



Porter Five Forces Analysis of the Leading Mobile Cellular Telephony Service Provider in India

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Abstract— *In this paper, we have discussed Porter Five Forces model and presented mobile communication market scenario in India. Then we have analyzed the intensity of competitions among different mobile phone service providers. Different forces which may throw a challenge to the existing leader are thus found out.*

Keywords— *Porter analysis; subscribers; suppliers; mobile phone*

I. INTRODUCTION TO PORTER FIVE FORCES

Porter (1980) gave the idea of deployment of five forces for the industry analysis [1]. These five forces are (1) the threats of substitute products or services (2) the threats of the entry of the new competitors (3) the intensity of competitive rivalry (4) the bargaining power of buyers (5) the bargaining power of suppliers. He said that these forces jointly determine the competitive intensity of a firm within the industry. Strength of these forces leads to lower profitability of an organization and vice versa.

Wheelen & Hunger (2002) also considered Porter's approach for industry analysis but he also included sixth force i.e. relative power of other stakeholders [2]. These include governments, local communities, trade associations, special interest groups, unions, shareholders and complementors.

Pearce and Robinson (2005) in [3] and Johnson and Scholes (2002) in [4] mentioned that Porter's model provides an easy and simple approach for industry analyses. This model also provides an opportunity to take important decisions like whether to enter in a particular industry or to leave it. This is also a very simple tool in the hands of strategists to determine the profitability position of a firm.

Tomi *et al* (2007), studied on past, present and future of mobile service payment by using Porter's five competitive forces model (consumer power, merchant power, new e- payment service, traditional payment service and competition between m-payment service providers) [5] and four contingency forces like social environment, commercial environment, technological environment and legal/regulatory environment. They were in view that factors like social environment and traditional payment service were never considered earlier in research work. Little consideration was given to the five factors like commercial environment, legal/regulatory environment, merchant power, new e-payment services and competition between m-payment service providers. While highly studied factors were technological environment and consumer power. According to them there is no clear relationship between mobile service payments, electronic payments, traditional service payments and banking services. Furthermore he also stressed that business to business commerce should also be given more attention.

Cafferky (2005) in [6] and Goold (1997) in [7] proved that Porter's framework of five forces is not applicable in case of religious organization. Since instead of five forces, the force of mission, faith and loyalty determines organizational efficiency and profitability.

II. MOBILE COMMUNICATION SCENARIO IN INDIA

India is the fastest growing mobile phone market in the world. The booming telecom industry has been attracting large amount of investments in the country. It is the world's second largest telecommunication market with 898 million subscribers as of March 2013. The revenue grew up by 13.4% to reach 64.1 billion US\$ [8]. According to the latest survey conducted by *Voice and Data*, CyberMedia group journal, Bharti Airtel emerges as India's top mobile phone operator.

At first glance, the telecom regulator's numbers reveal that in the Indian market, Bharti Airtel Ltd, Vodafone India Ltd and Idea Cellular Ltd continue to lead the revenue market share charts. But take a deeper dive into the latest numbers released by the Telecom Regulatory Authority of India (Trai) and it reveals a landmark shift in India's telecom sector: GSM incumbents—Bharti Airtel, Vodafone and Idea Cellular—have jointly crossed 70% in revenue market share.

Let's take a look at India's few top telecom service providers in terms of revenue.

Bharti Airtel

Bharti Airtel retained its leading position among telecom service providers and posted a growth of five per cent to end 2009-10 fiscal with revenues of Rs 38,800 crore (Rs 388 billion).

The company is structured into four strategic business units -- mobile, telemedia, enterprise and digital TV.

The company has with operations in 18 countries with a footprint covering 1.8 billion people. Sunil Bharti Mittal is the chairman and managing director of the company.

In March 2010, Bharti Airtel bought the African operations of Kuwait-based Zain Telecom for \$10.7 billion.

Recently, it has joined a consortium of global telecom operators to announce the launch of the EASSY cable system -- the 10,000 km undersea cable connecting Africa to Europe.

Vodafone Essar

The Indian subsidiary of Vodafone Group, Vodafone Essar recorded 13.7 per cent growth to emerge as the third largest player with revenue of Rs 23,200 crore (Rs 232 billion).

The company commenced operations in 1994 when its predecessor Hutchison Telecom acquired the cellular license for Mumbai.

It has operations across the country with over 106.34 million customers.

It is the world's leading international mobile communications group with approximately 347 million proportionate customers as on 30 June 2010 and has around 40 partner networks worldwide.

Vittorio Colao is Vodafone chief executive, and Marten Pieters is managing director and CEO, Vodafone Essar.

Reliance Communications

Reliance ADA Group's flagship company, Reliance Communications reported a negative growth of 3.5 per cent with revenue of Rs 22,130 crore (Rs 221.3 billion).

It is India's largest private sector information and communications company, with over 100 million subscribers.

It has established a pan-India, high-capacity, integrated (wireless and wireline), convergent (voice, data and video) digital network, to offer services spanning the entire infocomm value chain.

Anil D Ambani is the chairman of the company.

BSNL

Bharat Sanchar Nigam Limited saw a drop in its revenue for the second consecutive year to post Rs 30,240 crore (Rs 302.4 billion), a drop of 14 per cent, even though it retained the number two position among telecom players.

BSNL offers both fixed line and mobile services with broadband connections.

With over 71.68 million subscribers, BSNL currently is the largest wireline service provider in India.

The company has reported around 6 crore (600 million) 2G connections and 9,73,378 3G connections since February 2010. All major towns and cities are covered through BSNL network.

Gopal Das is the new chairman and managing director of BSNL.

Idea Cellular

Idea Cellular is part of the Aditya Birla Group and has bagged fifth position with a revenue of Rs 11,390 crore (Rs 113.9 billion).

It is a leading GSM mobile services operator in India with 67 million subscribers. Idea offers both prepaid and post-paid services.

It is a pan-India operator with services being made available in all parts of the country.

Idea was the first cellular service provider to launch General Packet Radio Service (GPRS) and Enhanced Data rates for GSM Evolution (EDGE) in the country.

Kumar Mangalam Birla is the chairman of the group.

Tata Communications

Tata Communications reported revenue of Rs 11,000 crore (Rs 110 billion).

The company holds leadership position in emerging markets.

Tata Communications leverages its advanced solutions capabilities and domain expertise across its global and pan-India network to deliver managed solutions to multi-national enterprises, service providers and Indian consumers.

The Tata Global Network includes one of the most advanced and largest submarine cable networks, a Tier-1 IP network, with connectivity to more than 200 countries across 400 PoPs, and nearly 1 million square feet of data center and collocation space worldwide.

Srinath Narasimhan is the managing director and CEO of Tata Communications.

Tata Teleservices

Tata Teleservices spearheads the Tata Group's presence in the telecom sector. It has posted revenue of Rs 6,900 crore (Rs 69 billion).

Established in 1996, Tata Teleservices, one of the 96 companies of Tata Group, has its network in 20 circles. It is the first company to launch CDMA mobile services in India.

It launched mobile operations in January 2005 under the brand name Tata Indicom. It enjoys a pan-India presence through existing operations in all of India's 22 telecom circles.

Tata Teleservices operates under five different brands -- Tata Indicom (CDMA services), Tata DOCOMO (GSM services), Virgin Mobile, Tata Walky (which is the brand for fixed wireless phones), Tata Photon (the company's brand that provides a variety of options for wireless mobile broadband access) and T24.

Tata Teleservices Ltd, along with Tata Teleservices (Maharashtra) Ltd, serves nearly 70 million customers in more than 450,000 towns and villages across the country.

Anil Sardana is the managing director of Tata Teleservices.

Aircel

Aircel recorded the highest growth of 37.2 per cent among operators in 2009-10. The company posted revenue of Rs 4,700 crore (Rs 47 billion) to move to the number eight slot.

It is a joint venture between Maxis Communications Berhad of Malaysia and Sindya Securities Investments Private Limited, whose current shareholders are the Reddy family of Apollo Hospitals Group of India.

Aircel commenced operations in 1999 and became the leading mobile operator in Tamil Nadu. It emerged a market leader in Assam and in the North Eastern provinces within 18 months of operations.

Today, the company has a foothold in 21 circles including Chennai, Tamil Nadu, Assam, North East, Orissa, Bihar, Jammu & Kashmir, Himachal Pradesh, West Bengal, Kolkata, Kerala, Andhra Pradesh, Karnataka, Delhi, UP(West), UP(East), Maharashtra & Goa , Mumbai, Madhya Pradesh and Punjab. It has over 43 million customers in the country.

MTNL

Mahanagar Telephone Nigam Limited (MTNL)'s revenue dropped nearly by a fifth highest among the top 10 players -- to Rs 3,650 crore (Rs 36.5 billion).

The company has achieved a customer base of 8.06 million in the two metro cities of Delhi and Mumbai. The government currently holds 56.25 per cent stake in the company.

Today it has more than 9,00,000 GSM mobile connections. The company was in the forefront of technology induction by converting 100 per cent of its telephone exchange network into the state-of-the-art digital mode.

The market share is shown in Fig.1.

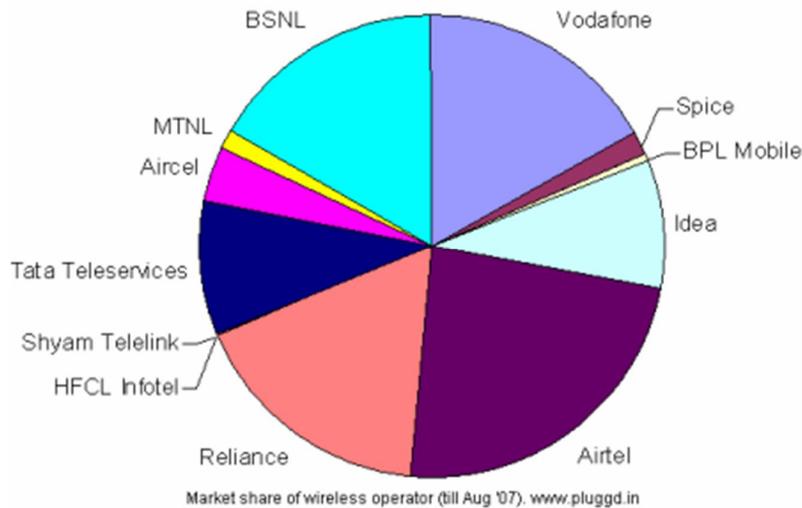


Fig.1. Market share of mobile phone service

III. GROWTH OF MOBILE TELEPHONY MARKET

The number of telephone subscribers in India increased from 895.51 million at the end of Dec-12 to 898.02 million at the end of Mar-13, registering a growth of 0.28% over the previous quarter Dec-12. This reflects year-on-year (Y-O-Y) negative growth of 5.61% over the same quarter of last year. The overall Tele-density in India slightly declined from 73.34 as on 31st December, 2012 to 73.32 as on 31st March, 2013 [8].

Subscription in Urban Areas decreased from 556.96 million at the end of Dec-12 to 548.80 million at the end of Mar-13, and Urban Teledensity declined from 149.90 to 146.96. Whereas, Rural subscription increased from 338.54 million to 349.22 million, and Rural Teledensity increased from 39.85 to 41.02. Share of subscription in Rural areas out of total subscription increased from 37.80% at the end of Dec-12 to 38.89% at the end of Mar-13 [8].

Monthly Average Revenue Per User (ARPU) for GSM service increased by 6.99%, from `98 in QE Dec-12 to `105 in QE Mar-13, with Y-O-Y increase of 7.84%. Gross Revenue (GR) and Adjusted Gross Revenue (AGR) of Telecom Service Sector for the QE Mar-13 has been 54283.78 Crore and 35279.50 Crore respectively. There has been an increase of 2.70% in GR and 2.18% in AGR as compared to previous quarter. The year-on-year (Y-O-Y) growth in GR and AGR over the same quarter in last year has been 10.24% and 2.39% respectively. Pass-through charges accounted for 35.01% of the GR for the quarter ending Mar-13. The quarterly and the year-on-year (Y-O-Y) growth rates of pass-through charges for QE Mar-13 are 3.67% and 28.53% respectively [8].

The growth / decline in subscriber for top five service providers is listed below [8].

Table 1. Growth/Decline in Subscribers

Service provider	Subscriber base Dec 12(million)	Subscriber base Mar 13(million)	Net addition	Rate of growth (%)	Market share Dec 12 (%)	Market share Mar 13 (%)
Bharti	185.19	191.48	6.29	3.40	20.68	21.32
Vodafone	147.51	152.39	4.88	3.31	16.47	16.97
Reliance	119.79	124.22	4.43	3.70	13.38	13.83
BSNL	120.96	121.65	0.69	0.57	13.51	13.55
IDEA/Spice	113.95	121.61	7.66	6.72	12.72	13.54

IV. ANALYSIS

We have analyzed the performance of Bharti Airtel by considering Porter five forces model.

1. Intensity of Competition Among Rivals

Bharti Airtel has strong rivals in telecommunication sector of India like BSNL and Vodafone. Initially, it had only two competitors but now this figure has jumped to more than ten. All these companies are providing similar services with the same capabilities. Although it has enhanced its investment in last few years and working hard to expand its network yet the presence of strong competitors is a major threat for its successful survival. The detail data are available in the first section.

2. Bargaining Power of Buyer

Although subscribers are not concentrated, not purchase in bulk but still can easily switch for better quality, coverage and rates. In this context subscribers' position is strong. Bharti is the leading operator in Access segment in terms of number of subscribers. However, in term of net additions during the quarter, Idea recorded the highest growth of 7.66 million, followed by Bharti (6.29 million) and Vodafone (4.88 million).

3. Threats from Substitutes

Presence and easy availability of substituted products is a great threat for the successful survival of any organization since it can enforce the company to cut the price of its product. The growth rate of reliance is more than Bharti and that of Vodafone is almost comparable to Bharti as shown in table 1.

4. Potential Entry of New Competitors

Since current telecom technologies involve heavy capital investment so chances of success for new entrants are very limited. Still it is seen that few new entrant like Idea is growing very rapidly and the growth rate is much higher than the top service providers.

5. Bargaining Power of Suppliers

As far as the suppliers are concerned, the pros and cons to all service providers are equal that may be in human resource or products.

The conclusion from the analysis is shown in tabulated form (Table 2).

Table 2

Forces	High	Medium	Low
Intensity of competitors	√		
Bargaining power of buyers		√	
Threats from substitutes	√		
Threats from new entrants			√
Forces			√

V. CONCLUSION

So far very little analysis is done on telecom sector using Porter five forces model. Analysis indicates that although to meet competition the top service provider is struggling hard but the presence of strong rivals has put a challenge. From above discussion, we may conclude that the presence of rivals is the main area that needs company's management serious attention. Company may follow the strategy of horizontal integration by taking the decision of merger or acquisition with any of its one or two rivals. The leader should offer special packages for students / education sector since they are the main service users.

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