CUSTOMER CONSIDERATIONS FOR CELLULAR SERVICES

Dr. Manoj Singh Bisht,

Assistant Professor In Commerce (M.Com. NET, Ph. D),
Department of Commerce, Government P.G. College Gopeshwar,
District - Chamoli,
Uttarakhand

ABSTRACT

Customer is an individual who purchases or has the capacity to purchase goods and services offered for sale by marketing institutions in order to satisfy personal or household needs, wants or desires. Cellular telephone services have achieved great commercial success, because users recognize that mobile telephone access can improve productivity and enhance safety. The decrease in price of mobile phone set and the tariff has paved the way for the increased usage of mobile phone among Indians. As cellular networks cover more geographic areas and as rates drop, new subscribers are opting for cellular services for personal security, safety and convenience. Increase in demand and the poor quality of existing telecommunication landline services led mobile service providers to research ways to improve the quality of service and to support more users in their system. The purpose of this paper is to study customer preferences, their considerations and source of information regarding cellular services.

Key Words: *Customer Preference, Source of Information, Cellular Services, Tariff*

INTRODUCTION

Wireless phone industry has been continuously growing. Since the first mobile phones were introduced into the marketplace in 1979, the market demands for mobile phones and services continues to grow at an average over 20% per year. Over the past five years, the number of subscribers that operated on mobile wireless systems has been increasing by over 45% per year. In 1996, 190 million people worldwide had mobile phones, while at the beginning of 2001, the number increased to over 680 million people, which means that one out of ten people in the world, has at least one mobile phone. Thus, it is reasonable to expect continuous high growth in the area in the near future.

The wireless revolution will be fuelled by several factors. The affordability of wireless for the masses will be sustained on account of low tariffs, cheap handsets and attractive financing schemes. Wireless operators will continue to focus on prepaid products in order to increase the adoption of wireless among the lower middle income and low-income groups. Wireless users will increasingly migrate to wireless, lured by the benefits of mobility and the attractive bundled plans that are being launched by the wireless operators. Wireless data services will also become a growing revenue steam. Some operators have already deployed 3G technologies on their networks such as email, web access, video conferencing, etc. Especially, some of these new features have been mostly realized by

their integration into the widely used mobile phones.

LITERATURE REVIEW

Woodruff, Cadotte and Jenkins (1983) suggested that expectations should be based on experience norms-what consumers should expect from a given service provider given their experience with that specific type of service organization. **Munnukka (2005)** aimed to focus on more accurate tools for mobile service providers to price their services more effectively. Price sensitivity according to this study was one of the key factors affecting to companies pricing choices. But the study focused that in mobile services sector business practitioners were facing problems in pricing decisions as they were short of knowledge on their customers' price sensitivity levels and dynamics. **Sinha and Wagh (2008)** analysed that the growth of cellular telecom sector and Understanding Consumer's preferences and Choices on the use of cell phone. The result of this survey showed that "economy" is the most influencing factor for mobile subscribers. In the survey, 88% consumers accepted that they would talk more if call charges declined. In addition, it was found that multi usage and better services are other factors which also influenced customers. Good service or quality customer service includes politeness, responsiveness, promptness, caring and commitment towards the customer, and designing systems, procedures and responses around the sole aim of making the customer feel secure, special and satisfied. **Kargin, Basoglu, and Daim (2009)** explored the factors impacting the adoption of mobile services. Through a field study, product preference factors were studied. Service cost and speed were found to be the most critical factors.

Objectives

1) To determine customer preferences and their source of information regarding different cellular services.

2) To find out is there any difference across demographics on the above variables.

RESEARCH METHODOLOGY

The present study is an exploratory and empirical in nature based on both primary and secondary data. The secondary information is collected from different published materials viz. magazines, journals, websites etc. For the primary information the required data was collected through the structured questionnaire. 200 subscribers, using both pre paid and post paid schemes of different cellular services (BSNL, Airtel, Vodafone, Idea and Tata Indicom) in the Garhwal region of Uttrakhand were selected on the basis of convenience sampling method. The data was analysed with the help of statistical tools (SPSS) and hypothesis testing with chi-square.

STATISTICAL ANALYSIS AND FINDINGS

Customers Preference

In order to find out that what are the main considerations of the customer in order to prefer his mobile services the analysis shows that majority of the customer preferred lower tariff (38%) followed by better service (34%), small amount recharge (16%), and free incoming (12%). Further in this context, it is observed that price must be proportional to the perceived value, while distribution means should be used in order to achieve a high level of satisfaction (Meidan, 1996). To understand the associations if any between customers preferences and across demographics the following observations has been made with the help of $\chi2$ tests:

H₀: The association between the gender and customer preference is not significant.

Gender	Customer Preference				Total
	Lower Tariff	**Better Service**	**Small Amount Recharge**	**Free Incoming**	**Total**
Male	53(52.4)	43(46.9)	26(22.1)	16(16.6)	**138**
Female	23(23.6)	25(21.1)	6(9.9)	8(7.4)	**62**
Total	**76**	**68**	**32**	**24**	**200**

Figure given in the brackets represent the Expected Frequency

The table value of χ^2 for 3 degree of freedom at 5 percent level of significance is 7.815. Since the calculated value of chi-square (3.382) is less than the table value of chi-square, the difference is insignificant. So we accept null hypothesis (i.e.) there is no significant difference between gender and customer preferences.

H₀: The association between the age and customer preference is not significant.

Age	Customer Preference				Total
	Lower Tariff	**Better Service**	**Small Amount Recharge**	**Free Incoming**	**Total**
Upto 30	44(41.0)	42(36.7)	8(17.3)	14(13.0)	**108**
31-45	2622.0)	14(19.7)	12(9.3)	6(7.0)	**58**
Above 45	6(12.9)	12(11.6)	12(5.4)	4(4.1)	**34**
Total	**76**	**68**	**32**	**24**	**200**

Figure given in the brackets represent the Expected Frequency

The table value of χ^2 for 6 degree of freedom at 5 percent level of significance is 12.592. Since the calculated value of chi-square (20.975) is higher than the table value of chi-square, the difference is significant. So we reject null hypothesis, (i.e.) there is significant difference between age and customer preference about mobile services.

H₀: The association between the education and customer preference is not significant.

Education	Customer Preference				Total
	Lower Tariff	**Better Service**	**Small Amount Recharge**	**Free Incoming**	**Total**
Intermediate	22(17.5)	18(15.6)	0(7.4)	6(5.5)	**46**
Graduate	26(25.8)	28(23.1)	12(10.9)	2(8.2)	**68**
Post graduate	20(24.3)	18(21.8)	14(10.2)	12(7.7)	**64**

Others	8(8.4)	4(7.5)	6(3.5)	4(2.6)	**22**
Total	**76**	**68**	**32**	**24**	**200**

Figure given in the brackets represent the Expected Frequency

The table value of χ2 for 9 degree of freedom at 5 percent level of significance is 16.919. Since the calculated value of chi-square (24.033) is higher than the table value of chi-square, the difference is significant. So we reject the null hypothesis, (i.e.) there is significant difference between education and preference about mobile services.

H₀: The association between the occupation and customer preference is not significant.

Occupation	Customer Preference				Total
	Lower Tariff	**Better Service**	**Small Amount Recharge**	**Free Incoming**	
Student	36(31.2)	30(27.9)	6(13.1)	10(9.8)	**82**
Service	16(18.2)	10(16.3)	14(7.7)	8(5.8)	**48**
Businessman	14(11.4)	10(10.2)	6(4.8)	0(3.6)	**30**
Others	10(15.2)	18(13.6)	6(6.4)	6(4.8)	**40**
Total	**76**	**68**	**32**	**24**	**200**

Figure given in the brackets represent the Expected Frequency

The table value of χ2 for 9 degree of freedom at 5 percent level of significance is 16.919. Since the calculated value of chi-square (21.598) is higher than the table value of chi-square, the difference is significant. So we reject the null hypothesis, (i.e.) there is significant difference between occupation and preference about mobile services.

H₀: The association between the income and customer preference is not significant.

Income	Customer Preference				Total
	Lower Tariff	**Better Service**	**Small Amount Recharge**	**Free Incoming**	
Dependent on Others	34(26.6)	26(23.8)	2(11.2)	8(8.4)	**70**
Up to Rs. 10000	22(22.8)	26(20.4)	4(9.6)	8(7.2)	**60**
Rs.10001-Rs.20000	1418.2)	8(16.3)	20(7.7)	6(5.8)	**48**
Above 20000	6(8.4)	8(7.5)	6(3.5)	2(2.6)	**22**
Total	**76**	**68**	**32**	**24**	**200**

Figure given in the brackets represent the Expected Frequency

The table value of χ2 for 9 degree of freedom at 5 percent level of significance is 16.919. Since the calculated value of chi-square (42.364) is higher than the table value of chi-square, the difference is significant. So we reject null hypothesis, (i.e.) there is significant difference between income and customer preference about mobile services.

Source of Information

To find out the prominent channels of information the analysis shows that majority of respondents get information from SMS or Call (39%) followed by Friends & Relatives (33%), Other Users (16%), Dealer (09%) and the least number was of Media (03%). Further to understand the association if any between customer preferences and across demographics the following observations has been made with the help of χ2 tests:

H_0: The association between the gender and source of information is not significant.

Gender	Source of Information					
	SMS or Call	Media	Friends & Relatives	Other Users	Dealer	Total
Male	55(53.8)	5(4.1)	46(45.5)	21(22.1)	11(12.4)	**138**
Female	23(24.2)	1(1.9)	20(20.5)	11(9.9)	7(5.6)	**62**
Total	**78**	**6**	**66**	**32**	**18**	**200**

Figure given in the brackets represent the Expected Frequency

The table value of χ2 for 4 degree of freedom at 5 percent level of significance is 9.488. Since the calculated value of chi-square (1.369) is less than the table value of chi-square, the difference is insignificant. So we accept null hypothesis, (i.e.) there is no significant difference between gender and source of information.

H_0: The association between the age and source of information is not significant.

Age	Source of Information					
	SMS or Call	Media	Friends & Relatives	Other Users	Dealer	Total
Upto 30	40(42.1)	2(3.2)	40(35.6)	15(17.3)	11(9.7)	**108**
31-45	23(22.6)	2(1.7)	16(19.1)	14(9.3)	3(5.2)	**58**
Above 45	15(13.3)	2(1.0)	10(11.2)	3(5.4)	4(3.1)	**34**
Total	**78**	**6**	**66**	**32**	**18**	**200**

Figure given in the brackets represent the Expected Frequency

The table value of χ2 for 8 degree of freedom at 5 percent level of significance is 15.507. Since the calculated value of chi-square (8.175) is less than the table value of chi-square, the difference is insignificant. So we accept null hypothesis, (i.e.) there is no significant difference between gender and source of information.

H_0: The association between the education and source of information is not significant.

Education	Source of Information					
	SMS or Call	Media	Friends & Relatives	Other Users	Dealer	Total
Intermediate	16(17.9)	0(1.4)	17(15.2)	9(7.4)	4(4.1)	**46**
Graduate	22(26.5)	5(2.0)	24(22.4)	9(10.9)	8(6.1)	**68**
Post graduate	31(25.0)	0(1.9)	17(21.1)	13(10.2)	3(5.8)	**64**
Others	9(8.6)	1(0.7)	8(7.3)	13.5)	3(2.0)	**22**
Total	**78**	**6**	**66**	**32**	**18**	**200**

Figure given in the brackets represent the Expected Frequency

The table value of $\chi 2$ for 12 degree of freedom at 5 percent level of significance is 21.026. Since the calculated value of chi-square (17.107) is less than the table value of chi-square, the difference is insignificant. So we accept null hypothesis, (i.e.) there is no significant difference between education and source of information.

H_0: The association between the occupation and source of information is not significant.

Occupation	Source of Information					
	SMS or Call	Media	Friends & Relatives	Other Users	Dealer	Total
Student	32(32.0)	1(2.5)	28(27.1)	13(13.1)	8(7.4)	**82**
Service	19(18.7)	2(1.4)	15(15.8)	9(7.7)	3(4.3)	**48**
Businessman	15(11.7)	2(0.9)	8(9.9)	2(4.8)	3(2.7)	**30**
Others	12(15.6)	1(1.2)	15(13.2)	8(6.4)	4(3.6)	**40**
Total	**78**	**6**	**66**	**32**	**18**	**200**

Figure given in the brackets represent the Expected Frequency

The table value of $\chi 2$ for 12 degree of freedom at 5 percent level of significance is 21.026. Since the calculated value of chi-square (7.710) is less than the table value of chi-square, the difference is insignificant. So we accept null hypothesis, (i.e.) there is no significant difference between occupation and source of information.

H_0: The association between the income and source of information is not significant.

Income	Source of Information					
	SMS or Call	Media	Friends & Relatives	Other Users	Dealer	Total
Dependent on Others	26(27.3)	1(2.1)	27(23.1) .	10(11.2)	6(6.3)	70
Up to Rs. 10000	22(23.4)	2(1.8)	19(19.8)	10(9.6)	7(5.4)	60
Rs.10001-Rs.20000	21(18.7)	1(1.4)	16(15.8)	8(7.7)	2(4.3)	48
Above 20000	9(8.6)	2(0.7)	4(7.3)	4(3.5)	3(2.0)	22
Total	78	6	66	32	18	200

Figure given in the brackets represent the Expected Frequency

The table value of χ^2 for 12 degree of freedom at 5 percent level of significance is 21.026. Since the calculated value of chi-square (8.537) is less than the table value of chi-square, the difference is insignificant. So we accept null hypothesis, (i.e.) there is no significant difference between income and source of information.

SUMMARY OF THE FINDINGS:

➢ *Regarding the customer preferences towards different services there is significant difference on age, education, occupation and income whereas, it is missing in case of gender.*

➢ *Regarding the selection of source of information there is no significant difference across demographics.*

CONCLUSION

During the survey a proper feedback has received from the customers about the cell phone services offered by the different service providers. Customers are more discerning and demanding and moreover, they want worth of their money. The present study reveals that mostly customer shown their inclination towards lower tariff because most of the customers belongs to middle-income group and disclosed that they will talk more if call charges decline. Majority of the respondents came to know about the services offered by the service provider through SMS or Call. Hence the cellular service providers should pay their attention on such issues. The general conclusion of this study is that there is a significant relationship between demographics and customer preference. However, for gender the test statistic was not significant. The results indicate that, there is insignificant association between demographics and source of information. If these things have been seriously considered, the service provider companies will grow up in a stable manner.

REFERENCES

- **A. Meidan (1996),** "Marketing Financial Services", Macmillan Press Ltd, London

- **A. Seth, H. M. Gupta and K. Momaya (2007),** "Quality of Service Parameters in Cellular Mobile Communication", International Journal of Mobile Communication, Vol. 5(1), 68-93.

- **B. Kargin, N. Basoglu and T. Daim (2009),** "**Exploring Mobile Service Adoption: Customer Preferences, System Sciences**", HICSS '09. 42nd Hawaii International Conference on Publication Date: 5-8 Jan. 2009

- **E. Nurvitadhi (2002),** "Trends in Mobile Computing: A Study of Mobile Usage in the United States and Japan", A Thesis for B.A in International Study.

- **G. B. Voss, A. Parasuraman and D. Grewal (1998),** "The Role of Price, Performance and Expectations in Determining Satisfaction in Service Exchanges", *The Journal of Marketing*, Vol. 62 (4), 46-61.

- **J. Munnukka (2005),** "Dynamics of Price Sensitivity among Mobile Service Customers". Journal of Product and Brand Management, Vol. 14 (1), 65-73.

- **K. Pandyaand S. Bulsari (2007),** "Telecom Service Development in Post Liberalization Period in India", the ICFAI Journal of Management Research, Vol. VI, No. 4.

- **K. Siau and Z. Shen (2003),** "Mobile Communication and Mobile Services" International Journal of Mobile Communication, Vol. 1(1-2), 3-14.

- **S. Chakraborty and D. Chakraborty (2006),** "Study of important aspects affecting consumer choice of mobile service providers". Management & Labour Studies, Vol. 31, No. 4, pp. 309-331.

- **S. K. Sinha and A. Wagh (2008),** "Analyzing Growth of Cellular Telecom Sector and Understanding Consumer's Preference and Choices on the Use of Cell Phone", Indian Journal of Marketing, Vol. xxxviii (9), 27-35(51).