

# Strategic Review 2006

## The IT Industry in India

The IT-ITES Industry continued its rapid growth, with 2004-05 being the best year of the new millennium. Exports of the IT software and services sector registered an impressive rise, and the domestic market too saw strong growth. The evolution of the industry continued, with considerable expansion in product development, engineering services and R&D. A new word was added to the industry lexicon to describe the more sophisticated work being sourced from India.

This annual report, as in past years, documents in detail this evolving picture of the Indian IT industry. It also looks at other critical elements of the industry eco-system, including telecom, human resources, policy and regulatory aspects. The role of IT in social development, including governance, is another key element.

For the last few years, NASSCOM has increasingly focused on three specific areas, which are critical to sustaining the 'India advantage' in the long-term: cyber security (including piracy, privacy, data protection and intellectual property rights), human resources, and infrastructure (especially airports, local mass transportation, roads, and electric power). During the year, many initiatives were taken in all three areas; while a lot remains to be done, the progress and prognosis are positive.

The evolution of the industry also takes place in dimensions other than size and scope. Brand India in IT is no longer just low cost and high quality; it also includes information security, good and transparent corporate governance, and – increasingly – innovation. NASSCOM has paid a lot of attention to innovation, which matches well with its focus on small companies and the products space, since these three are greatly overlapping facets.

Government policy continues to be strongly supportive and provides an excellent environment for investment and growth. Procedural hurdles and red-tape has not disappeared, but is considerably reduced. State

governments vie for investments by IT companies by providing incentives and a conducive business environment.

Talent continues to be a challenge, a problem resulting from the success of the industry and India's accelerating economic growth. The issue is not so much about overall quantity, but of quality. NASSCOM's work is focused on increasing the supply of persons with the appropriate skill-sets and the right quality.

This report documents these issues in some detail, as also the action that is underway. In addition, as always, it provides a perspective on broader aspects of the IT industry and includes a considerable amount of statistical detail about the industry.

The NASSCOM research team, headed by Sunil Mehta, and comprising Gaurav Singh, Nirmala Balakrishnan, Diksha Nerurkar and Mukta Anand, has taken great pains and very considerable efforts to put together this report. I hope readers will find it interesting and useful. We would welcome feedback and comments.

January 30, 2006



Kiran Karnik

**2005 was a year of steady growth with gradually increasing optimism for the global IT-ITES sector. Increasing outsourcing adoption and maturing global service delivery were the key drivers of growth.**

Worldwide spending on information technology (IT) and IT-enabled business services (together referred to as IT-ITES) grew by nearly seven per cent in 2005, on the back of healthier spending across key markets of the US and Western Europe, and strong growth in emerging markets. Outsourcing continued to be the primary growth engine with global service delivery forming an integral part of the strategies adopted by customers as well as service providers.

The year 2005 also witnessed the coming of age of the Indian IT multinationals with the traditionally India-centric, indigenous players beginning to build noticeable global presence – through cross border acquisitions and organic growth in other low cost locations. This was complemented by global majors continuing to significantly ramp-up their offshore delivery capabilities – predominantly in India, vindicating the success of the global delivery model and highlighting India's increasingly important role in the new world IT order.

In addition to the growth in scale, the portfolio of services sourced globally continued to expand into higher-value, more complex activities, further reinforcing the increasing maturity of the global delivery model.

**The Indian IT-ITES sector continues to record strong growth; estimated to grow by 28 per cent over FY 2004-05. Service exports growth estimated at 32 per cent.**

The Indian IT-ITES sector continues to chart remarkable double-digit growth and is expected to exceed USD 36 billion in annual revenue in FY 2005-06<sup>1</sup>, an increase of nearly 28 per cent in this current fiscal.

<sup>1</sup> The fiscal year for the Indian economy follows a twelve month-cycle spanning April–March. Hence all the figures reported for the current Indian fiscal year (FY 2005-06) pertain to the industry's performance during April–December 2005 that have been used to arrive at the year end estimates

Services (IT-ITES) exports, accounting for nearly two-thirds of the total, are estimated to grow by 32 per cent. Leading publicly listed players<sup>2</sup> have reported a top line year-on-year growth of nearly 34 per cent, over the first half of the current fiscal. Additionally, MNC owned captive units have been scaling up their operations steadily with the headcount forecast to grow by at least 30 per cent this year. IT-ITES activity in the domestic market is also witnessing steady growth with the services segment coming into its own - reflecting sound optimism for the year-end results.

**To better reflect how the industry and customer markets view the portfolio of services sourced from India, NASSCOM has re-classified the manner in which it reports the various segments included within IT-ITES. For instance, this year onwards, engineering and R&D services are being identified as an independent service line and will be reported separately. Consequently, some of the services (e.g. GIS), earlier included under ITES-BPO, will now be reported under engineering and R&D services. Further, NASSCOM has increased its overall estimate of industry exports for the previous year (FY 2004-05), based on the details reported to NASSCOM and STPI by individual companies. As a result of the reclassification and the revision of estimates, the historical values for a few segments have changed. In addition to the projections for FY 2005-06, to help ease comparisons, NASSCOM has restated the details for the preceding years FY 2003-04 and FY 2004-05 as per the new classification.**

IT services exports lead Indian IT-ITES, accounting for approximately 35 per cent of the industry aggregate (domestic + export revenues), and are projected to grow by 32-33 per cent in the current fiscal (FY 2005-06). Steady demand in traditional areas such as custom application development and application management is being supplemented by increasing traction in package implementation and software deployment, as well as relatively new areas such as remote infrastructure management, IT consulting and software testing.

<sup>2</sup> Comprising over 50 leading publicly listed companies, accounting for approximately two-third of the total revenues earned by Indian companies.

The IT-enabled Business Services (ITES-BPO) segment continues to chart strong year-on-year growth, estimated at 37 per cent for FY 2005-06. Growth is being driven by a steady increase in scale and depth of existing service lines, and by the addition of newer vertical specific and emerging, niche business services.

Engineering and R&D services and software products are two other segments that hold significant opportunity for the Indian IT-ITES sector. Driven by the demonstrated success of adapting offshore delivery to traditional IT services and the expanding scope of ITES-BPO, firms are increasingly applying the same concepts to increase returns from their core product/service design and development processes using globally distributed development teams. Export revenue from this segment is estimated to be growing at a CAGR of 37 per cent over FY 2003-06. Engineering and R&D services alone are estimated to be growing at a CAGR of 43 per cent over the same period.

Complementing the continued growth in IT-ITES exports is a growing domestic market. Strong demand over the past few years has placed India amongst the fastest growing IT markets in the Asia-Pacific region. While hardware still accounts for a majority share, spending on services and the outsourced model is gaining noticeable traction. Growth in the domestic market is beginning to reflect the early signs of service line depth that characterises maturing markets.

Recognising its potential, leading IT firms (Indian as well as MNC) are beginning to focus on the domestic market. The proportion of revenue earned from the domestic market by the predominantly export focused Indian IT firms has grown and several large domestic contracts announced last year were won by MNCs. Global product companies are also looking to introduce localised versions of their software products to drive usability and penetration. This specific focus on the domestic business opportunity is helping create an environment of healthy competition in the industry that augurs well for the development of the domestic market.

**As global sourcing matures and demand for multi-country delivery capability increases, newer destinations are being explored, however India continues to offer and deliver the best 'bundle' of benefits.**

Inspired by the Indian IT-ITES success story, several other locations have been presented as alternate options for offshore outsourcing.

However, organisational experiences as well as syndicated analyses comparing the various sourcing locations have revealed that India continues to offer and deliver the best 'bundle' of benefits sought from global sourcing.

The large and growing pool of skilled professionals has been a key driver of the rapid growth in the Indian IT-ITES sector. With over 50 per cent of its population having an average age of less than 25 years, it is very unlikely that India will face a shortage of working age population for the foreseeable future.

There have been concerns that a part of the available pool is unsuitable for direct employment into the industry – implying a talent crunch. However recent research has proved these fears unfounded. Even at current levels of suitability, India has the single-largest pool of suitable offshore talent – accounting for 28 per cent of the total suitable pool available across all offshore destinations and outpacing the share of the next closest destination by at least a factor of 2.5.

To sharpen India's value proposition and extend India's leadership in the global IT-ITES space, the industry has already launched several initiatives to further enhance the availability of and access to suitable talent for IT-ITES in India. These include comprehensive skill assessment and certification programs for entry-level talent and executives (low-middle level management) and an image enhancement program to build greater awareness about the career opportunities in this segment. NASSCOM is also working with the academia across the country to encourage and facilitate greater industry interaction, thus helping them share relevant feedback, stay updated on developments in the industry and giving them an opportunity to incorporate positive changes to their curriculum and pedagogy.

2005 witnessed a surge in the incidence and visibility of cases involving loss or misuse of data across the world – highlighting the vulnerability of existing systems and processes to such breaches and stressing the importance of a robust security policy and environment – both at the company as well as the country levels. Indian IT-ITES was not unaffected by these events. While the direct loss caused due to the two to three incidents reported in India was minimal, and the perpetrators/accused were identified and dealt with swiftly – it led to somewhat unjustified concerns about information security at offshore operations. On the flip-

side, the prompt follow-up by the enforcement authorities in India reflected the preparedness of the Indian info-security environment to address such issues.

Even though India's record on information security ranks better than most locations, authorities in India are maintaining a keen emphasis on further strengthening the information security environment in India. Specific initiatives underway include enhancing the legal framework through proposed amendments to the IT Act 2000 – currently under review by the government, increasing interaction between the industry players and enforcement agencies to help create greater awareness about information security issues and facilitate mutual support as and when required.

Demonstrated process quality and expertise in service delivery has been a key factor driving India's sustained leadership in global service delivery. Since the inception of the industry in India, players have been focusing on quality initiatives to align themselves with international standards. Over the years, the industry has built robust processes and procedures to offer world class IT software products and related services.

Today, India-based centres (both Indian firms as well as MNC-owned captives) constitute the largest number of quality certifications achieved by any single country. Further, several client organisations have acknowledged that superior process and project management capabilities at their India based centres have helped deliver higher performance levels when compared with their other (erstwhile) sourcing locations across the world.

The transition from outsourcing to global sourcing of services is expected to drive the next phase of evolution in process quality frameworks and practices, with India playing an integral role in defining best practices and global benchmarks. Having aligned their internal processes and practices to international standards such as ISO, CMM, Six Sigma, etc., companies in India are seeking to further increase the quality and productivity benchmarks by introducing adaptations more suitable for remote service delivery.

Achieving cost efficiencies continues to rank amongst the primary factors driving the growth of global sourcing. India has a strong track record of delivering a significant cost advantage, with clients reporting savings of

up to 60 per cent over the original cost base. Further, in spite of the rising wages, recently released statistics show that India continues remains the most cost competitive sourcing base for IT-ITES.

Several firms are already leveraging high levels of productivity and utilisation, and economies of scale to sustain cost-competitiveness in service delivery. A recent analysis linking performance levels and practices across leading India based players has reinforced that these gains can be further extended by adopting industry best practices and focusing on operational excellence.

A strict focus on process excellence and the resultant productivity gains at the firm level coupled with external factors such as the scope for lowering telecom costs to internationally competitive levels, lower depreciation and other infrastructure costs, geographic broad-basing of the industry to more cities, etc., is expected to sustain India's cost-competitiveness.

India's core proposition of talent, quality, security and cost advantage has been complemented by rapid growth in availability of high quality telecommunication connectivity across the country. Progressive policy reforms continue to help drive down telecom prices towards internationally competitive levels, increase penetration and facilitate adoption of the latest, most efficient and economical technologies.

In addition to strong telecom links, cities across the country have witnessed steady growth in office facilities, hotels and other supporting business infrastructure matching global standards. Physical connectivity, via road and air, has also been stepped up over the last few years. According to the mid term review of the tenth five-year plan (2002-07), released in FY 2004-05, India currently has the second largest road network in the world – totaling over 3.3 million kilometers. Deregulation of the aviation sector and the recently enacted Open-Skies Policy has provided a significant fillip to the availability and affordability of airline travel.

Notwithstanding these developments, some elements of physical infrastructure – mainly in a few hubs – are beginning to show some signs of strain. Recognising the imperatives of having adequate infrastructure to support continued business growth, the central and state governments have initiated several efforts towards this end. These include expansion of existing airports and developing plans for the building

of new airports, strengthening the highway networks in the country, and scaling up public transport infrastructure within the cities.

While some imbalances may persist in few areas over the short-term, successful execution of the outlined programmes will address any concerns of infrastructure availability in the country. Further, armed with the experience of the initial hubs, urban planners are now better prepared to account for infrastructural demands due to the rapid growth expected in this sector.

Progressive policy reform in the post-liberalisation era has been a key contributor to the stellar growth of the Indian economy over the past fifteen years. The rapid growth of Indian IT-ITES is no exception. The enabling policy environment provided by the central and state governments has played a critical role in the rapid growth of this sector. Its success is best exemplified in the fact that several other nations are trying to emulate the policy environment that has helped develop the IT-ITES sector in India.

Complementing the continued policy reform aimed at addressing the evolving needs of the industry and sustaining India's attractiveness as a sourcing destination, the Indian government continues to support the interests of the industry by being an active proponent of global free trade.

India's unparalleled attractiveness as an IT-ITES destination is now a well known fact. However, demonstrated IT-ITES prowess is not the only factor attracting international investors to the country. Strong economic prospects backed by sound fundamentals of favorable demographics and investment ratios, human capital, trade openness, increasing urbanisation and rising consumption spending make India an attractive investment destination – as a sourcing base as well as a significant market.

The all-pervasive nature of ICT holds the potential to significantly boost the social development of emerging countries. Today, we have several examples demonstrating how ICT innovation may be applied not only to improve business efficiencies but also promote good governance, achieve key human development goals such as increased access to education, health services and extend employment opportunities to the marginal sections of the society.

The rapid and broad-based adoption of ICT is an essential prerequisite for a nation to realise these goals. Recognising the importance of the role that ICT can play in the country's development, the Indian government has initiated the National e-Governance Plan for implementation during the years 2003-07, which lays out the blueprint for a more e-enabled India. Building on the objectives of this vision are several mission mode projects that are already underway — a few of which are beginning to see early signs of success.

The Indian IT industry has also been a prominent proponent of this cause. In addition to playing an instrumental role in executing the projects initiated by the various government ministries and departments, several Indian IT companies are actively using their business experience and success to independently undertake social development initiatives. NASSCOM Foundation<sup>3</sup> has, in its short existence, made notable progress with the Rural Knowledge Centre programme and the Tsunami rehabilitation efforts; and is actively expanding its scope of activities in association with various other domestic and international organisations.

**The future holds significant opportunity for India – much larger than the aggressive targets set by the industry for itself. Key stakeholders have initiated efforts to ensure that Indian IT-ITES achieves its full potential. Successful execution will be the key.**

With the global economy witnessing a steady recovery to traditional levels of growth, the outlook for corporate spending on IT and other business services over the next few years remains positive. IDC forecasts a growth of over 7 per cent (CAGR) in worldwide IT-ITES spends, and a growth of over 15 per cent (CAGR) in offshore IT spending<sup>4</sup>, over 2005-09. Outsourcing and global delivery of IT-ITES will continue to evolve rapidly, expanding in scale, scope of activities and geographic reach. Needless to say, aspiring leaders will need to adapt their business models to these changes to survive and effectively capitalise on the opportunities.

<sup>3</sup> To help facilitate greater industry involvement in using ICT to achieve developmental goals and channel the independent firm level efforts in a more effective manner, NASSCOM has helped establish NASSCOM Foundation (NF), which represents the IT industry's commitment to leveraging IT for empowering and serving the under privileged.

<sup>4</sup> IDC estimates for offshore growth are for IT Services only. Offshore adoption of BPO is at least as strong and its growth is projected to exceed that in IT services.

As global delivery matures, most sourcing destinations, including emerging locations, will tap this potential and grow in size. An already compelling value proposition based on strong fundamentals coupled with proactive initiatives to further strengthen it (already underway), will ensure that India remains the leading destination and an indispensable part of all significant global sourcing strategies.

The strong, consistent performance so far and the positive outlook bode well for the Indian IT-ITES sector, putting it well on track to exceed the targeted USD 60 billion in exports by FY 2009-10.

However, the opportunity for India is much larger. With less than 10 per cent of the current addressable (offshore) market captured till date, there is significant headroom for growth.

For India to fully capitalise on the opportunity and sustain a disproportionate lead in the global IT-ITES space, key stakeholders need to focus on five key areas; a) enhancing the talent pool advantage – focus on skill development to better leverage the world's largest working population, b) strengthening urban infrastructure in existing (Tier I) and emerging (Tier II and Tier III) cities and continued emphasis on proactive regulatory reform to facilitate greater ease of doing business, c) driving a philosophy of operational excellence amongst industry players (across the board) to ensure that India based delivery sustains world-leading benchmarks in performance, d) catalysing domestic market development, and e) actively promoting an uncompromised agenda towards global free trade.

Recognising the potential of the sector and the opportunity it holds for the country, relevant constituents of the key stakeholder groups are actively engaged in developing and implementing initiatives that will strengthen India's bid for sustained leadership in this space. Successful execution of these initiatives effected through a concerted effort by the key stakeholders, including the government, industry and NASSCOM, and the academic community will ensure that India achieves its full potential.

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Clearly, the Indian growth story remains unchanged. In spite of sporadic skepticism and rhetoric over the past year, Indian IT-ITES continues on its high growth trajectory and is well on track to achieve the targets that the industry has set for itself by the end of the decade.

This report reviews the industry's performance in 2005, estimates the growth expected at the end of the current fiscal (FY 2005-06), details the service line trends observed across the various industry segments over the past year, presents an assessment of India's competitiveness as a sourcing destination, analyses the sustainability each individual factor contributing to India's leadership position and provides a view of the outlook projected for the global and Indian IT-ITES industries – outlining the opportunities, challenges and agenda for key stakeholders to further extend India's leadership in this space.



# **NASSCOM™**

NATIONAL ASSOCIATION OF SOFTWARE AND SERVICE COMPANIES  
International Youth Centre, Teen Murti Marg, Chanakyapuri, New Delhi-110 021, India  
Phone: 91-11-23010199, Fax: 91-11-23015452  
e-mail: [research@nasscom.in](mailto:research@nasscom.in), Website: [www.nasscom.in](http://www.nasscom.in)