

## **The Plight of Mobile Number Portability in India**

**\*T.Iyyappasamy**

**Assistant Professor in Management, Annapoorana Engineering College, Salem and PhD.,  
(Management) Research Scholar, Vinayaka Missions University, Salem, India.**

### **Introduction**

The telecommunication services in India have witnessed the phenomenal change over the last few years. The craze for mobile services in India is increasing substantially. Keeping the high consumers demand in to consideration, many big players like Reliance, Airtel, Aircel, Vodafone, BSNL, Tata Indicom, Virgin Mobile etc. has launched their services in the market. Information technology has brought tremendous change in day-to-day activities of common man to entrepreneurs. Number of mobile subscriber went up from 10.4 million at the end of 2002 to 545.05 million in Feb 2010. Mobile as a medium is growing fast with its easy accessibility and reach. It is not just telecom centric.

From a communication tool, it has emerged as a device for all purposes. In many countries, mobile phones now outnumber land-line telephones, with most adults and many children now owning mobile phones. The mobile phone itself has also become a totemic and fashion object, with users decorating, customizing, and accessorizing their mobile phones to reflect their personality. In the rationale of modern marketing, the firm's existence is dependent on customer's satisfaction. Therefore, the knowledge of "what the customer thinks" and "what consequently would contribute to his satisfaction" is at the requirement of the marketer. The present study aims to identify the Factors affecting Mobile Phone Users' Behaviour. It also intends to know the consumer's satisfaction with the different services and its future impact on socio economic changes.

After becoming the second most populated country in the world, India is set to achieve another record of having half a billion wireless connections, thus becoming the second largest group of mobile phone users after China. In fewer than twenty years ago, mobile phones were considered to be rare and expensive pieces of equipment used by businesses to a pervasive low-cost personal item but now it has become a common household item. Building trust and adapting to the individual and local needs of the community are critical success factors for the diffusion and success of cutting-edge information and communication technology. With the introduction of private sector telecom service provider in the state the competition in the telecom industry has increased significantly.

### **Key Statistics**

Telecom Regulatory Authority of India (TRAI) has revealed that the country's mobile subscriber base has increased from 893.84 million in December 2011 to 903.73 million in January 2012. Telecom operators added 9.88 million mobile subscribers in January 2012. The overall tele-density reached 77.57 per cent. Broadband subscriber base increased from 13.30 million at the end of December 2011 to 13.42 million at the end of January 2012.

Industry experts believe that Smartphone segment would be the fastest-emerging division that would even outpace the overall handset market. The segment is anticipated to account for 29 per cent of the total handset volume with 97.2 million units by 2017, registering a CAGR of around 40 per cent. Third largest in the world and the second largest among the emerging economies of Asia, the Indian Telecommunication network has emerged as a leader time and again. Owing to this growth, a large number of multinational telecommunication leaders are pouring into the nation and expressing their interest to invest in the telecom industry in India.

## Concept of Number Portability

Globally, the introduction of MNP across markets has witnessed a mixed response from customers. The push for MNP implementation has always been led by market regulators in an effort to provide mobile customers with the freedom to move between service providers and drive healthier competition. Globally, among the major countries, Singapore was the first to implement MNP In 1997, followed by Hong Kong, Australia, Germany, US and France etc., MNP has been introduced in India, in two phases. It has been introduced first in Indian metro city and group A telecom zones, on December 31, 2009, and afterward in the remaining part of the country, by March 20, 2010. Subscribers have to pay up all due bills before making an application for MNP. The mobile porting fee is to be paid to the latest operator. No fee payment is necessary to be given to the operator for porting. TRAI said that porting between mobile operators be supposed to be accomplished within four days. Prepaid users must keep in mind that their balance talk time and SMS will disappear if they switch to a different operator. According to the Indian telecom regulator TRAI, nearly 8.54 million subscribers were issued porting requests in the month of April 2011, an increase of 32.98% month on month. ([www.mnp-india.com](http://www.mnp-india.com)).

The decision to introduce Mobile Number Portability (MNP) was taken in 2007, and later TRAI's suggestions were taken into consideration. Then Indian Union IT & Communications Minister Mr.A. Raja said in a statement that the government of India aims at bringing mobile number portability in the market in major Indian cities by August 2009 and in the remaining cities by the end of this year.

Mobile number portability has been a topic of discussion in the Indian telecom circles for a long time. Mobile service providers in India were opposed to the introduction of portability of numbers, as it gave the unsatisfied customers an ability to easily switch to another service

provider without changing their numbers. Obviously, this feature puts greater power in the hands of the mobile consumers. With this mobile number portability system in place high charges or bad service would not be easily forgiven.

Mobile number portability enables the customers to retain their old numbers while shifting from one operator to another. This process would involve a break in service when a number is detached from one provider and added to another. TRAI has said that this period should be at the most two hours. Initially, mobile number portability would work only within a city, going outside the city circle means getting a new number, but this may change in the future.

Mobile number portability will work for both pre-paid and post paid mobile phone connections. In case of pre-paid customers, the balance in the existing pre-paid card would be exhausted, or would be lost. A credit transfer to another provider does not come within the purview of mobile number portability.

The Department of Telecommunications (DoT) shall select through a bidding process that is already underway, a few centralized operators to act as Mobile Number Portability Clearing House Administrator (MCHAs) who shall setup **Number Portability Database (NPDB)**, administer and implement the MNP service. The Number Portability Database will have the mobile numbers of all mobile users. All mobile service providers will then link their networks with that of the MCHAs and NPDB.

### **About MNP**

Mobile number portability (MNP) allows mobile users to retain their numbers when changing from one network operator to another. Mobile number portability will be applicable to both CDMA and GSM technologies and also to post paid and prepaid categories of customers. Singapore was the first country in the world to implement MNP in 1997. India is

one of the few countries where the subscribers are yet to enjoy the benefit of MNP. The biggest upside of MNP will be an improvement in the quality of network and customer service expected from the telecom operators. It could marginally reduce tariffs particularly in the areas like international roaming and VAS.

### **MNP Progression**

The practice of moving a mobile number from one operator to another is called "porting". To complete the port, the subscriber's mobile number and the recipient's network ID are paired and updated in a master centralized database. This will be facilitated by a separate agency called Mobile Number Portability Service Provider, which will be acting as number portability clearing house and maintain centralized data base services.

India will use a recipient-operator initiated method of porting. This is as per the international standard where a customer wishing to port his number will contact the new Recipient operator who will then complete the process of porting with the Donor Operator. The other method is Donor-led-Porting, which is considered neither an efficient process nor customer friendly.

A major technical challenge to MNP is the routing of calls and messages to a number after it is ported. The best international practice is the use of a central database (CDB) of ported numbers. Once the donor operator has disconnected the mobile number and the recipient operator has activated it, the MNP service provider allocates the corresponding Location Routing Number to the ported number in the Number Portability Database and broadcasts the updated Location Routing Number along with the ported mobile number to all Access Providers and International Long Distance Operators who shall update their respective Local Number Portability Database. Whenever a call is made to a ported number,

the operators will query it to find out which network to send a call to. This is also known as All Call Query (ACQ) and is highly efficient and scalable model. A majority of the established and upcoming MNP systems across the world is based on this ACQ/CDB method of call routing. India has selected the ACQ model for call routing. The porting process will take a maximum time of 36 hours in all licensed service areas except in the case of J&K, Assam and North East where the maximum time allowed is 10 days. The window period for disconnection and activation by operators has been kept at one hour each.

MNP is available only within a telecom circle. A subscriber is eligible to make a porting request only after 90 days of the date of activation of his mobile connection. If a number is already ported once, it can be ported again only after 90 days from the date of the previous porting. TRAI has explained that this minimum period is required to enable the service provider to recover the customer acquisition cost. After porting of a mobile number, if it remains disconnected for 90 days, it will be reversed back to the original operator.

### **Charges for MNP**

There are three types of charges payable either by the subscriber or by the telecom operators.

Per Port Transaction charge is paid by recipient operator (the operator to which the subscriber shifts his connection) to Mobile Number Portability Service Provider. Porting charge is payable by the subscriber for porting his number to the recipient operator. TRAI has capped the porting charge at Rs. 19. The regulator has also noted that operators are free to charge any amount less than this. There is no need to make any payment to the existing operator. Dipping charge is paid by the telecom operator who uses the query response system of the MNP service provider for obtaining location routing number for correct routing of the called number.

## **MNP roll out in India**

MNP was to be implemented in a phased manner, and the first phase was to start in Metro cities and A circles by December 31, 2009, and the second phase, in the rest of the country by March 2010. The Government later decided to implement it in the entire country in one go by March 31, 2010. The launch of Mobile Portability Services was again extended to June 30, 2010, due to a lack of readiness of various stake holders.

Recently for the fourth time, the Government has extended the deadline to October 31, 2010, as the testing of MNP is yet to be completed by various telecom operators. While only 14 per cent of the mobile networks across the country is so far ready for the introduction of MNP, 36 per cent is in progress. In the case of remaining 50 per cent, testing is yet to be done. While the private players are slow with testing, state-run BSNL and MTNL have not even set up MNP gateways. Apart from testing delays, MNP also ran into trouble with the home ministry and the FIPB over security clearances. The home ministry had voiced its concerns over the selection of the clearing house stating the company selected as Mobile Number Portability Service Provider had no experience in running telecom operations and this company had a set-up in Pakistan. However, the ministry finally cleared the agency in April 2010.

Currently DoT has issued licences to two companies - Syniverse Technologies India and MNP Interconnection Telecom Solutions - for implementing number portability in India. MNP Interconnection is a 74:26 joint venture between US based Telcordia and Deepak Talwar Consultants. Under the current telecom regulations, DoT has split the country into two number portability zones, with each zone comprising 11 circles. Each 11 circle MNP Zone is to be serviced by a separate MNP solutions provider to pre-empt a monopoly situation.

## **Challenges in roll out**

To implement this proven porting and call routing process, mobile service providers need to upgrade their infrastructures to enable appropriate re-routing of calls to subscribers who have ported out of their network. Huge Capex is required for each operator to implement this process. The operator preparations for this model take time, and the manner of handling such routing and data management is critical, as any inefficiency will directly lead to inefficiency in transmission as well as errors in switching.

While new telecom operators are betting on mobile number portability to acquire new subscribers, established players are worried about the 'abnormal' churn it would result in. The success of MNP is measured by the percentage of ported numbers. TRAI has estimated the porting rate to be around 10% in the first 15 months and 7%, 6% and 5% respectively for the successive three years. However according to industry observers, after an initial churn, there will not be significant shifts by subscribers from one operator to another. In the countries where MNP was introduced, it produced mixed results. For example, it was successful in Hongkong, where the number of ported numbers went very high during the first 3 years. However in the case of Singapore and Taiwan it did not create much impact. The operators in these countries managed to retain the customers through various options like long term service contracts and better customer service.

The Indian scenario is complex and there are many factors which will influence the outcome of MNP:

1. One major factor to be considered in India is the presence of large prepaid customers whose loyalty is already very low. Therefore MNP will have an impact only on the post paid customer base.



2. Secondly the prices are already very low and all the operators are facing margin pressure. Therefore the possibility of existing operators getting into another price was is remote.

3. The third factor is the launch of 3G services in India. This will be a major tool for retaining the customers as well as churning the customers from non 3G operators.

4. Finally there are a large number of new operators like Uninor, MTS, Videocon, Etisalat etc who have entered the Indian telecom market recently. These operators are anxiously awaiting MNP roll-out to churn the high value customers from the incumbents.

Incumbent service providers like Airtel, Vodafone, Idea and RCom have already started focussing on network availability and coverage and customer service. Incumbents are focussing on retaining their high-value mobile users, who are business users, or high net worth individuals. With MNP, the big players could easily attract post paid or business users from other lower performing service providers. In the highly penetrated metro markets like Delhi and Mumbai the focus will be no longer on gaining new subscribers, but on retaining the current base, and increasing the average revenue per user. It is expected that MNP will result in increased cost for the operators for improving the customer service and network quality. Its impact on revenue share is likely to be marginal. Consolidation is also expected very soon and MNP could be one of the triggers.

## **Conclusion**

India has 630 million mobile subscribers as on May 31, 2010. Even though there are 14 players, the market is dominated by Airtel, Reliance Communications, and Vodafone, which together control majority of the customer market share. The launch of 3G services will play a major role in deciding the direction of MNP-related churn. Subscribers of non-3G operators

are expected to move to 3G operators after the MNP roll-out. Superior network coverage and customer service will be the other key drivers of MNP. Even though telecom operators are downplaying the impact of Mobile Number Portability; they would be hard-pressed to retain high-ARPU customers, many of whom have been continuing with the same telecom operators just for the sake of retaining the mobile numbers despite poor customer service and network congestion. Competition has always been good in any industry and with more healthy competition expected, more innovation, solutions, and competitive pricing is anticipated from mobile service providers. This will subsequently lead to more consumer interest and usage, thus resulting in revenue growth. MNP is another major event anxiously awaited by telecom observers.

**Reference:**

**Mihir Dash, Divas Gupta.** “Impact of Mobile Number Portability on Student Segment in India” [ssrn.com](http://ssrn.com) 2190095.

**K Kumaresh,C.Sekar,** International Journal of Research in IT & Management, <http://www.mairec.org> 1119.

**K. Kumaresh , S.Praveena,** Volume No.1, Issue No.11 ISSN 2277-1166.

[www.telecommunications.com](http://www.telecommunications.com)

[www.mnp-india.com](http://www.mnp-india.com)