

Consumer Behaviour Towards Usage of Smartphone (In Sonapat City)

Sudha Rani¹, Neeta Sharma²

^{1,2}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 identify the most effective medium for advertisement of Smartphone (in Rohtak city) and second, to find out the level of satisfaction that consumer derives out of their Smartphone and consumer motivation for buying a Smartphone (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 the maximum users purchased Smartphone for work and its features and the most effective medium of Smartphone advertisement is internet and maximum users are most satisfied with their current Smartphone status... Findings also revealed that, most of respondents purchase Smartphone for work purpose.

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 3rd 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 cartoonist.
- 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.

Jonas Hedman (2005) conducted a study on, "The User Experience of Smart Phones: A Consumption Values Approach" to understand the user experience of smart phones over time as perceived by its users. According to the data, the way the artifact satisfied consumption values changes over time. Functional value increases for some participants and

declines for others. The direction and magnitude of change is affected by pre-adoption expectations. Social value declines over time due to many factors, including the rapidly changing nature of technology, in which the “coolness” factor rapidly wears off as other products mimic an innovative artifact. Emotional value is derived both from the iPhone itself (the aesthetic appearance and way it feels to the touch) as well as by software and associated services. The artifact itself satisfies epistemic value, as do the third-party applications, websites, etc. The epistemic value inherent with the iPhone drops rapidly. And much of the contextual value strongly depends upon whether an internet-connected personal computer is available.

Bishal Nagarkoti (2009) conceptualized in their study, “Factors Influencing Consumer Behavior of Smartphone Users” that Smartphone is really essential to make the daily life easier. Indeed Smartphone have made people smarter by organizing their lives with a single device and providing access to the world wide information at the fingertips. It doesn’t only organize daily life by putting calendars, to do list and shopping list at one place but also helps people connected from all over the world by integrating contacts, emails, social networking, messaging and even video chats. It has made lives easier for everyone. One can use it for education purpose, job related tasks, information search for entertainment purposes. That is the main reason that everyone carries a Smartphone nowadays.

Mohd Azam Osman (2012) conducted a study “A Study of the Trend of Smartphone and its Usage Behavior in Malaysia”. He stated the insightful overview of the Smartphone trends and usage behaviors in Malaysia, which could also be applicable to other developing countries in similar region. This study has revealed that various factors that are pertinent in the context of Smartphone purchasing decision such as design, performance, connectivity, price, and influences from market and social trend. The future works can adopt specific theory or concept to conceptualize these Smartphone-related factors and empirically test their relationships. In other words, with the factors revealed in this study, academics could develop a context-specific research framework to empirically examine the Smartphone adoption or usage. For practitioners, the information provided here would be useful for them to have a better sense of the Smartphone market in Malaysia and the region, and to inspire them to come out with effective commercial strategy

Kaori Nagahata (2013) in his study, “Mapping Features of Smartphone on Consumer Behavior Model toward 2020” that proposed a consumer behavior model related to the use of Smartphone features. The spread of Smartphone use has changed consumer behavior and implemented practical 2020services. In order to achieve success, each enterprise must develop and provide a novel service according to purpose they aim to fulfill. His ultimate goal of 2020 is to establish competitive advantage. Nowadays retailers consider 2020 services as advanced marketing strategies and aim to expand range of customers and business spheres by them. For example, the major British supermarket chain Tesco opened virtual stores in the South Korea subway platform .Tesco, as compared with the other supermarkets, is inferior in the number of the real stores; however, Tesco succeeds in an exploitative monopoly lock on commuters to provide novel customer experience of shopping with this service. We believe that the map help enterprises to create such innovative services with Smartphone’s and their dissemination.

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 satisfaction level, effective advertisement medium etc. Customer satisfaction level were measured using a five-point Likert scale (scaling performance level from “very dissatisfied” to “very satisfied”).

Objectives of the study:

1. To study consumer motivation for buying a Smartphone.
2. To identify the most effective medium for advertisement of Smartphone.
3. To find out the level of satisfaction that consumer derives out of their Smartphone.

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:

Ho: There is no association between consumer future Smartphone brands Preference& Current using Smartphone brand.

H1: There is an association between consumer future Smartphone brands Preference& Current using Smartphone brand.

2. It is two tailed test.
 3. The α 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. 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

One-Sample Kolmogorov-Smirnov Test		
		Total
N		100
Normal Parameters ^a	Mean	2.5000
	Std. Deviation	-1.04929
Most Extreme Differences	Absolute	.263
	Positive	.174
	Negative	-.263
Kolmogorov-Smirnov Z		2.631
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

	if in case you go for buying a different brand, your preference is	N	Mean	Std. Deviation	Std. Error Mean
current using Smartphone brand	apple	25	2.5600	1.26095	.25219
	blackberry	17	2.7059	.91956	.22303

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
Current Using Smartphone Brand	EVA	2.589	.115	-.408	40	.685	-.14588	.35736	-.86813	.57636
	EVNA			-.433	39.750	.667	-.14588	.33666	-.82643	.53467

EVA- Equal Variance Assumed

EVNA- Equal Variance Not Assumed

- We have checked the consumer future Smartphone brands Preference & Current using Smartphone brand or satisfaction level with their current using Smartphone and sig. (P- Value) of Levene's test is .115, which is greater than α value (usually .05). So the null hypothesis is accepted. So there is no association between consumer futures Smartphone brands Preference & Current using Smartphone brand
- The internet is very common and effective media for all type of advertisement and every person aware from internet.
- The maximum users purchased the Smartphone for work purpose and the Price, Performance, Design and Quality factors also plays an important role for Smartphone purchase

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 satisfaction level. 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.

CONCLUSION

- 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]. Ling, W. Hwang and G. Salvendy (2006), Diversified users' satisfaction with advanced mobile phone features, Universal Access in the Information Society, 5(2), 239-249.
- [2]. Kotler, P. (2004). Ten deadly marketing sins: signs and solutions.
- [3]. Pakol et al, (2010). An investigation of consumer behavior in mobile phone markets in Finland. In Submission to the 32nd EMAC conference, Track: New Technologies and E-Marketing.
- [4]. David Kruch, Richards, Crustehfuld & Egerton L.B.lachey, 'individual in society' (chapter 2).
- [5]. Philip Kotler, "Marketing Management (Analysis, Planning, Implementation and Control). (13th 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]. Zhou, N., & Shanturkovska, G. (2011). Chinese Consumer Behavior in the Mobile Phone Market: Nokia Case (Doctoral .Dissertation, Gotland University). IDC. January 2014. Retrieved 2014-01-27.
- [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:

- [12]. <http://mairec.org>
- [13]. <http://apple.com>
- [14]. <http://blackberry.com>
- [15]. <http://nokia.com>
- [16]. <http://samsung.com>
- [17]. <http://scribd.com>
- [18]. <http://wikipedia.com>
- [19]. <http://hdl.handle.net>