

## Bharti Airtel grows at a stunning pace by keeping its focus on the customer.

### Overview

#### ■ **Business Challenge**

*Bharti Airtel needed to maximize its future flexibility and growth potential by adopting a business-driven framework for integration, allowing it to implement and deliver new services rapidly. With competition intensifying in the Indian telecom services market, Bharti Airtel needed to find a way to focus on developing new services that could set it apart from the competition and strengthen its customer relationships.*

#### ■ **Solution**

*Bharti Airtel entered into a comprehensive 10-year agreement with IBM to transform its processes and take on the management of its IT infrastructure. Its new platform provides a standardized framework for Bharti Airtel to integrate its channels and customer-facing processes—enabling a more seamless customer experience, higher customer satisfaction and more profitable growth.*

#### ■ **Key Benefits**

- *Ability to process 1.5 million new customers per month*
- *Outsourcing of technology enables Bharti Airtel to focus resources on growing the business*



*Based in New Delhi, Bharti Airtel is India's largest private sector telecom operator, with a strong presence in mobile communications, fixed line services, and domestic and international long distance services. Bharti Airtel is India's sixth-largest company by market capitalization, with more than 57 million customers (as of 12/31/07) and US\$4.2 billion in annual revenues (as of 3/31/07).*

In the global telecommunications market, it's hard to imagine a more fertile environment for explosive growth than India. With a large, young and tech-savvy population, an economy whose growth rate is second only to China and telephone penetration of just seven percent, India stands as a textbook example of how demand for communications services can be explosive if the conditions are right. A few years ago, when forecasters predicted a fourfold increase in subscribers in three years—to 200 million—it seemed impossible. Since then, however, market growth has outstripped the unlikely forecast, and no operator has been better poised to capitalize on this opportunity than Bharti Airtel ([www.airtel.in](http://www.airtel.in)).

*“By working along with us to transform our go-to-market strategies and reinvent our internal processes, IBM has been a partner for the innovation that we see as essential in our ability to sustain our rapid growth.”*

— Jai Menon, Group CIO,  
Bharti Enterprises and Director  
(IT & Innovation), Bharti Airtel

## Supporting rapid customer growth with an innovative business model

### Business Benefits

- Ability to process 1.5 million new customers per month
- Improved cross-selling and targeting and a more seamless, efficient total customer experience through end-to-end integration of customer-facing processes
- Optimization of business processes and infrastructure through flexible, standardized integration framework
- Outsourcing of technology enables Bharti Airtel to focus resources on growing the business
- Flexible pricing model enables Bharti Airtel to avoid major increases in capital expenditures

Based in New Delhi, Bharti Airtel is India's largest private sector telecom operator and India's sixth-largest company by market capitalization. Bharti Airtel is also the only operator to offer its services (mobile, fixed line and Internet access) in each of India's 23 "circles," or operating areas. While this wide service footprint made Bharti Airtel especially well-positioned to capitalize on India's telecom boom, it also presented the company with significant challenges and risks in addressing this demand. In order to keep up, while also maintaining high levels of customer service, all the processes required to run its business—from order management and service activation to those processes involved in the operation of its core network—needed to run smoothly and in sync with each other. With the company approaching a new phase in its growth as a business, and with the need for a compelling user experience of utmost strategic importance, Bharti Airtel knew it needed to take a fundamentally new look at the way it created and managed its customer-facing processes.

### The risks of growth

Bharti Airtel's other big challenge was the need to make the major investments in IT infrastructure required to service its rapidly growing base of subscribers. As a capital expenditure, these investments are typically offset by the future service revenues that they enable. However, in addition to the inherent risks of a large fixed investment, Bharti Airtel faced an added financial risk from a steady decline in India's average revenue per user (ARPU) for mobile telecom services, the result of government-mandated pricing changes that created—at roughly eight dollars a month—one of the lowest ARPUs of the region. Thus, while Bharti Airtel realized that it was absolutely essential to invest in its future growth, factors unique to the Indian market substantially increased the risks of making these capital investments.

To address these unique opportunities and challenges, Bharti Airtel established a far-reaching outsourcing relationship with IBM that substantially mitigates its IT investment risks by giving IBM full control and ownership of Bharti Airtel's IT infrastructure and associated processes. By substituting predictable operating expenses for risky, upfront capital investments, this strategy fundamentally transforms the financial underpinnings of its business model. An equally important aim of this strategy is to enable Bharti Airtel to focus its energies on growing, serving and retaining its customer base—and thus fully capitalize on India's astounding growth surge.

*“Our new strategy is all about delivering a truly differentiated experience, and having the flexibility to continually improve the customer experience.”*

— Jai Menon

## Growth through flexibility

Bharti Airtel knew that the key to capitalizing on its growth opportunities was to establish deeper and more personalized relationships with its customers, as well as to provide a consistent, high-quality customer experience. It further realized that, from an IT perspective, the ability to integrate its diverse systems and processes was essential. Bharti Airtel saw the flexibility of IBM's integration approach—and recognized the application of IBM's extensive portfolio of middleware products and expertise in service-oriented architecture (SOA)—as an ideal match for its integration requirements. Dr. Jai Menon, Group CIO, Bharti Enterprises and Director (IT & Innovation), Bharti Airtel, was a key architect of the plan. "Our new strategy is all about delivering a truly differentiated experience, and having the flexibility to continually improve the customer experience," says Menon. "We knew that having a flexible framework for integrating our systems and customer-facing processes was essential to enabling this—and that IBM's strength in this area would prove to be a great fit."

Incorporating the proven IBM Service Provider Delivery Environment (SPDE, or "speedy") Integration Hub solution, IBM Global Business Services designed and implemented an Enterprise Application Integration platform that integrates a wide range of customer-facing and back office processes. Its flexibility is evident in the range of integration options it provides Bharti Airtel. In the case of customer self service, for example, each of the three main channels—Web, interactive voice response and short message service—employ different integration technologies (such as publish/subscribe via IBM WebSphere® MQ and asynchronous messaging via IBM WebSphere Business Integration Server) depending on the channel's technical needs.

In line with its vision, Bharti Airtel's advanced integration capabilities have enabled the company to transform key aspects of the customer experience; account activation is just one example. With Bharti Airtel signing up an average of 1.5 million customers per month, the ability to activate new accounts with maximum efficiency is essential. By integrating the account activation process with such key backend systems as billing, provisioning and order management, Bharti Airtel was able to cut the time required to activate new mobile accounts by 90 percent. Bharti Airtel's integration framework has also led to stronger business intelligence capabilities, which have in turn enabled the company to maximize the value of its customer relationships through cross selling and market segmentation. Menon sees these improvements as part of a broader pattern that came out of Bharti Airtel's partnership with IBM.

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## Key Components

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### Software

- IBM Service Provider Delivery Environment
- IBM WebSphere Business Integration Server
- IBM WebSphere MQ
- IBM DB2®

### Servers

- IBM System p™
- IBM System x™
- IBM TotalStorage® Enterprise Storage Server®

### Services

- IBM Global Business Services
  - IBM Global Technology Services
  - IBM Strategic Outsourcing
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## Why it matters

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As part of its first-of-a-kind IT outsourcing agreement, IBM helped Bharti Airtel create a highly flexible platform for integrating its customer-facing processes across all lines of business. The dramatic process streamlining this system has enabled is a key reason Bharti Airtel has been able to add an astounding 1.5 million new customers per month without a hitch.

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“IBM has played a pivotal role as a strategic partner in contributing to Airtel’s vision and roadmap for innovation,” explains Menon. “By working along with us to transform our go-to-market strategies and reinvent our internal processes, IBM has been a partner for the innovation that we see as essential in our ability to sustain our rapid growth.”

A key driver of Bharti Airtel’s decision to outsource its IT activities to IBM was the desire to channel its internal energies and resources into capitalizing on a spectacular market opportunity rather than on the enabling platforms needed to do so. The scorching growth of Bharti Airtel’s customer base, and the ability of its business processes to keep up with this growth, illustrates the success of this strategy. But it was also driven by the desire to maximize the efficiency of its operations by entrusting IBM with the ownership and management of its IT resources, and, in the process, making its IT costs more predictable and manageable. IBM has held up its end of the agreement by continually investing in the optimization and consolidation of Bharti Airtel’s infrastructure—key components of which include IBM System p and System x servers as well as IBM TotalStorage Enterprise Storage Servers. IBM Global Technology Services performs ongoing software maintenance and development, while IBM Strategic Outsourcing provides installation services, help desk services and the ongoing management of Bharti Airtel’s IT environment.

Two years into the agreement, Bharti Airtel’s innovation efforts have resulted in many external recognitions, a highlight of which was receiving the 2006 NASSCOM IT & Innovation Award from the Hon’ble Prime Minister of India, Dr. Manmohan Singh. Bharti Airtel’s bold strategy has also produced outstanding results at the bottom line. Even in the face of declining average revenue per customer in India, Bharti Airtel has been able to post an operating cash flow margin of 40 percent, a full five percentage points higher than the rest of the industry. Menon sees process efficiency and scalability as a big factor in its performance. “It’s our ability to bring activation from four days to two hours, and our billing cycles from 15 days to two hours,” says Menon. “It’s our ability to handle more and more customers.”

#### **For more information**

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