

**Mobile Number Portability and Service Quality – A Case Study of BSNL MNP Customers**

**\*Anita Ramadass**  
**\*\*Dr.C.Swarnalatha**

\*Research Scholar, Anna University-Madurai regional Centre, Madurai.

\*\*Prof & HOD, Dept. of Management Studies, Anna University-Madurai Regional Centre, Madurai.

**Abstract**

The Indian telecom industry is growing at a very fast pace with the subscriber base reaching 933 million at the end of March, 2014. Mobile number portability facility (MNP) within a service area was implemented in the country by January 2011. The introduction of MNP facility has resulted in nearly 117 million MNP requests in the country by the end of March, 2014 as per Telecom Regulatory Authority of India report. The heavy competition in the telecom sector has been further increased with the introduction of MNP. The Telecom service providers (TSP) have to adopt new strategies to retain their subscriber base. This research paper attempts to study the factors which motivate customers to opt for MNP and the influence of service quality on MNP and the port out and port in choice of customers with reference to BSNL and other TSPs.

**Keywords:** Mobile Number Portability, BSNL, service quality

**1. Introduction**

Mobile number portability (MNP) is the process by which customers can change from one service provider to another without changing their mobile number. A mobile number serves as a contact number not only for voice calls but also for a number of bank transactions and website registrations, etc that it is difficult for the customer to change the mobile number as it requires effort and time to intimate friends, relatives, office staff and all organisations where it is registered regarding change of mobile number. Hence, prior to the introduction of MNP, even if the customer was dissatisfied with the service and wanted to change the mobile operator on account of any of the factors such as high tariff, lack of proper network coverage in a particular area, poor service quality, etc the customer was forced to retain the connection with the same operator to avoid the inconveniences that came along with a mobile number change. Also, customers do not want to forego fancy numbers, premium numbers or numbers to which they are attached sentimentally. Introduction of MNP has thus empowered the customers.

Mobile number portability (MNP) gives the customer freedom to choose his service provider while at the same time retain his mobile number but within the ambit of the regulations prescribed by the telecom regulator.

MNP was rolled out in a phased manner in India. MNP Pilot service was launched in Haryana local service area (LSA) which was then implemented across the country by 20<sup>th</sup> January 2011. This MNP is restricted to switching the service provider within LSA (coinciding with geographical states in the country). It is yet to be introduced on pan India basis.

The customers within a LSA can now switchover to other service provider using MNP facility if they are dissatisfied with the service. Hence, every operator is forced to ensure that its customers are satisfied to prevent them from porting out to other operators.

The number of telephone subscribers in India had increased to 933 million by the end of March, 2014 while the count of mobile number portability requests had reached 117 million by the end of March 2014 as per Telecom Regulatory Authority of India (TRAI) Report.

**Literature Review**

Satisfaction is based on the customer's previous experiences with the service provider, advice of friends and associates, competitors offering and information from marketers (Kotler, 1997). Zeithaml and Bitner (2000), defines customer satisfaction as

follows: “Satisfaction is the customer evaluation of a product or service in terms of whether that product or service has met their needs and expectations.

Shin and Kim (2008) suggest that both consumer satisfaction and switching barriers impacted intentions and attitudes to switching service providers. Sutherland (2007) studied the introduction of number portability in different countries and concluded that the demand for portability is potentially high, since consumers show resistance to switching service providers when they cannot keep their current numbers. As per Sean Lyon (2006) prices fell and churn increased in countries with better MNP delivery standard. Also Rafique Ahmed Khuhro, et al. (2011) have stated that customers are satisfied after availing MNP facility .

Thus, all previous research point to the customers intention to satisfy his need by switching service providers if he has the option to retain his number. Also in countries where it has been implemented the customer is satisfied after MNP. Hence, it becomes essential for Telecom service providers to understand customers behaviour to prevent churn and the factors that influence him in arriving at MNP decision.

**Objectives of the Study**

1. To identify the customer reasons for switching over from one service provider to another.
2. To study the relationship between MNP and service quality.
3. To compare the port out and port in customer switchover pattern of MNP with reference to BSNL.

**Research Methodology**

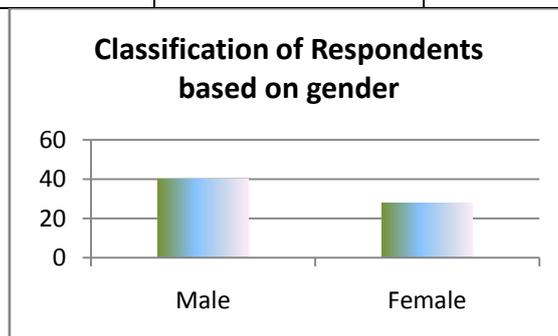
Convenience sampling was used and 128 respondents were chosen from all age groups in Tamilnadu service area. Telecalling was resorted to obtain the customer response. The responses were then summarised and interpreted.

**Data Analysis and Interpretation**

The number of respondents surveyed was 128 of which 75 were male and 53 were female across different age groups and occupation. Out of the 128 customers surveyed 68 were port out customers while 60 were port in customers.

**Table1: Classification of respondents based on gender**

Gender	Respondents	Percentage (%)
Male	75	59
Female	53	41
Total	128	100



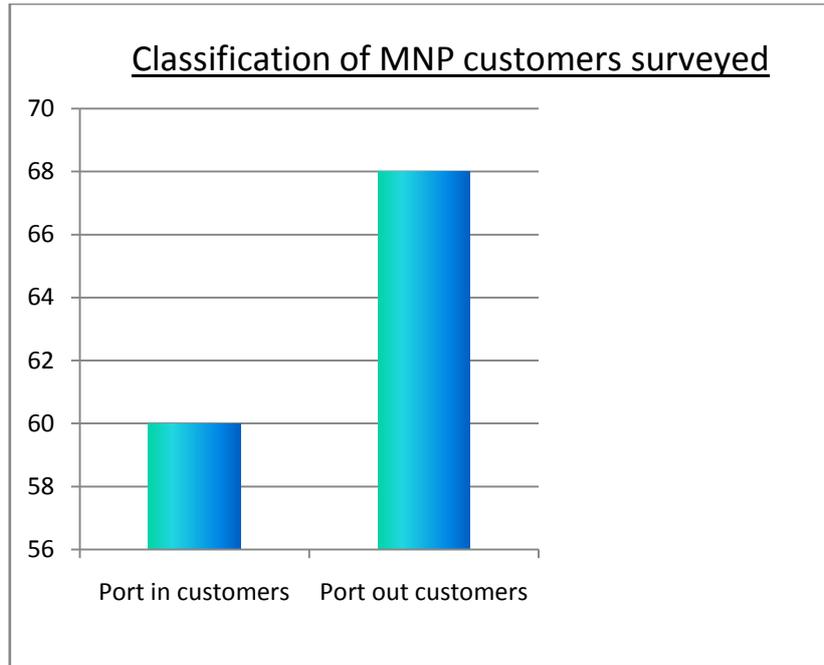


Figure: 2 Classification of respondents based on MNP type.

“Port out” customers are customers who want to move out to another service provider whereas “Port in” customers are customers who want to come into the network from other service providers. The respondents were asked to identify the major factor for arriving at the port out decision. The responses are summarised in table 2.

**Table 2: Factors influencing the MNP decision of port out customers**

Factors	Port out customers	Percentage of customers
Network coverage/quality	27	40%
Tariff	13	19%
Customer service	15	22%
Value added services	8	12%
Miscellaneous	5	7%
Total	68	100%

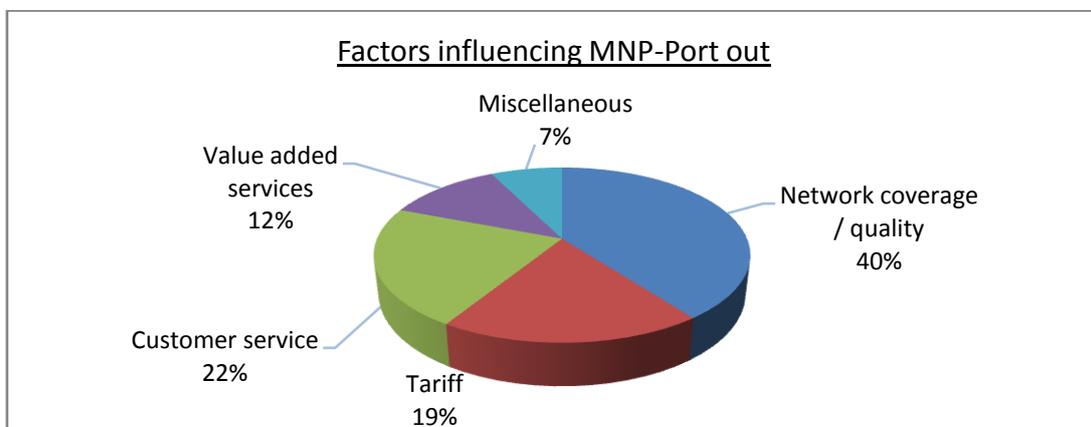


Figure 2: Factors influencing customers port out decision.

Among the 68 “port out” customers who were surveyed 40% stated that they had changed their operator because of poor network coverage in their area while 19% stated that they wanted to avail some special package option of another operator or were dissatisfied with the prepaid charges.22% of the customers felt that the customer service personnel were not responsive to their queries.12% of the customers opted for MNP as they wanted to avail certain value added services while 7% of the customers wanted to changeover for other reasons such as to have a standby network as they had more than one connection, to be part of some friends/relatives CUG ,etc

The customers were also asked to identify the service provider they had ported into. This data is summarised in table 3 below.

**Table 3: Respondents porting out from BSNL to other TSPs**

Port_In Provider	Service	No. of customers	% of respondents ported out from BSNL to other TSPs
Aircel		6	9%
Airtel		13	18%
IDEA		12	18%
Reliance		7	11%
TTSL		12	17%
Vodafone		19	28%
Total		68	100%

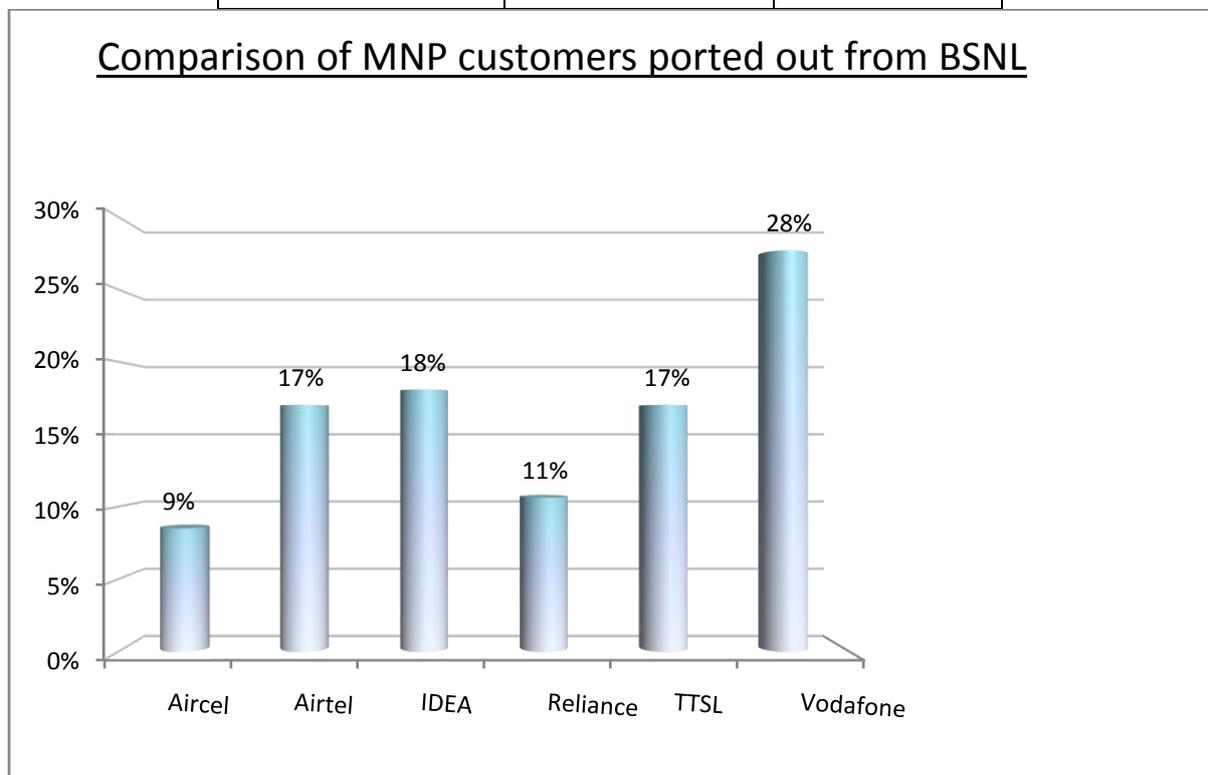


Figure 3: MNP Respondents ported out from BSNL to other service providers.

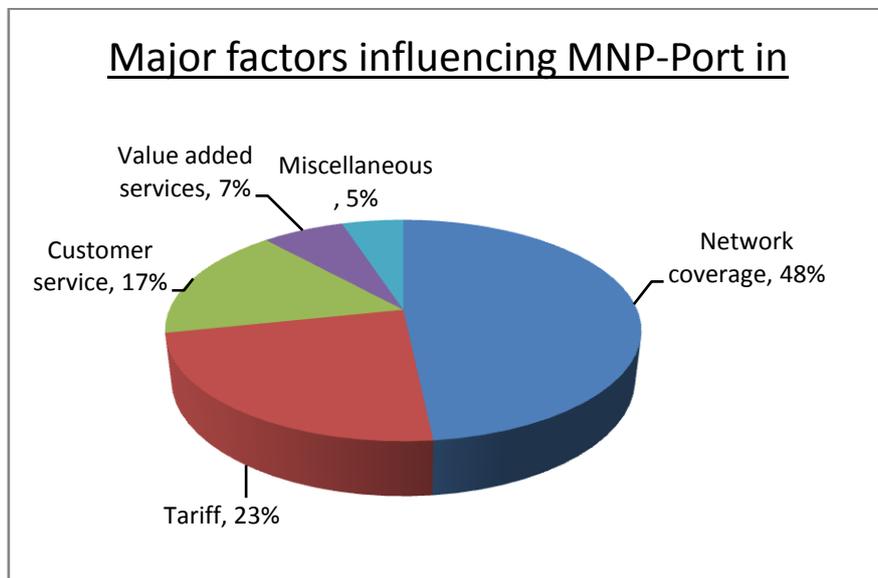
Maximum number of customers who ported out of BSNL ported into Vodafone network with the port in percentage being 28% whereas Aircel has had the least number of port in numbers at 9%. Almost 18% of the customers ported into IDEA network while 17% of the customers ported into Airtel and another 17% into Tata Teleservices Ltd. The remaining 11% ported into Reliance network.

From table 1 it is observed that the general perception of 40% of the MNP customers who ported out of BSNL was due to perceived problems in network coverage or network service quality in areas where they felt the other operator had a better network quality followed by 22% of the customers who perceived the customer service to be better with the other operator. This is confirmed from the fact that 28% of the customers ported to M/s Vodafone Pvt. Ltd. which has a strong network presence and is building up its presence in rural areas and also has a very good customer support network. Airtel, Idea and TTSL are almost equal competitors for MNP followed by Reliance and Aircel.

The response of the port in customers surveyed is summarised below.

**Table 4: Factors influencing the MNP decision of port in customers**

Factors	Port in customers	Percentage of customers
Network coverage	29	48
Tariff	14	23
Customer service	10	17
Value added services	4	7
Miscellaneous	3	5
	60	100



A total of 60 respondents were surveyed of which 48% stated that they ported out of the previous service provider due to network coverage problems and felt BSNL had better network coverage, 23% stated BSNL tariff was better, 17% ported in due to poor customer service with the other operator, 7% due to dissatisfaction with value added service of the other TSP and 5% on account of other miscellaneous reasons.

**Table 4: Customers Ported into BSNL from other TSPs**

Port out Service Provider	No. of customers	% of customers ported into BSNL from other TSPs
Aircel	18	30%
Airtel	10	16%
IDEA	3	5%
Reliance	11	18%
TTSL	9	15%
Vodafone	8	14%
Total	60	100%

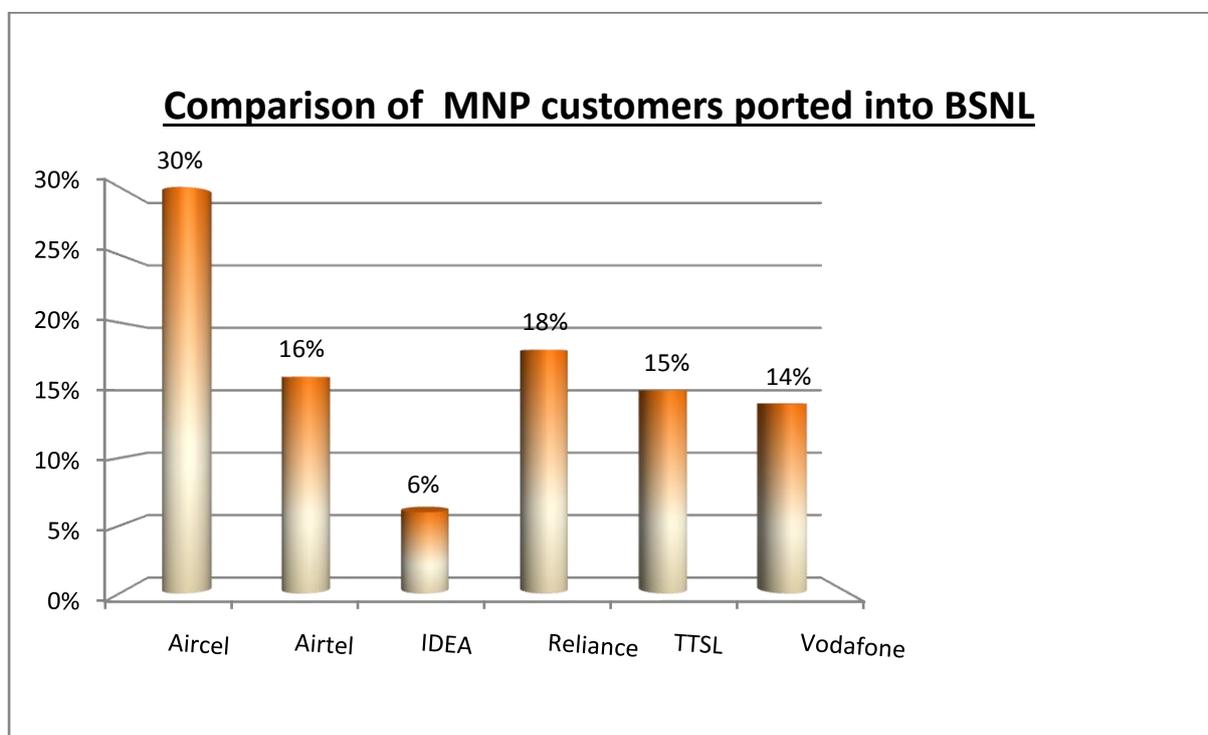


Figure 4: Comparison of the % of respondents who ported into BSNL from other service providers.

From figure 4 it is observed that out of the 60 respondents surveyed 30% of the respondents ported into BSNL from Aircel followed by 18% from Reliance, 16% from Airtel, 15% from TTSL, 14% from Vodafone and 6% from IDEA.

**Findings and Suggestions**

Dissatisfied customers exist across all Telecom service providers. Irrespective of the fact whether a customer was porting in or porting out network coverage was a major factor for opting for MNP by the customer. Network coverage and customer service which determine service quality together account for 62% of port out and 65% of port in cases. As network quality and customer service define the service quality of the service provider we can conclude that service quality of a TSP is an important factor which influences MNP decision of customers.

In the case of BSNL, the percentage of port in customers is almost equal to the number of port out customers. Customer port out and port in is not restricted to any particular service provider network. Customers ported out from BSNL to multiple service providers and similarly customers have ported in from multiple service providers to BSNL. Hence, customers perception of the service quality in a particular network is what determines MNP followed by pricing to some extent.

TSPs should therefore work out strategies to improve service quality by monitoring and maintaining network quality benchmarks and resolving complaints on priority. Hence, to prevent customers from switching over the TSPs have to ensure that service quality is maintained to the satisfaction of the customers and their plans cover all types of market segments and the network coverage is satisfactory across all populated areas where competition is expected. TSPs can also introduce loyalty schemes to prevent customer churn out to some extent.

### **Conclusion**

Service quality of service provider is an important aspect in influencing the customers perception of service and in turn his decision to opt for MNP. MNP is not limited to any one service provider and varies depending on the customers perception of service quality. In the case of BSNL the number of customers porting out and porting in over the same period was approximately equal during the period of study. It was observed that maximum customers ported out to Vodafone network and maximum customers ported in from Airtel network.

There may be overall gainers and losers among the service providers depending on their network presence, tariff, technology, customer service, etc but which cannot be assessed in this study as it is restricted to Tamilnadu service area and BSNL service provider alone.

### **References**

1. Press Release No. 25/2014 of Telecom Regulatory authority of India.
2. Rafique Ahmed Khuhro, et al.(2011) "Customer Satisfaction in Telecom Industry after Mobile Number Portability", IJCRB, December 2011, VOL 3, NO 8.
3. Sean Lyons (2006), "Measuring the Benefits of Mobile Number Portability", Economic Papers from Trinity College Dublin, Economics Department
4. Sutherland Ewan, "Mobile number portability", Info, vol 9, No. 4, 2007, p 10-24.
5. Shin, D-H and W-Y. Kim (2008), "Forecasting customer switching intention in mobile service: An exploratory study of predictive factors in mobile number portability,"
6. *Technological Forecasting & Social Change*, 75 (6), 854-874.
7. Website: [www.airtel.in](http://www.airtel.in)
8. Website: [www.bsnl.co.in](http://www.bsnl.co.in)
9. Website: [www.dot.gov.in](http://www.dot.gov.in)
10. Website: [www.trai.gov.in](http://www.trai.gov.in)