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# The CIO Series

## Airtel's Amrita Gangotra: Dialing the Revenue Connection First



## Airtel's IT Chief Amrita Gangotra Dials the Revenue Connection First

Amrita Gangotra brings a business as well as a technological outlook to her role as director of information technology (IT) for India and South Asia at Bharti Airtel, India's biggest mobile phone services provider. The company also has a presence in landlines, broadband and television broadcasting. Expanding on her role as a technical leader, Gangotra also has developed an eye for spotting revenue earning possibilities and delivering the technology infrastructure to realize them. She faces many challenges, however, in selling her vision within and outside the company in order to execute her strategy.



Airtel, meantime, generated \$9.3 billion in revenue in 2010 (Rs. 15,756 crore, up 53% from 2009), and has some 220 million customers across 19 countries. That includes 170 million customers in India, where it also offers fixed-line, broadband and direct-to-home television services.

cost optimization, building scale and improving customer satisfaction scores "to building new revenue streams and keeping the organization abreast with new technologies" to get there.

That shift is a long way from Gangotra's brief when she joined Bharti Airtel in 2002 as vice president of solution engagement for mobile business. "When I joined, the CIO would look after ERP (enterprise resource planning) systems which, through software programs, integrate internal and external management information across the organization, billing, CRM (customer relationship management) and so on," she says.

Now, Gangotra serves in dual roles: The first role is as Airtel's IT chief, providing support to various business functions, including human resources and finance. She must also keep the systems working well in billing, CRM and call center infrastructure. In the second role – more of a strategic business role – the chief goal is to identify technologies that will help generate revenue in areas such as "m-commerce" (mobile commerce) and cloud computing services.

In this rapidly growing company, the phrase "revenue stream" seems to come more easily to Gangotra than the words "technology" or "IT." That suggests how she perceives her role as chief information officer (CIO) at her company, where she also is on the management board.

The CIO role, which is central to Gangotra's current responsibilities, has grown significantly in integrated telecommunications companies like Airtel, she says. It has moved from a focus on

### A TECHNOLOGY FACE FOR NEW REVENUE DRIVERS

A recent example of the strategic aspect of Gangotra's role is Airtel's launch of a mobile "app" (or applications) store. The Airtel App Central store has applications customers can buy or download free, including for tracking air and rail reservations or insurance policy details. "The technology thinking was done by the CIO's organization and the business team helped in preparing the business case and its ability," says Gangotra. "We launched the app store and the value added services like recharging through SMS (text messages)."

Another recent move is Airtel's Digital Media Exchange, aimed at a broad market of broadcasters, cinema houses, media production and distribution houses and even banks. Here, her team has found new uses for Airtel technology in the distribution of digital content across multiple media platforms. "It helps in digitizing media content and using them just-in-time through online connectivity," she says, describing the venture as unique in the industry. The team had to grapple with many challenges in determining the right business model, architecture and technology, in addition to managing more marketing-related efforts across the company, such as "m-advertisements" (advertising through mobile phones). "It is pretty much more the non-technology pieces we devote our time on rather than just building the architecture," she says.

In explaining the genesis of the Digital Media Exchange Media, Gangotra points out that media houses needed "transformational" technology to get away from traditional models. "Some of the TV houses shoot their episodes [and physically] carry the recordings to the broadcasting agencies – it is pretty much manual and analog," she says. Airtel realized it could provide connectivity between various locations of an organization

and the media exchange. The company realized that if it built a system covering pre-production, post-production and distribution of content, it would help media houses contain costs and seize opportunities for a rental subscription model.

The technology also helps institutions like banks digitally distribute and broadcast signage, advertisements or other communications simultaneously across their network. "You can have the same ad running at 2,000 branches of a bank all across the country," she says. "It builds a new revenue stream for us."

Gangotra pries open new revenue opportunities with projects such as Airtel Money, a recently launched e-commerce product. "There are no standard cookie-cutter solutions here, considering RBI (Reserve Bank of India) regulations and the relationships we are trying to build with banks," she says. "How do you think through that? Study the market to see what standard products are available, what you need to customize, and what solutions the architecture will help in scaling."

### VIEW FROM THE CORNER OFFICE

Gangotra has a seat at C-level deliberations from the formative stages of deals or projects. For example, In Sept 2010 she got involved at an early stage with Bharti Airtel's 10-year outsourcing initiative about managing the company's computing and mobile network across 16 African countries. The outsourcing initiative was valued between \$1 billion to \$1.5 billion by market sources. In March 2010 Bharti Airtel bought Zain Telecom's African operations for more than \$10.7 billion.

"Our whole objective of going global is additional revenue streams, but it is also how we build in synergies and keep costs low," says Gangotra, referring to the strategic importance of the outsourcing initiative.



Among Gangotra’s key efforts underway is building infrastructure for cloud computing, “a very big initiative for all [mobile phone] service providers.” Cloud computing essentially allows users to download and rent IT application software located on remote servers, or “clouds,” instead of purchasing them. New revenue-generating opportunities open up with cloud services and by leveraging Airtel’s data center infrastructure — for example data storage. Cloud services would enable up-to-the-minute software required for new mobile applications, allowing clients and third-party developers to access them as needed.

### BEEN THERE, DO ‘IT’ AGAIN

One of the biggest strengths Bharti Airtel takes to new markets is its business model, the company believes. Replicating that effectively with the appropriate technology is a top priority. The company’s business model has been “successful in spite of the ARPUs (average revenue per user) being one of the lowest in the world,” she says. Bharti Airtel has, over the years, expanded aggressively into semi-urban and rural India without getting disenchanted by ARPU levels, a critical benchmark for many mobile phone service providers in the West.

But Airtel’s low-margin strategy has paid off. The company now has 170 million customers and that growing base can be tapped for higher-value services. Airtel is also credited with pioneering into rural markets. Gangotra says another distinctive feature in Airtel’s growth has been in adopting marketing strategies similar to those at fast-moving consumer goods (FMCG) companies, typically characterized by aggressive penetration and pricing models, and a longer-term focus on market share over short-term profitability. “We would like to replicate this success in the other [companies] we acquire,” she says. As Airtel

expands into new markets, she sees herself playing a key role in keeping costs low, building synergies where possible and transferring best practices.

Airtel also uses a distinctive model for its IT functions that Gangotra wants to take to newer markets. Back in 2004, the company decided to outsource IT functions to third-parties, which helped minimize IT infrastructure investments. Such objectives were “very different from the traditional outsourcing model of cost arbitrage,” Gangotra says. For one, it sought to pool its existing talent and expertise in India. Also, the approach broke from conventional outsourcing formats where vendors bill by the hour or get fixed fees for executing projects. Airtel instead adopted an “outcome-based model, where outsourced service provider revenues are linked to the efficiencies their services help generate. This also allows Airtel to use the latest IT systems, ensuring it doesn’t nurse legacy systems.

### MARKETING THE IT VISION

Gangotra says the model adopted in India is suitable for newer markets. She is currently looking to place global contracts for IT products, services or technology the company purchases. Work is also underway to use cloud computing services more globally. Cloud computing is particularly useful in smaller countries where the requisite skill may not be available.

Gangotra has to factor in several country-specific issues as she designs the technology infrastructure to support expansion. Regulatory regimes vary widely, for example, and sometimes, the technologies must work with more than one language – such as using English, Hindi, Bengali, etc. “The only debate when we go to a specific country is on how we deal with those nuances.”

Internally, Gangotra arranges periodic ‘Technology Hour’ sessions with C-level executives in order to brief colleagues on new initiatives and the technological resources. These sessions also help her team determine work flows in sales, customer care and human resources. “We normally think through a three-year roadmap and break it down into one-year IT plans.” She currently has between five and 10 strategic projects and 30-40 other projects underway. These projects focus on several KPIs (key performance indicators) such as customer satisfaction and customer “stickiness” or retention levels.

### REAPING THE BENEFITS

Without providing specifics, Gangotra says the company’s marketing campaigns have resulted in a higher conversion rate, (the percentage of prospective customers who sign up for services). Airtel’s conversion rate these days is significantly higher than the 10-15% rate (of prospective customers) in earlier years, she notes. A couple of years ago, her office worked a “business analytics” exercise called “Project Arjun” to extract “business intelligence” from customer profiles of the company’s 170 million subscribers. Gangotra won the ‘2010 CIO 100’ award from International Data Group (IDG) for that work. She also won IDG’s CIO100 Innovation Award last year, plus the Gold CIO award by Cyber India Online and the IT magazine Dataquest, among other honors.

### AN EYE FOR NEW OPPORTUNITIES

With new technologies constantly unfolding, “keeping track of competition and benchmarking worldwide on various parameters are important strategies,” Gangotra says. “Just because we are number 1, I don’t think we have the mindset that we will remain No. 1. Our constant endeavor is to raise our own bar — benchmarking against ourselves.”

All of the new initiatives have meant new hardware and software costs for Airtel. But the company’s IT spend remains roughly at the same proportion of revenues as the industry average while the investments have enabled new revenue streams and brought other benefits, including a modern network operations center that proactively monitors and troubleshoots “incidents” as it prevents disruptions in system availability. Other gains include shared services in work processes involving human resources, finance and other company departments.

Over the span of her career, Gangotra has experience across the FMCG, telecommunications and IT industries. She spent nine years with Nestle India, where she helped implement an ERP program across business groups that also became a standard across Nestle’s Asia Pacific operations. Prior to her current assignment, she was CIO for Airtel’s mobile services, the company’s largest business unit. She has also participated in global advisory boards at leading companies, including IBM and Intel, and is president of the Indian chapter of The Data Warehousing Institute of Renton, Washington. Gangotra has a postgraduate degree in operations research from Delhi University.

### TOMORROW’S CHALLENGES

Gangotra lists her top challenges as she prepares for the future. “One is, as a technologist, ensuring the scale in terms of the architecture to help us support 250 million customers,” she says. “We don’t see benchmarks or examples that will help us in providing technology to support these customers.”

Her second challenge: to support new revenue streams. She says she looks forward to launching 3G (third generation) and broadband wireless services that will provide Internet connectivity in untapped rural and other markets in India,



and enable data communications. “We were essentially a voice organization — people who knew how to manage the voice business — but now we are transforming to a data business.” With data services, mobile phone users can use email, browse online and download text, music, movies and so on. “[Third generation] services will bring an explosion in data consumption. How do I start building systems that will help us in monetizing the data usage, control the data usage for people who go beyond the limits allotted to them, monitor fraud, and so on?” asks Gangotra.

In the Indian market, Bharti Airtel took the lead in outsourcing its IT, network and operations infrastructure to global partners with strong domain expertise, after which many telcos followed in its footsteps. Today, Airtel continues to work closely with all its partners towards quality execution of plans directed to its vendors. “While the outsourcing model helps optimize efficiencies, we focus a great amount of our efforts towards ensuring delivery on high service benchmarks, monitoring our partners’ overall performance and adherence to strict SLAs. This challenge is a part and parcel of managing the large scale of Bharti Airtel’s IT operations that exist today - which over a period of time, has successfully helped Airtel focus on its core business competencies,” Gangotra explains.

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