Consumer buying intentions towards smartphones: A conceptual framework

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Abstract
This manuscript aims to investigate the different factors affecting buying intentions of customers towards smartphones. A conceptual model is developed that extrinsically and intrinsically affect the purchase decisions of the customers. An extensive use of literature review is considered for better analytical research. The research aims to overcome the gap of understanding the concept of buying intentions for smartphones which motivates customers in making the purchase decision. This study provides valuable insight into consumer behavior regarding smartphones demand by examining the factors that influence customers’ demand for using and owning them. The findings of the study identifies Product Feature, Price, Social influence, Brand Name and Convenience factors which affects the buying motives for Smartphone.

Keywords: Smartphone, purchase intentions, influencing factors, consumer purchase decisions, product features

Introduction
In the present Scenario, Smartphones have made existences of individuals much easier and Comfortable. Innovation is the essential explanation behind getting comfort into individuals' everyday life. It has enhanced the expectations for everyday easies and individuals' way to deal with things. India is challenging the worldwide pattern in Smartphone Market since it is still a developing business segment an expanding number of individuals are upgrading from feature phone to a smartphone.

More than 70 percent of cell phone smartphone users were relied upon to move up to premium smartphone models. An expanding number of smartphone companies took an interest in the Make in India activity, and domestic manufacturing boosted sales of smartphones in India. (According to a report in the Economic Times)
of cell phone clients over the globe will utilize a cell phone at any rate once per month this year, It appraises that there will be 4.30 billion Smartphone customers worldwide in 2016, discourse to 58.7% of the worldwide population. Despite the fact that shopper development is moderating, the quantity of Smartphone customer will move to 4.78 billion in 2020(refer figure 1).

India secured the second spot in the list of the world’s largest smartphone market, enlisting in at a healthy growth rate of 23% Year over year. As per report from Counterpoint(April 2016) , there is an opportunity for growth in Indian smartphone In India more than 1.2 billion individuals have smartphone in the hands of less than one-fourth of a billion of its people.

![India Mobile Handset Shipment Share Q1 2016](Image)

(Source: Counterpoint Research; April 2016)

India’s key contribution in worldwide smartphone market development, “India which surpassed USA and turn out to be second leading smartphone market in terms of consumers has continued to catalogue resilient demand for smartphones. There is an enormous open door for each market player in the mobile value chain when the second largest market by volume is still under penetrated and developing, while the rest of the world smartphone demand has waned. India is the next China.

**Research Objectives**

- To explore the previous studies related to purchase intentions of consumers towards smartphone.
- To identify the key factors that motivates consumers to purchase and use Smart Phones.

**Literature Review**

On the basis of investigation, first of all study describes the trends in the mobile sector in order to illuminate the issues underlying consumer behavior. This will be followed by review of recent studies concerning factors that seems to affect the choice of a Mobile Phone, operator as well as intentions to adopt new mobile phone features and services such as multimedia messaging services and sending emails. The author conducted an extensive review on literature on national and international perspectives of mobile phone consumer purchase intention/behavior of last 15 years. The finding of the literature reviews were based on search of keywords like “purchase intentions”, “influencing factors”, “consumer purchase decisions”, “product features”. Finally paper reports the survey findings and ponders managerial and theoretical implications.

The mobile phone is not only a device of communication but it is an independent gadget which depicts individual’s status, identity, style, and pattern (Deng, 2006) [9]. Currently Mobile phones are named as ‘smartphone’, as they offer more advanced computing power, advanced features and connectivity. Furthermore the smartphone’s major capabilities to make voice call, video call, SMS, and MMS, smartphones have been transposed as a “new information medium” (May, H., & Hearn, G. 2005) [22].

**Purchase Intentions**

Prior research states that purchase intention is a significant measure of actual purchase behavior. Purchase Intention can be discussed as predisposition of the customers with regard to their actual purchase action. It describes individual’s inclination in purchase of product and how they categorize their preferences to the available options. (Zeithaml, 1988) [14]. Purchase Intention can describe the extent of consumer willingness to buy a product, if purchase intentions are high, consumer willingness is high to buy a product or service. Schiffman & Kanuk, 2000 [10]. Consumer behavior represents behavior or activities conducted by an individual during obtaining, using, and disposing of products and services, during that time consumer will consider and buy the product and services what their intentions reflects.

**Attitudes**

One of the integral elements of consumer behavior study is behavior intentions of consumer. It relies two parameter that is person’s attitude towards carrying out the behavior and effects of other’s opinion towards the behavior. Arnould, & Zinkhan, 2004) [1]. Attitude plays a critical role in consumer behavior, and they are especially important because it motivates people to behave in relatively consistent ways (Babin & Harris, 2009) [4]. Further it guides consumer choices by providing a framework of evaluation on the basis of their knowledge of attribute and advantages of each alternative (Wells & Prensky, 2000) [32].

**Product Features**

Joshi Sujata et al. (2016) [28] studied Five factors namely as Technology factors, Hardware factors, Basic factors, Financial factors were taken in to consideration for the research work. Primary data was collected from 306 respondents by means of survey with questionnaire. Factor analysis was used to ascertain the factors that affect the young student’s choice of smartphone handset. Regression analysis was further done on the factors obtained in order to validate the significance of these factors on the customer’s willingness to buy the smartphone. The finding of the articles revealed that Technology, OS version and Hardware features have a significant effect on young student’s choice while purchasing a smartphone. In the research entitled “A Study of Consumer Preference for Smartphone: A Case of Solan Town of Himachal Pradesh” conducted by Deepa Gulerta (2015) [14, 15] aims to ascertain elements which are responsible for developing consumer preference for Smartphone and several usability features. The data were collected from various 80 Smartphone users and statistical analysis like percentage method, total weightage Method, Chi-square test and F test were applied for analyzing the relationship between preferred usability features and demographic variables. The research finding states that consumers considered usage ease and processing speed as
major factors building preference which was followed nearly by technological needs and applications. Mad Lazim, H., & Sasitharan, D. (2015) [20] tried to explore the factors that encourage consumer to buy a smartphone. The researcher has considered High Speed Processing/ Operating System, Design, Application & software, price, Brand and Convenience as influencing factors that affect Purchase decision of smartphone. The population considered in the research was Malaysian smartphone users from all age group with sample of 427 respondents for this study. The analysis of this collected data states that multipurpose function of the smartphone such as multipurpose applications, high speed processors was influencing factors to Malaysians consumer to buy a smartphone. Uddin et al. 2014 [31] conducted a research work on the Title “Factors Affecting Customers’ Buying Decisions of Mobile Phone: A Study on Khulna City, Bangladesh” which focuses on the motive to uncover the underlying factors which affect customers in choosing mobile phone. A structured questionnaire designed to collect the data. A total of 200 respondents were interviewed from them 160 were found flawless thus used for data analysis. Factor analysis was applied to extract the underlying factors affecting mobile phone purchasing decision, findings of the research states that while purchasing the mobile phone, customer are influenced by different factors which ultimately affects the purchase decision, the important factors which influence the customers during purchase are physical attributes which includes physical characteristics of mobile phone like camera, Bluetooth, color, weight and others

In the research work undertaken by intended to determine the factors affecting purchase intention of smartphone by identified five independent factors that affect purchase intention of smartphone, which include price, compatibility, security, and social influence and consumer innovations. The data were collected through the structured questionnaire from 187 respondents and were analyzed with the help of Correlation and Regression Method. The research finding states that compatibility and consumer innovations are highly significant factors influencing buying decision of smartphone amongst Chinese customers. In research study entitled “Factors Affecting Mobile Phone Purchase in the Greater Accra Region of Ghana: A Binary Logit Model Approach” Conducted by invested on the study of factors affecting mobile phone purchase decision, the data was collected from 200 respondents and analyzed with Binary logistic regression Model. Research finding states that advanced technology features such as internet browsing and durability or quality of mobile phone are the two main factors significantly influencing mobile phone purchase decision. It was suggested that modern technology features that are more durable and high quality are expected to be incorporated in the Mobile phone. Safiek Mokhils and Azizul Yadi (2012) [21] conducted a research on “Consumer Choice Criteria in Mobile Phone Selection: An Investigation of Malaysian University Students” with the aim of studying the importance of different preference criteria in mobile phone selection among Malaysian consumers. The Data was collected through self-administered questionnaire from 371 university students. The respondents were asked to rate the relative importance of 29 potential influencing factors regarding their choice of mobile phone. The principal components factor analysis resulted in seven independent dimensions: (1) innovative features, (2) image, (3) price, (4) personal recommendation, (5) durability and portable aspects, (6) media influence, and (7) post-sales service out of which innovation in mobile phone features and design does arrive on top of the list in consumers’ choice of mobile phones.

Azira Rahim et.al (2016) [27] examined Purchasing Intention of Smartphone among University Students. The study explored various factors which influences purchase intention of smartphone among university students in Malaysia. It examined the relationship between product features, brand name, social influence, product sacrifice and purchase intention of smartphone. Data was gathered from 367 students from UiM Kedah. Four hypotheses were used to test the relationship between the independent variables such as product features, brand name, social influence, product sacrifice and purchase intention of smartphone and Cronbach Alpha was applied to test the reliability of the scales. Product features and brand name were considerably and certainly related to purchase intention of Smartphone. Ayodele et al. (2016) [2] research aimed at determining the factors of Smartphone purchase behavior among young adults in Anambra State, Nigeria. Research finding states that aesthetic value, smartphone features has a foremost effect on the purchase behavior among young adults.

Social influence

Tried to study the factors affecting consumer’s purchase intention of Smartphone. Research attempts to find out significant difference between the responses of male and female with respect to the factors such as Relative Advantage, Dependency, Compatibility, Convenience, Product Features, Price, Brand name and Social Influence. The Questionnaire was circulated and collected from 159 respondents. Various statistical tools like Multiple Regression, Mann Whitney U were used to analyze data. The result shows that social influence, compatibility and dependency were found to be significantly influencing purchase intension of the Smart Phone consumers.

Malviya et al. 2013 [21] studied Factors Influencing Consumer’s Purchase Decision towards Smartphones in Indore. The research aims to identify the relationship between the four factors specifically price, brand name, feature and social influences during purchase of smartphone. The data were collected from 188 respondents and were analyzed and interpreted using chi-square, Reliability analysis, Factor analysis, Confirmatory Factor Analysis with the help of Statistical Package for Social Sciences (SPSS). Research study concluded that Social Influence acts for the Brands used by the people as a status symbol and Features form the product specifications. A study by Chi, Yeh, and Tsai (2011) [8] indicates the influencing of advertising endorser on consumer purchase intention. The result of study indicated that celebrities can associate product value to customer by transfer their feelings on a particular product. This is because those endorsers can produce a strong recommendation and affect the choice of consumer. Thus, it can increase the consumer purchase intention. A research work done in the West China having objective to investigate the psychological factors influencing College students’ utilization of mobile phone and the relationship between the college students’ Individual characteristic and the aspect which they take in to consideration when they select the mobile phone. In order to carry out the research work a
structured questionnaire was prepared and data were collected from 172 respondents. Furthermore the data were analyzed by applying KMO test and Bartlett test of sphericity. The study discovered that purchasing motivation positively influences the social attribute factor. Analysis also states that special mobile phone function and style affects the consumer’s individuality, style and life concept. Li, S., & Li, (2010)

Price
In the research paper Consumer Buying Behavior of Mobile Phone Devices examined by aims to investigate the factors affecting the decision of buying mobile phone devices in Hawassa town of Ethiopia. In order to carry out the research study, a sample of 246 consumers was taken and simple random sampling technique was used. Furthermore the data were analysed with help of correlation and multiple regressions. Analysis revealed that price is the foremost important influencing factor affecting the choice to purchase mobile phone. Karjaluo et al. (2005) [16] conducted a research study in Finland with regard to factors that influence intention to acquire new mobile phones and factors that influence on mobile phone change decision among consumers. The Researcher categorized the factors into seven categories namely innovative services, multimedia, design, brand and basic properties, outside influence, price and reliability. The primary data were collected by using two different approaches that is Study 1 focus group interviews with 79 graduate students and Study 2 with the survey of 196 respondents. The study indicated that although the choice of a mobile phone is a particular choice situation, there are some general factors that seem to guide the choice. Investigators studied that price, brand, interface, and properties are the important factors which is affecting the actual decision amongst mobile phone brands while technical problems are the basic reason to change mobile phone. Research entitled “A Study on Brand Preference of Mobile Phone Customers With Reference To Erode City” Conducted By Dr. P. Karthikeyan (2011) [18] aims to find out mobile phone brand preference among the customers in Erode city of Tamil nadu, India. The survey was conducted through structured questionnaire by contacting 300 respondents. The research analysis found that brand have most favored attribute while selecting a smartphone in respect of quality, price, technology and durability. The company which fulfills the consumer desires in the competitive market has high preference on brands among the consumers. Researcher concluded that most of the respondents were selecting the Smartphones for the reason of its ‘high quality’ and ‘Price.

In the research paper “An investigation of Consumer Behavior in Mobile Phone Markets in Finland” undertaken by Pakola et al. (2007) [26] intended to investigated consumer purchase intentions in mobile phone markets in Finland. The researcher has collected data from 397 respondents and factor analysis was used to make inferences of collected data. Research study states that price is the most influencing factor in buying Mobile Phone. Furthermore it states that price was regarded as the most significant motives affecting to purchase decision in current mobile phone model for consumers in Finland. It was been noted in the analysis that price might have dominated the decision making in the sample more than it does for the whole population, as the average net income in the target groups was relatively low. Paulraj et al. 2011 [25] aims to conduct a research to understand the Indian consumers’ perception choice in selecting cellular mobile telecommunication service providers. A structured questionnaire was developed to collect primary data from the consumers and was analyzed; reliability and factor analysis were carried out. The findings of research revealed that price, functions/ performance of a mobile phone, mobile phone quality plays an important role in the purchase decision of the smartphone. Price plays an important role in the consumer purchase decision as India is one of the price sensitive counties. However, the study also indicates that mobile phone quality and availability has an important impact on consumer perception for selecting mobile phone manufacturer.

Convenience
Suki and suki (2013) [29] studied “Dependency on Smartphones: An Analysis of Structural Equation Modelling” by keeping objective to observe the influence of social needs, social influences and convenience of smartphone on students’ dependency on smartphones. The research revealed that one of the integral influencing factors was Convenience which affects the students’ dependency on smartphone. Obtaining smartphone is similar to mobile phone and a computer together, it supports them in carrying stuff wherever they go and it was better to carry a handy smartphone rather than a laptop. In the research paper entitled “Examining the Factors Influencing Purchase Intention of Smartphones in Hong Kong” by Mei Mei Lau, Aris Y. C. Lam aims to investigates the factors that influence the purchase intention of smartphones, which includes perceived usefulness, perceived ease of use, perceived enjoyment, perceived value, subjective norms and external influence. The samples under survey were 150 university undergraduate students in Hong Kong. In order to analyze the data, Exploratory Factor Analysis, Reliability Analysis and Multiple Regression analysis were used. The results suggested that major factors that have a significant influence on purchase intention are perceived usefulness, perceived ease of use, perceived enjoyment, and perceived value. Naing, K. W., & Chaipoopirutana, S. (2014) [24] investigated the factors that affect consumer’s purchase intention towards Smart phone by taking into account perceived quality, product image, consumer aspiration, emotional value, consumer uncertainty and attitude towards product and purchase intention of a smart phone. The data were collected from 400 respondents and analyzed with the help of Pearson Correlation. The research reveals that there is a positive and imperative relationship among perceived quality, product image, consumer aspiration, and emotional value, attitude towards product and purchase intention.

Brand Name
In the research paper titled “Consumer Buying Preference towards Entry Level Smartphone” research work done by aims to study consumer purchasing preference for entry level smartphone amongst youth. In order to achieve the stated objective, an exploratory and descriptive analysis comprising of 200 respondents chosen by using stratified sampling. The collected data were analyzed with the help of conjoint analysis. By analyzing the data it was found that Brand is the most significant attribute as a selection parameter amongst the customer which was followed by...
Price and Purpose respectively. An image-based Empirical research was conducted by investigates critical drivers and their relevance in mobile phone purchasing decisions. The researcher identifies namely price, brand and brand ambassador as the critical drivers for conducting research work. The research reveal that out of three drivers of purchase decision brand and brand ambassador were found as the important driver in purchase decision of Mobile Phone where price has least influence over the purchase decision.

In the Research paper “Students' demand for smartphones: Structural relationships of product features, brand name, product price and social influence.” Carried out by Norazah Mohd Suki (2013) aims to find out structural relationships of product features, brand name, product price and social influence with demand for Smartphones among Malaysian students. The data was collected from 320 valid pre-screened university students with convenient sampling technique and the outcome of the research revealed that brand name and social influence have an effect on the increasing demand for Smartphones among Malaysian students.

Research conducted in Korea by Khayyat, T. N. (2012), intended to ascertain and enumerate the impacts of the factors that influences customer satisfaction in the mobile telecommunication business and to determine the relationships between the demographic variables and the degree of customer satisfaction by taking determinants such as Perceived usefulness, Perceived ease of use, Perceived enjoyment, Price, Demography and Brand. Total of 1,458 valid survey responses were collected and analyzed. The study found that found that brand and service quality are most important indicators of making customer’s perception.

Rowland E. Worlu (2011) carried out research work on “consumer-purchasing motives in Nigerian cellular phone Market: an empirical investigation”. The research intended to examine consumer-purchasing motives in cellular-phone markets. The study surveyed 297 Nigerian consumers to identify their motives for purchasing. The analysis of this research work shows that primary factors for the purchase of a mobile phone were found to be manufacturer, market conditions and influential persons. For the choice of operator, the factors were found to be features and brand components of pricing, quality, and influential persons.

Theoretical Model

According to theoretical framework is the base on which it is logically developed, described and elaborated network of associations among the variables deemed relevant to the problem situation. Based on the literature review following theoretical framework has been proposed for the present study. There are five independent factors (Product Feature, Brand Name, Price, Social Influence and Convenience) which influence the independent variable (Purchase Intension).

In order to develop the model, researcher has taken the base of Self-Determination Theory (SDT; Deci & Ryan, 1985) and has recognized diverse categories of motivation in light of the distinctive reasons or objectives that offer ascent to an activity or behavior. The most essential refinement is between intrinsic motivation, which indicates accomplishing something that is intrinsically fascinating or pleasant, and extrinsic motivation, which indicates accomplishing something that prompts to an attachable result.

After studying the necessary literature for the current study, various components were identified that played a very crucial role in purchase intentions towards the smart phone. The major factors that extrinsically motivate the customers while purchasing the smart phones includes Product Features, Price and Brand Name and the factors that intrinsically motivate the purchase intensions of the customers include are Social Influence and Convenience.

Fig 3: Proposed Theoretical Model on Factors affecting purchase intentions of Smart Phones prepared by the author

The reviewed literature for the present study also depicted the importance of these factors for the purpose of purchase. Without considering these factors, it would be difficult to consider purchasing the smart phones and hence they are significant. These factors lead to generation of Trust among the customers, their Attitude is also influenced by these factors and it shows the smart phone usefulness in one’s personal and professional life. Finally customers after considering these important parameters take a decision to purchase the smartphone and take the advantages of its utility.
Conclusion and Implications
The purpose of this study is to analyze consumer buying intentions towards smartphone by identifying various factors that influence consumer in purchase of smartphone. This study reviewed various literatures and has investigated the different variables that influence consumer buying intentions of smartphone. It has recommended various factors which are highly considerable by consumer while buying a smartphone. On the basis of reviewing previous research work, the study shows that Product Feature, Brand Name, Price, Social Influence and Convenience have positive impact on consumer’s purchase intention. One of the key contributions of the study is the development of a conceptual framework that affects the consumer while buying a smartphones. Smartphone marketers should ascertain strategic significance of studying consumer purchase intentions. Hence, smartphone companies must implement a tailor made marketing mix tactics to motivate customer to buy smartphone, which will gear up selling of smartphone and generates rosy amount of money for companies in the future.

References
7. Counterpoint Research: http://www.counterpointresearch.com/india1q16/
13. eMarketer:https://www.emarketer.com/Article/Mobile-Phone-Smartphone-Usage-Varies-Globally/1014738
18. Karthikeyan P. A study on brand preference of mobile phone customers with reference to erode city, international journal of research in commerce, it & management. 2011; 1(7):66-77