

# Consumer Behavior towards Usage of Smartphone (In Rohtak City)

Sudha Rani<sup>1</sup>, Neeta Sharma<sup>2</sup>

<sup>1,2</sup>Student of M. Phil., Department of commerce, MDU, Rohtak, Haryana

---

## ABSTRACT

**Purpose:** Despite the rapidly growing competition, the study of consumer behavior is very important. The aim of this paper is to analyze the consumer preference for brand of Smartphone (in Rohtak city) and second, to determine whether there is a significant difference between preferences for features of smart phones on the basis of gender (special reference to Blackberry, Samsung, Apple and Nokia).

**Design/methodology/approach:** An empirical study using descriptive research design and convenience sampling was applied. Data is collected with the help of questionnaire and used independent sample t-test for analysis.

**Findings:** The study's measure findings revealed that maximum Smartphone users are female respondent who are students and have income level 5000-30000 P.M and reason of selection of current Smartphone are features that gives them many facilities like internet and many apps. It is also a status symbol. Findings also revealed that, male respondents are more aware about Smartphone features as compared to female respondents.

**Research limitations/implications :** respondent might having more than one Smartphone, but for this research work, data of only one Smartphone has been accepted from one respondent.

**Practical implications:** The methodology employed here can be easily applied by marketers for evaluating customer behaviors and service quality performance for improved decision making and resource allocation.

**Keywords:** Smartphone, PDA, GPS navigation system, apps.

**Paper type:** Research paper.

---

## Introduction:

Marketing start with the consumer and end with the consumer. Under the modern marketing concept all marketing activities have to reveal around consumer. Today consumer behavior is not constant. It is always ready to take advantage of any price cuts and sales, because he is fully aware of the market conditions. So today it is necessary to every marketer to study or have knowledge about consumer behavior Consumer behavior was a relatively new field of study in the mid-to-late 1960's with no history or body of research of its own, the new discipline borrowed heavily from concepts developed in other scientific discipline, such as psychology (the study of individuals), sociology (the study of groups), anthropology (the influence of society on the individuals), social psychology (the study of how an individual's operate the group) and economics. Many early theories concerning consumer behavior were based on economic theory, on the notion that individuals act rationally to maximize their benefits (satisfaction) in the purchase of goods and services. The initial thrust of consumer research was from a managerial perspective; marketing managers wanted to know the specific causes of consumer behavior. They also wanted to know how people receive; store and use consumption related information, so that they could design marketing strategies to influence consumption decisions.

**Factor influencing consumer behavior:** 'what' consumer consume but also 'where' 'how often' and under what conditions' goods and services are consumed, is influenced by a number of external and exogenous factors. These factors are broadly classified in four parts:

- (A) Buyer characteristics
- (B) Product characteristics

- (C) Seller characteristics
- (D) Situational characteristics

### **Meaning of Smartphone:**

A mobile phone that is able to perform many of the functions of the computer, typically having a relatively large screen and an operating system capable of running general purpose applications. It is mobile phones with more advanced computing capabilities and connectivity than basic features phone. Early Smartphone's typically combined the features of a mobile phone with those of another popular consumer device, such as a personal digital assistant (PDA), a media player, a digital camera's and/or a GPS navigation unit. Modern Smartphone include all of these features plus the features of a laptop, including web browsing, Wi-Fi and 3<sup>rd</sup> party apps and accessories.

### **Features of Smartphone's:**

#### **Personal digital assistant (PDA):**

It is a mobile device that functions a personal information manager. PDA is largely considered obsolete with the widespread adoption of Smartphone. Nearly all current PDA have the ability to connect to the internet. A PDA has an electronic visual display.

#### **Media player:**

It is a portable digital consumer electronics device that is capable of storing and playing digital media which is electronically stored, such as audio, images and video files etc.

#### **GPS navigation system:**

It is a device that receive global positioning system signals to determine the device's location on earth. GPS devices are used by the military, by aircraft, by sailors and for recreational by the public.

#### **Wi-Fi:**

It is popular technology that allows an electronic device to exchange data or connect to the internet wirelessly using radio waves.

#### **Apps:**

It is applicable software design to run on Smartphone's, tablet computers and other mobile devices. Apps are usually available through application distribution platforms, which began appearing in 2008 and are typically operated by the owner of the mobile. Operating system such as the APPLE Apps store, Google Play, Windows phone store and Blackberry Apps world. Some apps are free, while others must be bought.

### **Introduction of Smartphone:**

#### **Apple:**

Apple, the world's most profitable Smartphone maker, has a number of advantages over most of the competition. It is a strong competitor in the prosumer customer segment– 15.3% of current Smartphone market share.

#### **Blackberry:**

- Low cost OS with open development

Advantages: Scalable and flexible functions on a variety of smart phones

Disadvantages: Low adoption and low number of available apps (both are rapidly increasing).

#### **Samsung:**

##### **Advantages:**

- High performance memory chip
- More efficient processing of order

**Disadvantages:**

- Design is not much different compared to other galaxy phones and plastic design.
- Touch wiz it looks cartoonish.
- Project butter has not been fully implemented in their jelly bean builds.

**Nokia:**

**Advantages:**

- Already wearing the latest OS windows phone 8.
- Nokia provides its own store to download most of the applications for free
- It is a mid range phone that would be affordable by most of the people

**Disadvantage:**

- It is difficult to open the back cover
- Nokia is too late to enter the android world and there is a risk of to be unsuccessful
- The price of this phone is huge if we compare it to the specs it provides. There are many phones that provide better specifications in same range.

**Market share of Smartphone:**

**Table: 1**

	Market share(2013) in %	Market share(2012) in %
Apple	15.3	18.7
Blackberry	2.7	5.2
Samsung	31.3	30.3
Nokia	4.3	5.2

It represent Samsung is the most powerful brand of Smartphone its market share is highest than other brand.

**Review of Literature**

While going through review of previous research's finding particularly conducted empirically and researcher came across many studies which covered the various aspects related to this topic but researcher mainly focused attention on those studies which are relevant for this topic. Dholakia & Bagozzi (2001) mind-set concept includes aspects of processing information and as such seems more relevant for this study. The flow construct theory explores to which extent an individual perceives a sense of control while navigating the web, the perception of the users' attention and web interaction and the degree of curiosity during interaction (Hoffman & Novak's, 1998). The mind-set concept focuses on action and cognitive orientation, consumer intention to collect and process information and post consumption decision making to serve goal Attainment.

According to Karjaluoto et al. (2005), price, brand, interface, and properties tends to have the most influential factors affecting the actual choice amongst mobile phone brands. Ling, Hwang and Salvendy (2007) surveyed college students to identify their preference of their current mobile phone. The results of their survey indicated that the physical appearance, size and menu organization of the mobile phones are the most determinant factors affecting the choice of mobile phones Eric and Bright (2008) conducted a study on factors that determine the choice of brands of mobile phone in Ghana specifically Kumasi Metropolis. Accordingly, the results of the study showed that the first most important factor is reliable quality of the mobile phone brand and the other factor is user-friendliness of the brand of the mobile phone. Likewise, Das (2012) conducted an empirical research based on survey Method on factors influencing buying behavior of youth consumers towards mobile handsets in coastal districts of Odessa located in India. According to the study, a handset of reputed brand, smart appearance, And with advanced value added features, pleasure ability and usability; is the choice of young consumers; females in gender-group, post-graduates in level of education-group, students in occupational group, urban Residents in geographical area group plays most prominent role in buying decision of a mobile handset.

Taki Mack and Sharples (2009) showed that usability in the most important determinant of mobile choice; other attributes particularly features, aesthetics and cost are other factors that have implication on the choice of mobile phone brand. In other study conducted by Kumar (2012), price, quality and style functions as the most influential factors affecting the choice of mobile phones. Moreover, Saif et al, 2012 selected four important factors i.e. price, size/shape, new technology features and brand name and analyzed their impact on consumers' buying behavior. According to his result, consumer's value new technology features as the most important variable that influences consumers' to go for a new mobile phone purchase decision. Pakola et al. (2010) attempted to investigate consumer purchasing motives in cellular phone markets. The results indicated that while price and properties were the most influential factors affecting the purchase of a new mobile phone, price, audibility and friends' operator were regarded as the most important in the choice of the mobile phone operator.

Subramanyam and Venkateswarlu (2012) conducted a study on factors influencing buyer behavior of mobile phone buyers in Kadapa district in India. The researchers studied the various types of marketing strategies adopted by market to acquire the attention and cognition of both existing and potential customers, and to study what role these marketing strategies play in consumer buying process. According to the results, income, advertising and level of education in a family are the determining factors of owning a mobile phone set. Malasi (2012) examined the influence of product attributes on mobile phone preference among undergraduate university students in Kenya. The study indicated that varying the product attributes' has an influence on the undergraduate students' preferences on mobile phones. Various aspects of product and brand attributes were considered such as color themes, visible name labels, and mobile phone with variety of models, packaging for safety, degree of awareness on safety issues, look and design of the phone.

### **Research Methodology**

A test was designed to assess the consumer behavior towards usage of Smartphone. The survey was conducted with a convenience sample of 100 respondents of Rohtak City. Questionnaires were completed and returned either via email or were collected in face-to-face interviews. From this sample, 53 per cent of the respondents were female. The questionnaire comprises of two parts. In the 1st part respondents were asked to provide information about their demographics network. The second part contains customer preference, Behavior and the factors that might affect Customer preferences for features of smart phones were measured using a five-point Likert scale (scaling performance level from "1 least preferred" to "5 most preferred").

#### **Objectives of the study**

- To analyze the consumer preference for brand of Smartphone.
- To determine whether there is a significant difference between preferences for features of smart phones on the basis of gender.

#### **Data Analysis and interpretation**

In this includes editing, coding, classification, tabulation and graphic presentation of data. After that data were interpreted and analyzed to get the results for conclusion and recommendations. The data so collected has been analyzed with the help of various tools and techniques to fulfill the research objectives of the study. These include percentage table, frequency table, cross tabulated table and mean keeping in context with the objective of the study. It was further suitably analyzed by independent sample t-test.

- Mean Or average value, a measure of central tendency, is obtained by summing all elements in a set and dividing by number of elements.
- Statistical technique-independent samples t-Test. The independent sample t-Test can be used to see if 2 means are different from each other when the two samples that the means are based on were taken from different individuals who have not been matched.

#### **1. Null and alternative Hypothesis:**

##### **Hypothesis-1:**

H0: There is no difference between preferences for features of smart phones on the basis of gender

H1: There is a difference between preferences for features of smart phones on the basis of gender

2. It is two tailed test.
  3. The  $\alpha$  level:  $\alpha=.05$
  4. The appropriate statistical test for this ratio scale is independent sample t-Test.
- First of all, we compute the statements of consumer preference of Smartphone on the basis of features by adding all statements together. And SPSS is used for this purpose (SPSS→ compute→ total in target variable→ numeric expression- Touch Screen+ Wi-Fi+ APPS+ GPS+ Front Facing Camera). After these steps, with the help of total of these statements, we can find out whether it is normally distributed or not. For this, we are using “1 sample K-S Test” (Analyze→ non-parametric→1 sample K-S Test). Output table is given below:

**Table 2: 1 Sample K-S Test**

<b>One-Sample Kolmogorov-Smirnov Test</b>		
		<b>Total</b>
	N	100
Normal Parameters <sup>a</sup>	Mean	21.1700
	Std. Deviation	2.70822
Most Extreme Differences	Absolute	.270
	Positive	.140
	Negative	-.270
Kolmogorov-Smirnov Z		2.704
Asymp. Sig. (2-tailed)		.000
Test distribution is Normal.		

Thus, table 2 shows that the value at the ‘Sig.(2-tailed)’ is .000, which shows that the sample is normally distributed. Therefore, we are going for parametric tests. In parametric test, for this type of data, in which samples are dependent to each other, we are using independent sample t-test.

**Table 3: Group Statistics**

Total*	Gender	N	Mean	Std. Deviation	Std. Error Mean
	Male	47	21.2979	1.36597	.19925
	Female	53	21.0566	3.50502	.48145

Total\*= Touch Screen+ Wi-Fi+ APPS+ GPS+ Front Facing Camera

**Table 4: Independent Sample t-Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig.(2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Total	EVA	26.986	.000	.443	98	.659	.24127	.54484	-.83994	1.32248
	EVNA			.463	69.048	.645	.24127	.52105	-.79819	1.28073

EVA- Equal Variance Assumed

EVNA- Equal Variance Not Assumed

We have checked preference for all features on the basis of total and sig. (P- Value) of Levene's test is .000, which is less than  $\alpha$  value (usually .05). So the null hypothesis is rejected. So there is a difference between preferences for features of smart phones on the basis of gender.

### **Suggestions**

In regards to finding related to consumer behavior towards usage of Smartphone, a case study of Rohtak city, there are several measures through which Smartphone companies improve their market share and know about the consumer preference. Here, some of the suggestions to improve above said qualities are as follows:

- Smart phone companies should focus more on advertisements on internet websites.
- As consumer wants more and more features so smart phone manufacturers should increase the number of features
- As the consumer prefers word of mouth or consulting someone tech savvy, so smart phone brands must maintain their good will and increase services.
- Smartphone's can increase the number of customers by lowering down their prices to economical level.

Smartphone provider can consider other method for increase the number of customer s such as good customer service, social responsibility.

### **Conclusions**

- Most preferred brand in smart phone market is Samsung followed by Apple & Nokia.
- The main reason for smart phone purchase is its features.
- Internet websites & television is an important source of information to consumer.

Mostly consumer wants buy the same brand of smart phone in future. So consumer is brand loyal in case of Smartphone

### **References**

- [1]. Agarwal, S., & Teas, R. K. (2002). Cross-national applicability of a perceived quality model. *Journal of Product & Brand Management*, 11(4), 213-236.
- [2]. Kotler, P. (2004). Ten deadly marketing sins: signs and solutions.
- [3]. Schiffman Leon G. and Kanuk L.(CB) 'Consumer behavior, 'pretice Hall mc, Englewood ED.2<sup>nd</sup>.
- [4]. David Kruch, Richards, Crustehfuld & Egerton L.B.lachey, 'individual in society' (chapter 2).
- [5]. Philip Kotler, "Marketing Management (Analysis, Planning, Implementation and Control). (13<sup>th</sup> Edition), Prentice Hall of India Private Limited, New Delhi-110001, 1995.
- [6]. Leon G Schiffan & Leslie Lazer Kanuk " Consumer Behavior"- Prentice Hall of India Private Limited, New Delhi-110001, 1999.
- [7]. C.N.Sontakki, "Marketing Management" Kalyani Publishers, New Delhi-Ludhiana, 1996.
- [8]. A.K.Phophalia, Sarita Sharma, ' Analysis, Planning and Control' Kanishka publishers, New Delhi-110002, 1997.
- [9]. Dr. M.M .Verma & R.K. Aggarwal "Consumer behavior." King Books (Regd.) 1684, nai Sarak, New Delhi-110006,2000.
- [10]. C.R.Kothari- Research Methodology, Vikas Publishing House.
- [11]. C.B.Memoria, Satish Mamoria, S.K.Suri, "Marketing Management Kitab Mahal Allahbad,1989.

### **Website Sources:**

- [1]. <http://mairec.org>
- [2]. <http://apple.com>
- [3]. <http://blackberry.com>
- [4]. <http://nokia.com>
- [5]. <http://samsung.com>
- [6]. <http://scribd.com>
- [7]. <http://wikipedia.com>
- [8]. <http://hdl.handle.net>