

The Swelling Cloud in the Blue Sky

Cloud computing is expected to be a \$42-billion opportunity by 2012, and Indian IT services' top tier doesn't want to lose out on this great white hope. **ANAND ADHIKARI**

INDIAN IT'S GIGS IN THE CLOUD

TCS

Piloting cloud services for small and medium businesses

INFOSYS

Researching on cloud applications and offering consultancy services

WIPRO

Setting up a 'public' cloud in its data centres, a 'private' cloud for employees

TECH MAHINDRA

Piloting a cloud computing service framework for a large Independent Software Vendor (ISV)

COGNIZANT

Rolling out an internal cloud platform to host and test applications

Like many of the Next Big Things and disruptive trends in technology that come (and more than a few disappear as quickly as they arrive), cloud computing has had its fair share of cheerleading. Companies like salesforce.com, Amazon EC2 (which the online retailer launched way back in 2006), and Google App Engine have made rapid strides in this area. Cloud computing, very simply, is a service to the user—the cloud is IT—that is delivered by virtualised resources that are independent of location. IT companies offer time to clients on their infrastructure and pay on the basis of usage (without having to buy software). The benefits: Ability to store large amounts of data at a lower cost, and perhaps also faster processing of those data.

What's more, users can access a diverse range of web-based computing applications that are available in the cloud.

Serendipitously, cloud computing got a lift after the onset of the global credit crisis, and the severe downturn in global economies shifted the spotlight to the advantages of cloud computing. "That's when some of our customers started asking about cloud services," recalls Sharad Sanghi, Founder of Netmagic Solutions, which positions itself as the first managed IT services company—managing all the IT needs of an organisation right from LAN, desktop, storage, data centre to helpdesk management—to launch cloud computing services in India (last April). Netmagic offers services like data centres, hosting, and remote infrastructure management for small

and medium enterprises (SMEs). Cloud computing, for its part, has become the fastest-growing service at Netmagic. "The growth is faster than what we anticipated," says Sanghi, who is targeting a 12 per cent contribution to the turnover by 2010 from its cloud offerings.

But it's not just entrepreneurs like Sanghi who are attempting to reap the benefits in the cloud. After global biggies like IBM, Microsoft and Google plunged into this space, it's now the turn of Indian IT services' top tier—TCS, Infosys, Wipro, Cognizant, Tech Mahindra—to focus more closely on cloud computing. Such services fit in well with Indian IT's proposition of quality at competitive costs. With the cost advantage gradually eroding, cloud computing could be just what the doctor ordered for the tier I firms. It's also a huge opportunity waiting to be grabbed what with research firm IDC projecting that cloud computing will be a \$42.2-billion global business by 2012. This represents 8.5 per cent of the projected IT spending of \$493 billion by 2012. Today, out of the \$383 billion spent on IT services, cloud services consumes about \$16.2 billion or just 4 per cent of the entire spend.

India's IT majors are putting their time, money and energy in two areas: Software as a Service (SaaS) and Platform as a Service (PaaS). The third layer of cloud services—Infrastructure as a Service (IaaS)—is not so much the focus. "To be a real cloud player, you must provide the relevant domain applications and the necessary business services," believes K. Ananth Krishnan, Vice President & Chief Technology Officer, TCS.

TCS today provides applications covering common office and business applications, core vertical BPO applications and also niche analytics applications on the cloud to SMEs in the manufacturing, retail, education and health

THE OPPORTUNITY

AREA
Infrastructure as a Service

SERVICES
Servers, processors, memory, database and storage network are provided as a service.

MARKET SIZE
\$11 billion

AREA
Platform as a Service

SERVICES
Application development is offered as a service.

MARKET SIZE
\$10 billion

AREA
Software (Application) as a Service

SERVICES
Domain-specific applications offered as a service.

MARKET SIZE
\$21 billion

Projections for 2012

Source: Market

care segments.

Infosys has been looking at cloud computing for more than a year. "We are working at getting cloud computing into a utility paradigm to innovate effectively and enable collaboration," says Subu Goparaju, Vice President and Head of Software Engineering & Technology Labs at Infosys Technologies. The services include helping companies in building cloud computing services on public clouds such as Amazon Web Services (AWS), Microsoft Azure and Google App Engine. For instance, in November, Infosys integrated Volantis Systems' award-winning ubik.com service with Windows Azure. Ubik.com is a free-to-use online service that allows anyone to create personalised mobile Internet sites without having to write a line of code.

Wipro, too, claims that it has made significant progress in cloud computing. "We have set up public



"We offer consultancy services to advise companies on how to derive maximum value by shifting certain applications to a cloud"

Subu Goparaju, Vice President, Infosys Technologies

"To be a real cloud player, you must provide the necessary business services on top of an infrastructure in a service model"

K. Ananth Krishnan, Chief Technology Officer, TCS

clouds in our data centres. The cloud is only being offered as a surround service to existing enterprise customers," says I. Vijaykumar, CTO at Wipro. The third-largest Indian IT major has done pilots on public clouds in areas like high-performance computing, modelling and simulation, ERP, massive data volume performance analysis and secure file system deployment. "We have also rolled out a private cloud within Wipro for employees," adds Vijaykumar. Similarly, Cognizant's global technology office has rolled out an internal cloud platform. "We have not yet opened this up to our customers and other third parties," says Sukumar Rajagopal, Senior Vice President and Head of Innovation at Cognizant. IT

companies are also following a collaborative approach by tying up with start-ups, universities and technical institutions and vendors of cloud computing. "We also need collaboration with the government bodies (Ministry of IT) and academic bodies (IITs) to help standardise cloud computing technologies in India for its large scale adoption and benefits," says L. Ravi, Executive Vice President & COO, Tech Mahindra.

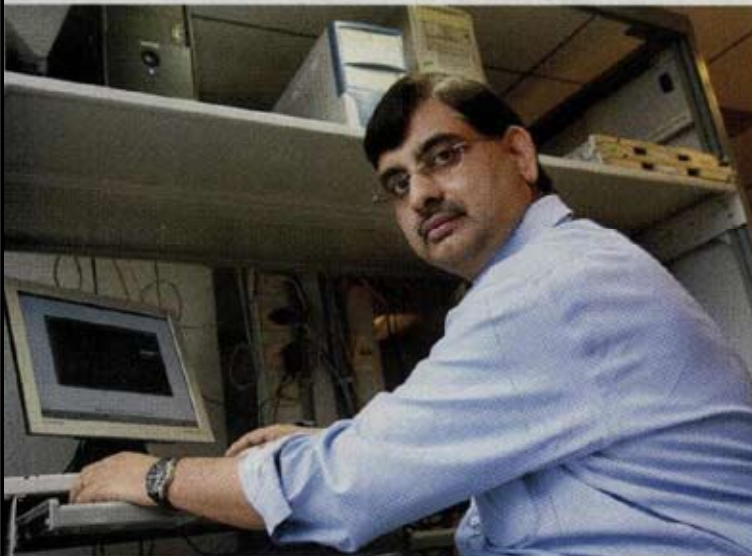
There are those who believe that private clouds are a good starting point for large organisations. Opting for a public cloud straightaway could result in issues of data security and audit challenges. Tech research firm Gartner, in a recent report, predicts that private cloud services will



VIMESH GORWANI

"We have rolled out a private cloud for employees...several industry-specific applications are being delivered as cloud services"

I. Vijaykumar, Chief Technology Officer, Wipro Technologies



DEEPAK G. PAVAR

be a stepping stone to future public cloud services.

Clearly, there is lot of hype over cloud computing and debates are still raging over the right way to approach the cloud. In fact, until big enterprises adopt cloud—currently it's an SME favourite—many of the cloud services will remain topics of discussion. "The number of applications running on a cloud today is still very small," admits the CTO of a large IT company. Many admit that cloud computing is actually going through its initial phases where a major thrust is on awareness, which could be later followed by acceptance and implementation.

Currently, the onus is on the cloud computing players to quantify the value of the service to potential users—how much of cost reduction can it result in? Also, the technical robustness of the service has to be validated. It's over to the Indian IT top tier, for whom cost has always been one vital leg of its proposition, to distill the value from hype. ©

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