



BRIC Spotlight Report

Telecommunications Sector in India: Surviving the Scandals and Consolidating Past Gains for Future Growth

From one of the most celebrated among emerging market success stories to a case study in corruption and nepotism, the Indian communications industry has seen a dramatic swing in fortunes in recent years. After several decades of stagnancy under a government-owned monopoly, the industry became a classic example of how the right combination of new technology, innovation, and supportive government policies can transform a sector. Through the industry's success, India's large consumer market potential was boosted, attracting investments into several other sectors of the economy. For the smaller emerging countries, it was

Fast Facts

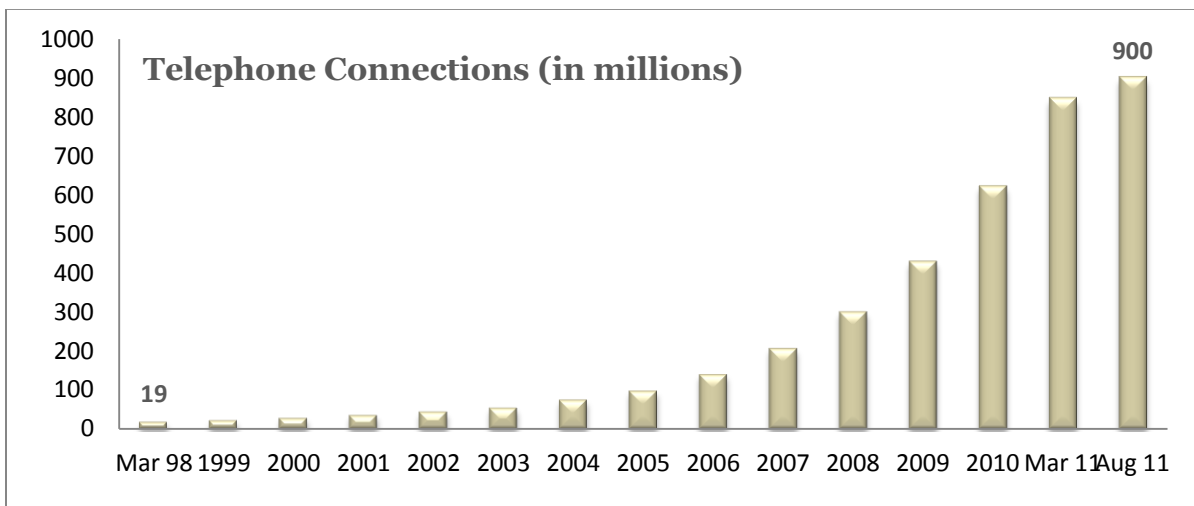
- India remains the fastest growing telecommunications market globally, though the pace of growth has slowed.
- Call rates are the cheapest in the world, and can be less than 1.0¢ per minute under some plans.
- The Indian market is intensely competitive with 11 carriers, most of them present throughout the country.
- The share of telecommunication services in India's GDP is expected to increase to 15% by 2015.
- Following the exponential growth over the last decade, market penetration has increased to 75 telephone connections per 100 people.
- Broadband internet usage remains low, with only 12.5 million users in a country of nearly 1.2 billion people.
- The 2010 government auction of 3G cellular and 4G wireless broadband licenses saw aggressive bidding and the entry of new companies.
- Controversies and corruption allegations related to the award of spectrum licenses have affected the industry recently.

suggested as an exemplary model, one which illustrated the benefits of introducing pro-market industrial reforms and encouraging competition.

However, intense competition for market share eroded the industry's profitability. Aggressive bidding for spectrum made it difficult to maintain prices at a sustainable level and the wave of corruption scandals involving senior government officials has dimmed the industry's luster in recent years. With this, relatively young companies continue to lose money. Nevertheless, the Indian communications services market remains one of the fastest growing and the most competitive anywhere in the world.

The transformation of the Indian telecom sector and the impact it had on the lives of ordinary Indians have been almost miraculous. In the not too distant past, a telephone connection was a luxury for most Indians. Since government-owned companies had a monopoly, only the affluent and the politically-allied could get a connection on demand. Others had to wait for months or even years and often resorted to bribing telephone company employees to make a call. When they finally had a connection, callers were typically burdened with high call rates and erratic service.

The contrast to the present day can hardly be wider. India is the fastest growing market in the world now, with more than seven million new telephone connections added in the month of August 2011 alone. Notably, all of them are mobile telephones. While the pace of growth has slowed down, it is still above the growth rates in other large markets. With nearly 900 million users across the country, India is now second only to China in total number of telephone connections. With several service providers even in rural markets, Indian consumers are spoiled for choice. Equipment availability and service reliability are comparable to any developed market, while the call rates are the lowest in the world. With rates as low as a penny per minute and free incoming calls, even the lowest income groups in India can afford cellular telephones now. On their mobile phones they now have access to services like banking and real time information on prices of farm produce.





Evolution and expansion

The seeds of the communications revolution in India were sown in the mid-nineties when the government allowed private firms to offer mobile telephone services. The first licenses were issued in 1995 for the four largest cities, followed by 18 other geographies by 1998. Though foreign ownership was restricted to 49% in these firms, many large foreign telecommunication companies partnered with Indian companies to enter the market. However, high call rates and regulatory restrictions limited growth for several years. Frustrated by the slow growth and large financial costs, most foreign companies exited the market.

The regulations were further eased in 2003, which removed regulatory bias in favor of select technologies and allowed firms to expand across the country under a single license. As the businesses achieved scale and with better technology, call rates came down substantially. This kick-started a virtuous cycle where the increased number of users improved economies of scale for service providers and lowered call charges, which attracted even more users. Subscriber growth literally exploded and the industry added more than 10 million subscribers a month on average for several years starting in 2006. Stock market valuations of telecom companies soared, helped by exceptionally strong revenue and earnings growth. Though their average revenues per customer were substantially lower than service providers in mature markets, the massive customer base in India offered huge potential for future growth. The sector also became one of the largest employment generators in the country, and steadily expanded its share of the government's indirect tax revenues. With more than 170 million subscribers in India, and 230 million across all markets, market leader Bharti Airtel is now the fifth largest telecom company globally.

The high degree of innovation by the service providers also played a fair part in sustaining the boom in India. Most large telecom companies outsourced almost all of their network and other infrastructure, to instead concentrate on marketing and customer support. Instead of investing large amounts of capital in their own infrastructure, the telecom carriers pay the equipment

vendors, who build, own, and operate the network, based on actual usage. This trend opened up significant opportunities for global equipment manufacturers like Nokia and Ericsson, besides technology service providers like IBM. Indian service providers now also share infrastructure like transmission towers, which helps them expand to new territories quickly and manage costs better. Attracted by the opportunity, independent transmission tower operators have also entered the market. As well, the fast expanding market for mobile handsets attracted global manufacturers to India. India is now the second largest manufacturing base for Nokia, which remains the global leader in mobile telephone handsets. More recently, select domestic handset manufacturers have gained market share by offering attractively priced products to value-conscious buyers.

Top Telecommunications Firms in India

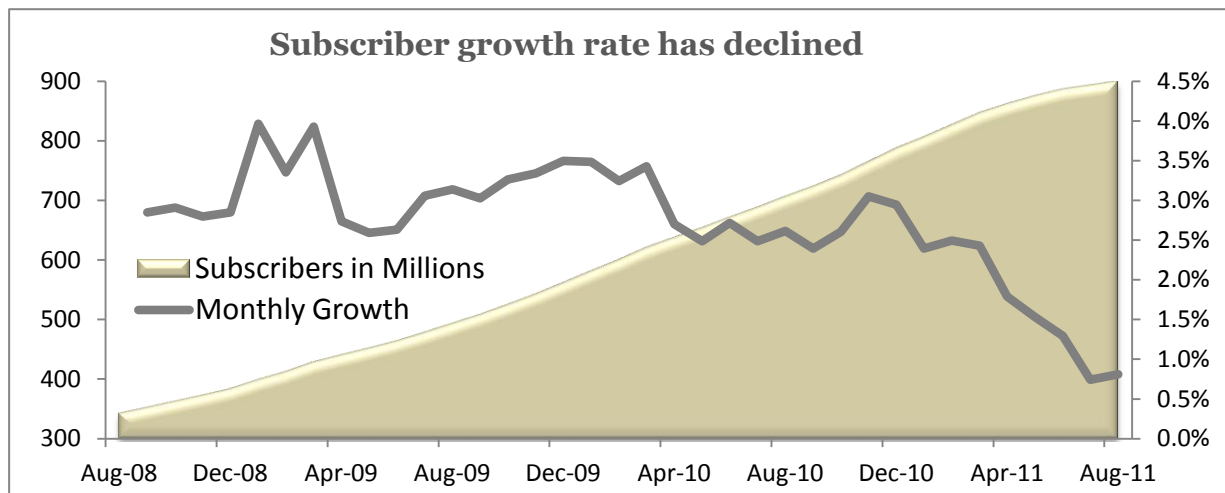
Company	Ownership	Equity Listing	Market Cap in Billions (USD)
Bharti Airtel	Public	Mumbai	33.12
Reliance Communications	Public	Mumbai	3.91
Vodafone	Vodafone Plc	No Local Listing	NA
BSNL	Government	Not Listed	NA
Idea Cellular	Public	Mumbai	7.24
Tata Teleservices	Private	Subsidiary Listed	NA
Aircel - Maxis	Private	No Local Listing	NA
Tata Communications	Public	New York, Mumbai	1.28
MTNL	Government	New York, Mumbai	0.50

Interestingly, with the exception of Hutchison Whampoa, none of the large global telecom companies had a direct presence in India during this phase of fast market expansion. Singapore Telecommunications had an investment interest through its shareholding in market leader Bharti Airtel, but did not have operational control of the business. While the huge potential for market growth was attractive to global players, the limited number of potential acquisition targets and the high business valuations dissuaded them. Eventually, Vodafone Plc bought out Hutchison Whampoa's majority holding in the third largest Indian telecom carrier for nearly \$11 billion while Malaysian operator Maxis Communications took control of a smaller company servicing the southern parts of India. Japanese telecom major NTT Docomo also forayed into India by acquiring 26% of Tata Teleservices for over \$2.5 billion.

Competition and Controversies

The high growth rates encouraged the government to allow even more service providers to enter the industry. In 2008, the Indian government awarded licenses to several new companies, opening up an opportunity for global companies to gain a foothold in the market. Telenor of Norway, Sistema of Russia, and Etisalat of the UAE quickly acquired majority control of new license holders and launched services. To grab market share, the new entrants launched their services at attractive price points. When the more established players responded with price cuts of their own, it blew up into a full-fledged price war. The growth in subscriber additions slowed, the profit margins of even the most established companies in the industry declined and losses piled up for the new companies. Stock prices of telecom companies, which were investor favorites for several years, started to underperform.

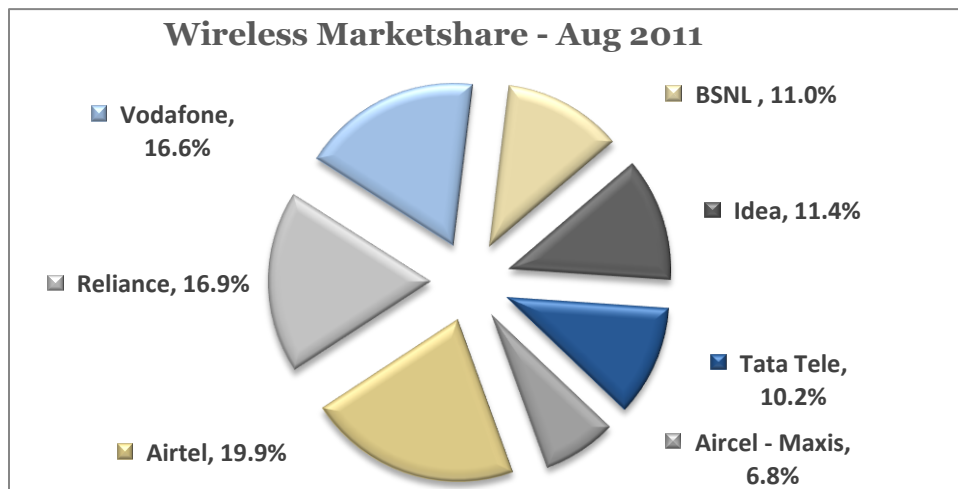
Even more damaging were the corruption scandals that followed. In 2010, the government invited applications from existing service providers for licensing additional telecom spectrum for providing high-end 3G services. In a deviation from its earlier practice of fixed pricing for airwave spectrum, the government decided to give out the new licenses on the basis of a competitive auction. The prices quoted by the bidders were several times higher than the fixed price granted previously by the government for older licenses, including just a year before in 2009.



Allegations of collusion between telecom companies and government officials to fix spectrum prices started floating around. These charges gained credibility after the government's independent auditor presented a detailed report that showed a loss of several billion dollars in license fees due to the earlier policy of fixed spectrum pricing. India's federal investigation agency started a probe and soon arrested several public officials, including the federal minister in charge of the telecom industry and a member of the federal parliament. Senior executives of some of the telecom companies were also arrested and are currently awaiting trial.

Seeking growth overseas

As the home-grown Indian telecom companies gained in size and realized that the subscriber gains in the domestic market wouldn't last forever, they started searching for opportunities in overseas markets that were underdeveloped. Bharti Airtel started offering services in Sri Lanka and Bangladesh, but those markets were relatively small. For companies seeking large untapped markets, Africa was the most obvious destination as the telecom industry in that continent was relatively less developed and offered growth opportunities. Tata Communications was the first to venture into Africa with a relatively small business in offering fixed line services in South Africa. Bharti Airtel's first African destination was in the Seychelles and the company later courted MTN, one of Africa's leading telecom companies, for a possible merger. After Airtel's attempts failed, another large Indian company, Reliance Communications, also pursued MTN and came close to a deal to merge the two businesses. However, the arrangement fell through as the proposed structure of the deal was relatively complex and faced regulatory hurdles.

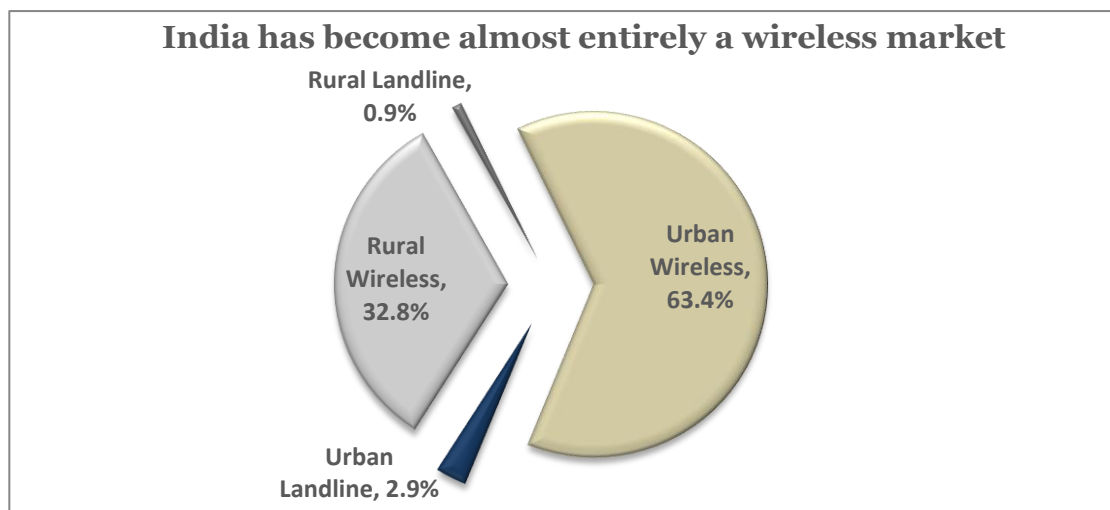


Airtel finally realized its overseas ambitions when it acquired the African business of Zain Telecom for \$10.7 billion in 2010. The deal boosted Airtel's subscriber base by 40 million and gave the company entry into 15 African countries. The company hoped to repeat its success in India and exponentially grow the African market by offering more affordable call rates. However, the progress has been slower than expected as the relatively higher operational costs and the geographically dispersed markets have limited the company's ability to wring out efficiency gains. The falling equity market valuations and the early difficulties faced by Bharti Airtel in its overseas businesses have since dissuaded other Indian companies from pursuing opportunities outside the country.

Future growth opportunities

After several quarters of bloodletting, the industry has realized that the price wars cannot be sustained indefinitely, as they would hurt both the established players and the challengers. As a

result, call rates have gradually started moving up higher. Some of the established carriers have seen an improvement in profitability, though the call volumes continue to trend lower. Though none of the new entrants are as yet profitable, their losses are unlikely to worsen any further. At the same time, it may be difficult for the smaller players to survive in the long-run and it is possible that some may be acquired by the larger carriers. This is unlikely in the short term as the current regulations and licensing conditions restrict mergers and acquisitions in the industry. For instance, current rules do not permit a carrier to have more than a 40% market share in any of the country's 22 telecom regions. Further, no telecom carrier can hold more than 10% equity stake in another company in the same region. However, if the government accepts the recent proposals by the Telecom Regulatory Authority of India (TRAI), these rules will become less restrictive and encourage consolidation in the telecom sector.



For future growth, the industry is banking on high value 3G and data services that fetch higher revenues per user and are more profitable. Though 3G services were launched by the major carriers in 2011, customer conversions have been slower than anticipated because of higher costs. However, the rising popularity of smart-phones and intensive marketing has led to increased demand for these services. It is expected that emerging markets like India too will follow the more mature markets where the majority of the customers have moved to higher value services. Spectrum licenses for 4G services that are even faster are likely to be offered for bidding by the government shortly. While spectrum prices are likely to rise even higher, as it is a scarce commodity, the established carriers are expected to bid aggressively.

Another segment that offers significant growth potential is internet broadband services. Despite India's global reputation as a technology services powerhouse, broadband internet services are not as popular. The services available to retail consumers have low connections speeds and are of poor quality. Several companies are betting that increased demand for online multimedia will lead to significant growth in this space, if higher quality services are provided at affordable price

points. The bidding for 4G wireless broadband licenses in 2010 were no less aggressive than that for 3G cellular licenses, indicating the industry's confidence in this segment's growth potential.

Besides the new jobs generated directly, the telecommunications industry has also created a large number of small businesses which provide support services in sales and equipment servicing. The growth of the industry has also contributed significantly to overall economic growth in India, by facilitating activity and efficiency gains in other sectors. Reliable and cost-effective communication services have opened up new markets for farmers and small businesses in other parts of the country, while ensuring faster dissemination of prices and other information. Like in other parts of the world, the telecommunications revolution has touched the lives of millions of Indians and the industry is likely to remain a significant growth driver in the future as well. 🌍

Data Source: Telecom Regulatory Authority of India

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