant variables whereas the rest 40.40% remains unexplained. The study also used only three age brackets. Further study in this area might be augmented by using random sampling method with larger sample size in order to facilitate generalizing the result. Future researches can be carried out by adding more age brackets, income effects as well. Structural equation model (SEM) might be the most effective tool for exploring the factors affecting buying decisions.

ACKNOWLEDGEMENT

REFERENCES

Aldhaban, F. (2012). Exploring the Adoption of Smartphone Technology: Literature Review. In Technology Management for Emerging Technologies (PICMET), 2012 Proceedings of PICMET'12, IEEE, pp. 2758-2770.

Auter, P. J. (2007). Portable Social Groups: Willingness to Communicate, Interpersonal Communication Gratifications, and Cell Phone Use among Young Adults. *International Journal of Mobile Communications*, 5 (2), pp. 139-156.

Bangladesh Bureau of Statistics (2014). Available:http://www.bbs.gov.bd/ArchiveFileList.aspx? MenuKey=88 (June 19, 2014).

Bhalla, M. R. and Bhalla, A. V. (2010). Generations of Mobile Wireless Technology: A Survey. *International Journal of Computer Applications*, 5 (4), pp. 26-32.

Bina, M. and Giaglis, G. M. (2005). Exploring Early Usage Patterns of Mobile Data Services. In International Conference on Mobile Business (ICMB'05), IEEE, pp. 363-369.

Botelho, A. and Pinto, L. C. (2004). The Diffusion of Cellular Phones in Portugal. *Telecommunications Policy*, 28 (5/6), pp. 427-437.

Brewster, S. (2002). Overcoming the Lack of Screen Space on Mobile Computers. *Personal and Ubiquitous Computing*, 6 (3), pp. 188-205.

Campbell, S. W. and Russo, T. C. (2003). The Social Construction of Mobile Telephony: An application of the Social Influence Model to Perceptions and Uses of Mobile Phones within Personal Communication Networks. *Communication Monographs*, 70 (4), pp. 317-334.

Chapman, J. and Wahlers, R. (1999). A Revision and Empirical Test of the Extended Price-Perceived Quality Model. *Journal of Marketing Theory and Practice*, 7 (3), pp. 53–64.

Cooper, M. (2001). Internet: A Life-Changing Experience. *Multimedia*, IEEE, 8 (2), pp. 11-15.

Duarte, P. A. O. and Raposo, M. L. B. (2010). A PLS Model to Study Brand Preference: An Application to the Mobile Phone Market. *In Handbook of Partial Least Squares*, Berlin Heidelberg: Springer, pp. 449-485.

Dunlop, M. and Brewster, S. (2002). The Challenge of Mobile Devices for Human Computer Interaction. *Personal and Ubiquitous Computing*, 6 (4), pp. 235–236.

Economides, A. A. and Grousopoulou, A. (2009). Students' Thoughts about the Importance and Costs of Their Mobile Devices' Features and Services. *Telematics and Informatics*, 26 (1), pp. 57–84.

Field, A. (2009). *Discovering Statistics Using SPSS*, 3 rd ed., SAGE Publications India Pvt Ltd.

Gatignon, H. and Robertson, T. S. (1985). A Propositional Inventory for New Diffusion Research. *Journal of Consumer Research*, 11 (4), pp. 849-867.

George, D. and Mallery, P. (2011). *SPSS for Windows Step by Step: A Simple Guide and Reference*, 10 th ed. India: Dorling Kindersley India Pvt. Ltd.

Ghorban, Z. S. (2012). Brand Attitude, Its Antecedents and Consequences. Investigation into Smartphone Brands in Malaysia. *Journal of Business Management*, 2 (3), pp. 31-35.

Ha, Y. and Stoel, L. (2004). Internet Apparel Shopping Behaviors: The Influence of General Innovativeness. *International Journal of Retail and Distribution Management*, 32 (8), pp. 377-385.

Haverila, M. (2011). Mobile Phone Feature Preferences, Customer Satisfaction and Repurchase Intent among Male Users. *Australasian Marketing Journal*, 19 (4), pp. 238-246.

Haverila, M. (2012). What Do We Want Specifically from the Cell Phone? An Age Related Study. *Telematics and Informatics*, 29 (1), pp. 110-122.

Hellier, P. K., Guersen, G.M., Carr, R. A. and Rickard, J. A. (2003). Customer Repurchase Intention: A General Structural Equation Model. *European Journal of Marketing*, 37 (11/12), pp. 1762–1800.

Isıklar, G. and Buyuközkan, G. (2007). Using a Multi-Criteria Decision Making Approach to Evaluate Mobile Phone Alternatives. *Computer Standards and Interfaces*, 29 (2), pp. 265–274.

Jiang, P. (2004). The Role of Brand Name in Customization Decisions: A Search vs Experience Perspective. *Journal of Product and Brand Management*, 13 (2), pp. 73-83.

Katz, J. E. and Aakhus, M. (2002). *Perpetual Contact: Mobile Communication, Private Talk, Public Performance*, Cambridge: Cambridge University Press.

Kiljander, H. (2004). Evolution and Usability of Mobile Phone Interaction Styles. Thesis, Department of Computer Science and Engineering, Helsinki University of Technology, Helsinki.

Kotler, P. and Armstrong, G. (2010). *Principles of Marketing*, 13 th ed. New Jersey: Pearson Education, Inc., Upper Saddle River.

Lambert, Z. V. (1972). Price and Choice Behavior. *Journal of Marketing Research*, 9 (1), pp. 35–40.

Li, X., Gani, A., Salleh, R. and Zakaria, O. (2009). The future of mobile wireless communication networks. In Communication Software and Networks, 2009. ICCSN'09, International Conference on IEEE, pp. 554-557.

Loo, J. L. (2009). Acceptance of Health Services on Mobile Phones, Doctoral Dissertation, University of North Carolina.

Mallenius, S., Rossi, M. and Tuunainen, V. K. (2007). Factors Affecting the Adoption and Use of Mobile Devices and Services by Elderly People–Results from a Pilot Study, 6th Annual Global Mobility Roundtable.

Mehta, N. (2007). Investigating Consumers' Purchase Incidence and Brand Choice Decisions across Multiple Product Categories: A Theoretical and Empirical Analysis. *Marketing Science*, 26 (2), pp. 196-217.

Moon, J. W. and Kim, Y. G. (2001). Extending the TAM for a World-Wide-Web Context. *Information*

and Management, 38 (4), pp. 217-230.

Munnukka, J. (2005). Dynamics of Price Sensitivity among Mobile Service Customers. *Journal of Product and Brand Management*, 14 (1), pp. 65-73.

Nguyen Dang, H. (2013). Exploring the Factors Affecting Purchase Intention of Smart Phones: A Study of Office Workers in Ho Chi Minh City, Doctoral Dissertation, International University HCMC, Vietnam.

Park, J. K. and Yang, S. (2006). The Moderating Role of Consumer Trust and Experiences: Value Driven Usage of Mobile Technology. *International Journal of Mobile Marketing*, 1 (2), pp. 24-32.

Park, Y. and Chen, J. V. (2007). Acceptance and Adoption of the Innovative Use of Smartphone. *Industrial Management and Data Systems*, 107 (9), pp. 1349-1365.

Parsons, K. (2010). Mobile Phones. Available: http://businesscenter.jdpower.com/default. aspx?f=/jdpacontent/corpcomm/Home/Electronics/ Electronics_MobilePhones.htm

Petruzzellis, L. (2010). Mobile Phone Choice: Technology versus Marketing. The Brand Effect in the Italian Market. *European Journal of marketing*, 44 (5), pp. 610-634.

Powers, T. and Nooh, S. (1999). The Impact of Country-of-Origin on Product Choice: A Developing Country Perspective. *Journal of Practical Global Business*, 1 (1), pp. 18–40.

Rogers, E. M. (1995). *Diffusion of Innovations*, 4th ed., New York, NY: The Free Press.

Shimp, T. A. and Bearden, W.O. (1982). Warranty and Other Extrinsic Cue Effects on Consumers' Risk Perceptions. *The Journal of Consumer Research*, 9 (1), pp. 38–46.

Teng, W., Lu, H. P. and Yu, H. (2009). Exploring the Mass Adoption of Third-Generation (3G) Mobile Phones in Taiwan. *Telecommunications Policy*, 33 (10), pp. 628-641.

Tobin, P. K. J. and Bidoli, M. (2006). Factors Affecting the Adoption of Voice over Internet Protocol (VoIP) and Other Converged IP Services in South Africa. *South African Journal of Business Management*, 37 (1), pp. 31-40.

Van Biljon, J. and Kotzé, P. (2008). Cultural Factors in a Mobile Phone Adoption and Usage Model. *Journal of Universal Computer Science*, 14 (16), pp. 2650-2679.

Wikipedia,Available: http://en.wikipedia.org/wiki/List_of_countries_by_ number_of_mobile_phones_in_ use

Woo, K. S. and Fock, H. K. Y. (1999). Customer Satisfaction in the Hong Kong Mobile Phone Industry. *The Service Industries Journal*, 19 (3), pp. 162-174.

Woodside, A. G. and Wilson, E. J. (1985). Effects of Consumer Awareness of Brand Advertising on Preference. *Journal of Advertising Research*, 25 (4), pp. 41–47.

Xue, F. (2008). The Moderating Effects of Product Involvement on Situational Brand Choice. *Journal of Consumer Marketing*, 25 (2), pp. 85-94.

Young, T. (2003). Software Interface Design for Small Devices: Software Practices Lab, University of British Columbia.

Zhou, K. Z. and Nakamoto, K. (2007). How Do Enhanced and Unique Features Affect New Product Preference? The Moderating Role of Product Familiarity. *Journal of the Academy of Marketing Science*, 35 (1), pp. 53–62.

List of Annexure(s)

Factors	Annexure 1: Statements of Factors
X1	Price of the hand-set influences you to buy a specific model.
X2	Perception of fragility and durability of hand-set affects you to buy this.
X3	Advertising plays a role in your buying decision.
X4	You wish to buy innovative or a hand-set which has innovative usages.
X5	Expected quality is very important to you.
X6	You consider where this hand-set has been manufactured (i.e., Japan, China, USA etc).
X7	Products of a reputed company will never be the worst.
X8	When you buy the product, you choose better features.
X9	Ease and convenience to use the hand-set are very important to you.
X10	You used to buy a hand-set which is easily available to you.
X11	Hand-set is a source of entertainment to you.
X12	You need utility services (m-payment, m-commerce and m-banking) from this.
X13	You will buy a mobile what your friend or mate or favorite person has bought.
X14	A hand set indicates one's social status
X15	You will ask about battery power backup when you will buy it.
X16	Better operating systems and updated network facilities are vital to your buying decision.
X17	Your buying decision is influenced by after sales services experience of ex-user.
X18	Physical appearance and design excellence affect your buying decision.
X19	When you will buy your hand-set, you will ask some existing users about their experiences using this product.
X20	You believe that hand-set of a particular brand is the best.
X21	Salesman convincing power influences your decision to buy a particular hand-set.

Annexure 2: Rotated Component Matrix[a]

Factors	Component						
	1	**2**	**3**	**4**	**5**	**6**	**7**
v19	0.712						
v17	0.701						
v15	0.662						
v18	0.586						
v16	0.570						
v8	0.523						
v2	0.377	0.366					
v20		0.727					
v7		0.667					
v6			0.746				
v12			0.612				
v5	0.386		0.546				
v4			0.466	0.430			
v3				0.800			
v11				0.493			
v10					0.809		
v9					0.615		
v14						0.782	
v13						0.694	
v21							-0.840
v1		0.429					0.431

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

Annexure 3: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	5.202	24.771	24.771	5.202	24.771	24.771
2	1.715	8.165	32.936	1.715	8.165	32.936
3	1.312	6.250	39.185	1.312	6.250	39.185
4	1.136	5.409	44.594	1.136	5.409	44.594
5	1.081	5.150	49.744	1.081	5.150	49.744
6	1.054	5.021	54.765	1.054	5.021	54.765
7	0.999	4.758	59.523	0.999	4.758	59.523
8	0.837	3.984	63.507			
9	0.774	3.685	67.193			
10	0.751	3.576	70.769			
11	0.705	3.356	74.125			
12	0.700	3.331	77.456			
13	0.644	3.068	80.524			
14	0.621	2.958	83.482			
15	0.608	2.893	86.375			
16	0.566	2.697	89.072			
17	0.535	2.546	91.619			
18	0.513	2.442	94.060			
19	0.487	2.317	96.377			
20	0.421	2.006	98.383			
21	0.340	1.617	100.000			

Extraction Method: Principal Component Analysis.