CHAPTER 4

MOBILE NUMBER PORTABILITY

4.1 INTRODUCTION

“Mobile Number Portability” means the facility which allows a subscriber to retain his mobile telephone number when he moves from one Access Provider to another irrespective of the mobile technology or from one cellular mobile technology to another of the same Access Provider; (TRAI)”

Though it was introduced as a tool to promote competition in the heavily monopolized wireline telecommunications industry, number portability became popular with the advent of mobile telephones, since in most countries different mobile operators are provided with different area codes and, without portability, changing one's operator would require changing one's number. Some operators, especially incumbent operators with large existing subscriber bases, have argued against portability on the grounds that providing this service incurs considerable overhead, while others argue that it prevents vendor lock-in and allows them to compete fairly on price and service. Due to the conflict of interest, number portability is usually mandated for all operators by telecommunications regulatory authorities. 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. Competition is one of the major driving factors of the Indian telecom industry. Launch of CDMA services and entry of new players are the major events, which made the industry highly competitive over a period of time. Consistent rounds of tariff cuts and improvement in the quality of services only resulted from high competition. Players upgraded themselves by making huge investments to improve the infrastructure and thereby the quality of services offerings, in view of the size of the market and the opportunities it offered.
Indian telecom industry is one of the most competitive telecom industries in the world with 12 players offering services to over 390mn subscribers. However, the top 5 players have captured significant market share of 85%, while the other 7 players account for just 15%. Considering the size of the market, the TRAI has allowed entry of new players, which would fuel competition further.

Mobile operators offering telecom services in India include state-owned BSNL and MTNL, besides private operators like Airtel, Reliance Communications, Vodafone, Idea Cellular, Loop Mobile, Aircel, MTS and Tata Indicom/DoCoMo. Once mobile number portability is across in India, every operator will have to facilitate customers’ exit from and entry to their networks with the same number.

**TABLE 4.1: HISTORY OF MNP IMPLEMENTATION**

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>YEAR OF IMPLEMENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>March 14, 2007</td>
</tr>
<tr>
<td>United States</td>
<td>November 24, 2003</td>
</tr>
<tr>
<td>Mexico</td>
<td>July 5 of 2008</td>
</tr>
<tr>
<td>Mexico</td>
<td>July 5 of 2008</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>September 30, 2009</td>
</tr>
<tr>
<td>Brazil</td>
<td>March, 2009</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>March 1, 1999</td>
</tr>
<tr>
<td>Japan</td>
<td>October 24, 2006</td>
</tr>
</tbody>
</table>
WAYS OF PORTABILITY

There are four main methods to implement MNP by routing a number to new service provider:-

All Call Query (ACQ)

The operator that originates the call always checks a centralized database and obtains the route to the call.

Query on Release (QoR)
The operator that originates the call first checks with the operator to which the number initially belonged, the donor operator. The donor operator verifies the call and informs that it no longer possesses the number. The operator that originates the call then checks the centralized database, as is done with ACQ.

Call Dropback

Also known as Return to Pivot (RoP). The operator that originates the call first checks with the donor operator. The donor operator checks its own database and provides a new route. The operator that originates the call then uses this route to forward the call. No central database is consulted.

Onward Routing (OR)

The operator that originates the call checks with the donor operator. The donor operator checks its own database and obtains a new route. The operator to which the number was designated routes itself the call to the new operator. This model is called indirect routing.

4.2 PROCESS OF MNP: HOW TO CHANGE MOBILE OPERATOR?

Earlier the subscribers were hesitant to change their operators due to fear of losing their existing mobile number, but now with MNP subscribers can easily switch to new operator while retaining same mobile number. There’s a catch though. You cannot switch operator and retain number if you have been with that operator for less than three months. Prepaid users must remember that their balance talk time will disappear if they switch to a different
operator. The maximum downtime between deactivating the existing connection and starting the new connection will be a maximum of two hours. TRAI has forwarded the responsibility to the Department of Telecommunications (DoT) to select an operator who will be licensed to manage an end-to-end MNP solution.

- Subscribers must pay up all pending bills before making an application for MNP.
- The porting fee is to be paid to the new operator.
- No payment is required to be given to the operator you are leaving.
- TRAI said that porting between mobile operators should be accomplished within four days.

The porting rate in any country depends on a number of factors like:

- Mobile subscriber base
- Churn rate
- Number of operators in the market

Per Port Transaction Charge

The per port transaction charge has been computed by dividing the total cost to the MNP Service Provider (MNPS) by the estimated number of porting subscribers, over a period of 5 years. Accordingly, the Per Port Transaction charge works out as follows:-
### TABLE 4.2: Per Port Transaction charge

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Unit</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cost</td>
<td>Rs in Mn</td>
<td>2320.47</td>
</tr>
<tr>
<td>Average porting</td>
<td>In Mn</td>
<td>123.26</td>
</tr>
<tr>
<td>Per Port Transaction Charge</td>
<td>In Rs</td>
<td>18.83</td>
</tr>
<tr>
<td>License fee</td>
<td>@1% IN Rs</td>
<td>0.19</td>
</tr>
<tr>
<td>Total Per Port Transaction Charge</td>
<td>In Rs</td>
<td>19.02</td>
</tr>
<tr>
<td>Rounded off</td>
<td>In Rs</td>
<td>19</td>
</tr>
</tbody>
</table>

Source: TRAI

TRAI said that subscribers in India will be able to change their service providers while keeping the same mobile number, at a fee of no more than Rs 19. It doesn’t matter whether you want switch from GSM to CDMA or vice-versa, or within GSM and CDMA operators; you can still retain the same number. However, initially, you will be able to switch operators and retain the number only within the same telecom circle. You cannot retain the same number and change operators if you want to, say, move from Delhi to Mumbai. TRAI also said that service providers will be able to charge any amount less than or equal to Rs 19. MNP will be introduced in India, in two phases. It will first be introduced in Indian metros and Category A telecom.
4.3: EVALUATION OF MNP

Mobile Number Portability More Attractive To India's Postpaid Users and High Spenders:
According to the Nielsen Mobile Consumer Insights study, postpaid subscribers have almost
double the minutes of usage compared to pre-paid subscribers and the incidence of data
application usage is also higher among postpaid and high spenders. Vodafone has the highest
postpaid subscriber base in India. They found on the basis of the survey that postpaid
subscribers will show higher switching rate then the prepaid subscribers.

“Consumers and the market will decide who the predominant player will be, with the
significant developments in the industry of Mobile Number Portability. As the market grows
and hyper-competition takes effect, retention of the right type of customers will become
critical,” said Panchapakesan.

ADVANTAGES TO SUBSCRIBERS:-

• Free mobility from one service provider to another, without changing the mobile number.
• Price competition if the market is competitive.
• Competition among service providers will lead to improvement in quality of service and
product innovation, in order to retain and expand the customer base.
Many value-added services may be offered by service providers to attract customers, either
free or at low costs.

DISADVANTAGES TO PHONE SUBSCRIBERS:-
• Telecom operator charges porting fees in many countries. These charges comprise of administrative fees and recurring monthly fees for number porting services.

• Waiting period for mobile subscribers to get their number successfully ported. This waiting period ranges from 1-2 working days in Hong Kong, to 4-7 working days in Taiwan and Singapore, 4 days in India as directed by TRAI resulting in too much inconvenience for subscribers.

ADVANTAGES TO TELECOM OPERATORS:-

• It increases competition by allowing consumers to switch service providers, yet retaining their old mobile phone number, which help telecom operator to improve its product line and services.

• It provides a fair chance to all the service providers. Player with better quality of service and innovative products can sustain in the long term.

• It can be one of the major reasons for the industry to consolidate.

DISADVANTAGES TO TELECOM OPERATORS:-

• Increase in churn rate directly affects the revenues of the service provider.

• Increases price competition.

• It may put pressure on margins, as product innovation costs and marketing costs may increase.

• Increased investments in back-end services.

SUGGESTIONS FOR COMPANIES

The arrival of the new system in India will definitely make mobile network operators stay on guard as the subscriber has the flexibility to move out of their network at any time. Mobile network operators will have to face this huge hurdle and will have to improve upon their customer service and products to be the best if they wish to retain their esteemed customers.
There are many exit barriers or strategies that the operators can adopt to prevent their base from churning. A few examples of such strategies are:

- Offer advance rental plans with bundled free airtime before introduction of MNP to lock-in the subscribers.
- Enhance network coverage by providing in-building solution.
- Offer personalized customer care.
- Focus on services like mobile money, navigation, email that would make subscriber think twice before leaving the network.

TABLE 4.3: MNP and Switching Behaviour in Telecom Sector (2011)

<table>
<thead>
<tr>
<th>S.N</th>
<th>Operators</th>
<th>Total Subs in millions</th>
<th>Subs ported in</th>
<th>% Subs ported in</th>
<th>Subs ported out</th>
<th>% Subs Ported out</th>
<th>Net additions</th>
<th>% Net additions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>Vodafone</td>
<td>127.36</td>
<td>488,250</td>
<td>0.38</td>
<td>295,489</td>
<td>0.23</td>
<td>192,761</td>
<td>0.16</td>
</tr>
<tr>
<td>2)</td>
<td>Idea</td>
<td>64.29</td>
<td>391,191</td>
<td>0.46</td>
<td>240,402</td>
<td>0.29</td>
<td>150,799</td>
<td>0.18</td>
</tr>
<tr>
<td>3)</td>
<td>Bharti Airtel</td>
<td>155.80</td>
<td>530,615</td>
<td>0.34</td>
<td>382,400</td>
<td>0.25</td>
<td>148,215</td>
<td>0.10</td>
</tr>
<tr>
<td>4)</td>
<td>Aircel</td>
<td>51.83</td>
<td>162,664</td>
<td>0.31</td>
<td>117,822</td>
<td>0.23</td>
<td>44,842</td>
<td>0.09</td>
</tr>
<tr>
<td>5)</td>
<td>Uninor</td>
<td>20.31</td>
<td>31,019</td>
<td>0.15</td>
<td>24,689</td>
<td>0.12</td>
<td>6,330</td>
<td>0.03</td>
</tr>
<tr>
<td>6)</td>
<td>Videocon</td>
<td>6.01</td>
<td>5,404</td>
<td>0.09</td>
<td>11,633</td>
<td>0.19</td>
<td>-8,229</td>
<td>-0.10</td>
</tr>
<tr>
<td>7)</td>
<td>MTNL</td>
<td>5.43</td>
<td>3,793</td>
<td>0.07</td>
<td>14,851</td>
<td>0.27</td>
<td>-11,052</td>
<td>-0.20</td>
</tr>
<tr>
<td>8)</td>
<td>TTSL</td>
<td>86.05</td>
<td>197,404</td>
<td>0.23</td>
<td>236,753</td>
<td>0.28</td>
<td>-39,389</td>
<td>-0.05</td>
</tr>
<tr>
<td>9)</td>
<td>BSNL</td>
<td>86.82</td>
<td>107,724</td>
<td>0.12</td>
<td>257,817</td>
<td>0.29</td>
<td>-150,093</td>
<td>-0.17</td>
</tr>
<tr>
<td>10)</td>
<td>Reliance</td>
<td>128.87</td>
<td>44,753</td>
<td>0.03</td>
<td>351,170</td>
<td>0.27</td>
<td>-306,417</td>
<td>-0.24</td>
</tr>
</tbody>
</table>

Source: www.wordpress.com

4.4: CONCLUSION

The move is sure to unsettle the market. It will generate fierce competition between service providers and force big ones to improve their services. At the same time, it will benefit new players immensely. Introduction of mobile number portability will facilitate the easy exit of disgruntled users. This also means telcos will have to put more effort to retain those customers, who earlier stayed loyal to the operator out of the necessity of retaining their number. There are some additional factors which affect porting. These are procedure for porting, porting time, porting costs/fee, lock-in period, customer awareness, exit barriers,
launch of services by new operators, attractive/aggressive tariff plans, innovative services, VAS offerings, quality of service, time to resolve disputes & porting process complexity etc. As seen internationally, the porting rate is high in the initial period of introduction of MNP and then reaches a plateau. Unlike other countries where at the time of introduction of MNP, the telecom sector had matured, in India, several new operators are entering the market and the monthly addition of new subscriber is still very high. As the churn rate is quite high, it is expected that once MNP is available, subscribers may use this facility as an alternative to switch over to other operators. Price competition may intensify post MNP implementation. We believe that services and the quality of services in the telecom industry are quiet homogenous, making pricing the key differentiator, and major tool to attract and retain subscribers. In a worst-case scenario, new players or small existing players may adopt cheap pricing strategies to attract and retain subscribers.