



## MOBILE NUMBER PORTABILITY (MNP) IN INDIA

## Commerce

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## ABSTRACT

The telecom services have been recognized the world-over as an important tool for socio-economic development of a nation and is a big contributor to the rapid growth and modernization of various sectors of the economy. Mobile number portability system is to allow switching your mobile phone operator from one to another while keeps your existing mobile phone number. This paper explores the scenario of MNP, Zone- wise total number of Mobile Number Portability and Market share of service providers.

## KEYWORDS

MNP, Portability, Telecommunication

## INTRODUCTION

India's telecommunication network is the second largest in the world by number of telephone users (both fixed and mobile phone) with 1.153 billion subscribers as on 31 May 2018. It has one of the lowest call tariffs in the world enabled by mega telecom operators and hyper-competition among them. As on 31 May 2018, India has the world's second-largest Internet user-base with 432 million internet subscribers in the country.

## Mobile Number Portability

"Mobile number portability (MNP) is a service that allows a cell phone or smart phone customer to change telecom carrier and keep the same phone number".

MNP is essential for maintaining competition in the telecom sector. By making it easy for users to switch operators if they are dissatisfied or otherwise require a change, MNP ensures that users are not locked into a particular telecom service and thus imposes a competitive constraint on telecom operators. With the issue of Telecommunication Mobile Number Portability Regulations, 2009, TRAI laid down the basic business process framework for implementation of intra-circle (within the service area) MNP in the country, in January 2011<sup>2</sup>.

## History of MNP

The following table shows that the implementation of mobile number portability in world level.

**TABLE NO-1**  
**Implementation Of Mobile Number Portability**

S.No	Country	Year of implementation
1	Hong Kong	March 01, 1999
2	Australia	September 25, 2001
3	Italy	April 01, 2002
4	Germany	November 01, 2002
5	France	June 30, 2003
6	USA	November 24, 2003
7	Saudi Arabia	July 08, 2006
8	South Africa	November 10, 2006
9	Canada	March 14, 2007
10	Pakistan	March 23, 2007
11	New Zealand	April 01, 2007
12	Mexico	July 05, 2008
13	Singapore	June 13, 2008
14	Brazil	September 01, 2008
15	India	January 20, 2011

Source: www.wikipedia.

## Review of literature

**Abd-Elrahman Hassanein Abd-Elrahman (2018)**<sup>3</sup>. "A Review of Telecommunications Service Quality Dimensions", The purpose of this paper is to review the service quality dimensions established in various empirical studies conducted across the world specifically applied to telecommunications services. This paper reviews only

empirical studies based on survey data and statistical methods of analysis since 2001 till 2017. The critical review of the different service quality models is intended to compile the various dimensions which emerged out of the studies, compare the commonality between them and highlight the limitations of the studies. The findings revealed that the meaning of service quality may have some universal aspects, as demonstrated by the similarities in the underlying dimensions as proposed in the different studies. This paper lends support to the contention that the dimensionality of SERVQUAL and importance of the dimensions vary with the cultural and country context even within the telecommunications industry. It identifies eight service quality dimensions in the telecommunications services – reliability, tangibles, responsiveness, assurance, empathy, network, customer service and convenience. The findings are valuable to academics and practitioners in providing a direction for service quality improvement by indicating the common theme that emerges from the service quality models.

**Hall, J., O'Mahony, B., & Gayler, J. (2017)**<sup>4</sup>. "Modelling the relationship between attribute satisfaction, overall satisfaction, and behavioural intentions in Australian ski resorts", this study models the relationship between attribute satisfaction, overall satisfaction, and behavioural intentions within the context of ski resorts. Utilising a sample of 426 respondents, K-means cluster analysis is used to develop five motivational ski tourist segments, and the influence of attribute satisfaction on overall satisfaction is determined for each tourist segment. A structural equation model (SEM) is used to confirm the relationship between attribute satisfaction, overall satisfaction and behavioural intentions. The study found that different tourist segments were motivated by different attributes and it is not necessary for all attributes to be satisfied in order to achieve overall satisfaction and positive behavioural intentions. The results provide destination managers with insights to influence overall satisfaction, manage tourists' behavioural intentions, and improve destination competitiveness.

## OBJECTIVES OF THE STUDY

- To study the overview of mobile number portability in India.
- To analyse the mobile number portability services in different zones.
- To measure the effectiveness of MNP across various service providers.

## Research methodology

The present study is of analytical and descriptive in nature. The use of secondary data is made for the study which was collected from different sources. The relevant secondary data were from various publications such as Reports on TRAI from Telecommunication website, Handbook of TRAI, magazines such as Business India, India Today, Business World, Business and Economic Survey and other websites were also referred to. The collected data is analyzed with the help of statistical tools like growth rate, Mean, Standard Deviation and Co- Variance is presented in the form of Tables.

## Zone- Wise Total Number of Mobile Number Portability in India

The following table mobile number portability in service area - wise in India. The Indian telecom industry was about to launch Mobile Number Portability (MNP) in a phased manner, on September 2009

and to be completed by March 2010. But it delayed due to some reasons till 30th June; finally MNP has been launched in India on January 20, 2011. Due to shutdown of Aircel wireless subscriber, mobile number portability Requests number has reached to more than 382.06 million at the May 2018.

**TABLE NO-2**  
**Zone- Wise Total Number Of Mobile Number Portability**

Service Area/ Year	Upto May 2018	2016-17	2015-16	2014-15	2013-14	2012-13
<b>Zone -I (Northern and Western India)</b>						
Delhi	19159932	11868355	8327904	5998851	143000	1216000
Gujarat	2500877	19544609	16078452	12540674	232000	3830000
Haryana	1839433	10901899	7433136	5615988	116000	1403000
Himachal Pradesh	13934263	986477	715721	523934	7000	154000
Jammu & Kashmir	862026	124495	72675	35640	1000	86000
Maharashtra	26277980	18603137	14914184	11772191	187000	4035000
Mumbai	20142399	15097619	11478663	8476932	166000	1871000
Punjab	14274461	10695088	7402093	5313934	110000	1319000
Rajasthan	31542054	23002490	18322698	14659318	324000	4840000
UP(East)	20542328	13680929	9797167	7766018	103000	3065000
UP (West)	16515342	12291,89	9594903	7686895	107000	2895000
<b>ZONE-II (Southern and Eastern India)</b>						
Andhra Pradesh	32045187	24637338	20009891	14647077	266000	4137000
Assam	3035263	1402066	993987	489915	6000	233000

Bihar	14482626	10119830	7372102	3461,119	84000	1027000
Karnataka	36753723	29905923	23424452	17668838	265000	6196000
Kerala	9242554	7503764	6462051	5329524	82000	1628000
Kolkata	9506230	5699278	4700394	3558498	59000	1130000
Madhya Pradesh	25232034	18837928	13350032	9504934	135000	2813000
North East	1195317	530265	420304	267666	5000	117000
Orissa	7577935	5421547	4317720	3080418	53000	1101000
Tamil Nadu	32779812	16715524	13173385	9430901	164000	2786000
West Bengal	20112804	15192339	1076789	6016057	117000	2016000
<b>Total (Zone-1+Zone-2)</b>	<b>382062580</b>	<b>272,762,887</b>	<b>209,129,813</b>	<b>153,845,322</b>	<b>2732000</b>	<b>47898000</b>

Source: TRAI Annual Reports

From the above table -2 shows that the mobile number portability (MNP) in Zone-I (Northern and Western India), the highest number of requests in 2012- 13 and till date have been received in Rajasthan (about 31.54 million) followed by Maharashtra (about 26.28 million) service area and MNP Zone-II (Southern and Eastern India), the highest number of requests 2012- 13 and till date have been received in Karnataka (about 36.75 million) followed by Tamilnadu (about 32.78 million). The reasons for the Due to shutdown of Aircel wireless subscriber, mobile number portability Requests number has reached to more than 382.06 million at the May 2018.

#### Service Provider-wise Wireless Subscribers

The following table -3 shows that the subscriber base of individual wireless service providers from 2007-08 to 2016-17.

**TABLE NO-3 Service Provider-wise Wireless Subscribers In India**

[Subscriber base in Millions]

Year/ Service Providers	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	%age growth/ reduction over FY 2016-17
Bharti	61.98	93.92	127.62	162.20	181.28	188.20	205.39	226.02	251.24	273.65	8.92
Vodafone	44.13	68.77	100.86	134.57	150.47	152.35	166.56	183.80	197.95	209.06	5.61
Idea/Spice	24.00	38.89	63.82	89.50	112.72	121.61	135.79	157.81	175.07	195.37	11.60
Reliance	45.79	72.67	102.42	135.72	153.05	122.97	110.89	109.47	102.41	83.50	-18.46
BSNL	40.79	52.15	69.45	91.83	98.51	101.21	94.65	77.22	86.35	100.99	16.95
Aircel	10.61	18.48	36.86	54.84	62.57	60.07	70.15	81.40	87.09	90.90	4.37
Tata	24.33	35.12	65.94	89.14	81.75	66.42	63.00	66.32	60.10	48.99	-18.49
Telewings (formerly Unitech)	-	-	4.26	22.79	42.43	31.68	35.61	45.62	52.45	50.49	-3.74
Sistema	0.11	0.39	3.78	10.06	15.68	11.91	9.04	8.86	7.69	4.91	-36.15
Videocon***	-	-	0.03	7.11	5.95	2.01	4.99	7.13	6.56	0	-
MTNL	3.53	4.48	5.09	5.47	5.83	5.00	3.37	3.51	3.56	3.63	1.97
Loop**	-	-	2.84	3.09	3.27	3.01	2.90	0	0	0	-
Quadrant****	-	-	0.33	1.47	1.33	1.37	2.17	2.73	30.16	0	-
S Tel	-	-	1.01	2.82	3.43	0	0	0	0	0	-
Etisalat	-	-	0.0004	0.92	0.78	0	0	0	0	0	-
Relainace Jio*	-	-	-	-	-	-	-	-	-	108.68	-
<b>Total</b>	<b>214.48</b>	<b>384.87</b>	<b>584.32</b>	<b>811.59</b>	<b>919.17</b>	<b>867.8</b>	<b>9.4.51</b>	<b>969.89</b>	<b>1033.63</b>	<b>1170.17</b>	<b>100.00</b>
<b>Mean</b>	<b>28.36333</b>	<b>42.76333</b>	<b>38.95403</b>	<b>54.102</b>	<b>61.27</b>	<b>57.854</b>	<b>60.30067</b>	<b>64.65933</b>	<b>70.70867</b>	<b>73.13563</b>	
<b>Standard Deviation</b>	<b>21.21972</b>	<b>32.01579</b>	<b>45.40201</b>	<b>57.9719</b>	<b>64.2352</b>	<b>64.24453</b>	<b>68.33116</b>	<b>74.76642</b>	<b>80.56754</b>	<b>86.95235</b>	
<b>Co- Variance</b>	<b>74.81391</b>	<b>74.86738</b>	<b>116.5528</b>	<b>107.153</b>	<b>104.8396</b>	<b>111.046</b>	<b>113.3174</b>	<b>115.6313</b>	<b>113.9429</b>	<b>118.8919</b>	

Source: Service Providers (\*) M/s Reliance Jio Infocomm Ltd launched their commercial services in 2016-17

(\*\*) M/s Loop services were discontinued since 2014-15 (\*\*\*) M/s Videocon Ltd. discontinued their commercial service since May 2016

(\*\*\*\*) M/s Quadrant Televentures Ltd. discontinued their commercial service on 15<sup>th</sup> February 2017.

From the above table -3 shows that the subscriber base of individual wireless service providers from 2007-08 to 2016-17 along with their percentage growth over the financial year 2016-17. The highest growth rate is 16.95% of the BSNL follow the 11.6% of the Idea/Spice, 8.92 % of the Bharti and 5.61%, 4.37% of the Vodafone and Aircel

### Market share in service provider

The following table Service provider wise market share in 2017-18.

**TABLE -4**  
**Service Provider - Wise Market Share**

Service provider	Subscriber base (Millions)		Increase/Decrease	Growth Rate (%)	Market share in Dec -17	Market share in Mar-18
	Mar-17	Mar-18				
Bharti	294.03	308.12	14.09	-	24.69	25.54
Vodafone	212.73	222.92	10.19	4.79	17.87	18.48
Idea	196.50	211.21	14.71	7.49	16.50	17.51
Reliance Com	34.30	1.11	-33.19	-96.77	2.88	0.09
Tata	38.55	33.07	-5.49	-14.24	3.24	2.74
Aircel	85.00	74.15	-10.85	-12.76	7.14	6.15
Quadrant	0.25	0.24	-0.01	-2.62	0.02	0.02
Telenor	41.91	37.98	-3.93	-9.37	3.52	3.15
Relainace Jio	160.09	186.56	26.47	16.53	13.45	15.47
BSNL	120.35	123.95	3.60	2.99	10.11	10.28
MTNL	6.96	6.90	-0.06	-0.82	0.58	0.57
<b>Total</b>	<b>1190.67</b>	<b>1206.22</b>	<b>15.54</b>	<b>-</b>	<b>-</b>	<b>-</b>

Source: TRAI Annual Reports

From the above table shows that the service provider wise market share in 2017-18. The following Bharti Airtel is the highest service provider in access segment of 308.12 followed by Vodafone 222.92 million, idea 211.21 and BSNL in 123.95 millions in March 2018. Reliance jio is the highest net value of 26.47 million. However, it is maximum decline the net value 33.19 million subscribers during the period.

### CONCLUSION

The Indian Telecom industry is the fastest growing industry in the world today and further development in Mobile Number Portability (MNP). MNP process permits free choice of mobile operator by the subscriber. It has elevated the level of open competition amongst network operators. MNP is most Requests number has reached to more than 382.06 million at the May 2018.

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