

CONSUMERS PERCEPTION AND PREFERENCE TOWARDS SMARTPHONE

Revathy Rajasekaran, S. Cindhana and C. Anandha Priya

Department of Management Studies, V.V. Vanniaperumal College for Women, India

Abstract

Smartphone usage has proliferated in recent years. Nowadays people seem to become dependent towards Smartphone due to its convenience, great camera features, easy applications installations, and more importantly, it can do most of the computer functions on the go. In this technology and competitive era, this study aims to explore the key factors which motivate consumers to purchase and use Smart Phones. Further, the reason behind usage of smart phone is found and to identify the customer attitude towards smart phone and finally to know the customer's satisfaction level towards smart phones. This study is more essential for Smartphone companies as their sales and profit will be depend upon on customer perception. Overall this study will facilitate the improvement of Smartphone industry in the view of customer perception and their attitude.

Keywords:

Smartphone, Consumer Perception, Marketing Strategy

1. INTRODUCTION

In this global era, technology has become an integral part in our lives. The saying 'world is at your fingertips' has become predominant nowadays. From desktop to laptops, technology has further minimized to smartphones.

Smartphone usage has proliferated in recent years. Some areas of the world have enjoyed rapid deployment and high penetration of mobile telephony [1]. 70% of the world's population own at least one Smartphone. In today's society, people are becoming more and more rely on technology especially when communicating with others.

Smartphone industry has been booming since 1983. Since then, there have been many large mobile phone companies stepping their foot into the industry. Western Smartphone makers, like Apple and Google, are increasingly looking east for growth, giving countries like India significant influence over the sorts of features they build into their phones.

India has the fastest-growing smartphone market in the world, accounting for 27.5 million devices sold in the second quarter of 2016, smartphone shipments in India grew 23 per cent annually in the third quarter of 2016 as compared to the global Smartphone market which grew at five percent, up according to IDC. Everybody is looking at India as a huge landing ground for their innovation and also as a next big step in that part of the world.

Thus, Smartphone market in India has huge competition. Each and every brand offers various features and is targeting to different needs of the customer therefore it is important to study the perception of Smartphone user.

This research is carried to understand the various factors which influence the purchase intension of the consumer and also helps to understand the mindset of different consumers while buying a smart phone.

2. REVIEW OF LITERATURE

The various literature related to the consumer attitude towards smartphone were studied for this study some of them are,

Osman *et al.* [1] concluded that the selling price is not the most important factor that affects smartphone purchasing decision, whereas the consumers perceive other factors such as design, connectivity, and performance to be more important than the price.

Kaushal and Kumar [3] inferred that the consumers are using or want to purchase Smartphone because their social circle is using it and hence they are also motivated and inspired to use Smart phone.

Nagarkoti [2] found that customers pay huge money in smart phones for latest technology and for brands.

Mohan [5] conducted a survey and his findings were Smartphone is just not only the want of customer but a need. Moreover, consumer perceives brand image while purchasing smartphone and few consumers in Indian market are brand loyal.

Liao [4] concluded that when buying a smartphone, a consumer sees the brand image more than other factor such as design, integration of hardware and software, file transfer and display, price of additional, purchase, price of the phone and camera.

Rani and Sharma [6] found that the maximum users purchased the Smartphone for work related purpose. The price, performance, design and quality factors play an important role for smartphone purchase.

Malviya *et al.* [7] found that people in Indore are buying Smartphones irrespective of its prices. He also added that features like brand, social image, technology and durability are playing major role in buying decisions of consumers in Indore.

3. OBJECTIVES OF THE STUDY

The main objectives of the study are:

- To explore the key factors which motivate consumers to purchase and use Smart Phones
- To find the reason behind usage of smart phone.
- To identify the customer attitude towards smart phone.
- To know the customer satisfaction level of the smart phones.

4. DATA AND METHODOLOGY

A Research design provides a scientific framework for conducting research investigation. The study is exploratory in nature. The primary data was collected from the users of Smartphone who were the students, businessmen, house wife and

employee of different age group, background and income level. Primary data was collected through structured questionnaire. The secondary data was collected from various research publications, journal and internet.

The study was conducted with a sample size of 307 Smartphone users in Virudhunagar. The technique used to identify the respondent is convenient sampling.

A structured questionnaire was framed covering the demographic details of the respondents, smartphone usage pattern and purpose, smartphone features and factors influencing smartphone purchase decision. 25 statements related to purchase decision of smartphone were identified and the respondents were asked to rate in Likert 5-point scale.

The survey responses were loaded in the SPSS Package 20. For analyzing the data Chi-square, Factor analysis, Correlation, Garrett's ranking, Regression and Anova were used. The test was conducted on 5% level of significance.

4.1 RESEARCH METHODOLOGY

- Research Design: Survey Research
- Sampling Frame: Smartphone users of different age group and different profession in Virudhunagar region.
- Sampling Method: Convenience Sampling
- Sampling Size: 307 respondents
- Nature of Data: Primary data as well as secondary data were collected from journals, websites, book, and magazine and from previous research related to smartphone
- Method of Primary - Data Collection: Questionnaire
- Type of Questionnaire: Structured questionnaire with suitable scaling.
- Type of Questions: Closed ended, Likert scale, Ranking questions and multiple-choice questions.
- Statistical tools used: factor analysis, correlation, regression, Chi – square, Garrett's ranking analysis
- Software Used: IBM SPSS Statistics 20 Package
- Period of Study: December 2017 to January 2018
- Area of study: Virudhunagar.

5. RESULT AND DISCUSSION

The results obtained from the analysis of the data by using the various statistical tools are discussed below.

5.1 PREFERENCE TOWARDS SMARTPHONE FEATURE

Table.1. Weighted average on preference towards Smartphone feature

Feature	Mean square	Rank
Operating System	4.57	5
Storage Capacity (Memory)	4.61	3
HD Display	4.38	7
Generation (2G/3G/4G)	4.54	6
Battery life	4.74	2

Camera Resolution	4.58	4
Colour and Design	4.15	8
Processing Speed	4.75	1

From Table.1, it is understood that processing speed, battery life, storage capacity, camera resolution and operating system are considered most important features in choosing the smart phone. Generation, HD display and color and design are considered less important while purchasing smartphone.

5.2 FACTORS INFLUENCING THE PURCHASE OF SMARTPHONE

The Table.2 shows the factors influencing the purchase of smartphone. The factors including quality of product, brand image, product feature and price are considered more influential factor for purchasing the smartphone while promotion and offer and family and friends suggestion are considered less influential while purchasing smartphone.

Table.2. Weighted average for factors influencing the purchase of smartphone

Factors	Mean Square	Rank
Brand Image	4.54	2
Price	4.24	4
Quality of Product	4.7	1
Promotion and Offers	3.58	6
Family and friends suggestion	3.96	5
Product Features	4.39	3

5.3 THE MOST USED MOBILE APPLICATION

The Table.3 shows the Garrett's ranking for most used mobile application by customers. Social application is the most used application by respondent followed by education app. The third, fourth, fifth most used application is shopping app, news application and banking application respectively. The least used apps are travel application and job app.

Table.3. Garrett's ranking for most used application by customers

Apps	Total score	Average score	Rank
Shopping app	16118	52.50	3
Job app	12930	42.12	7
Educational app	16125	52.52	2
Travel app	13689	44.59	6
Social app	18453	60.10	1
Banking app	13963	45.48	5
News app	15343	49.98	4

5.4 RELATIONSHIP BETWEEN AGE AND THE SMARTPHONE VARIABLES

In Table.4 seven smartphone variables say smartphone brand, price, reason of buying a smartphone, frequency of change in new

smartphone, level of switching between brand, per day usage of smartphone and influence group in buying smartphone are identified in order to find out their degree of relationship with age of customers. The findings reveal that there is a significant

relationship between customers age and reason of buying a smartphone, frequency of change in new smartphone, level of switching between brand, per day usage of smartphone and influence group in buying smartphone.

Table.4. Relationship between age and the Smartphone variables

Smartphone Variable		Age (in years)					Chi-square			
		<20	20-30	30-40	40-50	>50	Degree of Freedom	Calculated value	Asymp. sign	Significance status
Brand	Apple	5	11	6	6	3	36	42.930	.198	Not Significant
	Sony	1	9	1	2	0				
	Samsung	11	39	23	9	12				
	Moto	3	10	3	5	2				
	Lenovo	4	13	4	9	1				
	Lava	5	10	2	1	1				
	Micromax	5	7	2	4	1				
	Intex	1	4	0	4	0				
	Microsoft	2	2	2	2	3				
	Others	8	32	6	7	4				
Price	< 6,000	6	15	8	13	2	16	14.791	.540	Not Significant
	6,000-12,000	19	74	24	18	16				
	12,000-18,000	7	22	8	10	4				
	18,000-24,000	5	12	10	3	2				
	> 24,000	8	14	7	5	3				
Reason	Prestige	5	4	6	1	0	8	28.236	.000	Significant
	Personal need	27	117	38	42	27				
	Social need	13	16	5	6	0				
Change	1 year	4	22	3	2	1	12	21.238	.047	Significant
	1-2 years	17	42	13	16	2				
	2-3 years	13	35	16	12	12				
	> 3 year	11	38	17	19	12				
Level in switching	Low	7	23	12	13	8	3	21.958	.000	Significant
	Moderate	24	70	27	29	16				
	High	11	36	8	6	2				
	Extremely high	3	8	2	1	1				
Influence	Family	10	62	23	28	21	12	31.267	.002	Significant
	Friends	30	62	20	19	6				
	Peer groups	4	10	2	1	0				
	Neighbors	1	3	4	1	0				
Per day usage	< 2 hours	11	26	18	17	17	12	30.024	.003	Significant
	2 – 5 hours	15	63	19	15	4				
	5– 8 hours	8	24	8	8	4				
	> 8 hours	11	24	4	9	2				

5.5 FACTOR ANALYSIS

In this study, the researcher identified 25 statements to study the key factors which influencing the purchase behavior of smartphone. From the statements 4 key factors that motivate consumers for purchasing the smart phones and its usage are recognized they are product feature, price, peer group and brand image.

Table.5. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.605
Bartlett's Test of Sphericity	Approx. Chi-Square	948.306
	Df	300
	Sig.	.000

It is observed from the Table.5 by applying Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy of 0.605 indicated that patterns of correlations are compact and that factor analysis should yield reliable factors. Bartlett's test yield significance (p-value) of 0.000 indicating that correlation between variables is sufficient for factor analysis.

Table.6. Rotated Component Matrix

Variables	Component			
	1	2	3	4
Smart phone has more application than basic hand phones.	.754	.171	.069	.171
I will consider the brand image when buying a smart phone with higher price.	.671	.179	.130	.147
Smart phone provides high quality of games.	.634	.283	-.20	.030
Smart phone has high end operating system.	.614	.087	.182	.161
Smart phone internet accessibility is speedier than basic hand phone.	.524	.235	.003	.219
Smart phone brand name is my priority while making a purchase decision.	.488	.172	.081	.330
If I want to be like someone. I try to buy the same smart phone that they buy.	.456	.056	.142	.245
I like smart phone as the design look stylish.	.291	.268	.087	.038
My friend family member thinks that we should all use smart phones.	.192	.093	.062	.097
I will only buy smart phone during price offer period.	.036	.713	.053	.052
I buy smart phone because they are worth of their price and usage quality.	.190	.690	.052	.044
I am willing to buy Smart phone even though the price is higher.	.017	.603	.159	.024
I think that using smart phone is expensive overall.	.129	.521	.092	.173
The cheapness of some smart phone brand suggests me that they are low quality.	.135	.397	.353	.065

I compare prices of other smart phone brands before I choose one.	.014	.337	.008	.041
I will ask the opinion from my friends when buying a smart phone.	.016	.070	.796	.057
I like to buy smart phone which makes good impressions on my friends.	.104	.071	.762	.138
My friends/family members influence me to buy smart phone.	.281	.061	.689	.004
I will buy my favorite smart phone brand, regardless of the price.	.070	.006	.521	.093
I prefer to buy an international recognized smart phone.	.024	.115	.118	.607
I will consider the reputation of smart phone brand before purchasing it.	.053	.095	.075	.576
Brand image of smart phone increase my status in the society.	.121	.039	.078	.559
Smart phone has high quality camera.	.166	.086	.152	.502
It is important that my friends like the brand of smart phone I am using.	.212	.396	.152	.500
Price is an important factor when purchasing smart phone.	.192	.017	.265	.439

The Table.6 shows the rotated factor loading for 25 variables influencing purchase decision of Smartphone. From the Table.6 it is clear that the 25 variables have been converted to 4 factors namely product feature, price, peer group influence and brand image.

Table.7. Selected Statement

Factors	Selected Statement (Variable)	Factor Loading
Product Feature	Smart phone has more application than basic hand phones.	.754
Price	I will buy smart phone during price offer Period.	.713
Peer Group	I will ask the opinion from my friends when buying a smart phone.	.796
Brand Image	I prefer to buy an international recognized smart phone.	.607

From the Table.7, the following are the most important factors:

- The variable 'Smart phone has more application than basic hand phones' comes under factor Product Features is found to be the most important variable.
- The variable 'I will only buy smart phone during price offer period' comes under factor Price has highest score.
- The variable 'I will ask the opinion from my friends when buying a smart phone' under peer group influence is the third important factor for choosing a smartphone.
- The variable 'I prefer to buy an international recognized smart phone' comes under factor brand image is highly loaded.

6. RECOMMENDATIONS

Based on the findings of the study, the following recommendations are given to manufactures and marketers of Smartphone.

- From the study it is found that the four key factors which influence the usage and purchase decision of smartphone are product features, price, peer groups and brand image. So the manufacturers and marketers can focus on these factors when they design and promote the product.
- From the study it is found that customers are more interested in product features like processing speed, camera and battery life so the manufactures can concentrate more on it while designing smartphone.
- The smartphone manufacture can offer device with good processing speed because the customer has more concerned towards the speed of the device.
- Smartphone companies can concentrate more on battery issues this is a major problem faced by respondent in smartphone.
- The period of warranty and guaranty of smartphone can be increased to make the customer to trust the smartphone and buy it.
- As peer group is an important factor in purchase decision of smart phone, 'word of mouth' is a best way to promote smartphone. Also, most of the smartphone users get reference through friends and family.
- The smartphone manufactures can reduce the build in application storage space because the customers are interested more to have a personalized app.
- As price of the smart phone play a vital role in purchase decision, smartphone marketers can increase the brand loyalty among smartphone users by offering discounts if they buy their brand second time.
- The manufactures can offer different kinds of smartphone for different group of target customers say youth, business professionals and housewife.
- The companies can target more on the youth population as they are the one who uses Smartphone the most.

7. CONCLUSIONS

The overall results proved that the respondents have perceived smartphone in a positive manner. The results can be used by

Smartphone manufactures and marketers to know the needs of their target customer and design the product and formulate marketing strategies accordingly. The study shows that the product features like camera, battery life, processing speed are the most important factors in purchase decision. Further Product feature, price, peer group and brand image are the key influencing factors to buy the smartphone. Though the price of smartphone is high the customers are ready to pay and afford it for their social need. From this study it is clear that the Smartphone has become an essential part of life and it made life easier. Thus, there is ample opportunity and scope for Smartphone brands to get a larger pie in market share as long as they are to innovate in the industry.

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