



AN EMPIRICAL ANALYSIS OF SUBSCRIBERS INTENTION WITH SPECIAL REFERENCE TO 3G MOBILES IN SALEM CITY

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Abstract

Indian mobile market is one of the fastest budding markets and is forecasted to reach the more than 980 million users by the end of 2015. India has seen fast increase in the number of players which caused the tariff rates to slip an all-time low. This allowed the players to target the low income population thereby raising the market share. This study focuses on the awareness about 3G technology and usage of 3G mobiles in Salem city. 3G mobile network offers higher data rates than the previous generation networks (1G and 2G). The purpose of this study is to examine the subscribers' intention towards using 3G mobile services in Salem. Two Hundred 3G mobile users and non-users' data were collected through a survey and analyzed by means of percentage analysis, Garrett ranking and discriminate analysis. Findings show that most of the respondents aware about the 3G technology mobiles and most of them happy with the 3G mobile service.

Key Words: 3G Mobiles, Customer Satisfaction, Service Quality, Discriminant Analysis and Garrett Ranking.

INTRODUCTION

The telecom industry is one of the fast developing industries in India. India has about 962.63 million telephone lines making it the third largest network in the world after China and USA. With the annual growth rate of 45 per cent, Indian telecom industry has the highest growth rate in the world. The mobile communication plays a major role in telecommunication industry. Indian telecommunication sector is prosperous as Indian economies are considerably good. Mobile network comes under the service sector, which is experiencing a rapid development which in turn is supporting the growth in Indian economy, provides ample chances employment and self-employment generation. The most challenging job for present day for network providers is to retain their customers. Third Generation (3G) mobile network is the third generation of mobile networks that offer higher data rates than the previous generation networks (1G and 2G). It offers data rates of 144 Kbps for fast-moving mobile users in vehicles, 384 Kbps for slower moving pedestrian users, and 2 Mbps from fixed locations. In 2008, India entered the 3G arena with the launch of 3G enabled Mobile and Data services by Government owned MTNL and BSNL. Later from November 2010 private operator's started to launch their 3G services. There has been a steady growth in worldwide 3G mobile adoption. However, there also exists a wide range of 3G diffusion levels across countries. For example, the region of Asia trumped all others in 3G adoption with close to 52 percent of the world 3G market share as early as in 2006 (International Telecommunication Union, 2006). More recently, Asia-Pacific was home to an estimated 158 million 3G subscribers in 2008 and is expected to reach 564 million subscribers by 2013.

The number of smart phones, which account for just 37 percent of all mobile phone subscriptions, will reach 2,700 million by 2014, and growing at 15 percent compounded annually growth rate, will cross 6,100 by 2020. The falling cost of handsets, coupled with improved usability and increasing network coverage, are factors that are making mobile technology a popular phenomenon in the country. The broadband services user –base in India is expected to grow to 250 million connections by 2017, according to GSMA. It also expects to see increased mobile broadband penetration in India, with over 250 million on either 3G/4G by 2017.

OBJECTIVES

1. To study about the customer perception level and factor influencing the purchase of mobile phones.
2. To analyze the level of awareness and usage of 3G technology among the respondents.
3. To identify the problems encounter by the respondents in 3G and to suggest strategies to increase the usage of 3G mobiles.

METHODOLOGY

In order to study the 3G mobile users in Salem city, both primary and secondary data were collected. Secondary data was collected from different magazines, newspapers and government publications. For collection of primary data from respondents (customers) separate well-structured interview schedule was prepared based on the objectives of the study and pretested. For this purpose, Two hundred Users and Non users of 3G mobile services were randomly selected from the different mobile services in Salem city. The following statistical techniques were used to analyze the data Percentage analysis, Discriminant analysis, and Garrett ranking.

RESULTS AND DISCUSSION

The general profile of the respondents comprises of basic details such as age, gender, family income, occupational status and income of the respondents.

Table 1: Personal Details

Characteristics	Particulars	No of Respondents		Total Number of respondents	Percentage to total
		User	Non user		
Age	<20	4	2	6	3.00
	21-30	44	50	94	47.00
	31-40	22	22	44	22.00
	41-50	20	18	38	19.00
	>50	10	8	18	9.00
Gender	Male	84	76	160	80.00
	Female	16	24	40	20.00
Educational status	Illiterate	4	14	18	9.00
	HSC	10	26	36	19.00
	Under Graduates	26	20	46	23.00
	Post Graduates	42	22	64	32.00
	PhD	18	18	36	18.00
Occupational status	Self employed	8	16	24	12.00
	House wife	4	10	14	7.00
	Govt employee	14	12	26	13.00
	Private sector	26	26	52	26.00
	Students	48	36	84	42.00
Income level of the respondents	<25,000	4	4	8	4.00
	25,001-50,000	48	30	78	39.00
	50,001-75,000	26	20	46	23.00
	75,001 – 1 lakh	14	28	42	21.00
	>1 lakh	8	18	26	13.00

From the Table 1, it could be inferred that majority of the respondents were young age and middle aged persons and they were male. Most of the respondents were educated and they were students followed by employee in private and Govt sector. Considerable respondents' were house wife and students; hence the family income of the respondents was considered for this study. Major share of the respondents (39 per cent) have a family income of Rs.25, 001-50,000 per annum followed by respondents with family income of Rs. 50001-75000 (23 per cent).

MOBILE PHONE USAGE

Table - 2, Reasons for using Mobile Phones

S.No	Reasons	Garrett score	Rank
1.	Personal needs	80.12	I
2.	To stay in touch while move	61.87	II
3.	Business needs	58.39	III
4.	as a substitute for land line phones	57.72	IV
5.	Emergency needs	53.76	V
6.	Influence of friends	50.06	VI
7	Prestige	47.43	VII

Majority of the respondents were using mobile phone for their personal needs followed internet access, business needs, influence of friends, prestige and emergency purpose. The results showed that major share of the 3G users were using Nokia followed by Samsung brand and also same for the non-users. Other brands used by the respondents were lava, LG, Sony Ericson, Apple, Reliance and MTS .

Table – 3, Factors’ influencing the purchase of hand sets

S.No	Factors	Number of Respondents
1.	Price of the mobile	92
2.	Appearance of the mobile	38
3.	Advertisement	6
4.	After sales service	4
5.	Features of the mobile	62
6.	Brand name	82
7.	Warrantee	14

The reason for purchasing a particular brand of mobile is important because customers have wide variety of options to buy mobiles. Understanding the factors that influence the customers’ choice of handset will enable the companies to design the handset product mix to suit customer needs. The above table showed the multiple responses of the respondents. It could be concluded that Price of the mobiles was the most important factor influencing the purchase of mobiles followed by brand name of the mobiles. Features of mobiles, Advertisement, after sales service and warrantee are the other factors that should be considered factors considered while selecting the mobile phones and also found that majority of the respondents having only one connections followed by two connections. Most of the users and non-users were prepaid users. Interaction with the respondents also revealed that most of the respondents switched over from postpaid to pre-paid due to billing problems.

AWARENESS AND USAGE OF 3G TECHNOLOGIES AMONG THE RESPONDENTS

Table -4, Awareness of 3G technology among the respondents

S.No	Awareness	No of respondents	Percentage to total
1	Aware	162	81.00
2	Not aware	38	19.00
Total		200	100.00

Most of the sample respondents were aware about the 3G technology mobiles. Nearly 19 percent of the respondents were not aware about the 3G technology. It indicates that the companies should create more awareness about the 3G technology among the respondents to increase the sale of 3G mobiles.

Table – 5, Sources of information about 3G Mobiles (n=100)

S.No	Source of information	Total Number of Respondents	Percentage to total
1.	Advertisement	56	56.00
2.	Family /Relatives	6	6.00
3.	Retailers	14	14.00
4.	Friends	24	24.00
Total		100	100.00

It is evident from the Table 4, that an advertisement was the major source of information followed by friends, retailers and family. So the case firm should provide promotions like offers and discounts for the persons who motivate their relatives and friends to subscribe their own service. The sales person also should be trained to communicate the promotions effectively to non-customers in a friendly manner and not as product pusher.

Table - 6, Factors influencing the purchase of 3G Mobile Phones

S.No	Reasons	Garrett score	Rank
1.	Pricing strategies	52.59	I
2.	High speed	47.42	II
3.	Entertainment	33.26	III
4.	Network	30.06	IV
5	Policy	17.43	V

Majority of the respondents were considering the pricing strategies, high speed and entertainment was the most important factors while selecting the 3G technology mobiles. Network and other policies regards the 3G factors were also considered by the respondents while selecting the 3G mobiles.

Table -7, Reasons for using 3G Mobile Phones

S.No	Reasons	Garrett score	Rank
1.	Internet access	65.74	I
2.	Influence of friends	53.76	II
3.	Prestige	47.34	III
4.	Personal needs	36.12	IV
5	Business needs	28.90	V

Most of the 3G user respondents were using 3G mobile service because of internet access followed by influence of friends, prestige, personal needs and business needs.

DISCRIMINANT ANALYSIS

Discriminant analysis was done to find out the influence of different factors on the use of 3G mobiles. Respondent's monthly family income, Age and Occupation were considered as predictor variables. The discriminant analysis was done by using independent together method and the results are presented in the following table.

Test of Equality of Covariance

Box's M value = 4.189

F value (approx) = 4.123

Significance level = 0.042

This is for testing the null hypothesis of equal population covariance

Canonical Discriminant Functions

Total number of observations = 100

Canonical correlation = 0.195

Wilks' lambda = 0.962

Table – 8, Structure Matrix

S.No	Particulars	Coefficients
1	Age	-0.146
2	Occupation	0.021
3	Family monthly income	0.920

It is inferred from the table.8 that, income level (0.920) was weighted heavily to maximize the discrimination between groups. These shows, pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions. The variables that discriminate the group is the monthly income level of the respondents family. Based on the above results it could be concluded that income level of the respondents was the main factor that influences the usage of 3G and there is a scope for converting the non users into users of 3G. So the firms should follow appropriate marketing strategies and promotional measures to attract the non-users of 3G mobiles.

Table -9, Reasons for not using 3G technology Mobiles (N=100)

S.No	Reasons	No of respondents	% to total
1	Lack of knowledge	26	26.00
2	Hand set price high	40	40.00
3	Want to wait and see further before migrate to 3G	16	16.00
4	The entertainment contents are not attractive	6	6.00
5	3G id complicated and difficult to use	2	2.00
6	Not confident with the technology and network	6	6.00
7	Monthly subscription fee of 3G is too high	4	4.00
	Total	100	100

From the above table most of the respondents felt that lack of knowledge about 3G and hand set price is very high are main reasons for not using the 3G technology mobile. So the case firm should concentrate more on price side to reduce the price of 3G mobiles and also give more advertisement to the customers to increase the sales

Table -10, Problems faced by the Respondents in 3G (n=100)

S.No	Problems	No of respondents	Percentage to Total
1.	Yes	24	24.00
2	No	76	76.00
	If Yes,		
	• Poor network coverage	16	16.00
	• Speed	8	8.00
	Sub total	24	24.00
	Total	100	100.00

From above table it could be concluded that majority of the respondents were not facing problem with 3G mobiles. Nearly 24 per cent of the respondents facing problems with 3G. In that, nearly 16 per cent of the respondents stated

that as Poor network coverage the major problem in 3G followed by less speed. The case firm should concentrate more on these aspects to switch over the customers.

Table – 11, Satisfaction level of the Respondents

S.No	Satisfaction	No of respondents	% to Total
1	Highly satisfied	34	34.00
2	satisfied	58	58.00
3	Neutral	8	8.00
4	Dissatisfied	0	0
5	Highly dissatisfied	0	0
Total		100	100.00

Most of the respondents were satisfied with the 3G technology mobiles. Nearly 34 percent of the respondents were highly satisfied with the 3G technology

CONCLUSION AND RECOMMENDATIONS

1. Most of the sample respondents belonged to the age group of 21-30 years and they were male. Majority of the respondents were graduate and students with an average family annual income of Rs.25,000 – 50,000. To attract the low income and high income group of people, the case firm should provide more schemes and offers as provided by its competitors to increase the 3G usage.
2. Considerable share of the respondents were aware of 3G through Advertisement, friends and relatives, so the case firm should provide promotions like offers and discounts for the persons who motivate their relatives and friends to avail 3G.
3. The sales person also should be trained to communicate the promotions effectively to non-customers in a friendly manner and not as product pusher.
4. All case firms should concentrate more on the influencing aspects (Speed, Pricing strategies, and entertainment in 3G mobiles) in customer point of view in order to utilize the services more.

REFERENCE

1. A brief report on Telecom sector in India – January -2015, AsA associated New Delhi.
2. Ida.T and Kuroda, (2006). “Discriminant choice analysis of demand for broadband in Japan”, Journal of regulatory economics, Volume 29, Number 1, pp. 5-22.
3. Pagani, M, (2004). “Determinants of adoption of Third Generation mobile multimedia services”, Journal of Interactive Marketing, volume18, issue 3, pp. 6-10 3. Wu, Y. L., Tao, Y., and Yang, P. C, (2008), “The use of unified theory of acceptance and use of technology to confer the behavioral model of3G mobile telecommunication users”, Journal of Statistics and Management Systems, Volume 11, issue 5, pp. 919–949.
4. www.telecommunications.com.
5. www.mnp-india.com.
6. www.itu.int/ict/statistics.
7. Dr. Vinit Dani and Mrs. Vanishree Pabalkar, “Impact Of Service Quality In Improving The Effectiveness Of Crm Practices Through Customer Loyalty – A Study On Indian Mobile Sector” International Journal of Management (IJM), Volume 3, Issue 1, 2012, pp. 29 - 45, ISSN Print: 0976-6502, ISSN Online: 0976-6510, Published by IAEME.
8. 8.Jagannath Aghav and Nikhil Sharma, “Mobile Safety Systems for Automobiles” International journal of Computer Engineering & Technology (IJCET), Volume 1, Issue 2, 2010, pp. 166 - 179, ISSN Print: 0976 – 6367, ISSN Online: 0976 – 6375, Published by IAEME.
9. The Growth face of 3 G in India –February -2014, Evalueserve white.