

A Research on Mobile Number Portability

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Abstract: The Indian telecom industry is one of the fastest growing in the world and is projected that India will have 'billion plus' mobile users by 2015. This research study pull the attention on mobile number portability with the special consideration given on porting, porting time, porting costs/fee, Customer demographics, customer awareness, Easy entry of new operator, launch of services by new operators, attractive/aggressive tariff plans, innovative services, quality of service, Voice quality, low call drops and state-of-the-art customer service setup etc. This research aims to figure out the impact of mobile number portability on service providers and service users, This paper examines the effect of Mobile Number Portability (MNP) on market price and consumer surplus. MNP reduces switching costs by allowing consumers to keep their phone number when they change service provider. Our study shows how the experience with regards to the introduction of MNP can be used as an example of best practice by other countries that plan to introduce it in the near future.

It has become especially important in recent years because of enormous growth of information technology and its significant potential for the impact on the rest of the economy. Telecom companies have recognized this and are rapidly evolving with better brands services and attractive measures. The competition in this space is further fuelled with the implementation of mobile number portability system, which allows switching your mobile phone operator from one to another while keep your existing mobile phone number. This paper tries to explore the scenario of MNP and how it has affected the various mobile network service providers across the region of Mumbai.

Keywords: Mobile Number Portability (MNP), Telecom Regulatory Authority India (TRAI), Service providers

I. INTRODUCTION

Telecommunications in India has grown rapidly and witnessed numerous important structural and institutional reforms, especially since 1991. The National Telecom Policy in 1994, New Telecom Policy in 1999 and many more are a few steps taken in this direction. Private sector participation had been opened up to supplement the efforts of DOT in basic telephone services. The opening up of the basic services provided a big opportunity for private & foreign investors which is now open to unrestricted competition. This has also helped a great deal towards maximization of consumer benefits. The tariffs have been falling continuously due to this healthy and unrestricted competition. India today has one of the lowest tariffs in the world. This emergence of India is also a result of various initiatives taken by the Government of India. With a strong population of over 1.1 Billion, India has become one of the most dynamic and promising telecom markets of the world. It has third largest telecom network and the second largest wireless network in the world. According to reports by TRAI (Telecom regulatory authority India), by the end of June 2018, the total wireless subscribers has reached to more than 918 million and registered a monthly growth of 0.42 wireless subscriber in India. Wireless subscriber in rural area is 378.29 million and urban is 540.44. It encourages market competition level and ensures better service in India.

- Telecom subscribers base in India reached 116.8 crore at the end of June, with Reliance Jio adding the highest number of new customers to its mobile network, according to a TRAI report released Aug, 2018.
- The wireless segment (97.46 per cent of total telephone subscriptions) dominates the market, while the wireline segment accounts for the rest
- Urban regions account for 58.58 per cent of telecom subscriptions, while rural areas constitute the remaining

The Indian telecom industry is very competitive with many players like Airtel, Vodafone, Idea cellular, Reliance, TATA and Government players like BSNL, MTNL. The Indian Telecom Industry had progressed by leaps and bounds. Certain highlights of the Indian Telecom Industry are:

- India's telephone user base has increased to 926.53 million with telecom operators adding 9.47 million new subscribers in December last year.
- As many as 2.74 million new subscribers were added by the telecom operators in November last year,



The history of MNP

Mobile Number Portability (MNP) was first introduced in the world by Singapore in 1997, and then UK, Hong Kong and Netherlands followed in 1999. Slowly other countries implemented it. In India, first phase in MNP implementation began in Metros in December 31, 2009, and the second phase, for the rest of the country by March 2015.

Impact on Service Providers

MNP will intensify competition but will not have a major effect on operators who have a strong customer base because they can retain their customers by providing competitive tariffs. However, newer players will be easily able to enter and survive in the market by providing Value Added Services and lower rates. MNP will force the service providers to focus their attention to quality of routing and calls, else the customer will switch. The subscribers will also have the flexibility to change the service providers if they are unhappy with the tariff, service,

services at lower rates. Any subscriber can make a porting request only after 90 days of activation of connection.

Present status of MNP

The Wireless subscriber number stands at more than 918 million at the end of July 2018. There are 378.29 million rural subscribers and 540.440 million urban subscribers. Out of this, about 12.72 million subscribers have submitted their request to different service providers for porting their mobile numbers.

Service area wise MNP status at the end of Jan 2019:

Service Area Wise MNP Status					
Zone - 1			Zone - 2		
Service Area	Number of Porting Requests (in Million)		Service Area	Number of Porting Requests (in Million)	
	Dec-18	Jan-19		Dec-18	Jan-19
Delhi	21.18	21.45	Andhra Pradesh	35.06	35.50
Gujarat	26.96	27.51	Assam	3.29	3.32
Haryana	14.93	15.18	Bihar	16.01	16.39
Himachal Pradesh	1.99	2.02	Karnataka	38.84	39.18
Jammu & Kashmir	0.98	1.00	Kerala	9.92	10.07
Maharashtra	29.38	30.01	Kolkata	10.03	10.13
Mumbai	21.45	21.64	Madhya Pradesh	26.94	27.33
Punjab	15.69	15.94	North East	1.29	1.30
Rajasthan	33.24	33.59	Orissa	8.15	8.32
U.P.(East)	22.51	22.85	Tamil Nadu	35.13	35.56
U.P.(West)	18.07	18.36	West Bengal	20.92	21.17
Total	206.38	209.55	Total	205.60	208.27
Total (Zone-1 + Zone-2)				411.98	417.82
Net Addition (January, 2019)				5.84	

Source: TRAI (<https://main.traai.gov.in/release-publication/reports/telecom-subscriptions-reports>)

Rational of the Study

Now a days it is the revolution in telecom industry in India and most awaited services for consumers and it gives experience to know more about consumers mind and changes taking by telecom operators. It gives lots experience in understanding the impact of MNP on service providers and as well as on mindsets of customers.

Impact on Service Providers

- Competition among service providers will increase and profit margins are likely to erode, operators who have a strong customer base will be able to retain their customers by providing competitive tariffs.



- New service providers will find it easier to enter and survive in the market by providing competitive rates and Value Added Services.
- Service providers will also be able to retain customer loyalty and build higher company value.
- The service providers will have better control over the quality of routing.

Impact on Subscribers

- Subscribers can now use one number throughout their life and have the flexibility of changing service providers if they are unhappy with the tariff, service, connectivity, etc.
- Subscribers are more likely to get efficient services at lower rates.
- A subscriber can make a porting request only after 90 days of activation of connection.
- Subscribers can also change operators within their registered circles only.

Overall, the impact on some operators like Reliance (leader in CDMA services), MTNL (first to launch 3G) and Tata, Idea, Vodafone will be positive. MNP is expected to reduce the cost of switching operators, making the market more competitive. Even though there are both direct and indirect costs of introducing MNP, all cost-benefit studies project that the effect of MNP will be positive overall. Retail prices, termination charges, price elasticity, market shares, as well as entry and investment decisions are likely to be affected with the implementation of MNP.

Research Methodology Research Problem:

The research problem of this proposal is to study "Consumer Perception towards MNP" and to identify the factors that customers would consider for switching over the other operator.

Research Scope and Objectives:

This research work is carried out to understand the impact of mobile number portability on the consumers in Maharashtra. The following were the objectives of the study:

- To know the customer perception towards MNP
- To measure the effectiveness of MNP across various service providers
- To know the general preference of the users regarding service provider
- To know various factors considered by the customers for MNP
- To know the post MNP feeling or opinion of the customers

Research Design: Descriptive Research.

Research Instrument: Questionnaire - Primary Data Collection and Secondary Data

Sampling unit : Customers of various Mobile Service Providers across Mumbai.

Sampling Method : Convenience Sampling Sample Size : 300 customers.

Sampling Application: Google Form.

Research Approach: Survey (Primary data is collected through self structured questionnaire).

Hypothesis Testing:

Hypothesis testing is done to find out the number of customers who port in and out for any particular network. It is also used to find out if all the network providers get the equal number of porting requests or not.

Limitations:

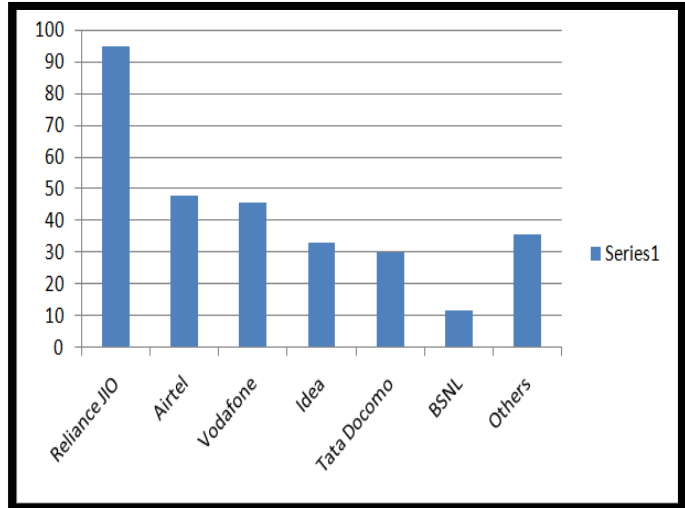
- The sample size taken is only 300 which is quite a small representation of the population. So what is true for this sample may or may not hold true for the entire population
- The hypothesis of subscribers INs and OUTs is based on secondary data which entirely depends on the accuracy of the secondary data.
- In this research, convenience sampling is used; and it has its own limitations.



Data Analysis and Interpretation

Question – I – Which telecom service are you currently using?

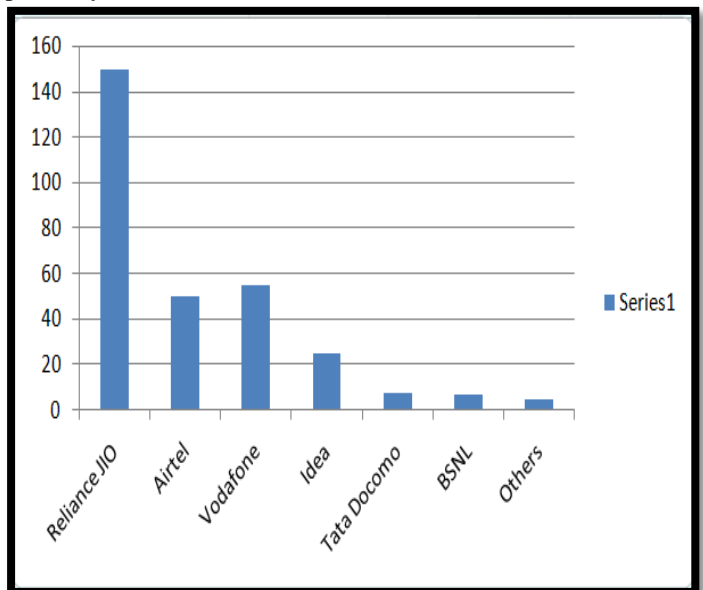
Service Provider	User
Reliance JIO	95
Airtel	48
Vodafone	46
Idea	33
Tata Docomo	30
BSNL	12
Others	36
Total	300



Question – 2 – Preference after MNP to port

- The result shows that the majority of respondent has port their number to Vodafone and it is the leading telecom company after introduction of MNP in India.
- And Docomo and AIRTEL come second and third respectively.

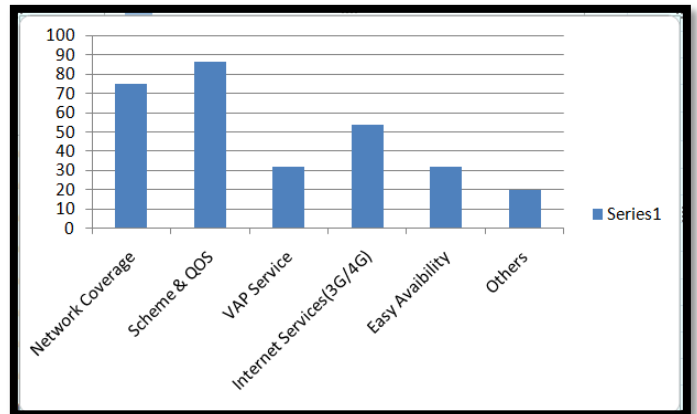
Service Provider	Preference
Reliance JIO	150
Airtel	50
Vodafone	55
Idea	25
Tata Docomo	8
BSNL	7
Others	5
Total	300





Question –3 – Reasons for MNP

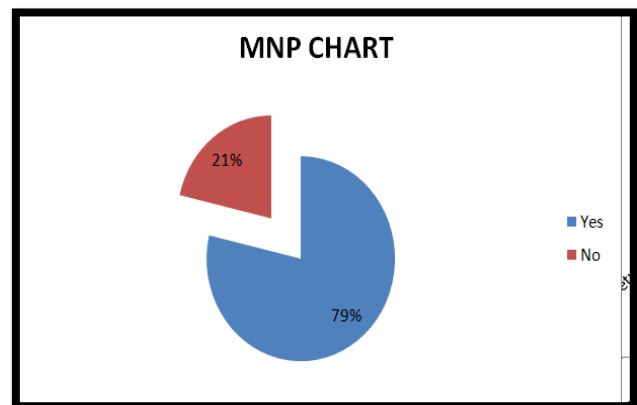
Reasons	Frequency
Network Coverage	75
Scheme & QOS	87
VAP Service	32
Internet Services(3G/4G)	54
Easy Avaibility	32
Others	20
Total	300



The main reason for porting the number was dissatisfaction from their existing services. Majority of the respondents believe that strong network and schemes are the strong reason for porting their number

Question –4 – Post MNP feelings

Response	Frequency
Yes	236
No	64
Total	300



- From the above graph it is observed that the 88% of the consumers are confident of having a better service after MNP.
- While only 12% are not confident.

Question – 5: MNP generates perfect competition among the service providers?

S.no.	Opinion	Percent (%)
1	Strongly Agree	113
2	Strongly Disagree	27
3	Agree	70
4	Disagree	24
5	Neutral	66
Total		300

Question – 6: Entry of new service provider has become easy after the introduction of MNP?

Sr.no.	Opinion	Percent (%)
1	Strongly Agree	15
2	Strongly Disagree	45
3	Agree	91
4	Disagree	60
5	Neutral	89
Total		300

Question – 7: MNP is good because it provides choice to change the operator while retaining existing number?

S.no.	Opinion	Percent (%)
1	Strongly Agree	42
2	Strongly Disagree	55
3	Agree	80
4	Disagree	48
5	Neutral	75
Total		300

Question – 8 :MNP helps in removing monopoly from the marketplace?

S.no.	Opinion	Percent (%)
1	Strongly Agree	60
2	Strongly Disagree	42
3	Agree	100
4	Disagree	40
5	Neutral	58
Total		300

Question – 9 : MNP forces operators to think on segmentation in the prepaid market ?

S.no.	Opinion	Percent (%)
1	Strongly agree	60
2	Strongly disagree	35
3	Agree	90

4	Disagree	66
5	Neutral	84
Total		300

Question – 10 : Satisfaction at affordable prices is the reason of switching behavior of customers?

S.no.	Opinion	Percent (%)
1	Strongly Agree	40
2	Strongly Disagree	43
3	Agree	88
4	Disagree	44
5	Neutral	85
Total		300

Question – 11 : Low prices and easy process for availing MNP services allow users to subscribe new operator?

S.no.	Opinion	Percent (%)
1	Strongly Agree	46
2	Strongly Disagree	26
3	Agree	100
4	Disagree	48
5	Neutral	80
Total		300

Question – 12 : MNP provides freeness from retaining or purchasing an-other SIM card of new service provider?

S.no.	Opinion	Percent (%)
1	Strongly Agree	90
2	Strongly Disagree	28
3	Agree	100
4	Disagree	27
5	Neutral	55
Total		300

Service Area Wise Mobile Number Portability Request:

Service Area	Oct-18	Nov-18	% Change	Upto November 2018
Delhi	320,000	210,000	-34%	20,950,000
Gujarat	30,000	190,000	533%	26,530,000
Himachal Pradesh	140,000	110,000	-21%	14,760,000
Haryana	20,000	20,000	0%	1,960,000
Jammu & Kashmir	20,000	10,000	-50%	970,000
Maharashtra	300,000	360,000	20%	28,920,000
Mumbai	190,000	140,000	-26%	21,280,000
Punjab	170,000	170,000	0%	15,490,000
Rajasthan	180,000	150,000	-17%	32,980,000
Uttar pradesh -East	130,000	180,000	38%	22,200,000
Uttar pradesh - West	(20,000)	180,000	-1000%	17,830,000
Total (Zone 1)	1,480,000	1,720,000	16%	203,870,000
Andhra Pradesh	410,000	330,000	-20%	34,680,000
Assam	20,000	20,000	0%	3,260,000
Bihar	150,000	140,000	-7%	15,730,000
Karnataka	290,000	230,000	-21%	38,560,000
Kerala	100,000	80,000	-20%	9,820,000
Kolkata	60,000	50,000	-17%	9,940,000
Madhya Pradesh	230,000	180,000	-22%	26,640,000
North East	10,000	10,000	0%	1,290,000
Orissa	60,000	50,000	-17%	8,010,000
Tamil Nadu	290,000	350,000	21%	34,690,000
West Bengal	90,000	90,000	0%	20,720,000
Total (Zone 2)	1,710,000	1,530,000	-11%	203,340,000
Total (Zone1 + Zone2)	3,190,000	3,250,000	2%	407,210,000

II. LIMITATION OF RESEARCH

- 1) All the limitations of non-probability sampling are applicable in this research.
- 2) At the time of research respondent are not ready to give answer.
- 3) Many respondent give unbiased and dishonest answer

III. CONCLUSION

The MNP process is relatively new to India but holds lots of scope. With the revolution of mobile telephony sector in India, the subscriber base has grown by leaps and bounds over the past decade. It can also lead to lots of errors like customer dissatisfaction, misalignment between the old and new service operator, loss of revenue and negative publicity. Hence proper infrastructure needs to be in place for it starts in India. The MNP is a very good system is introduced by the TRAI. This system helps the customer to switch over to another if they are not satisfied with the current network provider’s service or other factors. From this study we came to know that most of the people are dissatisfied with poor connectivity and network problem. Even though the subscribers are facing these kinds of problems frequently with the current service provider, they remain in the same network, this is because most of the service providers are providing the service alike. Hence, the subscribers are fed up with all the service providers and they remains in the same network. To avoid these kinds of problems the service providers has to provide quality service to their subscribers. And also the TRAI has to insist the service providers to offer a quality service to the subscribers. TRAI has to do is to create an awareness among the people about MNP, for that TRAI has to conduct various advertisement campaigns to make people aware about the system fully.

I find that because of this research the leading company from 2016 is Reliance JIO ,most of people can port from other operator to Reliance JIO.it is state that the mobile number portability is mostly use on that time.and most of People can port their number in reliance JIO.

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