

Customers Preferences of Product Attribute of Mobile Phone Handsets: A Descriptive Study

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Abstract:

In the present scenario, the fierce competition in the market has made the mobile phone markets very insecure. In this paper scholar tried to detect the choice standards of consumers in cell phone markets in Dehradun. The purpose of this study is to investigate the product as well as functional attribute affecting the consumer decision of buying mobile phone devices. In order to accomplish the objectives of the study, a sample of 151 consumers were taken by using convenience sampling technique. The study indicates that consumer give due consideration on product attributes as compared to functional factors while making purchase of mobile handset. The result indicates that there is no significant difference on the customer preferences of product as well as functional attributes across the different demographic status of respondents.

Key Words: Mobile Hand set, functional attributes, mobile phone usage Wi-Fi, etc.

I. INTRODUCTION

The mobile phones are the electronic devices which help to communicate across the world. In the communication era mobile phones is one of the reliable and effective way to communicate by different modes of communication. The mobile phones is very vital part of daily routine of human life and it is the one of fastest growing product in the global market. The demands of products at higher qualities at lower price lead to innovation. Consumer don't want only purchase mobile phone they want feel, touch, and see the product what they brought. The advance communication technology has witness a development in electronic field in the last two decade.

In the 21st century the mobile phone support a wide range of services such as text message, business application, gaming, short range wireless communication, internet etc. First mobile phone launch by Motorola in India. The beginning of mobile phone industry the first generation system used but it could not support to make more effective later 2G and 3G feature came in the market which make the boost in the market. Indian mobile industry is fastest growing in the world. India is the second largest mobile phone market after china. It has the world's third-largest Internet user-base. The Indian market is dominated by various mobile companies such as Samsung, Sony Ericson, Xiaomi, Motorola, Apple, LG, MicroMax etc.

In the competitive market of mobile phone the manufacturer always keep to competitive edge and differentiate the product attributes to persuade the customer to choose their brand instead of other. So there are lots of studies done to find out the factors which help to remain competitive in the market. All mobile phone have similar features but they differentiate by adding the function to make attractive to consumer. This leads great innovation in mobile phones industry.

The customer purchase decision influence by different factors throughout the world. This factor can be personality of customers and features associated with mobile phone handset. The customer preference of mobile phone attributes such as design, price, internet connection, battery life, gaming, e-mail, photo shooting, SMS, video quality, apps downloading, operating system and social networking etc. is very much popular. Its importance is increasing further when customer participates in large number. The product attributes help to select the product when customer confused between different products. This study has done with intention to find out the attributes which help to choose the mobile phone. It is focus on customer preference of product attribute of mobile phone handset.

II. REVIEW OF LITERATURE

Bhatt (2008) in this study the mobile phone usage among the post graduate student researcher analyzed the vital factor for mobile phone which affected the behavior at the time of mobile phone purchased. The factors are mobile phone carrier, services provider, equipment development..And young people like most key characteristics of mobile phone as well as risk understand which associated with.

Ling Hwang and Salvendy (2007) in this study they surveyed on college students to find out students preference on mobile phones. The result of survey show that size, physical appearance and main menu of mobile phone are the most important factors which influence the choices of mobile phone.

In the study of subramanyam and venkateswarlu (2012) they conducted the study on which factor influence the mostly buying behavior of customer. When they buy new brand mobile phone. This study conducted kadapa district in India. The study found a different kind of marketing strategy adopted by mobile company to acquire and retain the potential customer and these marketing strategy effects on consumer buying behaviors. As per study result advertising, level of

education, income and past experiences by friend and family member are the main factor which influence the customer at the time of owning mobile phone.

Malasi (2012) in the study factor influence of product attribute on mobile phone in university among under graduate student in Kenya. The researcher found various attribute which influence over the under graduate student on various brand and product considered. Like as color, name visibility, and mobile phone of different model, safety, physical appearance, design and price of mobile phone.

Mesay sata (2013) in this study factor affecting consumer buying behavior on mobile phone devices. The purpose of study to find and investigate the factor which affecting decision of buying of mobile phone devices in hawassa town. There were so many factors which influence the buying behavior. But researcher found six important factors price, product feature, social group, brand name ,durability and after sale services. From that it cleared the above factor work as motivational forces that influence for mobile phone purchase decision.

Uddin lopa and oheduzzaman (2014) in their study factor affecting customer buying decision on mobile phone. This study Conducted on Khulna city Bangladesh. In the present scenario increasing the mobile phones usage is more than recent years. various factors take into accounts when they decide the buy a mobile phone. The study try to unveil that factors those effect customer in choosing the mobile phone. In the study the result show that most important factors physical attribute when they buy a new mobile phone. There is also a some other factors like price, charging and operating facilities, size, weight and friends, neighbor recommendations which effect to there purchase behavior toward mobile phones.

Mohankumar and dineshkumar (2008) a study on customer purchase behavior toward mobile phone with reference to erode city India. This study was on purchase behavior toward mobile phone. The customer are the buyer who want happiness from the product. The customer would like see, touch and feel the product that's they buy. From this studies it cleared that factors influencing their buying behavior while choosing mobile phone. This study also help to know the satisfaction level of customer toward different mobile phone.

Heikki ,Jari, Manne, Timmo and Marrijuka (2005) in this study the factor affecting consumer choice of mobile phone. This study done in finland in their study they said mobile phone market is most turbulent market in present scenario. They focus on customer buying decisions process and light on the factors that finally affecting consumer choices. They found in their study when consumer buy mobile phone the technical problem are the main factor to change their mobile phone. There were also other factors which affecting the actual choice between mobile phone are the interface, brand, price and properties.

Wilska (2003) in this study the consumer decision of buying mobile phone depend upon a rational and emotional factors. Most of customers influence by both factor emotional as well as rational. Emotional factor are (game, music, camera and application) beside rational factors (communication and time management) the study found youth customers more prefer emotion factors than other factors.

Liu (2002) this study done on effect of promotional activities on brand decision in cellular telephone industry. In their study they analyzed factors affecting the buying decision of customer of different mobile phone in Asia. The study found the choice of mobile phone brand is based on two attitudes. These two attitudes are attitude toward mobile phone and attitude toward network. The most influencing factors while purchasing the mobile phone are new features in the mobile phone other then size, large screen and better capacity.

III. OBJECTIVES OF STUDY

Present research work have been taken up with following objectives

- To find out the product attributes that influence decision making in purchasing
- To know the consumer preference while they buy new mobile phones
- To know the major feature which a customer want in their mobile phones
- To know the consumer buying behavior towards mobile phones

Assumption of Hypothesis

H0: there is no significant difference on the preferences of product as well as functional attributes by the customers of different demograph

H1: there is significant difference on the preferences of product as well as functional attributes by the customers of different demograph .

IV. METHODOLOGY

The research methodology is the vain of every research. Present study have done to know consumer preference of product attribute of mobile handset. Present study is descriptive in nature. The descriptive research design was appropriate to know the customer preference of product attribute of mobile phones. The study is based on primary as well as secondary data. The primary method of data collection is used in the present study. The questionnaire technique is used to collect the data from market. The researcher has tried to find out the customer preference of different product attributes such as Design, Price, Screen Size, Touch-screen Utility, Camera quality, Sound quality, Video quality, Compatibility for high Games, Internet connection ,Apps variety, Multi-tasking, Multi point-touch screen, Battery life Easy use, Document reading/ editing, Brand Name, Operating System, Processor speed, Internal memory, Memory expansion capacity etc. as well as functional attributes such as SMS , Photo shooting, Video/ Movies/ TV watching, Web surfing, E-Mail, Social networking (Facebook/ Yahoo/ Google/ MSN), Documents Reading/ Editing, Gaming ,Apps/

software downloading, Picture/ Ringtones downloading, Maps, news reading, mobile banking, wi-fi etc. The combined mean of product feature attribute was calculated with help of SPSS software. The researcher has found the mean of product attribute is 3.8284 and function attribute is 3.5365 as per customer preference. Convenience sampling has been taken under the non probability sampling method. The sample size of this study is 151 respondents. Factor analysis and descriptive statistical tools are applied with SPSS for data. Table 1 shows the demographic characteristics of the respondents.

Table-1 Demographic Characteristics of Respondents

Variable	Description	Number of Respondents	Percentage
Age	up to 20	30	19.9
	21 to 30	100	66.2
	31 to 40	14	9.3
	41 to 50	5	3.3
	51 to 60	2	1.3
Gender	Male	90	59.6
	Female	61	40.4
Marital status	Married	47	31.1
	Unmarried	104	68.9
Income level	up to 10000	93	61.6
	11000 to 20000	38	25.2
	21000 to 30000	9	6.0
	above to 31000	11	7.3
Education	No formal education	1	.7
	Under graduate	39	25.8
	Graduate	48	31.8
	post graduate	43	28.5
	professional and other	20	13.2
Occupation	Student	70	46.4
	business	20	13.2
	Service	35	23.2
	professional	19	12.6
	house wife	7	4.6

Data presented in the table show the age analysis of respondents which indicate 19.9 percent respondents up to 20 year or in the age group 31 to 40 (9.3) percent respondents and 41 to 50 the respondent are 3.3 percent while 51 to 60 age group 1.3 respondent are there. Most of respondents from the age group of 21 to 30. It is indicating 66.2 percent of respondent from sample size. According to gender wise classification the table depicts 59.6 percent of the respondents are male and the rest 40.4 percents are females. It shows marital status of the respondents, 31.1 percent of the respondents are married, 68.9 percent of them are unmarried. Regarding the income it shows that 61.6 percent of the respondents earn income up to 10,000. The respondents earn income between 11,000 to 20,000 represents 25.2 percent and respondents earn income between 21,000 to 30,000 are 6 percent while 7.3 percent earn up to 31,000. The respondents are classified according to their education under the no formal education 7 percent respondents and under graduate 25.8 percent, while graduate are 31.8 percent which is most respondents as per education classification or post graduates respondent are 28.5, rest of 13.2 have professional education. The table also depicts the occupation of respondents the most of respondent are student 46.4 percent, having business 13.2 percent and in service 23.2 percent and professional respondents 12.6 percent, rest of 4.6 were house wife.

Table-2 Mean of Product Features and Functional features of Mobile hand across the respondents of Different Income Categories

Income By Classification	Product Feature	Functional Feature
up to 10000	3.9027	3.5735
11000 to 20000	3.7343	3.4576
21000 to 30000	3.5608	3.3272
above to 31000	3.7446	3.5303
Total	3.8284	3.5265

It is seen from the above table that mean rating of product feature has scored highest mean of 3.9027 among the respondents of income upto Rs10000PM. It is significant to note that combined mean of product feature and functional

features are highest among the respondents of income upto Rs10000PM **this signifies that lower income categories respondents are more sensitive and give due care of different product feature and functional features while making purchase of mobile handset.**

Table-3 One Way ANOVA Across Income

		Sum of Squares	Df	Mean Square	F	Sig.
Product feature	Between Groups	1.571	3	.524	1.807	.148
	Within Groups	42.615	147	.290		
	Total	44.186	150			
Functional Feature	Between Groups	.743	3	.248	.458	.712
	Within Groups	79.521	147	.541		
	Total	80.264	150			

One way ANOVA was carried out to assess the significance of mean difference of all the product attributes and functional attributes across the customers income. Assuming null hypothesis as Null Hypothesis (H_0): There is no significant difference on the preferences of product as well as functional attributes by the customers of different income level. We seen from the table that the value of (f) of product attributes is less than the table value(2.60) at $V_1= 3$ and $V_2=147$ at 0.05 level of significance. Therefore null hypothesis (H_0) is accepted indicating that there is no significant difference on the preferences of product as well as functional attributes by the customers of different income level.

Table-4 One Way ANOVA Across Level of Education

		Sum of Squares	df	Mean Square	F	Sig.
Product feature	Between Groups	.581	4	.145	.486	.746
	Within Groups	43.605	146	.299		
	Total	44.186	150			
Functional Feature	Between Groups	4.089	4	1.022	1.959	.104
	Within Groups	76.176	146	.522		
	Total	80.264	150			

One way ANOVA was carried out to assess the significance of mean difference of all the product attributes and functional attributes across the customers level of education. Assuming null hypothesis as Null Hypothesis (H_0): There is no significant difference on the preferences of product as well as functional attributes by the customers level of education. We have seen from the table that the value of (f) of product attributes as well as function is less than the table value(2.37) at $V_1= 4$ and $V_2=146$ at 0.05 level of significance. Therefore null hypothesis (H_0) is accepted showing that there is no significant difference on the preferences of product as well as functional attributes by the customers level of education.

Table-5 One Way ANOVAs Across The occupational Categories

		Sum of Squares	df	Mean Square	F	Sig.
Product feature	Between Groups	2.588	4	.647	2.271	.064
	Within Groups	41.598	146	.285		
	Total	44.186	150			
Functional Feature	Between Groups	2.985	4	.746	1.410	.234
	Within Groups	77.279	146	.529		
	Total	80.264	150			

One way ANOVA was carried out to assess the significance of mean difference of all the product attributes and functional attributes across the customers of different occupations assuming null hypothesis as Null Hypothesis (H_0): There is no significant difference on the preferences of product as well as functional attributes by the customers of different occupational categories. We see from the table that the value of (f) of product attributes is less than the table value(2.37) at $V_1= 4$ and $V_2=146$ 0.05 level of significance. Therefore null hypothesis (H_0) is accepted indicating that there is no significant difference on the preferences of product as well as functional attributes by the customers of different occupational categories.

V. CONCLUSIONS

In the present scenario, the fierce competition in the market has made the mobile phone markets very insecure. In this paper scholar tried to detect the choice standards of consumers in cell phone markets in Dehradun. Researcher studies the factors for purchasing new cell phone and made the comparative study of product v/s functional choice of customers

while selecting a particular brand of mobile hand set. Researcher observes that product factors are given due care as compared to functional features while selecting a brand of mobile hand set. In results researcher found that there is no significant difference on the preferences of product as well as functional attributes by the customers of different income level, education and occupation level of respondents.

VI. SUGGESTIONS

People attracted towards newer technology and will be able to shift from one mobile phone to another if it uses better technology. Mobile phone companies should carry out periodic survey to help in identifying these new technology features and decide which ones to add to its product. Moreover, by determining which combination of these features match the current trends and consumer needs would be cost effective to the mobile phone companies. In turn, product design is also very important in the success of the brand. Manufacturers of different mobile brands are improving on the durability and quality of the brand, they should also consider the price of selling it so as to make it affordable to all persons. It is recommended that companies concentrate more on developing quality and affordable mobile phones and spend more time on enhancing their products to offer it at lower prices which can be done by employing cost reduction measures.

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