Indian Institute Of Management Indore

Indian Telecom Policy – Network Resources Usage

Thesis Advisory Committee

-Prof. Dipayan Datta Chaudhuri–Chairman ----------

-Prof. Joysankar Bhattacharya - Member ----------

-Prof. Ajay Sharma - Member ----------

Tapas Sengupta
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Abstract

Industry regulators use pricing as a tool to bring in efficiency, optimal use of the available capacity and deployed resources. Specifically, to those service industries where there is capacity constraint and storage is not possible or it involves very high cost like the power sector. The telecom industry also falls in this category. In India, in the absence of this approach the Network capacity deployed to handle the busy hour traffic (peak traffic intensity) is underutilized in non-busy hours. It is perishable inventory, and once the capacity of Network is lost, cannot be recovered, neither can it be stored for future. Pricing as a tool in telecom, in India, was mainly used by the regulator, to improve competitiveness (control monopoly power) of the industry and used for network growth. The price discrimination and revenue management by the Indian Telecom operators were not much visible, with the objective of Network utilization. Pricing as a tool for improving Network utilization has rarely been explored so far. In fact, the TRAI, the Indian regulator overlooked Network Utilization, assuming a competitive market will automatically take care of Network efficiency. The operators were able to pass on the inefficiency to the users and not took many initiatives to overcome this deficiency. It is only the regulator who can force them for greater network traffic harmonization. Operators are benefitted by requiring less network resources and users are benefitted by having to share less of its proportionate Capital Expenditure and Operational expenditure cost in terms of reduced tariff and increased welfare. The discussion is focused on these aspects and highlights the shortcoming of the regulator's policy to improve efficiency.

We have also taken up a case study to showcase the death of a promising telecom company due to an immature telecom policy. The immature telecom policy squandered off the effort and progress made during the last two decades to bring the telecom industry into a competitive market and again brought back to oligopoly.

Key Words: Network usage, Peak Non- peak Hour's traffic, Telecom Traffic sensitivity to tariff, Capacity of Telecom Network

Chapter 4

Conclusion

The study describes pricing as a tool for the regulator to bring in efficiency by optimizing the deployment of Telecom Network resources. In the absence of this approach, the Network capacity deployed to handle the busy hour traffic (peak traffic intensity) is underutilized in non-busy hours. The pricing discrimination and revenue management were used by the operators with the sole objective of profit maximization. Pricing as a tool for improving Network utilization was not visible. In fact, the TRAI, the Indian regulator assumed competitive market forces[64] will automatically take care of Network efficiency. The operators were able to pass on the inefficiency to the users and not took much initiative to overcome this inefficiency and only regulator can force them to for greater network traffic harmonization. Operators are benefitted by requiring less network resources and users are benefitted by having to share less of its proportionate Capital Expenditure and Operational expenditure cost in terms of reduced tariff and increased welfare. The discussion is focussed on these aspects and highlighted shortcoming of the regulator's policy to bring in efficiency.

We have also taken up a case study to show case the death of a promising telecom company due to immature telecom policy. The immature telecom policy squandered off the effort and progress made during last two decades to bring the telecom industry into a competitive market and again brought back to oligopoly[65].

In the Chapter 2 we have observed that the peak traffic is significantly different from the non - peak traffic. Then we have also noticed that traffic is sensitive to price, by charging peak price some of the traffic can be diverted to non- peak slots or non-busy hours. We have observed that the installed capacity of the operators is under-utilized. By diverting peak traffic requirement of network capacity can be reduced for serving similar group of customers and there is better utilization of network in non- peak hour. Without this, underutilized network cost[66] is passed on to the customers. [But still telecom tariff was declining in India]. We have seen that there are many KPIs (Key parameter Index) related to QOS (quality of service) laid down by the regulator TRAI, which an operator needs to comply with. There is no

[64] Based on the regulator's (TRAI) data HHI has been calculated and the HHI has increased to 2698 in 2018 – 19 showing highly concentrated market.

[65] PIs refer the HH index calculation in this regard.

[66] Underutilized network incurs more cost in terms of Capex and Opex.

KPI by the regulator for the utilization of the capacity installed by the operators. The regulator thought ~~in~~ a competitive market forces will reduce the utilization cost. Therefore, it was concluded that the regulator TRAI needs to revisit its tariff policy of forbearance and come out with KPIs related with Network Utilization.

In the Chapter 3 we have seen new entrant RJIO benefitted from the existing policy of TRAI (starting from acquiring spectrum not through direct auction, but taking over a company shortly after, who has won the PAN India 4-G, spectrum paying five times than its net worth). Subsequently, getting a license to provide voice call over 4-G spectrum (which was not envisioned before by TRAI) by paying a relatively small amount of Rs 1685 crores (effective Rs.83 crores per MHz against Rs 1116 crores paid by others). [In some places it is Rs., but in other places it is INR. It should be standardized]. It also acquired significant customer base even before launching commercial service in the disguise of network testing and subsequently, by providing free services in promotional offers in several stretches over nine-month period. The predatory pricing (providing service below its actual cost[67]as alleged by other operators, adopted by RJIO, was overruled by TRAI. Then came downward revision of IUC (Interconnect Usage) charges, advantage also went in favour of RJIO. In case of Aircel, we have seen it was constantly trying to adjust itself initially in terms of cost saving, opex saving, EBIT saving initiatives, shutting down non profitable circles, selling the unused spectrum to Bharti Airtel and many other initiatives to reduce cost of operation. Then it also tried to merge with RCom to survive and pay off its debt to some extent. All these initiatives failed. Aircel subsequently tried to restructure its debt, but unfortunately new RBI guidelines related to NPA (non-performing Assets which just came after Bank of India fraud case in 2018) stopped implementation, although lenders were in favour of the proposal. It appeared Aircel explored all the options available to it for survival. It was observed that TRAI was having some kind of policy paralysis at the time of entry of R-Jio, Finally Aircel filed for bankruptcy in February 2018.

[67]RJIO provided voice service to all its customers below IUC(interconnect usage charges) Change in definition of predatory pricing to 'selling below average variable cost' from a test of interconnect usage charge-(IUC) compliance (voice pricing had to be above IUC rates in the earlier test of predation)

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