

# What Impinges The Choice Of Cell Phone Connection?

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## INTRODUCTION

Telecommunications, being one of the prime support services is required not only for rapid growth, but also for the modernization of various sectors of the economy. It has become especially important in recent years because of enormous growth of Information Technology (IT) and its linkage to the other sectors. Long back, the telecom network in India was owned and managed by government as it is considered as a strategic service. During that time, the telecom industry had a monopoly. Liberalization made the Government to adopt a gradual approach for the telecom sector reforms. Through selective privatization, competition was managed in different segments of the telecom market. In 1992, India introduced private competition in value-added services followed by opening up of the cellular and basic services for local area to private competition. The Telecom Regulatory Authority of India (TRAI) was constituted in 1997 as an independent regulator in this sector. With an addition of more than 6 million connections per month, India has become one of the fastest growing telecom markets in the world. The expanding spectrum and enormous growth have made the cellular operations highly competitive. Although the network in rural areas is expanding, but still the rural areas are not adequately covered. India is the 4th largest telecom market in Asia after China, Japan and South Korea. India is the 5th largest telecom market in the world and 2nd largest among emerging economies of Asia. Contribution of telecom sector in terms of revenue is 2.1 percent of the GDP as compared to 2.8 percent in developed economies.

## REVIEW OF LITERATURE

Consumer decision making process is usually guided by already formed preferences for a particular alternative. This means that consumers are likely to make the choice between alternatives based on limited information search activity (Beatty and Smith, 1987; Moorthy, Ratchford and Talukdar, 1997) and without detailed evaluation of the other alternatives (Alba and Hutchinson, 2000; Chernev, 2003; Coupey, Irwin and Payne, 1998; Slovic, 1995). In close relation to information search, evaluation of alternatives has also gained a momentum in recent research (Laroche, Kim and Matsui, 2003). Their study on consumer's use of five heuristics (*conjunctive, disjunctive, lexicographic, linear additive, and geometric compensatory*) in the consideration set formation found that *conjunctive heuristics* is the most often used decision model in the consideration set formation for two product classes in the study (beer brands and fast food outlets). *Conjunctive heuristics* means that a consumer selects a brand only if it meets acceptable standards, the so-called cutoff point on each key attribute the consumer regards as important (Assael, 1995, p. 249; Solomon, 2001, p. 280). In this non-compensatory method of evaluation, a consumer would eliminate a brand that does not fulfill the standards on one or two of the most important attributes, even if it is positive on all other attributes. Furthermore, consumer choice behavior can either be approached by utilizing different choice models (see, e.g., Chintagunta, 1999; Bockenholt and Dillon, 2000; Swait and Adamowicz, 2001) or neural networks to model selection decisions (e.g., Papatla, Zahedi and Zekic-Susac, 2002). Papatla et al. (2002) examined empirically brand choice and store choice in regard to margarine, detergent and tissue. The research found that while neural networks have higher probability of resulting in a better performance, hybrid models guaranteed equal or better results than stand-alone models. It has also been pointed that many decision strategies used by consumers can change due to person-, context-, and task-specific factors (Dhar, Nowlis and Sherman, 2000; Swait and 64 Journal Of Euromarketing Adamowicz, 2001). Therefore, mathematical modeling has its limitations in regard to the fact that consumers tend to utilize different approaches to make choices. Thereby, researchers should pay more attention to factors like task complexity and context in modeling choice behavior (cf. Swait and Adamowicz, 2001). Moreover, Coupey, Irwin and Payne

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(1998) found that the influence of task and context factors might be greater in situations in which a consumer has little prior knowledge and experience. It is widely accepted that the traditional problem solving approach involving rational decision making to the study of consumer choice may not be suitable for all situations, or is at least incomplete to understand choice behavior. Limited information search and evaluation of alternatives led to a situation in which consumer choice is also driven by hedonic considerations (e.g., Dhar and Wertenbroch, 2000). In general, a common distinction to be made is that while the utilitarian goods usually are primarily instrumental and functional, hedonic goods provide fun, pleasure and excitement. It has been noted that many choices have both utilitarian and hedonic features (Batra and Ahtola, 1990), and thus, it can also be proposed that the choice between mobile phones has both utilitarian (e.g., communication, time planning) and hedonic (e.g., games, camera) features. The younger the consumer, the more hedonistic features consumers tend to value in mobile phones (Wilska, 2003). Quite similarly, consumer choice can also be approached from the perspective of conscious and non-conscious choice (e.g., Fitzsimons et al., 2002). Quite many choice situations occur outside of conscious awareness and with limited information search (Kivetz and Simonson, 2000) and it can be stated that many choices have both conscious and nonconscious motives. Fitzsimons et al. (2002) found that in many cases, non-conscious influences affect choice much more than is traditionally believed by researchers.

Previous literature on mobile phone choice is sparse. Couple of academic articles have dealt with mobile phone usage and grasped the consumer decision making process. To begin with, Riquelme (2001) examined how much self knowledge consumers have when choosing between different mobile phone brands. The study was built upon six key attributes (telephone features, connection fee, access cost, mobile to-mobile phone rates, call rates and free calls) related to mobile (Karjaluoto et al.). The research showed that consumers with prior experience about a product can predict their choices relatively well, although respondents tended to overestimate the importance of features, call rates and free calls and under estimate the importance of a monthly access fee, mobile-to-mobile phones rates and the connection fee. Mobile phone choice and use has also been found to be related to prior consumption styles. According to a fresh survey of Finnish young people aged 16-20, it was found that mobile phone choice and especially usage is consistent with respondents' general consumption styles (Wilska, 2003). The research showed that addictive use was common among females and was related to trendy and impulsive consumption styles. Instead, males were found to have more technology enthusiasm and trend-consciousness. These attributes were then linked to impulsive consumption. The study concluded that genders are becoming more alike in mobile phone choice. Because individual differences in consumption patterns are obviously identifiable, we hypothesize that background variables especially have an influence on mobile phone choice. The present study deals with "What impinges the choice of cell phone connection?".

## **OBJECTIVE OF THE STUDY**

The basic objective of the study is to analyze whether the demographic factors like age, sex, income level etc. play any role in the choice of mobile phone connection or not.

## **SCOPE OF THE STUDY**

The study will help in understanding various factors that affect the choice of mobile service provider. The paper will not only help the mobile phone companies to concentrate upon the future strategy but to select the largest audience to be focused upon while expanding their market. For a layman, it will be useful for understanding the factors that affect the choice of any particular mobile connection. Last but not the least, the study will also help the Government agencies to control and monitor the telecom sector effectively. The questionnaire was administered to a sample of three hundred respondents (300) using mobile phone services covering respondents from different age groups, gender, education levels, income brackets and occupations.

## **RESEARCH METHODOLOGY**

The research methodology for the present study is based upon stratified structured sampling technique. A questionnaire was prepared to know whether demographic factors affect the choice of mobile connection or not. The null hypothesis to be tested was:

***H<sub>0</sub>: That age, gender, occupation and personal income do not affect the choice of mobile connection.***

This would be tested against the alternative hypothesis.

***H<sub>1</sub>: That the age, gender, occupation and personal income do affect the choice of mobile connection.***

To conduct the research, data from the primary sources was collected covering different age groups, income levels, gender and occupations. Analysis of the data has been done by using P-value and the Chi-Square test.

## DEMOGRAPHIC PROFILE OF THE RESPONDENTS

The level of income along with the disposable income is affected by the various demographic factors and these are taken to test the choice of mobile phone connection.

## ANALYSIS AND INTERPRETATION OF DATA

### AGE WISE AND GENDER WISE CLASSIFICATION OF RESPONDENTS

The age and gender wise composition of population affects the income and consumption habits. The age and gender wise classification of the respondents using cell phone is given in Table 1.

**Table 1 : Age Wise And Gender Wise Profile Of Respondents**

Age (Years)	N	%age	Sex	N	%age
Up to 20	45	15	Male	168	56
20-45	210	70	Female	132	44
45-60	36	12			
60 and above	9	3			
<b>Total</b>	<b>300</b>	<b>100</b>		<b>300</b>	<b>100</b>
Source: Primary Survey					
Note: N represents number of respondents.					

Age wise classification of the respondents' shows that majority of them i.e. 70 percent belong to the age group of 20-45 years. Only 3 percent of the respondents are in the age group of 60 years and above. So, use of mobile service provider is more popular in lower and middle age group as compared to old age groups. This age group is the working population and the need of cell phone is high in this category. While people in the age group of 60 years and above have lower mobility and thus can depend upon the landline telephone services.

Gender wise classification indicates that 56 percent of the respondents are male and 44 percent of the respondents are female. So it seems that male members have more mobile phones in comparison to their female counterparts. This may be due to the several facts one, male members have their self income but majority of the women are still dependent on their male counterparts to meet their requirements, two a reason maybe that the women respondents were less in number.

## EDUCATION AND OCCUPATION WISE CLASSIFICATION

Educational level of people helps them to take up different occupations or professions which help them to have more personal income and disposable income. So, the education wise and occupation wise classification of the respondents has been presented in Table 2. Educational level classification of the respondents depicts that 98 percent of the respondents are educated. Only 2 percent were found to be illiterate. While occupation wise classification indicates that service, business and professionals put together constitute the majority of the total respondents i.e. 68 percent, 30 percent respondents were dependent which led to the conclusion that mobile phone services are also quite popular among people having no self income.

## INCOME WISE CLASSIFICATION OF RESPONDENTS

The level of income affects the affordability of goods and services among the individuals. The income wise classification of the respondents is exhibited in Table 3. Maximum proportion of the respondents i.e. approximately 65 percent belonged to the bracket having personal income of less than ₹ 10,000 per month. Only 7 percent of the respondents have personal income of more than ₹ 50,000 per month. In a similar finding on family income, maximum

number of respondents (around 58 percent) belonged to families having income less than ₹ 50,000 per month followed by 24 percent covered in 50000-100000 slab. Average monthly personal income was ₹ 14000 against average monthly family income of ₹ 51948.

**Table 2 : Education And Occupation Wise Classification**

Education	N	%age	Occupation	N	%age
Illiterate	8	2	Service	99	33
Matric	76	26	Business	57	19
Graduate	89	30	Professional	48	16
Post-Graduate	127	42	Retired	6	2
			Dependents	90	30
<b>Total</b>	<b>300</b>	<b>100</b>		<b>300</b>	<b>100</b>
Source: Primary Survey					
Note: N represents number of respondents.					

**Table 3 : Income Wise Classification**

Personal Income (₹ per month)	N	%age	Family Income (₹ per month)	N	%age
No self Income	96	32	Up to 10000	38	13
Up to 10000	98	33	10000-20000	47	16
10000-20000	42	14	20000-50000	87	29
20000-50000	43	14	50000-100000	71	24
Above 50000	21	7	Above 100000	57	18
<b>Total</b>	<b>300</b>	<b>100</b>		<b>300</b>	<b>100</b>
<b>Average Monthly</b>	<b>14000</b>		<b>Average Monthly</b>	<b>51948</b>	
<b>Income</b>			<b>Income</b>		
Source: Primary Survey					
Note: N represents number of respondents.					

## INTERPRETATION OF THE DATA

### CHOICE OF PREPAID/ POSTPAID CONNECTION AMONG RESPONDENTS

Mobile telephone facility is available to the customers on prepaid/ postpaid basis. Customers choose the type of connection according to their requirements. Choice of connection among subscribers has been analyzed on the basis of different demographic parameters such as gender, age and personal income.

### GENDER WISE CHOICE OF PREPAID/ POSTPAID CONNECTION

An attempt was made to know about the preferences of different groups of customers for taking up the connection - Gender wise in Table 4. The analysis clearly reveals that prepaid connections are more popular among females, whereas postpaid connections are more frequently used by male subscribers. Among the total respondents, about 62.9 percent of the female respondents choose prepaid connection against 37.1 percent who opted for postpaid connection. The choice of post paid connection was more popular among male respondents. This may be due to the obvious reason that male subscribers are more mobile and have to depend upon cell phone connection, while female subscribers depend upon the landline telephone facility while they are at home. Majority of male respondents were working and they have more usage of mobile service in their day to day working.

### AGE WISE CHOICE OF CONNECTION

Age group and the choice of the type of connection (prepaid/postpaid) also has some significant bearing on using a

connection from a particular service provider. The age wise choice of connection among respondents has been depicted in Table 5.

**Table 4 : Gender Wise Choice Of Connection**

Gender Connection	Male		Female		$\chi^2$ Value (1 d.f.)	P- value (2-tailed)
	N	%age	N	%age		
Prepaid	74	44	83	62.9	10.508	.001**
Postpaid	94	56	49	37.1		
Total	168	100	132	100		

Source: Primary Survey. Note: N represents number of respondents. \*\* P-Value significant at 1% Level of Significance.

**Table 5 : Age Wise Choice Of Connection**

Age Group (Years) Connection	20 (%age)	20 -45 (%age)	45 -60 (%age)	Above 60 (%age)	$\chi^2$ Value (3 d.f.)	P - value (2 -tailed)
Prepaid	66.7	52.4	27.8	77.8	24.22	.002**
Postpaid	33.3	47.6	72.2	22 .2		
Total	100	100	100	100		

Source: Primary Survey. \*\* P-Value significant at 1% Level of Significance.

Relationship in choice of the connection among different age groups reveals that prepaid connection is more popular in younger age group i.e. less than 20 years and among the old age group i.e. more than 60 years due to their limited usage and limited income level. Most of the respondents (about 72 percent) in the age group 45-60 years being the working force use the post paid connection. In the age group of 20-45, both prepaid and postpaid connections are almost equally distributed. P-value of Chi-square test performed on the contingency table suggests that there is significant difference in the choice of prepaid and postpaid connections among different age groups as the P-Value is significant at 1 % Level of significance.

## PERSONAL INCOME AND CHOICE OF CONNECTION

Income level determines the choice of products based upon product features. An attempt has been made to identify the choice of a particular type of connection depending upon the income level of the respondents. The choice of connection among different income group respondents is reported in Table 6.

**Table 6 :Personal Income and Choice of Connection**

Personal Income (₹) Connection	No self Income (%age)	Upto 10000 (%age)	10000- 20000 (%age)	20000- 50000 (%age)	≥50000 (%age)	$\chi^2$ Value (4 d.f.)	P - value (2 -tailed)
Prepaid	64.60	54.10	42.90	53.50	4.80	26.481	.000**
Postpaid	35.40	45.90	57.10	46.50	95.20		
Total	100	100	100	100	100		

Source: Primary Survey. \*\* P-Value significant at 1% Level of Significance.

Table 6 clearly shows that prepaid connection is more popular among the people with lower personal income or no self income as respondents can keep regular track of their usage in case of a prepaid connection. Almost all the respondents (about 95 percent) with monthly income greater than ₹ 50000 have post paid connection because they have adequate financial resources to pay their telephone bills. There is significant difference in the choice of connection among respondents from different income levels as supported by the statistically significant P-Value of the Chi-square Test at 1% Level of Significance.

## OCCUPATION AND CHOICE OF CONNECTION

Occupation and choice of connection do share some significant relationship between them. The table 7 reveals the relationship of different occupations like service, business, profession etc. with the choice of prepaid and postpaid choice of connection.

**Table 7 : Occupation Wise Choice Of Connection**

Occupation Connection	Service (%age)	Business (%age)	Profession (%age)	Retired (%age)	Dependent (%age)	$\chi^2$ Value (4 d.f.)	P - value (2 - tailed)
Prepaid	23	29	62	67	63	18.543	.001 **
Postpaid	77	71	38	33	37		
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>		

Source: Primary Survey. \*\* P-Value significant at 1% Level of Significance.

Table 7 shows that both prepaid and postpaid connections are popular among different categories of connection services available. Prepaid connection is popular among professionals, retired and dependent category of respondents. The main reason for this is the limited income sources and limited usage of mobile phones for retired and dependent respondents. While service class and business class respondents (due to their wide usage of mobile phone services) opt for postpaid connections. P- Value of Chi-square test suggests that there is significant difference in the choice of connection and occupation as P-value is significant at 1% Level of Significance.

## CONCLUSION

Mobile phone services are becoming popular day by day. Service providers are increasing their market share by attracting new customers. India's tele-density has increased tremendously due to mobile telephone technology. Major conclusions that emerged from the study are that female respondents have more prepaid connections as against their male counterparts. Post paid connections are popular among the working age groups while prepaid connection is found to be most popular in the age group of less than 20 years and respondents above the age of 60 years. People having monthly personal income of more than ₹ 50,000 prefer to have a postpaid connection against others having no self income or low income prefer to take a prepaid connection. According to the study, service class and business class respondents choose postpaid connection while respondents of other categories of occupations have prepaid connections.

## BIBLIOGRAPHY

1. Bagozzi, R.P. & Dholakia, U. (1999) "Goal Setting and Goal Striving in Consumer Behaviour", Journal Of Marketing, Special Issue
2. Banerjee, Arindam (2005) "Deciding Where to Buy", Indian Management, June.
3. Bordley Robert F., "Integrating Gap Analysis and Utility theory in service research", Journal of Service Research, Vol.3, No.4, May 2001: pp 300-355
4. Chiquan Guo, "A Review on Consumer External Search: Amount and Determinants", Journal of Business and Psychology, Vol. 15, No. 3, March 2001: pp 505-519.
5. Christo Boshoff, "Service Advertising", Journal of Service Research, Vol. 4, No. 4, November 2002: pp 290-298.

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## RECOMMENDATIONS

Yarn prices should be reduced to meet client requirements. If the yarn prices continue to increase, definitely the cost of production will increase very rapidly. So, the government should take effective actions and maintain adequate stock of raw material to avoid the problems in the textile production process. The government should fix the raw material cost for annual consumption or as per the availability. The textile organizations should provide proper guidance and adequate training to all types of employees for improving their contributions to reduce the production problems. The production department should take sincere measures to reduce the waste and make use of wastage in producing useful products. Infrastructure plays an essential part in the production process; the textile organizations should improve their infrastructure facilities for eliminating the production problems.

## CONCLUSION

The production process is one of the core components that should be effectively maintained by the exporter. The production problems are to be solved systematically by the exporter and the measures to reduce the waste should be implemented and executed in the organization. The Government should take necessary steps to overcome the problems of the exporters during the production process.

## BIBLIOGRAPHY

- 1) [www.hpec.com](http://www.hpec.com)
- 2) [www.findarticles.com](http://www.findarticles.com)
- 3) [www.highbeam.com](http://www.highbeam.com)
- 4) [www.fibre2fashion.com](http://www.fibre2fashion.com)

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### (Contd. From Page 25)

6. Hawkins, Best & Coney (2004), "Consumer Behavior", 9th Ed, Tata McGraw Hill.
7. Jain Sanjay K and Sharma Kavita, "Product related antecedents of Consumer Involvement: An empirical investigation", Vikalpa, Vol. 25, No.1, January-March 2000: pp29-42
8. Joe Alba, "Knowledge Calibration: What Consumers Know and What They Think They Know", Journal of Consumer Research, Spring 2006,
9. Malhotra N.K., "Marketing Research : An Applied Orientation", 4<sup>th</sup> Ed., Pearson Education
10. Nargundkar Rajendra, "Marketing Research- Text and Cases", 3rd Ed., Tata McGraw Hill.
11. Pratibha A. Dabholkar (1995) , "A Contingency Framework for Predicting Causality Between Customer Satisfaction and Service Quality", Advances in consumer research, Vol.22, 1995:pp 101-108
12. Rao, K. R. (2004) "Into the Consumer's Mind", Indian Management, March.
13. S. Ramesh Kumar (2003) , "Conceptual issues in Consumer Behavior: The Indian Context", Pearson Publication.