

THE INDIAN IT INDUSTRY

Overcoming Challenges. Harnessing Opportunities. Embracing Innovation.

There has been a significant proliferation of IT adoption among Indian enterprises, spurred by the increasing globalisation of business with not only MNC firms coming to India, but more importantly, Indian enterprises acquiring global footprints. While this bodes well for the domestic IT market and should serve as a strong incentive for the Indian IT-BPO industry, the domestic IT market continues to face significant challenges. These need to be resolved before the real opportunities can be tapped by the Indian IT-BPO industry.

IT adoption in the Indian domestic IT market has experienced a surge in growth over the past few years. The domestic IT market witnessed its first phase of growth in 2003-08, which nearly tripled the market size from INR 303 billion in FY2003 to INR 932 billion in FY2008, a CAGR of over 25 per cent. The second phase of growth, expected to continue post 2009, will be based on the changing customer demands and the new and innovative services from IT-BPO vendors to meet this need.

The domestic technology and business services industry in India is in fact at an inflection point today. According to the NASSCOM Perspective 2020 report, increasing IT spend and globalisation of Indian corporations is leading to a maturation in domestic demand in terms of product complexity, delivery flexibility and service levels. Going forward, these trends are expected to drive domestic consumption and increase the size of the addressable market.

Increased IT usage by India's key corporates, the evolution of the Micro, Small and Medium Business (MSMB) segment into an implementer of technology and the roll out of e-governance projects by the government as well as increased IT adoption by the segment, are further expanding the addressable segment of the domestic IT-BPO market.

The other factors spurring the expansion of the domestic market are:

- A growth of 17 per cent in hardware sales in FY2008. Enterprise adoption of cutting-edge IT and increasing penetration into smaller towns is driving this momentum
- Rise in IT spends by India Inc, on a per employee basis as well as a percentage of their revenues
- Increase in IT services spends, which grew at around 20 per cent in 2008
- Hike in software services spending – 15 per cent is being supported by enhanced adoption

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- Jump in domestic BPO, which is growing the maximum at 40 per cent, and is being driven by the BFSI, telecom and airline verticals
- An increase in the number of transformational deals, with companies bagging multi-million dollar contracts for periods ranging from 5 to 10 years, apart from large outsourcing deals in the e-governance and e-procurement space

(Source: NASSCOM Strategic Review 2009)

The statistics for FY2009 are even more impressive, with IT-BPO growth estimated at around 19.4 per cent, to touch INR 1,113 billion. Interestingly, this year, India is expected to lead domestic spending growth projections among the top five markets in the APAC region including India, China, Vietnam, Thailand and Philippines.

Furthermore, analysts believe that the biggest domestic opportunity in most sectors (e.g., banking, insurance, retail, telecom, education, media and entertainment and healthcare) will lie in serving citizens and businesses at the lower end of the pyramid. Harnessing this opportunity through new price-performance paradigms, India is likely to be the laboratory for disruptive innovations to address the needs of these underserved segments.

Rise of domestic outsourcing

According to the NASSCOM Perspective 2020 report, the addressable market for domestic IT-BPO services outsourcing will touch around USD 90-100 billion by 2020 in India, with the key drivers being economic growth and increased IT adoption. The report also indicates that BFSI and public services will remain the largest outsourcers in the domestic segment, accounting for a business opportunity of around USD 13-15 billion. For customers in the domestic IT market, access to expertise in managing technology is seen as the biggest benefit of outsourcing, rather than cost reduction.

As in the global business services market, call centres, BFSI, F&A and telecom are expected to be the major outsourcing segments.

Challenges facing IT adoption in the domestic market

Despite the immense promise that the domestic IT market holds out to the Indian IT players, the sector continues to face significant challenges related to technology adoption. Hundreds of thousands, or perhaps millions of MSME have underinvested in IT and have not realised its immense benefits. IT adoption in the Indian MSME segment significantly trails behind comparator economies like Brazil and China, which is rather unfortunate given the transformational tailwind IT can provide to these firms.

The extreme price sensitivity of the Indian MSME segment, appropriateness of technology and complexity of IT management have emerged as significant IT adoption barriers.

The fact is that a majority of the branded IT products available at the national level in India today have been created in a context which is quite different to the context of the Indian SME segment, resulting in these products being alien to the requirements of the SME users.

Furthermore, managing multiple vendors, technology obsolescence, software licensing and upgrades and application changes require IT capabilities that most SME firms do not possess, leading them to rely heavily on their local vendors. With most local vendors themselves lacking capabilities to offer good quality solutions, SME users never seem to get a bang for their IT buck and consequently develop a sense of uncertainty vis-a-vis IT. This results in a cycle of IT underinvestment. Typically, IT adoption only focuses on automating routine tasks and the IT sourcing philosophy is predicated on the cheapest, which is often low quality.

Vast sectors of the Indian economy like healthcare, logistics, agriculture, and education too have little IT penetration, which perhaps limits their access to millions of Indian citizens. Even in sectors where there has been huge progress, such as banking and insurance, hundreds of millions of Indians continue to be denied access to formal systems. Clearly, people occupying the base of the pyramid, the underserved and the marginalised sections of the society, are not availing the advantages that IT brings. At the level of individual citizens, IT has yet to have a transformational impact on their quality of life except in the case of isolated examples like the Indian Railways, etc.

Addressing the pain points

It has therefore to be recognised that making IT ubiquitous in India is a long and arduous journey – one that will require the attention of the IT-BPO industry and collaboration between all the stakeholders in the Indian IT ecosystem.

To begin with, the IT industry needs to ensure that IT technology and solutions are made available, which are suitable to the needs of the micro and SME user firms. These solutions and technologies also need to be affordable for the micro and SME firms especially in the current economic climate where access to investment capital is difficult. Finally, the IT industry has to create a low cost yet efficient IT service capacity to take care of the support needs of SME users. Achieving this will require the Indian IT industry to work closely with customers across the various market segments and innovate to create new business models, much like what the Indian telecom industry has done successfully.

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In order to reach out to the lower end of the pyramid, a strong agenda of inclusive growth is needed. What this means is that current strategies for delivering public services need to be disaggregated and redesigned to address the challenges of scalability, affordability and access. This cannot be achieved without a strong involvement of IT as new models with radically different price-performance ratios are required to address the high volume low value Indian context.

Additionally, the following initiatives need to be taken up by the IT sector:

- Unlike the overseas markets, the domestic IT market requires demand stimulation. With market development efforts of individual firms focused on quick paybacks and overlapping with efforts of other firms, a collaborative market development can lead to better resource optimisation and create a force-multiplier effect
- Growth in IT adoption in the domestic market will be driven by first time users with high support requirements. Availability of a 'low tech-high touch' support is critical to make these users stay committed to using IT. Both the government and the IT firms need to invest in IT vocational skill development as part of their workforce development initiatives, in order to build the required support manpower
- Indian IT firms generally operate with a vertically integrated business model. To develop new market segments and provide high quality services to local users, Indian IT firms should invest in creating partner ecosystems and develop domestic market segments in partnership with local firms
- While prices of IT products have fallen recently, they remain high enough to act as a barrier to IT adoption, especially when assessed from the TCO perspective. For developing affordable products using technologies suited to the domestic market, IT firms should collaborate with Indian research institutes to commercialise domestic technologies

Recognising the leaders in IT deployment

Apart from encouraging Indian companies to adopt IT, it is also important to highlight the organisations that have taken a lead in deploying IT to achieve enhanced competitiveness. Recognising the importance of identifying India's forerunners in the area of IT deployment, NASSCOM has collaborated with CNBC TV 18 to institute the NASSCOM CNBC TV 18 IT User Awards. These have become the pre-eminent awards for the IT user community in India.

To enhance the inclusiveness of the awards, their current edition includes a combination of IT implementation leaders (banking, insurance, manufacturing, automobiles and auto-components, financial services, telecom, e-governance, etc.) and emerging sectors (healthcare, travel, utilities and energy, etc.), where the potential for transformational impact of IT is immense. The awards also have a special focus on MSMEs as well.

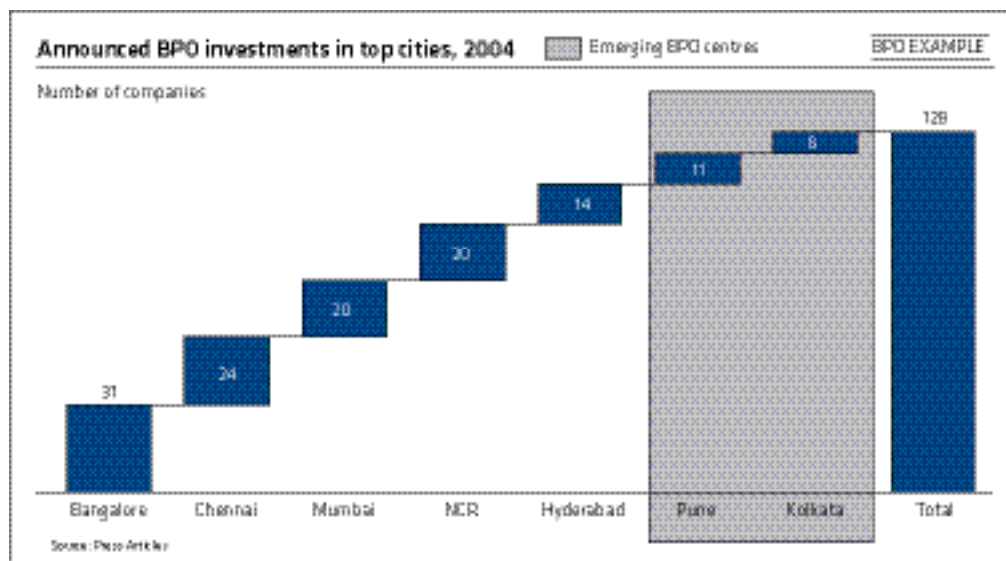
The evaluation criteria takes into account the IT adoption performance of nominated companies on a host of parameters, including their IT implementation roadmap, cost effectiveness, stakeholder impact and competitiveness.

By any yardstick, the growth in the domestic IT market in India has demonstrated a strong upward bias in recent years. A remarkable feature of the domestic IT market's growth recently is that the software segment, including services and products, exceeds the hardware segment, which is an indicator of the increased maturity of the market. However, the story of the domestic IT market is not only in the numbers as it is currently underinvested in IT but more importantly in the opportunity for innovation in both technology and services. Lack of legacy technologies is an opportunity to leapfrog the traditional technology adoption curve and move into new paradigms like SaaS, Cloud Computing, Web 2.0, etc. While all constituents of the ecosystem including the government have a role to play in developing the market, the IT industry has to collectively and pro-actively, take a leadership role in converting the latent demand into an active demand. The IT industry needs to collaborate with other sectors of the Indian economy to increase their productivity through increased IT adoption. This will not be easy as what worked in the export market may not work in the domestic market. New paradigms of price-performance will be required to increase the IT adoption in the underpenetrated sectors of the Indian economy.

Rajdeep Sahrawat
Vice President, NASSCOM

In the past, these prestigious awards have been bagged by several deserving organisations from different industry verticals and the government including LIC, Airtel, Reliance, HDFC, Indian Railways, etc. The 2009 Awards, to be announced soon, will felicitate the companies that have done something special with their IT adoption in 2008-09.

The Indian domestic IT-BPO market is on a strong growth trajectory, bringing far reaching advantages to the companies that are leveraging IT as an enabler for business growth. As Indian IT-BPO vendors continue to provide end-to-end specific solutions that address the challenges of the user community, we can expect an explosive growth of the industry on home turf.



Vendor	Client	Remarks
IBM	Idea Cellular	Provide support in end-to-end transformation of business critical process including billing, revenue assurance and credit collection, BI, fraud management, e-billing and payment and customer self care
Wipro Infotech	Airtel	Deliver next generation business transformation through business-IT alignment; implement a future-ready IT architecture and deploy global best practices and tools to sustain comprehensive IT operations
TCS	Ministry of External Affairs, Government of India	The Passport Seva Project would digitise the entire passport services and allow online filing of applications. The government will open 77 passport filing centres across the country in a phased manner
HCL Technologies	National Insurance Company	HCL to deploy a Core Insurance Solution (CIS) at nearly 250 offices of NIC by July 2009; entire implementation will be completed by April 2010
IBM	Kotak Mahindra Bank	IBM to design, build and maintain a highly scalable, energy efficient green data centre and converged IP network infrastructure. This implementation will help Kotak move towards a shared technology infrastructure services model across all its businesses
Infosys Technologies	Bharti Airtel	Infosys to provide a comprehensive product portfolio including devices, application servers and interactive applications to assist Airtel in offering an enhanced digital experience to Airtel Digital TV subscribers
HP India	Godrej, India	HP to provide IT outsourcing services including infrastructure solutions, SAP application services, consulting, and outsourced services
Tech Reliance	Reliance Capital	Tech Reliance to manage the IT infrastructure and applications management services for Reliance Capital's group companies

CASE STUDY

“Businesses and business users today are completely dependent on the 24x7x365 availability of IT facilities.”

V V Babu, CIO, ITC Ltd

How has ITC benefited from the use of IT?

The implementation of the strategic IT roadmap encompassing IT infrastructure and IT applications has had a significant impact on specific functional areas:

- **Supply Chain Management** – IT has improved our dealer level services and reduced stock out scenarios by 50 per cent in the marketplace. Through better visibility of sales, inventory and production-in-progress, ITC has maintained its leadership position and enhanced its market share despite the dip in industry volumes
- **Operations, Manufacturing** – IT has enabled the production planning to service dynamic marketing requirements despite a 400 per cent increase in SKUs in the past two years, and visibility of manufacturing-related information to the sales and distribution arm. Processed material wastage has declined by 25 per cent due to shop floor automation
- **Finance** – Forecasting of cash flow to synchronise the payouts with receivable collections has become possible leading to a 50 per cent faster closure of Book of Accounts and substantial reduction of working capital
- **Customer Service/Relationships** – While customers have visibility to order status, ITC businesses can respond quickly and accurately to queries, leading to higher customer satisfaction levels with better product quality and responsiveness of the company
- **Business Intelligence** – Implementing data-warehousing technologies and using predictive analytics and lead indicator tool kits, has led to a detailed view of customers and improved decision making

Businesses and business users today rely so much on the 24x7x365 availability of IT services that a

shipment cannot be made from the warehouse in case the ERP system is down. During the last one year, we have set up many warehouses and processing plants – all IT-enabled from day one. Our computing infrastructure today makes it possible to set up and make operational IT facilities in any new location in three days flat.

What steps can the government and IT-BPO services providers take to catalyse IT deployment within Indian companies, especially SMEs?

SMEs today comprise more than 99 per cent of the organisations globally and contribute to more than 40 per cent of the global GDP. Growing at a fast rate all over the world, they have become an attractive industry segment for ICT products and services. Over 3.50 crore Indian SMEs contribute to over 60 per cent of the GDP with the average Indian SMEs revenue growing roughly by 12 per cent YoY. IT spending globally by SMEs is expected to exceed USD 200 billion by 2020.

The management style of SMEs, along with their entrepreneurial culture, has allowed easy adoption of ICT solutions. In fact, SMEs ability to implement off-the-shelf solutions is a good lesson for large companies planning to implement packaged software solutions. Through smarter implementation of ERP solutions many progressive SMEs have derived business value, creating competitive advantage in the market. They have found new ways of doing business using web services, reducing costs in the value chain, and simplifying governance processes, etc.

To tap into this growing opportunity in the SME space, ICT vendors need to create niche solution offerings in the area of network and desktop security, archival and back-up, network infrastructure, accounting, supply chain and CRM solutions.

However, unlike large organisations, where big project teams work with detailed implementation methodologies covering as-is processes, to-be processes, POCs/prototypes, change management, etc., SMEs want faster roll out of the solution at value-for-money investments. SMEs have taken up wireless and mobile solutions due to their universal acceptance and dramatically reduced telecommunications expenses, thereby

reaping associated benefits much faster. Hence, ICT players need to create no-frills pay-as-you-use solutions using SaaS, Cloud Computing and ASP models. These solutions must be easy to implement and scale up, have a reduced TCO and achieve quick ROIs.

“IT has been a great contributor to our momentum. It has had an impact in areas such as distribution, production, planning and procurement.”

Pertisth Mankotia, Sheela Foam

How has Sheela Foam benefited from the use of IT?

We have covered our entire system through ERP and integrated our distributors and channel into the supply chain. The idea was to bring them to our level and enable them to enjoy the business benefits of IT, which has resulted in a growth of about 30 per cent. IT has had an impact in areas such as distribution, production, planning and procurement. It has helped improve delivery efficiency (leading to quicker delivery of foam). IT has enabled us to measure delivery efficiency – from manufacturing to distribution. We are currently in the process of measuring the distributor to dealer delivery efficiency.

A key benefit of IT has been its contribution in controlling our market operating price. What happens is that the moment the material is shipped from manufacturing to distributors, it gets recorded in the ERP. The distributors then sell to the dealers and each product they sell is identified with a unique serial number. The idea is to give the customer a single price, even if he/she visits 10 different places. If the dealer is not doing this, we send an SMS stating that the delivery will be stopped. In this way, IT has also helped reduce unauthorised selling of our product and ensured its genuineness.

At the same time, tracking our product has become possible, when it travels in between states, by tracing the serial number, and in case trespassers are involved, they are penalised. Eliminating unauthorised dealers, has improved our market operating price by 90 per cent. In the area of production and order placement too, a host of benefits have been accrued due to automation. The moment the distributor places the order, it

comes to our system. After checking the stocks, we club all the orders together, so that we can plan the raw material, etc., making our production more efficient. We have an appraisal system linked to the productivity of our people. It takes care of quality and delivery efficiency.

We have an interesting practice where we send an SMS to all key executives and sales staff at 6 am, which updates them about all the key business parameters – order status, targets, and the week’s top and bottomline. With this process in place, no reports are needed.

Additionally, we have been able to track our secondary and tertiary sales by using IT. We come to know about our actual market movement and the areas and product segments where there is potential and where there isn’t.

What can vendors and the government do to catalyse IT deployment within Indian companies, especially SMEs?

Most SMEs need three things to adopt IT: attitude, courage, and software and infrastructure. The government and IT services providers can contribute in the third area.

Today, the government is compelling companies to provide electronic data to pay their taxes, etc. In this way, organisations have to automate to conform to government norms. Thus, leading to a better understanding of the benefits of IT among companies. In our case, we took three years to see the benefits of IT adoption.

Another area, where we need to see improvement relates to SMEs. The smaller companies are typically being addressed by smaller IT services providers, which are often not geared up to meet their software needs. It would be great if some industry mechanism could be devised where companies could refer to a list of authorised vendors and purchase their technology from them. NASSCOM can play a role here and come up with an approved vendor list that SMEs can refer to, so that they can avoid falling in the wrong hands.

Software licensing fees is still very high, which prevents smaller companies from going for cutting-edge software, or even upgrading it. There should be some kind of policy to ensure that software licensing is not prohibitive in terms of costs.