# Vodafone India: the Indian wireless industry

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## Introduction

Sunil Sood, CEO & Managing Director of Vodafone India sipped his tea, thinking about how, over a period of 20 years, his company had established a strong foothold in India with annual revenue of US$6.3bn in the year 2015 and a subscriber base of 198 million customers (PTI, 2016). However, had just received a reminder from the Indian tax department to pay US$2bn in back taxes or face seizure of the company's local assets. This dispute dated back to the year 2007 when Vodafone acquired Hutchison Telecommunications International Ltd.'s Indian mobile business, Hutchison Essar Telecom. Vodafone took this dispute to the international arbitration panel. As of 2017, the case was still awaiting a decision by the arbitration panel (Gupta, 2013). Such a tax issue could be a drag on future growth in an industry who's margins were already razor thin. Sood needed to chart a course that would see Vodafone grow in a profitable manor by building a competitive advantage. However, such an endeavor could be expensive and may be beyond Vodafone's resources.

In addition to the ongoing tax issue the competitive landscape had altered with the introduction of a formidable new competitor. In September, 2016, Sunil Sood joined Idea Cellular and Bharti Airtel to file a complaint against a new competitor Reliance Jio with the Telecom Regulatory Authority of India (TRAI). They accused Reliance Jio of violating the 90-day promotional rule by offering free voice calls for life (Abbas, 2016). Reliance Jio announced that, beginning January 1, 2017, it would commercially launch unlimited 4G internet service to subscribers in India (Kahn, 2016). This unlimited 4G offering by Reliance Jio would force Vodafone to revise its data and call tariffs and upgrade its infrastructure. Vodafone, like its competitors in India, had accumulated a significant amount of debt. The total debt of 12 cellular companies in India was about $61bn (Kahn, 2016). Bharti Airtel had $12.46bn and Vodafone had a debt of $12.16bn, making them the top two indebted cellular companies in India (Siddharth, 2016). Vodafone's spectrum collection was quite weak in India. They had 2G spectrum in all 22circles; 3G in 15 circles; and 4G in nine circles (Bhupta, 2016). Bharti Airtel had 2G, 3G and 4G spectrum in all 22 circles. Debt associated with Reliance Jio entry made the situation quite difficult for Vodafone. A price war was causing a decline in revenues and the need to invest in 4G spectrum caused "prisoners dilemma" for Sood.

Sood wondered how investors would react to this latest reminder from the tax department along with the changes in the competitive environment. How should the company fortify corporate diplomacy with the Indian Government? Should he approach the parent company in the UK for funds? Given the rising risk of regulatory and judicial intervention, he was getting increasingly wary of the future of Vodafone in India. On top of all this, increased competitive pressure with declining revenues would certainly be the cause of sleepless

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nights. Sood would like to see a turnaround to make business environment favorable for Vodafone in India. The question was: how?

## History of vodafone

The late 1980s was a vital time for Vodafone's development. The company officially launched on January 1, 1985 as a subdivision of the UK's largest creator of military technology with the name Racal-Vodafone (Holdings) Ltd. The newly formed company was based in Newbury, Berkshire. However, to increase value for stakeholders, Racal split from Racal Telecom in 1991 and renamed as Vodafone Group, PLC (Consumer Connect, 2014). In 1994, Vodafone launched its Low Earth Orbiting Satellite phone services. This satellite allowed the company to be the first in the UK to provide faxing and text messaging services (Vodafone, 2015). In 1996, Vodafone made three key acquisitions, purchasing the remaining 75 per cent of Talkland and People's Phone along with 80 per cent of Astec Communications (Consumer Connect, 2014).

In 1999, Vodafone bought Airtouch Communications and decided to change its name to Vodafone Airtouch (Consumer Connect, 2014). The company also sold its 17.2 per cent share in E-Plus Mobilfunk, thus giving Vodafone a 35 per cent share in the largest German mobile network Mannesmann (Consumer Connect, 2014). Later in the year, Vodafone merged its wireless assets in the USA with Bell Atlantic Corp to form Verizon Wireless (Consumer Connect, 2014).

In 2001, Vodafone acquired Ireland's largest wireless communications company, Eircell, and started the process to acquire J-Phone, Japan's third largest mobile operator (Consumer Connect, 2014). Vodafone achieved a 97.6 per cent stake in this Japanese company in 2004 and disposed of it in 2006 (Vodafone Annual Report, 2016). In 2001, the company first offered 3 G voice calls and instant messaging (Vodafone, 2015). Some other key acquisitions of Vodafone included acquiring TelstraClear New Zealand for $660m in 2012 (Vodafone Annual Report, 2016) and purchasing the German company Liberty Global in 2013. In September of that same year, Vodafone sold its 45 per cent stake in Verizon Wireless to Verizon Communications for $130bn (Consumer Connect, 2014). Vodafone also introduced the first 4 G phone, the Blackberry Z10 (Vodafone, 2015).

In 2014, the company acquired 140 Phones4U stores in the UK. Vodafone also successfully tested voice calls over LTE and introduced HD voice calls (Vodafone, 2015).

In 2015, Vodafone celebrated the 30th anniversary of the UK's first ever mobile phone call. By 2016, Vodafone Group PLC was the world's leading cellular telephone operator, with more than 462 million subscribers and annual sales greater than $64bn. Vodafone was also the largest corporation in the UK and the world's third largest generator of free cash flow behind GE and Microsoft (Vodafone Annual Report, 2016).

## Status of Indian telecom sector

The Indian telecom sector has grown rapidly. The number of wireless subscribers in India exploded from 10 million subscribers in 2002 to about 1 billion subscribers in 2016, making India the world's second largest telecommunication market (Purohit, 2016). (See Exhibit 1 for subscriber growth) Among other factors, strong consumer demand and reasonable and hands-on regulatory framework such as deregulation of Foreign Direct Investment (FDI) made this growth possible in India (TRAI, 2016). The tele density – the measure of telephone connections per hundred individuals/area – in India increased from 2.81 in 2012 to 83.36 in 2016 (TRAI, 2016). As the Telecom Regulatory Authority of India (TRAI) reported, the tele density for wireless surpassed wireline in the year 2005. In the rural part of India average households spent about 1 per cent of income on telephones whereas in urban areas, households spent about 3.59 per cent (TRAI, 2016). The tele density in urban India

was about 4.4 times higher than that of rural parts of India (TRAI, 2016). The urban region accounted for 55.6 per cent of subscriptions in the wireless part of overall telecom subscriptions whereas the rural accounted for 42 per cent (TRAI, 2016).

The Indian Government divided the country into 22 regions called "Telecom Circles" (Indiainfocalling.com, 2016). If a company wanted to operate in a particular telecom circle, it was required to buy a license to operate in that circle to auction process (Indiainfocalling.com, 2016). These telecom circles or telecom service areas were further divided into four groups: metro circles, A circle, B circle and C circle (Indiainfocalling.com, 2016). The metro circles covered densely populated cities such as Delhi, Mumbai and Kolkata. A circle covered higher population density compared to B circle, and B circle covered more than C circle. The boundaries of these circles roughly corresponded to the territorial boundaries of individual Indian states with few exceptions (Indiainfocalling.com, 2016).

India reflects many of the criteria of an emerging market. Per capita income (nominal) in India is US$1670 with large currency swings in comparison to the US$. Rapid changes in the market are leading to significant economic growth. Like other emerging markets, India is capable of providing Vodafone with English speaking, highly educated technical workforce, however, they have to deal with a changing regulatory environment and wide disparities in income. By 2016, about two thirds of the Indian population, roughly 870 million, lived in rural parts of the country, providing significant growth opportunities for wireless telecommunication in India (Jain and Sanghi, 2016). However, these growth opportunities came with significant baggage. Rural customers tended to be low value due to lack of disposable income. The infrastructure costs to serve these customers tended to be higher due to lack of existing critical infrastructure such as roads (Indiainfocalling.com, 2016). Serving these customers with minimal additional costs would require a change in the Indian government's policy. The new policy should treat wireless telecommunication as critical infrastructure at par with roads and hospitals.

A majority of Indian wireless phones used GSM technology (95.4 per cent) compared to CDMA (4.6 per cent). (See Exhibit 2) GSM phones required SIM cards and the carrier had little control over the device whereas CDMA phones were locked by the carrier, making it difficult to change carriers. Flexibility and ease of changing Telecom Company was the key for the growth of GSM network in India. A SIM card enabled movement from one company to another. It also provided the flexibility of keeping multiple SIM cards in a one single device (Khedekar, 2012).

Most of the players in the Indian wireless industry belonged to large conglomerates except for government providers such as MTNL and BSNL. The foreign investors were allowed to invest up to 49 per cent in any wireless telecommunication company (Nishith Desai Associates, 2011). They could raise this investment to 74 per cent with an approval from Foreign Investment Promotion Board (FIPB) (Nishith Desai Associates, 2011). Domestic players in the Indian wireless telecom market included Airtel, Reliance, Tata, Idea/Spice, Vodafone/Essar, Aircel, BPL, HFCL, Sistema Shyam and MTNL/BSNL. (Exhibit 3 for market share.) Some of these companies were owned by old money families such as Tata's, Birla's and Ambani's with deep roots in the Indian corporate and political system. The Average Revenue per user (ARPU) rates in India were the lowest in the world but still wireless telecom companies such as Bharti Airtel had an EBITA of about 30 per cent. The ARPU/month in India was $2.90 compared to $50 in USA and $58 in Japan (Exhibit 4). Indian telecom companies generated high margins even with a low APRU due their ability to generate very low-cost minutes and maximize network utilization (Vogel and Barasia, 2011). The telecom companies used a high-volume low-price strategy in India. The minutes of use (MOU) in India was about 4000 per line compared to 2400 in UK and 2500 in China (Vogel and Barasia, 2011) (Exhibit 5). They reduced operating costs by sharing passive infrastructures such as towers, generators, or shelters (Vogel and Barasia, 2011). They also used outsourcing extensively compared to their counterparts in the west. With the use of

outsourcing, prevalent in backbone functions such as network and IT maintenance, data services, and general administrative functions, the telecom companies utilized scale compared to their counterparts in the west where most of these costs were fixed (Vogel and Barasia, 2011). By 2017, sharing of active infrastructure was still in the infancy stages in India, although it was evident in roaming, shared feeder cables, and transmission systems (Vogel and Barasia, 2011).

## India's leading mobile operators

In January 2016, India had about nine major wireless telecom operators of which five private players – Bharti, Vodafone, Idea, Reliance and Aircel – had a combined revenue market share of 78.68 per cent. (See Exhibit 3 for comparative data on India's leading mobile operators) (Table I).

## Bharti Airtel

Founded in 1995 and headquartered in New Delhi India, Bharti Airtel served about 251 million subscribers in India by March 2016 (Amarsy, 2015). There were several components of Bharti Airtel's Indian business model that contributed to the company's growth. First and foremost was the use of a variable cost business model. The company was successful in converting fixed costs into variable costs by using outsourcing as its key weapon. Bhartia Airtel outsourced responsibility of building and managing networks to top vendors such as Ericsson, Siemens, Nokia and IBM (Amarsy, 2015). This business model allowed the company to convert fixed costs into variable costs. Providers were paid based on usage and therefore no upfront investment was required. The business model known as "minute factory" drew upon the idea of generating high-volume with a low cost to the subscriber; if the price per minute was low, the usage for the subscriber was likely to increase significantly (Palepu and Bijlani, 2012). This model was against the conventional wisdom of the telecom sector of chasing average revenue per user (ARPU). Its product offerings in India included 2 G, 3 G and 4 G wireless services, fixed line broadband and voice services, and enterprise services (Palepu and Bijlani, 2012).

## Idea

Owned by Aditya Birla group, Idea Cellular had a subscriber base of about 150 million and revenue of about $4 billion in 2016 (Ajwani, 2015). Just like Bharti Airtel, Idea adapted a contrarian business model of focusing on tier 2 and tier 3 cities instead of metro areas (Ajwani, 2015). This decision was also financial as urban licenses were more expensive compared to rural (Ajwani, 2015). The rural market in India had penetration of about 42 per cent and Idea had a subscriber base of about 56.6 per cent in that market (Ajwani, 2015; TRAI, 2016). The company reduced the costs by pooling resources with competitors such as Vodafone and Airtel. These companies jointly owned stakes in telecom Tower Company, Indus tower (Consumer Connect, 2014). The biggest challenge was having a low market share of about 16 to 17 per cent metros compared to 25 per cent in tier 2 towns. Poor penetration in high ARPU markets hurt long-term financial viability (Ajwani, 2015). Another

**Table I** Major carrier's subscriber bases

| *Telecom sector private mobil carriers (2016)* | *No. of subscribers* |
|---|---|
| Bharti Airtel | 251 million |
| Idea | 150 million |
| Reliance and Aircel | 126 million |
| Vodafone | 198 million |

key element of the business model was not to follow a fast moving consumer-goods model (FMGM). Therefore, instead of appointing wholesale distributors in rural parts of India, Idea adopted a strategy of appointing direct distributors supported by its own sales and service team. The company accrued 50,000 distributors supported by a sales team or 4,500 employees serving 1.5 million retailers (Ajwani, 2015).

### Reliance and Aircel

Owned by Anil Ambani group with the customer base of about 87 million, the company operated in all 22 circles in India (Datta, 2016). In September 2016, Reliance Communication merged with Aircel (Purnell, 2016). A combined subscriber base of about 126 million gave these two companies the second largest holding in India of 2G, 3G and 4G operations (Gupta and Barman, 2016). This merger pressured the market to provide free voice calls along with low-cost 4G data. Subsequently, Reliance Jio, a company started by Mukesh Ambani, brother of Anil Ambani, began offering 4G data at the rock-bottom prices, resulting in a user base of about 60 million (Gupta and Barman, 2016).

### Vodafone

Vodafone, a wholly owned subsidiary of Vodafone Group PLC, UK, started operations in India in 2007 by acquiring Hutchison Telecom with a customer base of 31 million (Vodafone India, 2014). By 2016, the company had expanded service in all 22 circles with a customer base of 198 million. Vodafone India entered into a $2bn tax dispute with the Indian government related to its purchase of Hutchison in 2007. Sunil Sood saw this dispute as one between Vodafone shareholders and the Indian government with no bearing on the profit and loss account of Vodafone or on its future plans of offering an Indian IPO (Datta, 2016). In August 2016, Vodafone renewed its eight-year IT outsourcing relationship with IBM for another five years. The total value of this agreement was estimated to be about $750-$800m. The initial contract with IBM, signed in 2007, was centered on building a traditional IT infrastructure and application services. The 2016 contract that followed focused heavily on automation and migration to hybrid cloud architecture, intended to help Vodafone use a hybrid cloud platform between its main data center and disaster recovery sites (ET, 2016, Phadnis, 2016). Vodafone also signed a three-year deal with Huawei worth about $200 million to provide managed services including network operations. Huawei replaced Nokia for these Vodafone operations (Khan, 2016). The company also signed a three-year contract with Ericsson for maintenance of optical fiber network 10 telecom circles (Khan, 2016). Huawei and Vodafone had previously worked together on several projects in India. Huawei supplied 4G LTE base stations to Vodafone and also upgraded to increase capacity of Vodafone's wireline network (Team Tech, 2016). In 2007, Vodafone along with Bharti Airtel and Idea Cellular formed a joint venture called Indus Tower. This company was responsible for maintaining and developing the tower infrastructure in India. Vodafone and Bharti Airtel owned 42 per cent equity in the firm and Idea held the rest of 16 per cent equity in Indus Tower (Team Tech, 2016). With about 110,000 towers in India, Indus Tower rented towers to telecom companies for $50/month to about $3000/month depending on the location (Krishna, 2013). In addition, Bharti Airtel's Infratel owned about 35,900 towers; Idea Cellular had 9400 towers, and Vodafone India claimed about 25,000 towers in India (Aulakh, 2014). Leasing towers instead of owning them helped in reducing the overall operational cost for telecom companies. The success of Vodafone depended upon its ability to minimize operating costs along with maximizing network utilization. This required operating networks at full capacity. Bharti Airtel and Vodafone both operated in all the 23 circles in India. With Bharti Airtel, about 75 per cent operated at above capacity whereas with Vodafone 50 per cent operated at above capacity. Another 35 per cent operated at capacity (Vogel and Barasia, 2011). These capacities may have had a negative effect on call quality leading to poor customer satisfaction and retention.

This cost-saving focus was also reflected in marketing and customer service strategies. In terms of customer acquisition, the main priority was to acquire prepaid customers. This strategy provided benefit of billing and collection costs along with the ability to manage and expand scale (Vogel and Barasia, 2011). The company sold prepared SIM cards to customers through small retail outlets. Prepared recharges carried a commission off 4 to 5 per cent (Vogel and Barasia, 2011). Future recharges on the SIM cards could be managed electronically and directly with Vodafone, which helped in further reducing the sales and marketing expense. In India, electronic recharges accounted for about 80 per cent of total sales (Vogel and Barasia, 2011). Vodafone used about 12 million retail outlets to sell their services out of which only 1150 were company owned (Vogel and Barasia, 2011). Vodafone like its peers had no stake in the Indian handset market. It freed up capital, which could have been tied in the handset supply chain, also helping to reduce subscriber acquisition costs.

In western countries, the promotional discounts offered a new handsets account for about 12 to 14 per cent of sales (Vogel and Barasia, 2011). GSM phone subsidies in India were almost zero whereas CDMA subsidy amounted to about 3 per cent of sales price (Vogel and Barasia, 2011). To spread demand in off-peak hours, Vodafone offered deep discounts for making voice calls during those hours. Vodafone offered 1000 minutes for a rock-bottom price for calls made between 10p.m. and 8 a.m. (Vogel and Barasia, 2011). The 3 G data rates for Vodafone were at par with its major competitors Idea and Airtel. For 1GB/30 day validity, Vodafone charged Rupees 251 compared to Rupees 249 by Airtel and Idea. Reliance charged Rupees 156; Tata Rupees 126 and Aircel Rupees 128, but Reliance's network was not available in all the Indian cities (Kaushambi, 2015) (Exhibit 6).

After a 2007 successful launch of money transfer service called M-Pesa in Kenya, Vodafone launched a pilot of its value-added service in India in the year 2010. The first pilot was launched the state of Rajasthan to disburse money to recipients of state-benefit programs. M-Pesa was formally launched in 2013 for 1.5 million Vodafone subscribers out of a total of 170 million (Sen, 2014). M-Pesa, also known as mobile wallet, did not require Internet and was a SMS-based service used for sending and receiving money, making utility bill payments, and the charging mobile SIM cards. Since 2012, mobile-wallet services in India have been licensed by the Reserve Bank of India. Vodafone has tied up with ICCI bank to enable users to utilize a cash-out option as part of this mobile wallet (Sen, 2014). Any Vodafone subscriber could enroll in M-Pesa by an initial payment of 100 Rupees and simultaneously opening up an ICCI bank account. Through this mission of providing banking to unbanked customers, Vodafone utilized its dealers to become M-Pesa agents and business correspondents. Out of its 80,000 outlets in India, about 60 per cent were in the rural areas. For this mobile wallet business to grow, Vodafone needed to expand its reach in urban India and also to raise the comfort level for its customers with electronic banking (Sen, 2014).

Vodafone's mission in India was not to be labeled as a money hungry multinational corporation doing business in India. Corporate volunteerism was a fundamental part of Vodafone's Corporate Social Responsibility (CSR) in India. World of Difference (WoD) was the key CSR initiative of Vodafone Foundation India. As part of this initiative, Vodafone employees donated eight weeks from their regular jobs to work for a non-governmental not-for-profit organization of their choice. This program helped to align Vodafone employees' passion and skill with the societal need to transform people's lives and to create a better society in which to live. Some of the sustainability initiatives in India included: replacing 3,000 desktops with laptops; curbing plastic packaging for SIM cards; and, installing variable speed generators at 234 sites to reduce diesel usage by 35 per cent (Kapoor, 2013). Vodafone aimed to be a good corporate citizen working hard to make India a better place to live for future generations. Even in light of all these commercial and social successes in India, Vodafone's journey in India was not a smooth one in terms of its

relationship with the Indian Government. After the acquisition of Hutch, the company was under the watch of the Indian tax department. During this battle with tax department, Vodafone received short-lived relief from Indian Supreme Court.

## The Supreme Court of India

The Supreme Court of India formally came into existence on January 28, 1950. Initially the court was formed with seven judges on the bench. Over the years, the number of judges has increased to 30. The judges to the Supreme Court were appointed by the President of India. To keep the politics out of judiciary, a sitting judge the Supreme Court could be removed unless an order was passed by the President of India after a majority vote in the houses of Parliament (SCI, 2014). The only grounds for removal were proven misbehavior or incapacity. Over the years since inception, the Supreme Court of India rendered several landmark judgments including *Indira Gandhi* vs *Raj Narain* case in 1975; child sexual assault not to be taken lightly case in 2011; Vodafone tax case in 2012; 2G spectrum allocation case in 2012; and barring convicted politicians to serve in public office case in 2013 (Dailybite, 2015).

## Vodafone and the Supreme Court of India

The Indian tax authorities were known to be unpredictable regarding collection, especially involving foreign investors. The Indian Prime Minister Narendra Modi recognized this and even ran his campaign with the slogan "Make In India" with the promise that he would work to end the heavy-handed tax oppression. His goal was to try and create a fairer and more welcoming climate for international investors, aiming to create more substantial job opportunities for India's nearly 1.2 billion citizens (Bellman, 2015). When Vodafone Group PLC experienced tax despotism first hand, the company took to the courts to fight what would be a monumental battle with the Indian tax authorities.

The Indian tax authorities claimed that Vodafone owed an unforeseen nearly $2 billion in taxes to them from the Hutchinson deal. The Hutchinson deal occurred when Vodafone purchased a 100 per cent share interest in GCP Investments Ltd, which would come to be called Vodafone International Holdings. GCP was a Cayman Islands company owned by the Hong Kong based Hutchinson Group (Milbank, 2010). The Indian tax authorities claimed that Vodafone owed them a capital gains tax since GCP owned a large majority of the Indian cellular company HEL. The Bombay High Court stated that Vodafone should have withheld the taxes when Hutchinson (the seller) accepted Vodafone's payment based on section 195 of the Indian Income Tax Act (Slaughter & May, 2012). The Canary Islands had no tax policy making it an ideal location to conduct business. However, the perk of no taxes, combined with the way the Bombay High Court chose to interpret the transaction documents, caused the Indian tax authorities to believe that Vodafone secured the Hutchinson deal in a manner that was deceitful as an attempt to avoid paying Indian taxes. The tax authorities also expressed their frustrations with the fact that the revenue gained by Indian Government from companies like Vodafone was seriously decreased because many large corporations got their Indian divisions for hardly any money (Milbank, 2010).

Vodafone refuted these claims stating that they did not need to pay any taxes to the Indian tax authorities on the basis that Vodafone, the Hutchinson Group and GCP were all non-Indian companies with no sufficient physical presence to India. Vodafone argued that the authorities had no right to tax the deal. Vodafone also claimed no assets or capital gains taxes were applicable to India and the only gain that occurred was between the foreign bodies (Canary Islands and Hong Kong) that were directly involved (Gupta, 2013). The root cause of this dispute was based on the question that if India tax authorities have jurisdiction over the business deal made overseas to acquire an Indian company.

The Supreme Court ruled in favor of Vodafone in 2012. Three judges unanimously stated that the business settlement was not taxable in India, so no tax was owed nor was there a withholding obligation (Milbank, 2010). The Supreme Court also ruled that the Indian tax authorities were to pay back Vodafone the money that had already been paid (2,500 crore rupees) with additional interest (Business Standard, 2012). The *Vodafone International Holdings BV* vs. *Union of India* case was able to start clarifying the lines that had become blurred for foreign investors in India. The Supreme Court stated that based on the Indian Tax Act, the capital assets that the authorities believed to be taxable in India did not apply to a deal like the one between Vodafone and Hutchinson because of the holding company assimilated outside of India. The Supreme Court also clarified the taxation procedures for a company going through a holding company, stating that if the holding company was created for the transaction with no business foundation or legitimate backing just to avoid taxes, then the Indian tax authorities could disregard it. However, if a business chose to go through a legitimate holding company for tax planning purposes, it would be permitted and be respected (Nelivigi and Lillis, 2012).

The Supreme Court also discussed the Bombay High Court's statement which allowed tax officials to unbundle different rights for tax-collection purposes that were relevant to India. Prior to Vodafone getting to the Supreme Court, tax experts and lawyers both were not only unsure of how the authorities would go about unbundling, but also stated that the process could lead to a lot of confusion and cause situations to become quite convoluted (Business Standard, 2012). The Supreme Court stated that the authorities should view transactions as a whole and not try to separate them at the beginning of an investigation in search of some wrongdoing (Business Standard, 2012).

But it appeared that this victory was short lived. With the change of government in the center, came also the changes in the Indian law. Indian government changed the latter to enable tax authorities to be able to charge taxes on deals similar to Vodafone's retroactively. This change in law followed by a notice from tax authorities to Vodafone demanding $2bn in past-due taxes. Vodafone took the case for International arbitration in the year 2014, and it was still pending in 2016 (Reuters, 2016).

While everything seemed to work out, this was not the end of Vodafone's tax drama with India. Vodafone visited the Bombay High Court once more to refute another tax claim served to them in 2011 for the sale of its call center business, Vodafone India Services. The Indian revenue authorities believed that Vodafone needed to pay them more taxes based on transfer pricing protocol (the actual price of a business transaction) (Vyas, 2015). The law associated with transfer pricing stated that all cross-border arrangements were to be treated as if it were with an unconnected company. The authorities said the transaction was done internationally and was undisclosed to them, therefore justifying demand for a greater income tax. In 2014, the Income Tax Tribunal agreed with the Indian tax and revenue authorities stating the deal was considered international and that the respected authorities could move forward against Vodafone.

When the case was brought to the Bombay High Court in 2015, the ruling was in Vodafone's favor. The court hoped that the ruling would show that India was trying to be more welcoming to investors by increasing control of tax authorities (Vyas, 2015). Indian authorities did not show any signs of their interest to appeal the high court decision. By 2017, Vodafone had changed the way that people looked at investing in India and their cases caused revisions in the Indian tax laws (like the Indian Direct Taxes Code Bill) and their enforcement.

## A new landscape

### *Reliance Jio impact*

In September 2016, Reliance Jio, owned by Mukesh Ambani, launched a new wireless service called Reliance Jio. During the promotional time the company offered unlimited

voice calls and 1GB of 4G data for ₹ 99. This rate was lower than any other wireless provider's data rate in India. The company claimed to have on the 4G network and 90 per cent penetration. The entry of Reliance Jio triggered a price war among top three competitors, Bharti Airtel, Vodafone and Idea. It forced smaller players such as Aircel and Tata DoCoMo to condsider mergers with larger players. It also threatened the balance sheets of weak competitors, tipping some into the red. Reliance Jio's plan to offer data at rock-bottom prices had two major hurdles to overcome: first, availability of smart phones which were 4G compatible; second, the capability of the network infrastructure to handle future growth data-hungry subscribers. The average price of a smartphone in 2015 in India was $132 compared to $253 in China (Horwitz, 2016) (See Exhibits 7 and 8). The average monthly disposable income in India in the year 2014 was $452.11 (Nationmaster, 2014). Reliance Jio offered a smartphone replacement to its new subscribers for ₹ 3000 ($45) with the short-term intent of increasing the smartphone penetration in rural areas of India. Reliance Jio's management claimed to have a sturdy network capable of handling the influx of new data-hungry subscribers (Tech Desk, 2016). But a September 2016 report painted a different image of confidence in Reliance Jio's network capabilities. As per the report, Reliance Jio's 4G speed averaged at 7.2 mbps, which was quite low compared to competitions, i.e. Idea Cellular (7.6 mbps); Vodafone (9.1 mbps); and Bharti Airtel (11.5 mbps) (Mukul, 2016). This data positioned Reliance Jio to fail to deliver on its promise of a quality experience with the expected result of poor customer retention.

Several challenges faced Reliance Jio in successful implementation of its plan full of freebies for Indian customers. The SIM card for 4G only worked with a 4G handset. This required subscribers to upgrade handsets before using Reliance Jio's 4G service (Namdeo, 2016). In addition to costs associated with this upgrade, consumers faced portability issues if they wanted to switch back to their 2G or 3G service (Namdeo, 2016). The incentive of free data and talk time brought in loads of customers to the stores. The company knew that an inability to enroll them in a timely fashion would disappoint customers, damaging the company image in the long term (Namdeo, 2016). The company was also aware that an influx of large numbers of new customers would also force Reliance Jio to spend on network expansion. For price-sensitive Indian consumers, the real test for premium products of Reliance Jio happened after the initial promotional prices expired. By spoiling their customers with seamless high speed 4G network across India, Reliance Jio planned to entice customers into paying higher prices for the quality of their product. Reliance Jio aimed to set up 1 million Wi-Fi hotspots in India across the country in colleges, schools and in public places. This shake up of the wireless industry by Reliance Jio forced competitors, especially Airtel, Vodafone and Idea, to anticipate a loss of market share (Namdeo, 2016). Competitors had to decide whether to wait and watch or act immediately to jump on this 4G band wagon.

### *Demonetization*

On November 8, 2016 Indian Government announced demonetization of ₹ 500 and ₹1000 currency in India (Dhume, 2016). This surprise announcement temporarily shook up the Indian economy. But this announcement pointed to the ability of India consumers to adopt virtual payment methods, thereby helping companies such as Vodafone with their existing offering of M-Pesa. In short term, customers had problems paying their wireless bills on time (Gurnaney, 2016). To encouraged customers to use phones for financial transactions, Vodafone, Bharti Airtel and Idea, waived banking fees or Unstructured Supplementary Service Data (USSD) charges for customers through December 31, 2016. In a news report, Sunil Sood expressed Vodafone's commitment to help the Indian Government in transforming India into a digital economy (Sherpa, 2016). Indian telephone regulator, TRAI, also reduced USSD-based mobile banking tariff from Rupees 1.50 to Rupees 0.50 per session. By using USSD services, the consumers were be able to make peer-to-peer

transfers of money as well as deposit or withdraw money, competing in the landscape of electronic transactions with companies such as Paytm and Mobikwik (Sherpa, 2016 and NDTV, 2016). Both companies offered the capability of an interface between the retailer and consumer to process commercial transactions. The challenge for Vodafone was to develop an App-based product sooner than later, expanding the capability of M-Pesa. The company already had about 198 million active Indian consumers on its roll, but what Vodafone needed was to provide consumers ease and safety of performing a wide range of financial transactions using their cell phones. The mobile transaction business predicted growth from 3 billion transactions in 2016 to about 150 billion transactions by the year 2022 with a value of ₹ 2000 trillion (NDTV, 2016; First Post, 2016).

Vodafone faced several challenges in expanding to the mobile banking business. Indian customers needed to be assured of the security of their accounts when making financial transactions using a mobile phone. In a country of different languages, it was important that the customer in India be able to conduct transaction in their native language (Shetty, 2016). There were several platforms available to conduct mobile banking transactions. National Payment Corporation of India (NPCI) had an open source platform called Unified Payments Interface (UPI) for conducting mobile-to-mobile banking transactions without account details. The mobile-payment platforms were not portable, i.e. it was not possible to make transactions from one to another (Shetty, 2016). NPCI was owned by banks and worked as its cooperative; therefore, UPI was the preferred platform for banks even though it had associated security issues due to its open architecture. Vodafone had to consider whether to explore these emerging technologies to capture the new market in mobile banking.

### *Reduction of government regulation*

The government modified several bureaucratic hurdles in operating telecom business in India. One of the major steps in this direction was the modification of Unified License for telecom operations by the Department of Telecommunications (IBEF, 2017). This change allowed telecom companies like Vodafone to share active infrastructure such as antenna and transmission systems with other companies, with implications to significantly lower operating costs in India. The Indian government also made it easier for companies to pay for spectrum auction, enabling them to pay upfront at the time of auction or pay for a period of time in installments (IBEF, 2017). BharatNet was a government of the undertaking responsible for setting broadband rural parts of India. The Telecom Regulatory Authority of India (TRAI) proposed a public–private partnership model for the project that would allow companies such as Vodafone to expand their horizons in rural India. On the consumer side, the government asked wireless operators to compensate consumers for dropped calls (IBEF, 2017). TRAI also set up a centralized platform for registration and resolution of consumer complaints (IBEF, 2017). In early 2017, TRAI reignited plans to auction 700 Mega Hertz of Airwaves, which were ideal for 5 G services, even though there had been no takers for these airwaves in 2016 (Raj, 2016). The Indian government appointed a team of experts which has filed 100 patents related to 5 G technology (Raj, 2016). This aggressive move by the government to offer better technology to Indian consumers put financial strain on already debt-ridden telecom companies in India. As the Indian telecom companies moved from 3 G to 4 G to 5 G, they also moved away from voice heavy to high data consumption by the subscriber. This required a change in the government's role from regulator to promoter to keep consumers' privacy invasion concerns in check (Raj, 2016). On the other hand regulatory mechanism was important to make sure that consumers were not exploited by the operators and provided a framework for smooth settlement of disputes. The key for the Indian regulators was to keep the delicate balance between eliminating policies with negative impact on competition and promoting regulations to protect interests of consumers (Kumar, 2010).

### *The way going forward*

With the arrival of Reliance Jio on the India telecom landscape, the competitive dynamic changed with its offering of free voice calls and 4 G data at rock bottom prices (Reuters, 2016). Vodafone offered 4 G in only few circles and lagged behind Bharti Airtel and Reliance Jio. Expanding to 4 G network required a significant investment in infrastructure, including buying new spectrum. To recoup this investment would take longer than expected in a developed country because of India was country of low telecom service price and associated lowest margins (Reuters, 2016). The main rival, Bharti Airtel, announced it would invest $9bn in developing infrastructure (Reuters, 2016). Vodafone had an excellent track record of growth in India despite of several challenges. But there were questions in the mind of Sunil Sood: How could Vodafone sustain organic growth and what should be their future investment strategy in India? The company already had a debt of $12.16bn on their balance sheet. (Exhibits 9 and 10) How should they finance investment in new spectrum purchase? Was it worth getting into the race to buy 4 G spectrum? If the bills from Indian tax authorities came due in near future, how would they finance it without negatively affecting parent company's balance sheet?

*Keywords:*
Globalization,
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## Exhibit 1. Total wireless subscriber growth

**Table EI**

| | *January 13* | *January 14* | *January 15* | *January 16* |
|---|---|---|---|---|
| Total Wireless Subscriber Base (In Millions) | 862.62 | 893.81 | 952.34 | 1058.86 |
| Growth rate (%) | | 3.61 | 6.54 | 11.18 |

Sources: Trak.in (2016), Prabhudesai (2017); IBEF (2017)

## Exhibit 2. Total wireless subscribers based on technology

**Table EII**

| | *Subscriber base (Millions) Dec.' 12* | *Subscriber base (Millions) Dec.' 13* | *Subscriber base (Millions) Dec.' 14* | *Subscriber base (Millions) Dec.' 15* |
|---|---|---|---|---|
| GSM | 814.06 | 824.06 | 890.78 | 963.99 |
| CDMA | 105.11 | 62.24 | 53.19 | 46.90 |

Sources: Telecom Regulatory Authority of India (2016a)

## Exhibit 3. Market share of service provider's wireless subscribers in India 2013-2016

**Table EIII**

| | *January' 13 (%)* | *January' 14 (%)* | *January' 15 (%)* | *January' 16 (%)* |
|---|---|---|---|---|
| Bharti | 21.35 | 22.48 | 23.11 | 24.15 |
| Vodafone | 17.12 | 18.16 | 18.95 | 19.13 |
| Idea | 13.49 | 14.58 | 16.05 | 17.01 |
| Reliance | 13.71 | 13.17 | 11.19 | 9.94 |
| Aircel | 7.14 | 7.66 | 8.36 | 8.45 |
| BSNL | 11.62 | 10.6 | 8.42 | 8.2 |
| Tata | 7.85 | 7.07 | 6.98 | 5.97 |
| Telewings/Unitech | 4.65 | 3.8 | 4.67 | 5.05 |
| Sistema | 1.66 | 1.06 | 0.93 | 0.78 |
| Others | 1.39 | 1.42 | 1.33 | 1.32 |

Source: www.statista.com (2016)

Exhibit 4. Average revenue per user (ARPU) in 2009 based on country

**Table EIV**

| | |
|---|---|
| Japan | $57.8 |
| USA | $50.2 |
| UK | $34.4 |
| Germany | $22.3 |
| China | $10.0 |
| Russia | $9.4 |
| India | $2.9 |

Sources: Vogel and Barasia (2011)

Exhibit 5. Minutes of Use (MOU) in 2010 based on country

**Table EV**

| | |
|---|---|
| Japan | 1600 |
| USA | 5000 |
| UK | 2400 |
| Germany | 1000 |
| China | 2500 |
| India | 4000 |

Sources: Vogel and Barasia (2011)

Exhibit 6. 3G Data plan comparison

**Table EVI**

| *3G Provider* | *Price (in Indian Rupees)* |
|---|---|
| Idea | 249 |
| Airtel | 249 |
| Vodafone | 251 |
| Reliance | 156 |
| Tata DoCoMo | 126 |
| Aircel | 128 |
| BSNL | 139 |

Sources: Baglia (2015)

Exhibit 7. Comparison of cell phone plans based on country

**Table EVII**

| | *Voice* | *Text* | *Data* |
|---|---|---|---|
| Japan | $0.37/min | $0.003/text | $9.40/MB |
| USA | $0.25/min | $0.20/text | $0.08/MB |
| UK | $0.38/min | $0.15/text | $0.002/MB |
| South Korea | $0.09/min | $0.02/text | $0.02/MB |
| India | $0.01/min | $0.01/text | $0.0004/MB |

Sources: Nian-Moses and Li (2010)

Exhibit 8. Selling price of smartphone in India and Chain

**Table EVIII**

| *Year* | *China* | *India* |
|---|---|---|
| 2010 | $301 | $244 |
| 2011 | $279 | $254 |
| 2012 | $244 | $223 |
| 2013 | $202 | $174 |
| 2014 | $211 | $138 |
| 2015 | $253 | $132 |

Sources: Horwitz (2016)

Exhibit 9. Indian wireless companies debt

**Table EIX**

| *Company* | *Debt* |
|---|---|
| Bharti Airtel | $12.46bn |
| Vodafone | $12.16bn |
| Idea Cellular | $5.62bn |
| Reliance | $5.04bn |

Sources: Vikram Phillip (2016)

Exhibit 10. Vodafone India financials

**Table EX**

| | *2015* | *2014* | *YoY (%)* |
|---|---|---|---|
| Service revenue | 42,352 | 37,606 | 12.6 |
| o/w data browsing revenue | 5,690 | 3,437 | 65.5 |
| Total revenue | 42,526 | 37,777 | 12.6 |
| EBITDA | 12,605 | 10,847 | 16.2 |
| EBITDA margin (%) | 29.6% | 28.7% | 0.9 |
| Capital expenditure | 8,598 | 6,255 | 37.4 |
| Capital intensity | 20.2% | 16.6% | |
| Operating free cash flow (OFCF) | 3,228 | 7,647 | |

Sources: Vodafone.in (2015)


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