# Customers' Perception towards Mobile Number Portability: An Empirical Study

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Abstract – Perception means the sense of perceiving and the word perceive means to become aware of by one of the senses. It is therefore an intelligent observation or understanding. The word perception refers to the intuitive faculty. The word percept is the mental product with the help of this intuitive power the human being including animals perceive or become aware of through the senses or by mind. Other meanings of the word perceive are to discern to apprehend, to understand, to comprehend or to have knowledge. Perception is the process by which we become aware of and give meaning to events around us. It is through our perception that we come to define 'Reality'. Perceived reality is what individuals experience through one or more of the human senses and the meaning they ascribe to those experiences. Perception is the process by which people organize and obtain meaning from the sensory stimuli they receive from the environment. It is the process by which we make sense of the word. It is not foolproof. No two people in the same situation will perceive it in exactly the same way. Perception has close relation with the personality of the person perceiving the things and culture. To define the personality, the collection of psychological characteristics or traits that determine a person's preference and the individual style of behavior. Culture is the way in which a society as a whole perceives the world.

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## 1. INTRODUCTION

# 1.1 Mobile Number Probability

Mobile Number Portability (MNP) is a technology that enables subscribers to switch their service providers while retaining their mobile numbers. The mobile number portability is the process to change the mobile company without changing your mobile company. This is the very simple and easy way to change any mobile company according to the customers' choice. We believe the implementation of MNP would be a negative for the Indian Telecom Sector from an operator point of view, while for subscribers it would be a key positive. Churn rates, already in the region of 4-5 per cent monthly (prepaid subscribers) are likely to increase further. It will increase the competition of mobile companies to give better services. These companies will do their best to give their better performance. Mobile Number Portability is a feature present in most developing telecom markets around the world, is now making its way into the developing telecom markets of South Asia. Every mobile company tries to maximize their subscribers by giving better services than other mobile companies. MNP is a service that enables a mobile subscriber to switch operators while retaining his/her phone number. The customers want the good and proper communication with their friends and their relatives so they choose the best network. This MNP

is useful for the new companies because everyone will tries to use that companies if there is the all qualities in the company then the company develop themselves. The successful implementation of MNP is associated with high porting rates. The company should show all the proper details to the customers and give the full information to the customers because there will be too much options have the customers so they will want to full information about the company and all the schemes. This is because high porting rates signify that the facility is being utilized and conforms that mobile subscribers are in demand of the service every company wants to increase their customers.

Number Portability has to ensure that call routing for all mobile sessions Voice, SMS, MMS should be enabled with routing to the ported network for the same called subscriber number. IETF defines three types of number portability (NP): Service provider number portability (SPNP), location portability and service protability. SPNP allows subscribers to switch service providers while retaining the same phone number. The technology challenges towards implementation come through complexities in number administration, network signaling functions, call routing, billing and service management. The introduction of MNP is expected to increase churn rates and force

service providers to stay competitive through product and service differentiation. Prepaid churn rates are said to be between 3- 4 percent per month but the regulator is looking to increase it to about 8- 10 percent in order to force incumbent operators to be more competitive (Business Standard, 2007). Although competition is high in the Indian mobile sector, regulators feel the need for more intense competition for the benefit of subscribers. MNP will give the five new entrants into the mobile sector and four existing operators who have been allowed to provide services in new circles, a chance to survive in the already competitive marketplace. Given the anticipated growth in the mobile market to more than 500 million subscribers, one of the largest in the world and second only to China, regulators feel that the introduction of MNP in India is imminent and deem it a suitable time to set the stage to push subscriber number up.

### 2. REVIEW OF LITRATURE

Survey of related literature is an important prerequisite to the planning and implementation of a planned research project. Its review is an exacting task, calling for a deep insight and clear perspective of the overall fields. It is a crucial step, which invariably minimizes the risk of dead ends, rejected topics and rejected studies, waste efforts, trial and error activity oriented towards approaches already discarded by previous investigators and even more important erroneous finding based on a faulty research design. The review of the literature promotes a greater understanding of the problems and its crucial aspects and ensures the avoidance of unnecessary duplication. lt also comparative data on the basis of which to evaluate and interpret the significance of one's findings.

Mlik, et al. (2008)¹ describes various parameters that effect subscribers or parameters on which MNP depends and MNP decision using fuzzy logic. In this paper a sample has been taken when customer care services satisfaction is 55 per cent network coverage of strength is -75db and tariff plan is 65 paisa per call then MNP will be 0.5188 here it has considered three parameters and drawn the graph showing the required portability. By using this graphical representation, we can find out MNP for various input values and it can be decided that MNP should be carried out or not. This system can further improved by considering many more parameters which are responsible for MNP. These parameters are single strength, billing, IDD service etc.

**Reiko and Small** (2010)<sup>2</sup> reveals that the widespread presumption in favour of number portability is not necessarily in the interest of society in general, or even of consumers. In well developed telephony markets with high penetration rates, it is possible for consumers as a group to receive fewer surpluses following a reduction in the cost of switching between carriers as a result of the introduction of number portability. It has examined

four possible mature industry regimes, two of which involve some sharing of the market between the incumbent and the entrant. Switching costs affect customers and firm differently in these two shared market cases.

Iqbal (2011)<sup>3</sup> discusses about the suitability of introducing MNP in India. The paper will also consider how phone subscribers at the Bottom of the Pyramid (BOP) and the impact of the Low-cost, low-ARPU pricing model implemented in South Asia will affect porting rates. The researcher investigates the benefits, costs and preconditions for Mobile Number Portability (MNP), while questioning its suitability for implementation in emerging South Asia. He finds out that high porting rates are not the only means to measure the impact or successfulness of MNP. According to writer in many cases customer's loyalty also tends to increase, leading to lower porting rates than otherwise expected. At the end the writer says that the existing market structure in South Asia may not be as suited to MNP because of the large numbers of prepaid or low end users. Their phone use patterns and requirements are rather distinctive, compared to high end post paid subscribers, commonly found in the developed western markets.

Khan (2010)<sup>4</sup> emphasized to implement number portability, the best solution is to implement centralized system, maintain a common number porting database, and use the All Call Query (ACQ) Call routing scheme to route the calls to a ported number. A trusted 3<sup>rd</sup> party, which typically reports to the telecom regulatory authority, can maintain the centralized Number portability database. According to write the number portability gives freedom to subscriber to choose best service provider. This will encourage competition among the service providers, and in turn will reduce the tariff. From subscribers point of view it reduces cost, time and money. From service providers point of view specific network maintenance activities need to be done to ensure proper operation of the number portability service overtime.

Sharma (2011)<sup>5</sup> found that subscribers would likely to have efficient services at cheapest rate. Subscribers can retain one number lifetime while choosing competitive plans from other operators. In this way the researcher find out that the subscribers who wishes to port his mobile number should approach the Recipient operator, withdrew his porting request within 24 hours of its submission to the Recipient Operator. Some experts are saying that MNP would not a game changer, it will just make a bit initial impact and everything will flatten out in the long run eventually.

**Dhanya** (2012)<sup>6</sup> revealed the pros and cons of Mobile Number Portability System (MNPS) from both customers as well as service providers

Dr. Satbir Singh\*

perspective. It was found that, Customers are eagerly waiting for such a service, where customer can change service provider without changing mobile number. Major drawback of MNP for customer will be relatively less as compared to that of service provider. Service providers do not be happy with MNPS. They will face problems like losing customer base, cut-throat competition and financial loss and also they will have to upgrade their network. According to the researcher Mobile Number Portability System will change the scenario of the telecom industry. Earlier the only way a service provider was able to hold their customer was by the mobile number. But now if MNPS comes into action customer will have freedom to switch with same number so customer will rule the market. In this battle between customers and service providers, service provider will have to surrender against customers.

Kumar (2011)<sup>7</sup> advocated that the service accessibility, service affordability, promotional offers and customer services are four important factors which are influencing the customer in selecting the service provider. This study provides a significant contribution to the theory by conducting factor analysis and Structure equation method to know the impact of these factors in selection of service provider in India. There is a huge growth in mobile subscribers in India and heavy competition among the service providers. The finding of the study contributes to a better understanding of the relationship between Service Accessibility, Service Affordability, Promotional Offers and Customer Service to select the service provider. In particular, the finding in this research can help practitioners and academicians to understand the level of impact that these factors has on service provider and the correlation between these factors. The result of this research predicts that Customer Service is most important factor than Promotional Offers which is influencing the customer to select their service provider.

Farzana, et al. (2011)<sup>8</sup> found that there is huge potential to make a conceptual contribution by developing a theoretical linkage and improving the theoretical rational for existing linkages. More specifically, this study tested switching cost as a moderator to solve the conflicting and confusing relationship that exists between service satisfaction and service switching constructs, which is new to the service literature.

### 3. RESEARCH METHODOLOGY

The present study will be exploratory as well as descriptive in nature.

### 3.1 Statement of the Problem

To know the perception of mobile number portability users.

### 3.2 Objective of the study

The present study attempts to:

- (i) identify the factors responsible for Mobile Number Portability;
- (ii) study the satisfaction level towards MNP among mobile users; and
- (iii) to give the recommendations for the improvement in MNP in the society.

**Table :** Perception of mobile number portability users.

S.N.	Expectations	N/%	1	2	3	4	5	Tota
1.	Cheap call rate	N	300	88	12	.0	0	400
		%	75.0	22.0	3.0	0	0	100
2	Good network coverage	N	294	101	4	1	0	400
		:%	73.5	25.3	1.0	0.3	0:	100
3	Good and different type of tariff plan	N	159	136	86	17	2	400
		96	39.8	34.0	21.5	4.3	0.5	100
4	High Internet speed	N	207	144	-97	2	0	400
		%	51.8	36.0	11.0	0.5	U	100
5	Cheap internet pack	N	210	145	41	3.	1	400
		%	52.5	36.3	10.3	0.8	0.3	100
6	Good customer care facility	N	216	149	34	1	0	400
		96	54.0	37.3	8.5	0.1	0.	100
7	Discount offers and schemes	N	191	175	32	2	0	400
		%	47.8	43.8	11.0	0.5	0	100
-	3G service facility	N	159	175	58	8	ti	400
		%	39.8	43.8	14.5	2.0	0	100
9	Recharge voucher's facility	N	179	193	28	0	0	400
		96	44.8	48.3	7.0	.0	0	100
1.0	Free roaming facility	N	193	179	26	2	0	400
		96	48.3	44.8	6.5	0.5	0	100
11	Cheap rates of Value Added Services	N	121	204	68	7	0	400
		%	30.3	51.0	17.0	1.8	0 .	100

Source: Survey, Data processed through PASW 18.0

### **Detail Explanation**

depicts that 300 (75.0 per cent) respondents are expecting 'very much' with mobile phone service providers to 'cheap call rate' whereas 88 (22.0 per cent) respondents are expecting 'much' with mobile phone service providers to 'cheap call rate' and 12 (3.0 per cent) respondents are 'less expecting' with mobile phone service providers to 'cheap call rate'. 294 (73.5 per cent) respondents are expecting 'very much' with mobile phone service providers to 'good network coverage' whereas 101 (25.3 per cent) respondents are expecting 'much' with mobile phone service providers to 'good network coverage'. 4 (1.0 per cent) respondents are 'less expecting' with mobile phone service providers to 'good network coverage' and only one (0.3 per cent) respondent is 'lesser expecting' with mobile phone service providers to 'good network coverage'. It depicts that 159 (39.8 per cent) respondents are expecting 'very much' with mobile phone service providers to 'good and different type of tariff plan' whereas 136 (34.0 per cent) respondents are expecting 'much' with mobile phone service providers to 'good and different type of tariff plan'. 86 (21.5 per cent) respondents are 'less' expecting with mobile phone service providers to 'good and different type of tariff plan' whereas 17 (4.3 per cent)

Dr. Satbir Singh\*

respondents are 'lesser' expecting with mobile phone service providers to 'good and different type of tariff plan' and 2 (0.5 per cent) respondents are 'least' expecting with mobile phone service providers to 'good and different type of tariff plan'. 207 (51.8 per cent) respondents are expecting 'very much' with mobile phone service providers to 'high internet speed' whereas 144 (36.0 per cent) respondents are expecting 'much' with mobile phone service providers to 'high internet speed'. 47 (11.8 per cent) respondents are 'less' expecting with mobile phone service providers to 'high internet speed' whereas 2 (0.5 per cent) respondents are 'lesser' expecting with mobile phone service providers to 'high internet speed'. 210 (52.5 per cent) respondents are expecting 'very much' with mobile phone service providers to 'cheap internet pack' whereas 145 (36.3 per cent) respondents are expecting 'much' with mobile phone service providers to 'cheap internet pack'. 41 (10.3 per cent) respondents are 'less' expecting with mobile phone service providers to 'cheap internet pack' whereas 3 (0.8 per cent) respondents are 'lesser' expecting with mobile phone service providers to 'cheap internet pack' and only 1 (0.3 per cent) respondent is 'least' expecting with mobile phone service providers to 'cheap internet pack'. 216 (54.0 per cent) respondents are expecting 'very much' with mobile phone service providers to 'good customer care facility' whereas 149 (37.3 per cent) respondents are expecting 'much' with mobile phone service providers to 'good customer care facility'. 34 (8.5 per cent) respondents are 'less' expecting with mobile phone service providers to 'good customer care facility' whereas, 1 (0.3 per cent) respondents are 'lesser' expecting with mobile phone service providers to 'good customer care facility'. 191 (47.8 per cent) respondents are expecting 'very much' with mobile phone service providers to 'discount offers and schemes' whereas 175 (43.8 per cent) respondents are expecting 'much' with mobile phone service providers to 'discount offers and schemes'. 32 (8.0 per cent) respondents are 'less' expecting with mobile phone service providers to 'discount offers and schemes' whereas 2 (0.5 per cent) respondents are 'lesser' expecting with mobile phone service providers to 'discount offers and schemes'. 175 (43.8 per cent) respondents are expecting 'much' with mobile phone service providers to '3G service facility' whereas 159 (38.8 per cent) respondents are expecting 'very much' with mobile phone service providers to '3G service facility'. 58 (14.5 per cent) respondents are 'less' expecting with mobile phone service providers to '3G service facility' whereas 8 (2.0 per cent) respondents are 'lesser' expecting with mobile phone service providers to '3G service facility'. 193 (48.3 per cent) respondents are expecting 'much' with mobile phone service providers to 'recharge voucher's facility' whereas 179 (44.8 per cent) respondents are expecting 'very much' with mobile phone service providers to 'recharge voucher's facility'. 28 (7.0 per cent) respondents are 'less expecting' with mobile phone service providers to 'recharge voucher's facility'. 193 (48.3 per cent) respondents are expecting 'very much' with mobile phone service providers to 'free roaming facility' whereas 179 (44.8 per cent) respondents are expecting 'much' with mobile phone service providers to 'free roaming facility'. 26 (6.5 per cent) respondents are 'less' expecting with mobile phone service providers to 'free roaming facility' whereas 2 (0.5 per cent) respondents are 'lesser' expecting with mobile phone service providers to 'free roaming facility'. 204 (51.0 per cent) respondents are 'much' with mobile phone service expecting providers to 'cheap rate of value added services' whereas, 121 (30.3 per cent) respondents are expecting 'very much' with mobile phone service providers to 'cheap rate of value added services'. 68 (17.0 per cent) respondents are 'less' expecting with mobile phone service providers to 'cheap rate of value added services' whereas 7 (1.8 per cent) respondents are 'lesser' expecting with mobile phone service providers to 'cheap rate of value added services'.

### **CONCLUSIONS**

Most of the respondents (75 per cent) are expecting 'very much' with mobile phone service providers to 'cheap call rate. So service providers companies should make the strong plan regarding cheap call rate. 73.5 per cent respondents are expecting 'very much' with mobile phone service providers to 'good network coverage. So service providers companies should make the strong plan regarding good network coverage and 39.8 per cent respondents are expecting 'very much' with mobile phone service providers to 'good and different type of tariff plan. So service providers companies should make the strong plan regarding good and different type of tariff plan.

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Dr. Satbir Singh\*

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