



IT & ITeS

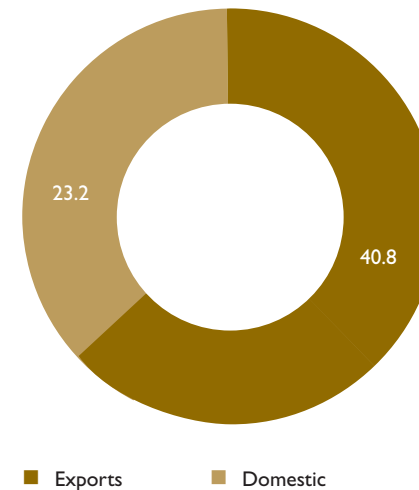
December 2008

MARKET OVERVIEW

IT/ITeS industry: On a steady growth track

- The Indian IT-ITeS industry grew at a rate of 33 per cent in FY2008
- Contribution of IT/ITeS industry to India's GDP has grown from 1.2 per cent in FY1998 to an estimated 5.5 per cent in FY2008
- Potential size of India's offshore IT/BPO industry in 2015 is estimated at US\$ 120 to 180 billion (10 to 12 per cent of GDP)

Revenue segmentation of IT/ITeS sector in 2008 (US\$ billion)

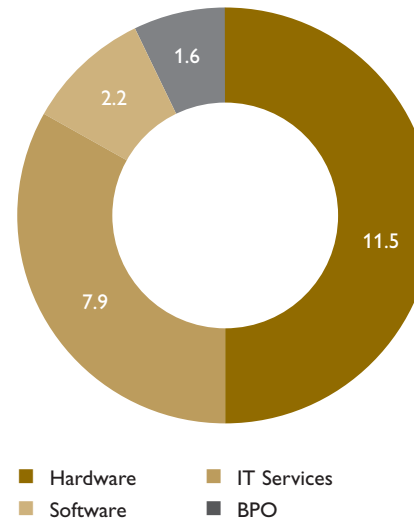


Sources: IDC, NASSCOM

IT/ITeS industry: On a steady growth track

- Direct employment for four million and indirect employment for 10 to 12 million by 2015
- Expected to earn revenues of US\$ 64 billion in FY2008, recording a CAGR of 31 per cent over the last five years
- Domestic market comprises hardware, software and IT-BPO services
- The sector estimated well within reach of the US\$ 60 billion exports target; growth at 23.2 per cent required to reach exports target in 2009-2010

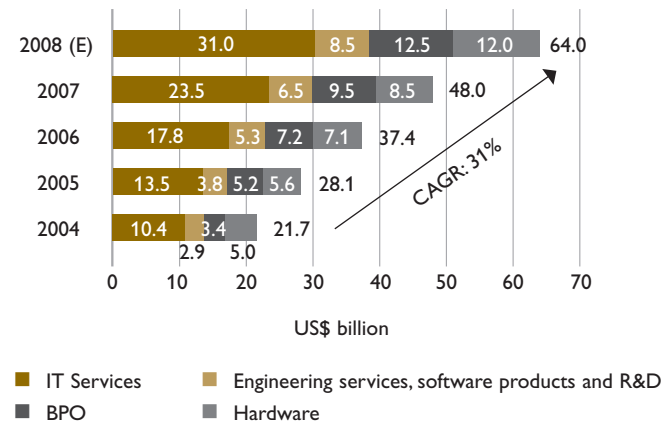
Indian domestic market, 2008
(US\$ billion)



Sources: IDC, NASSCOM

Revenues by segment – Indian IT industry

Revenues by segment



Source: NASSCOM Strategic Review 2008

Note: E - estimates

India maintains lead in IT/ITeS

- Indian IT/ITeS sector has matured considerably with its
 - expansion into varied verticals
 - well differentiated service offerings
 - increasing geographic penetration
- India's importance among emerging economies, both as a supply and demand centre, is fuelling further growth of the sector
- Continues to be one of the fastest growing industries in India, while India maintains its position as a strategic off-shoring destination for MNCs worldwide
- IT/ITeS sector contributed to over 5.4 per cent of India's GDP in 2006-07, an increase from 4.8 per cent in 2005-06



India topped A.T. Kearney Global Services Location Index, beating 49 other countries of the world, emerging as the destination of choice as an off-shoring location of global IT/ITeS powerhouses

GSLI
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IT services: Anchor segment for the sector

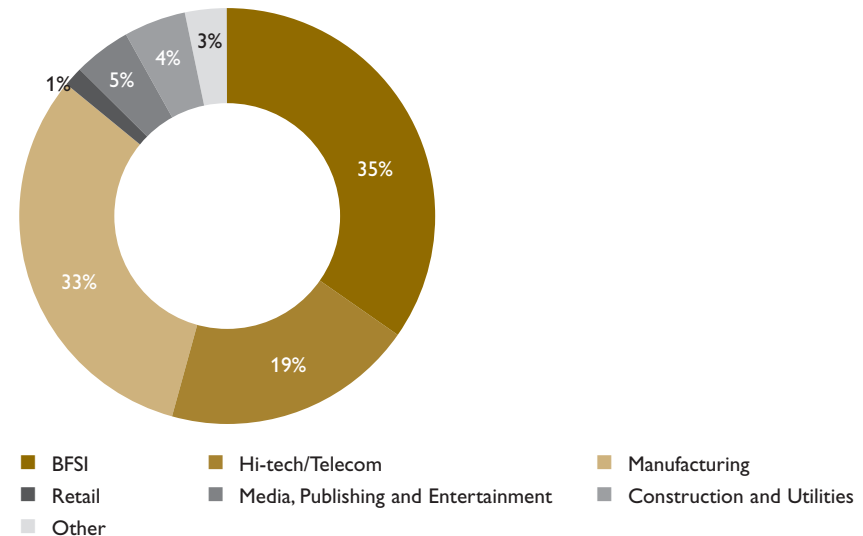
- Hardware accounted for about 49 per cent of the total domestic IT-BPO spend in FY2007
- Domestic hardware revenues grew by 20 per cent in FY2006 and are expected to exceed US\$ 7.5 billion, growing at about 17 per cent by FY2008
- Software exports expected to reach US\$ 40.8 billion, while the domestic market is expected to touch US\$ 23.2 billion by FY2008
- Increasing traction in offshore product development and engineering services is supplementing India’s efforts in Intellectual Property (IP) creation; the segment has grown by 23 per cent to report US\$ 4.9 billion in exports in 2006-2007

IT Services Export Revenues	US\$ billion
Project Oriented	7.71
IT consulting	0.35
Systems integration	0.37
Custom application development	6.54
Network consulting and integration	0.17
Software testing	0.28
Outsourcing	4.36
Application management	1.59
IS outsourcing	0.84
Others	1.94
Support and Training	1.23
Software deployment and support	0.99
Hardware deployment and support	0.08
IT education and training	0.17
Total	13.31

IT services: Anchor segment for the sector

- Banking, Financial Services and Insurance (BFSI) vertical continues to account for the largest share of exports at 31 per cent
- Telecom vertical accounts for second-largest share of the pie at 19 per cent
- Other verticals such as manufacturing, retail, media and healthcare are rapidly gaining pace

Revenue by Verticals

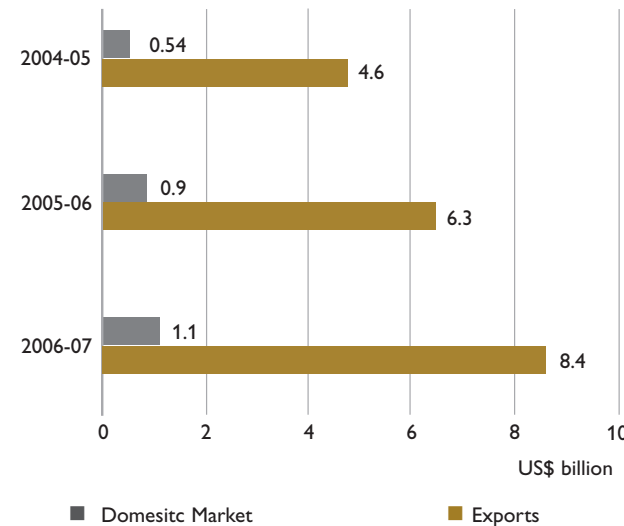


Source: NASSCOM

ITeS-BPO: Outsourcing growth story

- Services exports account for nearly two-third of the total IT/ITeS sector exports.
- Indian IT-BPO sector grew at an estimated 28 per cent in 2007
- Total revenue aggregate for the sector is expected to exceed US\$ 47.8 billion, nearly a ten-fold increase over the aggregate revenue of US\$ 4.8 billion, reported in 1998, and direct employment is likely to cross 1.6 million
- The concept of outsourcing is increasingly gaining acceptance even in the more conservative markets around the world

ITeS Sector Revenues

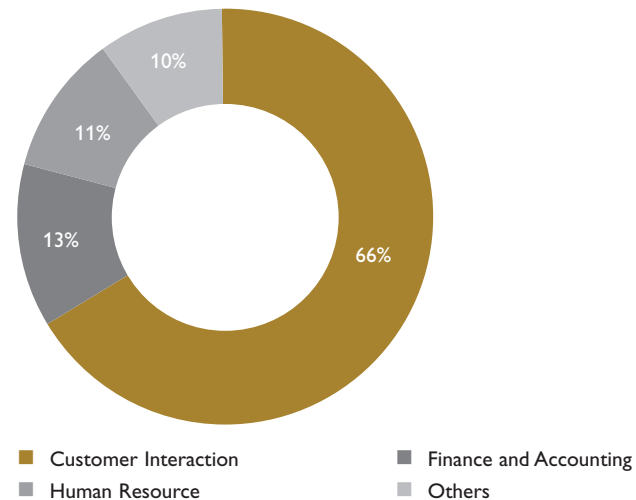


Source: NASSCOM

ITeS-BPO: Outsourcing growth story

- Industry has graduated to providing a high proportion of voice-based services and a wide range of back-office processing activities
- Scope of services has expanded in the last (three to four) years, to include increasingly complex processes involving rule-based decision making and research services requiring informed individual judgment

Revenue by Segments

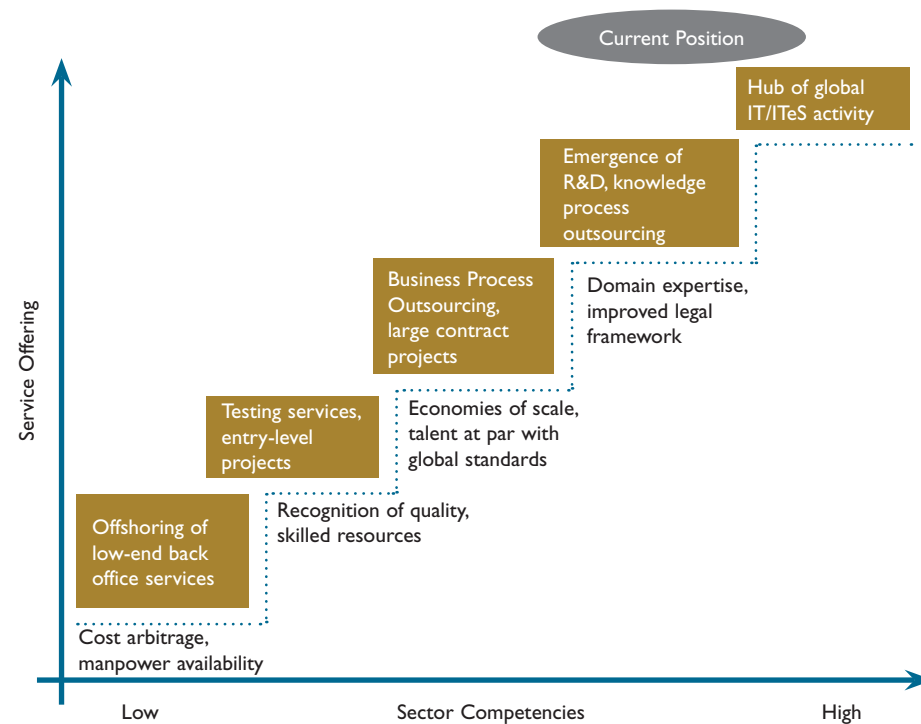


Source: NASSCOM

IT/ITeS sector: Moving up the value chain

IT/ITeS sector: From the back-end services location to the global innovation hub

- India, earlier the primary global offshoring destination for low-end back-office services, is now emerging as an innovation and research hub
- India is estimated to continue attracting substantial investments in the sector, with the cost-arbitrage factor expected to prevail for another 10 to 15 years*
- The ITeS segment is expected to leverage the penetration of the IT segment; complementing and completing end-to-end customer requirements with the aid of offshore and onshore service offerings



Source: Ernst & Young Analysis

*Source: AT Kearney, GSLI 2007

ADVANTAGE INDIA

India: Value proposition

Breadth of service offering

- Service offerings have evolved from low-end application development to high-end integrated IT solutions
- Range of services offered by leading players spans a wide spectrum cutting across multiple verticals

Quality/maturity of processes

- Host to more than 55 per cent of global SEI CMM Level 5 firms
- Expected to host the highest number of ISO certified companies

India: Value proposition

Cost advantage

- Cost of an engineer is about 20 – 40 per cent of comparable cost in European Union (EU)
- Selling, general and administrative costs approximately 80 per cent of comparable cost in EU
- Average offshore billing rate of US\$ 20 to 35 per hour; about 50 to 70 per cent lower than EU

Ease of scalability

- 6,75,000 technical graduates per annum, of which 4,00,000 are engineers
- Over 50,000 MBAs graduating per annum
- Leading firms add more than 10,000 new employees per annum

Global and 24/7 delivery capability

India: Strong offshoring credentials

Key offshoring destination

- India's share in the global market has increased by 3 per cent in the IT segment and by 6 per cent in ITeS from 2000-01 to 2005-06
- India has maintained its position as the preferred outsourcing destination; Indian IT/ITeS companies are now offering a global delivery model, at par with the highest global standards
- India offers low costs, technical and language skills, abundant skilled pool, mature industry players and supportive government policies

Top five Global Services Locations	
Country	Index on a scale of 7
India	7.00
China	6.56
Malaysia	6.12
Thailand	6.02
Brazil	5.89

Source: AT Kearney - GSLI 2007

India: Strong offshoring credentials

Quality of Services

- Demonstrated process quality, adherence to standards and expertise have been key to India's overall value proposition. Majority of Indian companies have aligned their operations to meet international standards, in order to establish credibility in the global market
- Currently 55 per cent of the world's CMM Level 5 companies are based out of India; India is host to the second-highest number of ISO certified companies in the world

India: Strong offshoring credentials

- ITeS industry stakeholders recognise information security as a critical element of global service delivery. Individual firms' efforts are complemented by policy framework established by Indian authorities
- Initiatives include strengthening regulatory framework through proposed amendments, scaling up the cyber lab and scaling up the National Skills Registry (NSR)

Firm foundations in talent and infrastructure

Infrastructure

- Dedicated cost effective quality real estate in the form of Software Technology Parks (STPI) and Special Economic Zones (SEZs)
- STPI infrastructure available across the country demonstrates government's support to the sector
- High quality telecom infrastructure with cost of connectivity declining rapidly and service levels improving significantly
- Real estate, air and road connectivity, hospitality registering impressive growth and providing supportive business environment to IT sector
- Infrastructure availability is set to complement the industry growth, with the Government of India working towards capacity building

Firm foundations in talent and infrastructure

Scalability

- India's young demographic profile and academic infrastructure have potential to cater to the growing demand for IT-ITeS
- An estimated additional demand for 0.8 million IT and 1.4 million ITeS professionals by 2009-10
- India possesses an abundant talent pool, producing 6,75,000 technical graduates per annum, of which 4,00,000 are engineers

Firm foundations in talent and infrastructure

- Industry stakeholders including individual firms, associations undertaking initiatives to address issues concerning suitability of talent
- Some such initiatives include
 - National rollout of skill certification through NAC (NASSCOM Assessment of Competence)
 - Setting up finishing schools in association with Ministry of HRD to supplement graduate education

Value addition at competitive costs

Cost of operations

- Amongst the top five global services locations, India maintains a substantive lead with respect to the financial attractiveness index
- Sourcing from India is estimated to deliver cost savings in the range of 25 to 60 per cent for MNCs
- Cost of an engineer is about 20 to 40 per cent, SG and A about 80 per cent and offshore billing rates about 50 to 70 per cent lower than costs in EU
- Average offshore billing rate at US\$ 20 to 35 per hour is about 50 to 70 per cent lower than EU
- Apart from lower administration and labour costs, the central and state governments offer fiscal and non-fiscal incentives to industry players, further adding to the cost advantage

Financial attractiveness of top five global services locations	
Country	Index on a Scale of 4
India	3.22
China	2.93
Malaysia	2.84
Thailand	3.19
Brazil	2.64

Source: GSLI 2007

Value addition at competitive costs

Value Addition

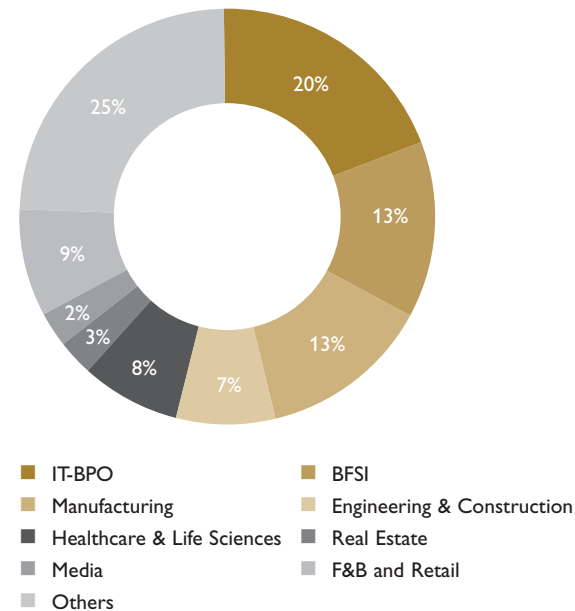
- Companies aggressively investing in innovation and R&D to differentiate their service offerings. Change Management and Process Consulting services increasingly becoming part of the end-to-end service requirements of clients
- R&D divisions of various MNCs being set up in India; number of patents and licences being filed from Indian firms increasing rapidly; India's IPR laws are now compliant to WTO TRIPS (Trade-Related Aspects of Intellectual Property Rights)
- HP, Microsoft, Cisco, Oracle, Motorola and Qualcomm are some of the leading IT giants who have set up their R&D centres in India, with aggressive expansion plans in the pipeline

Increasing investment activity

Sustained investor confidence

- The IT-BPO sector has consistently attracted the highest share of Private Equity (PE) and Venture Capital (VC) investment in the country
- IT/ITeS sector attracted deals worth US\$ 144 million during the first three months of 2008
- With 14 deals worth about US\$ 87 million, the sector has retained its status as being on the top of the list of investors during the first quarter of 2008

Break-up of VC/PE Investment in 2006 (Value)



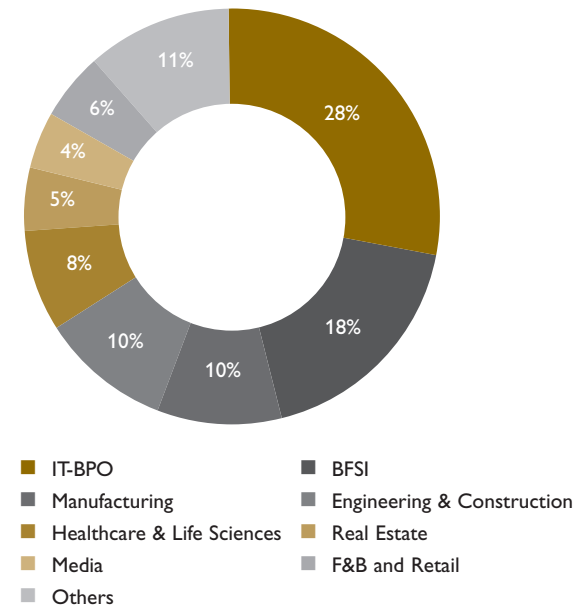
Source: NASSCOM

Increasing investment activity

Sustained investor confidence

- About 10 out of 21 deals during the first quarter of FY2008 came within the range of US\$ five to 10 million
- Majority of these include outbound acquisitions by Indian companies

Breakup of VC/PE Investment in 2006 (Volume)



Source: NASSCOM

Some recent PE and M&A deals

Target	Acquirer	Value in US\$ million
InfoCrossing	Wipro	5,984
Med Assist Holding	First Source Solution	330
Syndesis (Canada)	Subex Azure	164.5
Lason (US)	HOV Services	-
Flextronics Software System	Kohlberg Kravis Roberts and Co.	900
Mphasis BFL Ltd.	Electronic Data Systems Corporation (EDS)	398
Syndesis	Subex Azure Ltd.	158
Azure Solutions, UK	Subex Systems	141

Source: E&Y research

Established IT/ITeS hubs in India

NCR - Delhi

- Total STPI registered units by 2006-07: 1,400 (150 added in 2006-07)
- IT/ITeS majors: IBM, Genpact, Oracle, Am Ex, Convergys, HP, General Motors

Kolkata

- Total STPI registered units by 2006-07: 166 (28 added in 2006-07)
- IT/ITeS majors: IBM, Cognizant, TCS, Infosys, Wipro

Mumbai

- Total STPI registered units by 2006-07: 630 (40 added in 2006-07)
- IT/ITeS majors: TCS, Infosys, Wipro, Siemens, Accenture



Sources: STPI, Trammell Crow Meghraj

Established IT/ITeS hubs in India

Hyderabad

- Total STPI registered units by 2006-07: 1,060 (130 added in 2006-07)
- IT/ITeS majors: HP, Amazon, Verizon, Convergys, EXL, Infosys, TCS

Pune

- Total STPI registered units by 2006-07: 635 (108 added in 2006-07)
- IT/ITeS majors: Cognizant, Convergys, EXL, KPIT, Msource



Sources: STPI, Trameil Crow Meghraj

Established IT/ITeS hubs in India

Bangalore

- Total STPI registered units by 2006-07: 1,700 (201 added in 2006-07)
- IT/ITeS Majors: Infosys, Wipro, TCS, HP, Siemens, HSBC, Compaq
- Cumulative software exports from Bangalore are estimated at US\$ 11 billion, positioning it as the leading IT hub of India

Chennai

- Total STPI registered units by 2006-07: 900 (131 added in 2006-07)
- IT/ITeS majors: Infosys, Wipro, Accenture, Cognizant



Sources: STPI, Trammell Crow Meghraj

Emerging IT/ITeS destinations

Transitioning to the Tier 2 and Tier 3 cities

- Indian IT-ITeS industry is primarily concentrated in seven clusters: Bangalore, NCR-Delhi, Hyderabad, Chennai, Pune, Mumbai and Kolkata
- Most IT companies started their operations in India in tier 1 cities, and have subsequently expanded into tier 2 cities
- Emergence of tier 3 cities like Chandigarh, Mysore is prominent in the ITeS-BPO segment
- Tier 2 and tier 3 cities are gaining importance in the IT/ITeS industry as these locations offer higher savings in administration, maintenance, real estate and infrastructure costs and human resource availability and costs



POLICY

Government initiatives and progressive policy reforms

Establishment of a nodal agency (STPI)

Software Technology Parks of India (STPI)
was set up to provide:

- Fiscal benefits like tax holidays to attract investment into the industry
- Basic Infrastructure
- Single-window clearances for setting up Export Oriented Units (EOUs)
- Virtual model allows firms to avail benefits without restrictions on location

Government initiatives and progressive policy reforms

Telecom sector deregulation

- Sector deregulated in the mid and late 1990s to allow private sector and MNC participation
- Regulatory reform to allow adoption of new technologies
- Enable benefits of free market competition, improved service quality and declining tariffs

Progressive policy reform (fiscal/trade/other)

- No FDI restrictions
- Fiscal reform (international taxation, overseas investment, etc.) to facilitate ease of international transactions

Government initiatives and progressive policy reforms

Recent/current initiatives

- Area limit exemptions for the IT-BPO sector in the SEZ policy
- Special emphasis on talent and infrastructure development
- Infrastructure development; provisions designed to complement the STPI scheme
- Highest level of commitment to addressing core issues faced by the industry

Government initiatives and progressive policy reforms

Semiconductor Policy, 2006

- Encourages FDI investment in hardware production segment and provides lucid policy structure for attracting capital through focus policies
- Government to bear 20 per cent of the capital expenditure for manufacturing units located inside SEZs and 25 per cent for those outside SEZs
- Emphasis on wafer fabrication and ancillary manufacturing plants

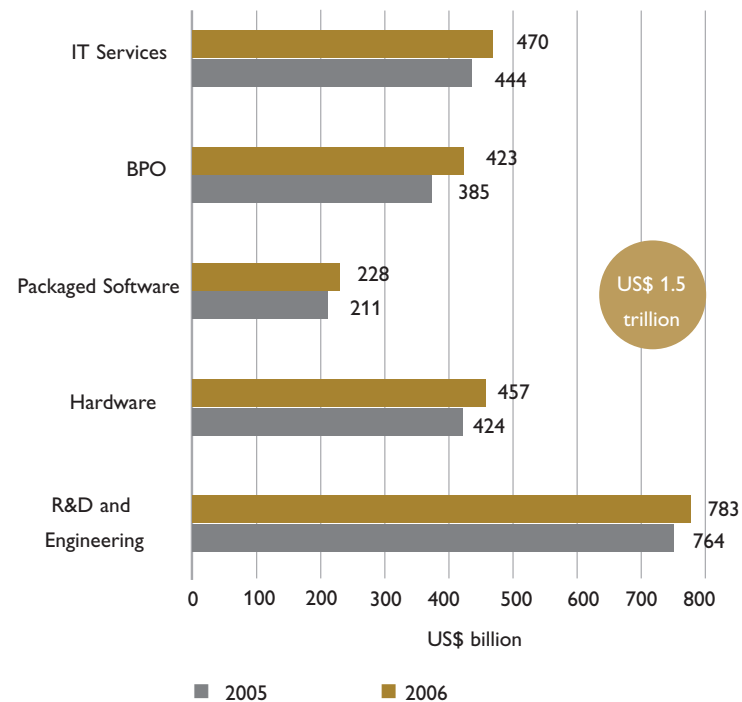
KEY TRENDS AND DRIVERS

Increase in global IT services spend

Technology-related spending

- Worldwide technology products and related services sector spends are estimated to have grown at 7.3 per cent to reach nearly US\$ 1.7 trillion in 2007
- Market size estimated at over US\$ 1.5 trillion
- Software and IT-BPO services account for over 70 per cent of the total technology spend
- Spend on engineering and R&D estimated at US\$ 780 billion

Global technology spend



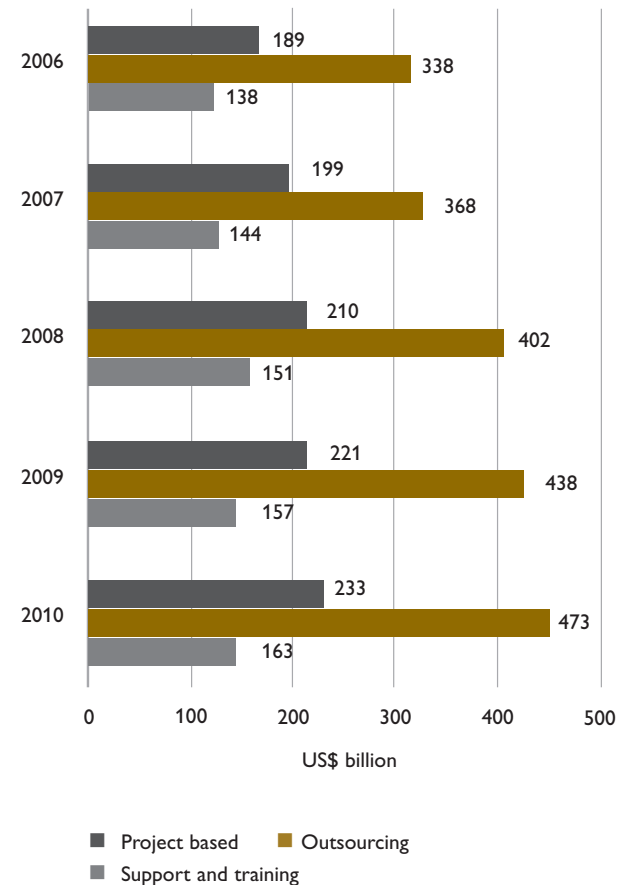
Sources: IDC, NASSCOM

Increase in global IT services spend

Worldwide IT services spending

- IT services form the largest segment of the worldwide spend on technology products and related services
- Spend on IT services estimated at US\$ 470 billion, growth of 5.9 per cent over US\$ 444 billion in 2004-05
- Within IT services, outsourcing is the largest and fastest growing category
- In 2005-06, spend on IT outsourcing was estimated at over US\$ 170 billion, more than 36 per cent of the total technology spend worldwide

Worldwide services spending



Sources: IDC, NASSCOM

Increasing global spending on IT/ITeS

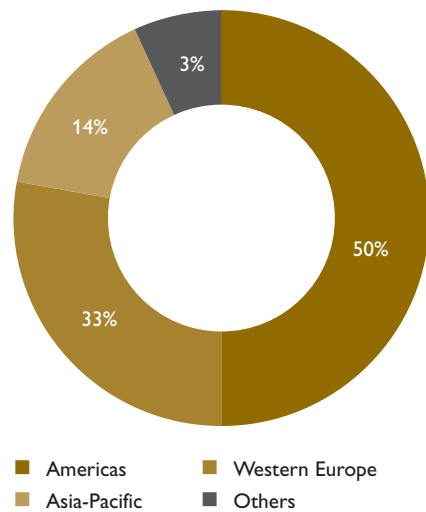
- In 2007, the worldwide spending on IT/ITeS was estimated to be around US\$ 1.7 trillion
- Various factors leading to the sector’s sustained growth are:
 - Increased reliance on IT for operational cost control
 - Increased requirement of IT for quality and regulatory compliance
 - Large scale recruitment, variable pricing in service sector businesses

Global spending on IT/ITeS in 2007		
Segment	Growth (per cent)	Aggregate (US\$ bn)
Hardware	5.9	478
Software	8.5	250
Services (IT)	6	495
Services (BPO)	10	462

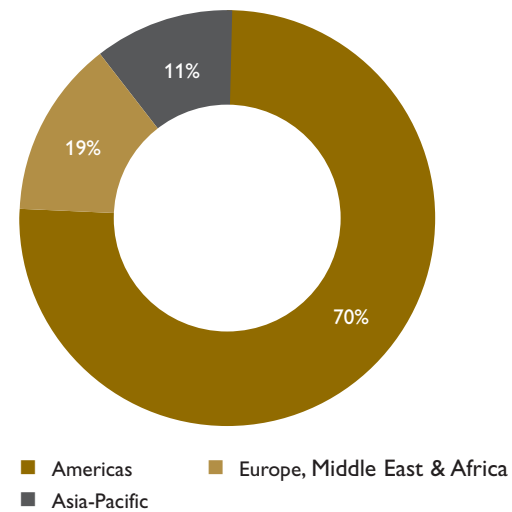
Source: NASSCOM Strategic Review 2008

Increasing global spending on IT/ITeS

Global spending on software, 2007 (in percentage)



Global spending on BPO sector, 2007 (in percentage)

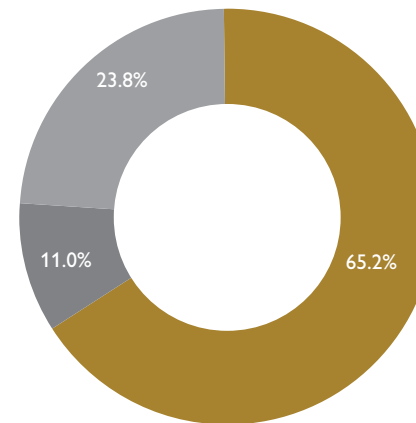


Emerging countries – demand and supply centres

Increasing importance of emerging countries (BRIC)

- Importance of emerging countries as both supply and demand centres being recognised
- Technology spendings of Brazil, Russia, India and China (BRIC) together accounted for US\$ 94.9 billion in 2006-07
- BRIC spending registered a growth rate of 14.3 per cent in the hardware segment, 17 per cent in the packaged software segment and 18.1 per cent in the IT services segment
- Global multinational corporations are increasingly focusing on tapping opportunities in these markets

Share of BRIC spendings on IT, 2007



Total BRIC spending - US\$ 94.9 billion

■ Hardware ■ Packaged software
■ Services

Source: IDC

Emerging countries – demand and supply centres

Demand for offshoring accelerating

- With maturing socio-political attitude, Europe is witnessing increased offshoring of services and growth rates from Europe are expected to be higher
- With increasing maturity in ‘near-shore’ delivery capabilities, European-language speaking countries like Hungary, Czech Republic, Russia, Poland, Bulgaria and Romania expected to support this trend
- European enterprises expected to offshore services to India, Philippines and China and other lower-cost locations, depending on the language and culture-dependence of the particular service
- Customers’ desire to focus on their ‘core’ services and utilise the benefits of globalisation in execution of their ‘non-core’ activities expected to further drive adoption of outsourcing strategy

Evolving nature of outsourcing contracts

Growth in number of multi-vendor contracts

- Deals signed in recent times indicate a growing customer preference for multi-sourced contracts; helps customer tap best of breed vendors and reduce the risk
- 2004-05 saw the most contracts signed (293) ever in the past five years with total contract value greater than US\$ 50 million
- Number of contracts with total contract value greater than US\$ 1 billion continued to decline

Evolving nature of outsourcing contracts

Large long term offshoring contracts

- Large players scaling up, increasing credibility of large-cap companies for handling large global projects
- British Telecom awarded US\$ 1 billion contract to Tech Mahindra
- General Motors awarded Wipro a five-year contract of the value of US\$ 300 million
- Single contracts being unbundled and awarded to multiple vendors for effective risk management
- ABN Amro awarded a US\$ 500 million five-year contract to TCS, Infosys and Patni
- TCS and Satyam together signed a seven-year contract worth US\$ 145 million with Qantas Airlines

Evolving nature of outsourcing contracts

Emergence of vendor consolidation

- Large MNC clients are outsourcing their global IT requirements to limited number of vendors, who in turn, execute by themselves, or outsource it to third parties, e.g., Vodafone and EDS' deal
- Clients expecting the status of 'client of choice' to ensure greater attention, increased responsiveness and high service levels

Demand through renewals

- Significant value of outsourced agreements coming up for renewal in 2007; estimates indicate the number to be approximately US\$ 100 billion
- Alternatives for renewal of these contracts expected to drive increased share of the business to 'offshore-based' service providers

Increasing presence across the globe

Global IT vendors increasing their India presence

- Global Vendors (such as Accenture, HP, EDS, IBM, Cap Gemini) looking at India with a long term view, by enhancing their offshore delivery capability through the organic and/or inorganic route
- Growing onshore presence of service providers who are able to deliver seamless hybrid onshore-offshore services at a lower cost
- Global vendors with limited or no India presence losing opportunities/contracts
- Large players scaling up dramatically in locations such as China and India with plans to add thousands of people to their offshore resources
- Large number of India based employees :
Accenture (16,000+), IBM (39,000+), EDS (15,000+) and Cap Gemini (4,000+)

Increasing presence across the globe

Emergence of Indian IT multinationals

- Expansion of global footprint by Indian IT companies through the Global Delivery Model (GDM), to service client needs seamlessly across the globe
- Indian firms gaining a global foothold, with giants like TCS, Wipro, Infosys and Satyam expanding their overseas presence, particularly in Asia and Europe
- Drivers for expansion are language requirements other than English; need to cater to 'near-shore' markets
- Increased M&A activity to be driven by the need for global service delivery capabilities while mitigating risks and timelines involved in moving to new geographies
- HR strategies of firms are geared towards building a workforce comprising diverse cultures

Mergers and acquisitions

Industry consolidation through acquisitions

- Over 94 cross-border deals in 2007 with investments crossing US\$ two billion, with increasing outbound deals
- IT/ ITeS sector emerged as the preferred space for venture capital investments in India in the first three months of 2008, attracting over two-third of the total deals worth US\$ 144 million
- With 14 deals worth about US\$ 87 million, the sector has retained its status as being on top list of investors during the first quarter of 2008. About 10 out of 21 deals, during the quarter, came within the range of US\$ five to 10 million. The same stood at six out of 28 deals within the range of US\$ two to five million, in the previous year's first quarter

Mergers and acquisitions

Industry consolidation through acquisitions

- The average ticket size of the deals has increased over the last few years
- Enhanced M&A activity has been witnessed by service providers seeking to add expertise in specific industry vertical or domain areas to their portfolio of services; hence this enables service providers to move up the value chain
- Relatively smaller service providers are now actively looking for opportunities to be acquired by larger firms or to form partnerships
- Companies based in the West are expected to take keen interest in organisations in India to stay competitive as well as explore local markets, which is now, not only a cost effective delivery location but also a rapidly emerging market by itself

Mid-cap growth story

- Mid-cap companies (US\$ 50-250 million) are growing at an aggressive pace, with well-defined strategies, rivaling large-cap credentials and capabilities in attracting clients
- Mid-cap companies also following a strategy of exploring new markets to insulate themselves against over-dependence on the US market, and to shield themselves from price competition with the large-caps
- Companies are increasing their focus on the domestic market, especially in emerging sectors such as retail, logistics, telecommunications and SMEs
- Companies leveraging their outsourced testing services and Offshore Product Development (OPD) capabilities with the Indian OPD market are estimated to grow to US\$ eight to 11 billion by 2008

Mid-caps: Building market competitiveness			
Niche service providers	Multi-domain players	Consolidators	Solution providers
<ul style="list-style-type: none"> • Focused on developing capability in a specific domain to compete with large-cap players • Aztec, Hexaware 	<ul style="list-style-type: none"> • Multi-domain capabilities across high growth verticals • KPIT Cummins, Mastek, Zensar 	<ul style="list-style-type: none"> • Growth through equal - sized mergers and significant acquisitions • Scandent Solutions (merged with SSI Tech) 	<ul style="list-style-type: none"> • Growth through well-defined target product/ solution segments • Crane Software, Geodesic, Polaris

KEY PLAYERS

Indian IT/ITeS industry structure

Top 10 Indian IT/ITeS firms (by revenue)			
1	Tata Consultancy Services	6	Tech Mahindra Ltd.
2	Infosys Technologies Ltd.	7	Patni Computer Systems Ltd.
3	Wipro Technologies Ltd.	8	I-flex Solutions Ltd.
4	Satyam Computer Services Ltd.	9	L&T InfoTech Ltd.
5	HCL Technologies Ltd.	10	Polaris Software Lab Ltd.

Source: NASSCOM

Indian IT/ITeS industry structure

	Revenue	Key characteristics – business model
Large-cap	Revenue > US\$ 250 million	<ul style="list-style-type: none"> • Mainly concentrated on application development and maintenance, package implementation, business process outsourcing (BPO) and consulting • Well positioned to bag large IT contracts with scalable capabilities • Strong delivery capabilities across multiple verticals • Low client concentration • Competes with global IT vendors such as Accenture, IBM, EDS, Cap Gemini
Mid-cap	Revenue US\$ 50 to 250 million	<ul style="list-style-type: none"> • Mainly concentrated on specific domain capabilities • Scale and margin pressures • Increasing competition from both small-cap and large-cap players
Niche Players	Focussed on key niche areas of operations	<ul style="list-style-type: none"> • Focussed on developing capabilities around a specific niche domain and aspire to be leader in that domain • Scale and growth pressures; limited growth available in specific niche areas • High client concentration • Threat from large-cap/ middle-cap players entering the niche areas

Note: Revenue as at the end of 2006-07 is used to classify companies

Source: NASSCOM

Indian IT giants

Tata Consultancy Services

- Revenues of US\$ 4.56 billion in 2006-07, recording a 41 per cent growth over revenues of US\$ 3.23 billion in 2005-06
- Profitability for the year was at 22 per cent of revenues
- Workforce of over 85,000 professionals by 2006-07, with growth of 36 per cent over 2005-06 employee base of 62,832
- With a strong foothold in Indian market, global presence is being established primarily through acquisitions; expanding the business verticals and exploring opportunities in the western and BRIC markets



Sources: Dataquest, E&Y Research

Indian IT giants

Wipro Technologies Ltd.



- Revenues of US\$ 4.97 billion in 2007-08 recording a 36 per cent growth over revenues of US\$ 3.56 billion in 2006-07
- Profitability for the year was at 21 per cent of revenues
- Workforce of over 67,000 professionals by 2006-07, with growth of 26 per cent over 2005-06 employee base of 53,742
- Acquired six companies and entered into a joint venture (JV) with another two, increasing offshore delivery centres and expanding service offerings

Sources: Dataquest, E&Y Research

Indian IT giants

Infosys Technologies Ltd.

- Revenues of US\$ 4.18 billion in 2007-08 recording a 35 per cent growth over revenues of US\$ 3.12 billion in 2006-07
- Targeting to reach US\$ 4.18 billion by 2008-09 with a year-on-year growth of 19 to 21 per cent
- Profitability for the year was at 29 per cent of revenues
- Workforce of over 72,000 professionals by 2006-07, with growth of 37 per cent over 2005-06 employee base of 52,715
- Infosys has chosen primarily the organic route for developing its overseas operations



Sources: Dataquest, E&Y Research

International players

Hewlett-Packard India

- The total revenue from HP's businesses in India was valued at US\$ 2,907 million in 2006-07 and includes India sales (US\$ 2,357 million), application services (US\$ 454 million), BPO (US\$ 115 million) and engineering services (US\$ 96 million)
- Workforce of over 29,000 professionals, constituting 19 per cent of the global workforce of HP in 2006-07, with a growth of 87 per cent over 2005-06 employee base of 15,454
- Domestic market contributed to 81 per cent of HP India's revenues with a share of domestic product sale revenues



International players

IBM India

- Revenues of US\$ 2.01 billion in 2006-07, recording a 52 per cent growth over revenues of US\$ 1.32 billion in 2005-06
- Workforce of over 55,000 professionals constituting 15 per cent of the global workforce by 2006-07, with a growth of 34 per cent over 41,000 employee base in 2005-06
- Asia-Pacific recorded the strongest revenue growth of IBM, with Indian revenues being the top contributor
- IBM plans to invest US\$ six billion in India over the next few years



ITeS giants

Genpact

- Workforce of over 28,000 employees by 2006-07
- Spread across more than 25 global delivery centres
- Revenues of US\$ 823 million in 2007-08, recording 29 per cent growth over revenues of US\$ 623 million in 2006-07



Sources: Dataquest, E&Y research

ITeS giants

Transworks

- Workforce of over 9,978 employees in 2006-07
- Spread across eight global delivery centres
- Revenues of US\$ 368 million in 2006-07, recording 826 per cent growth over revenues of US\$ 40 million in 2005-06



Sources: Dataquest, E&Y research

ITeS giants

IBM Daksh

- Workforce of over 22,000 employees in 2006-07
- Spread across 14 global delivery centres
- Revenues of US\$ 307 million in 2006-07, recording 72 per cent growth over revenues of US\$ 178 million in 2005-06



*NF: TransWorks was not featured in the top BPO companies of FY 2006

IT/ITeS players: Revenue considered is solely the contribution of IT/ITeS businesses

Profitability of a company was calculated taking into account the cumulative revenues of IT/ITeS/BPO/other services offered by the company

Source: Dataquest, E&Y research

KEY OPPORTUNITIES

Domestic market

India – one of the emerging markets

- The domestic market is picking up, showing definite signs of breaking out of the trend of hardware linked growth with the contribution of software and services exceeding that of hardware for the first time in FY2005-2006
- Overall size of the domestic market in 2006-07 was US\$ 15.9 billion, a 20.4 per cent growth in revenues of US\$ 13.2 billion for 2006-07
- Domestic IT market is dominated by the hardware spending accounting for over 50 per cent of the total spending

Prominent domestic ITeS deals in 2005-06	
Vendor-Client	Engagement type
MphasiS BPO-State Bank of India	Voice based customer support operations
Nortel and IBM Daksh and MphasiS and HTMT and Teletech-Bharti Tele Ventures	Call centre services (A US\$ 244 million deal)
Infovision-Whirlpool	Customer support activities
Spanco Tele-Air India	In-bound customer service
Dialnet Communications Ltd-Star Plus	IVR Platform based services
Customer First-Apollo Hospitals	Customer support activities

Source: NASSCOM

Domestic market

India—one of the emerging markets

- Government is taking up e-governance initiatives and increasing its IT spends/outlays; allocation has increased from US\$ 96 million in 2006-07 to US\$ 175 million in 2007-08, indicating increasing IT spends
- Demand for domestic BPO services increasing rapidly, with niche verticals like healthcare and retail fast gaining traction apart from the traditional verticals of BFSI and manufacturing

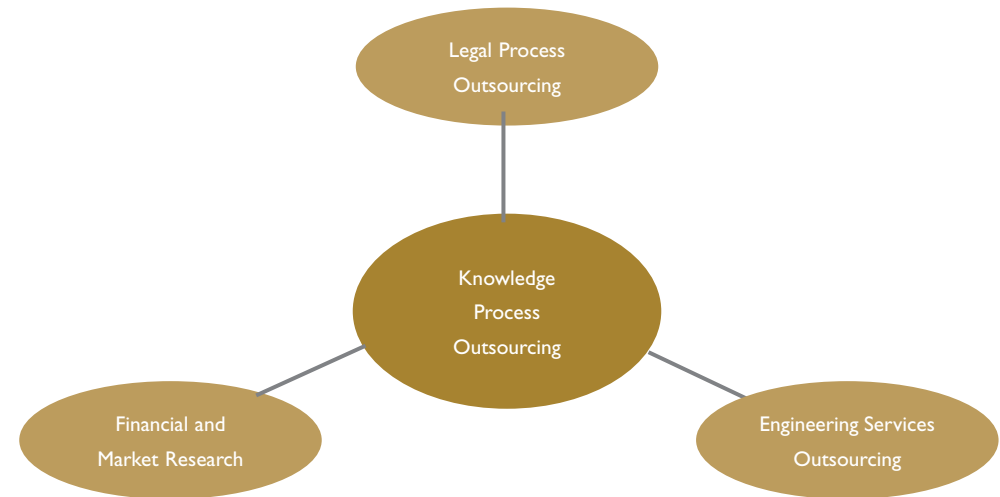
Prominent domestic IT services deals in 2005-06	
Vendor-Client	Engagement type
TCS-Central Bank of India	System integration
Wipro-Ashok Leyland	IT consulting
HCL-Bangalore Development Authority	Application development
IBM-Bharti	End-to-end IT outsourcing
Wipro-YES Bank	End-to-end IT outsourcing
HP-Bank of India	End-to-end IT outsourcing

Source: NASSCOM-IDC IT Report 2006

Knowledge Process Outsourcing (KPO)

Knowledge Process Outsourcing – Growth driver for ITeS sector

- The genesis of KPO followed BPO services in India. However, KPO is now picking rapid pace, with MNCs setting up third party captive units for data analytics, data modelling, etc.
- NASSCOM estimates global KPO revenues of US\$ 17 billion in 2009-10 with an estimated 60 to 70 per cent Indian share, translating into a US\$ 12 billion worth opportunity



Source: E&Y-IACC Global Offshore Outsourcing Summit 2006

Knowledge Process Outsourcing (KPO)

Knowledge Process Outsourcing – Growth driver for ITeS sector

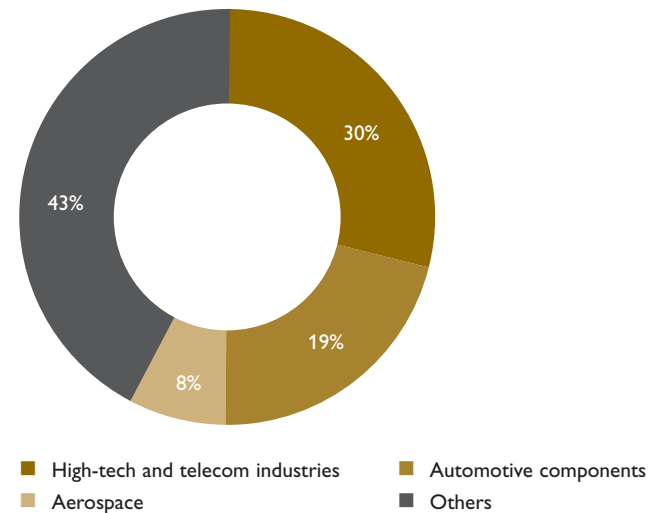
- Growth drivers for this business include high productivity of Indian resources and growing adoption of KPO by Small and Medium Enterprises (SMEs)
- Opportunities span across several service offerings: Legal Process Outsourcing (LPO), financial and market research and engineering services outsourcing are considered as fast moving service offerings

‘Engineering’: A new outsourcing opportunity

Engineering services outsourcing

- Global engineering services spend estimated at US\$ 750 billion, which is expected to increase to more than US\$ one trillion by 2020
- India’s share is about US\$ 1.5 billion of the US\$ 10 to 15 billion outsourced services in 2005-2006; India estimated to garner a share of about US\$ 50 billion by 2020
- Range of services includes engineering and designing solutions across diverse industry verticals like telecommunications, automotive, construction, aerospace, utilities and industrial design

Engineering services outsourcing verticals

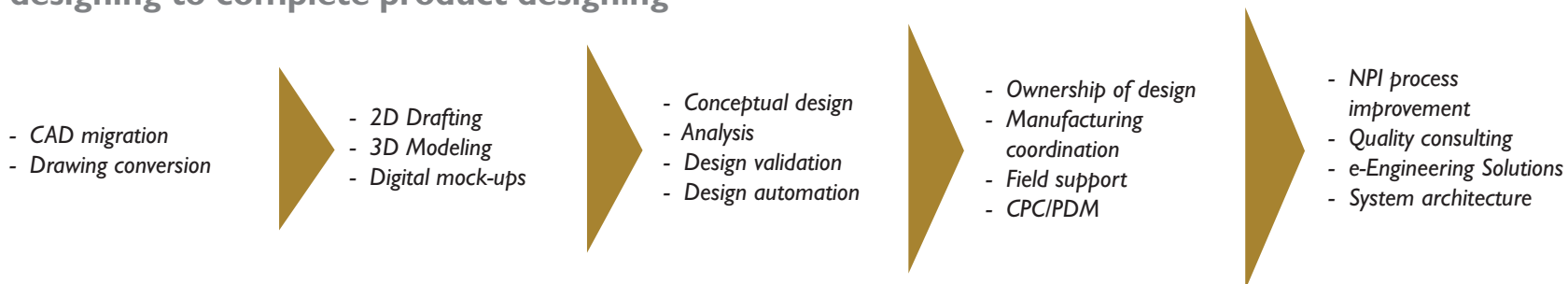


Source: E&Y-IACC Global Offshore Outsourcing Summit 2006

‘Engineering’: A new outsourcing opportunity

- Labour cost arbitrage in this sector is about 60 per cent of US counterparts
- Bechtel, General Motors, Ford, John Deere, Caterpillar, Silicon Automation Systems and John Brown Engineering are a few global giants that have set up their engineering services divisions in India

Migration of engineering services from low-end designing to complete product designing



Source: E&Y-IACC Global Offshore Outsourcing Summit 2006

Legal Process Outsourcing





Legal Process and IP Research Outsourcing

- Outsourcing of legal and IP research is presently at a nascent stage with tremendous growth potential. India offers the advantage of employing full-time legal professionals, resulting in higher efficiencies, compared to the temporary paralegals employed overseas for a large quantum of work
- India offers impressive opportunities to scale up, with a large pool of legal professionals (over 1 million lawyers and over 70,000 law graduates passing out every year) and cost arbitrage, with Indian lawyers billing one-tenth of their US counterparts (US\$ 40 to 60 in India compared to US\$ 350 per hour in the US)

Legal Process Outsourcing

- While most of the business presently comes from the US, there is huge untapped opportunity in Europe (especially UK), Canada and Australia
- Firms like SDD Global Solutions, JuriMatrix, Integreon, Pangea3, RR Donnelly are mushrooming, with increasing venture capital investment, tapping the vast market opportunities

Legal Process Outsourcing

Migration of legal and IP services from low value addition to creative services			
Legal content services	Legal documentation and analysis (non-litigation)	Legal documentation and analysis (litigation)	Intellectual property rights
<ul style="list-style-type: none"> Updating, summarising, annotating  <ul style="list-style-type: none"> Managing content 	<ul style="list-style-type: none"> Contract drafting Due diligence Contract review Preparation of model contracts  <ul style="list-style-type: none"> Management and maintenance of contracts Management of compliance 	<ul style="list-style-type: none"> Research and Evidencing for litigations Drafting of legal notices Analysis of case laws Review of court orders  <ul style="list-style-type: none"> Docketing Managing case papers 	<ul style="list-style-type: none"> Research on potential areas for product development Patent research Patent documents drafting Identification of patentability and infringement  <ul style="list-style-type: none"> Prior art searches IP asset management

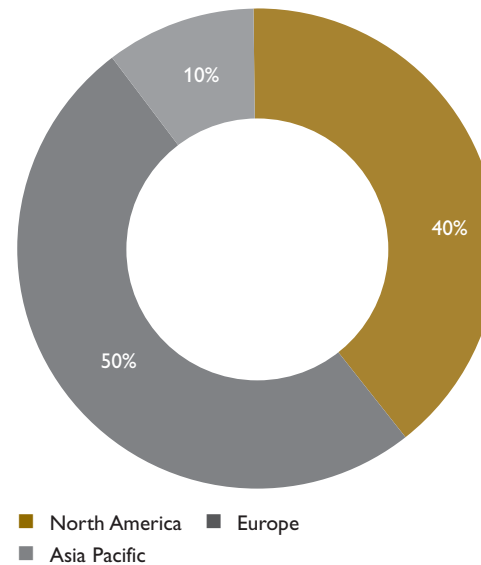
Source: E&Y-IACC Global Offshore Outsourcing Summit 2006

Research and analytics

Business, financial and market research

- Wave of new entrants comprising captive research centres set up by leading global investment banks, foreign banks and consulting firms, as well as several third-party service providers and leading BPO players
- Players aggressively ramping up their employee base, with captive centres by McKinsey & Co. (for business and financial research) and General Electric (for financial research)

Revenues by geographies



Source: E&Y-IACC Global Offshore Outsourcing Summit 2006

Research and analytics

- Leading third-party service providers have reported growth of over 100 per cent per annum over the past four to five years
- The Big Four of accountancy and professional services firms - Ernst & Young, Deloitte, PwC, KPMG have their presence in India, along with other leading firms like Datamonitor, Standard & Poor; India emerged as the choice destination for their front-end research and analysis divisions, migrating from the back-room services offshoring

Research and analytics

Spectrum of offerings		
Business research	Financial research	Market research
<ul style="list-style-type: none"> • Industry research • Company research • Situation analysis • Database building 	<ul style="list-style-type: none"> • Equity research • Company research • Credit analysis • Instrument analysis • Portfolio valuation • Financial modeling • Comparable valuation analysis 	<ul style="list-style-type: none"> • Market research and analysis • Market segmentation • Secondary research and surveys • Forecasting through predictive modeling • Data analytics

Source: E&Y-IACC Global Offshore Outsourcing Summit 2006

Continued growth opportunities

Testing services outsourcing

- Indian export revenues from software testing services were estimated at US\$ 385 million in 2006-07, a 36 per cent increase from US\$ 282 billion in 2005-06
- Leading players like Infosys and Wipro obtained 7-10 per cent of their revenues from quality assurance and software testing
- Functional testing of software and applications has gained critical importance with progression towards service oriented architecture
- Shrinking software product release cycles and increasing complexity of requirements, is resulting in the outsourcing of the bulk assignments and also fuelling this segment's growth

Continued growth opportunities

Software products

- Indian software products segment presently forms a very small percentage of the overall Indian IT-ITeS industry
- Several large and small niche players developing and marketing indigenous software products, deployed both in the domestic as well as international markets
- Indian software product vendors touched revenues of US\$ 666 million in 2005-06, a 44 per cent increase over 2004-05; top 10 companies contributed 85 per cent to segment revenues

Continued growth opportunities

- Firms are fuelling demand by making software affordable and easily available
- Besides scouting opportunities in Europe, Indian companies are making inroads into the Middle East, North Africa and Latin America, with the revenues heavily skewed towards exports

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