



IT & ITeS

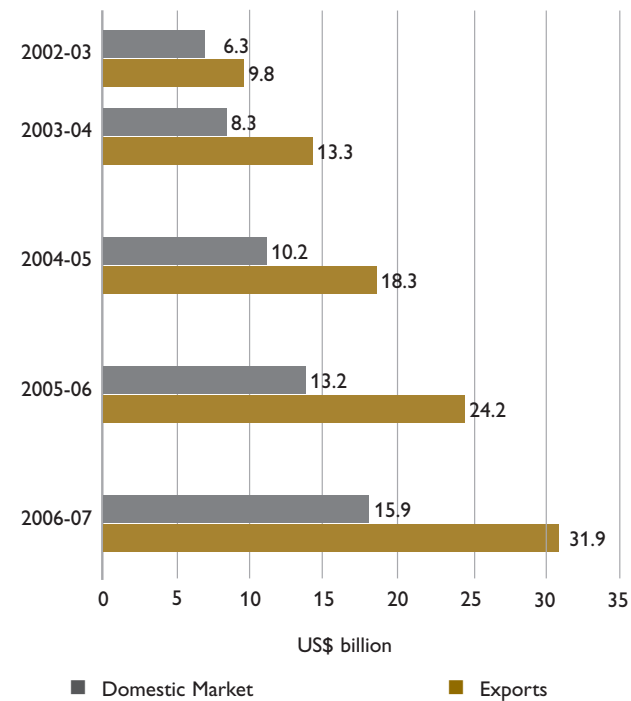
October 2007

MARKET OVERVIEW

IT/ITeS Industry on a Steady Growth Track

- Industry revenues at US\$ 47.8 billion for 2006-07; an increase of nearly 28% over 2005-06
- Exports revenue at US\$ 31.9 billion in 2006-07; growing at about 33% over 2005-06
- Size of the domestic market at US\$ 15.9 billion in 2006-07, a growth of 21% over 2005-06

IT/ITeS Sector Revenues

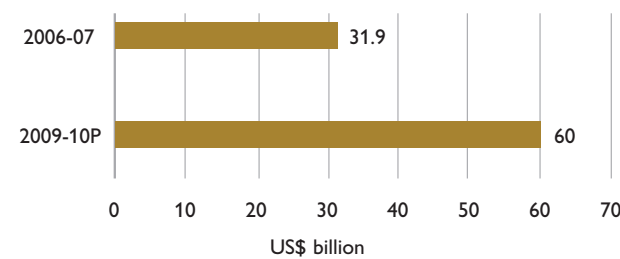


Source: NASSCOM

IT/ITeS Industry on a Steady Growth Track

- Domestic market breaking-out of hardware linked growth; e-Governance initiatives to boost domestic revenues
- Sector estimated well within reach of US\$ 60 billion exports target; growth at 23.2% required to reach exports target in 2009-10
- Investments by multinational companies reached an unprecedented scale; over US\$ 10 billion announced in 2006-07

Projected IT/ITeS Export Revenues



Source: NASSCOM

IT/ITeS Industry in Numbers

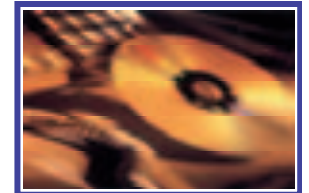
	2005-06	2006-07	Growth (%)
IT Services	17.8	23.6	32.58
Exports	13.3	18.0	35.34
Domestic	4.5	5.6	24.4
Engineering Services and R&D, Software Products	5.3	6.5	22.64
Exports	4	4.9	22.5
Domestic	1.3	1.6	23.08
ITeS	7.2	9.5	31.94
Exports	6.3	8.4	33.33
Domestic	0.9	1.1	22.22
Total Software and Services Revenues	30.3	39.6	30.69
Exports	23.6	31.4	33.05
Domestic	6.7	8.2	22.38
Hardware	7	8.2	17.14
Total IT/ITeS Industry	37.4	47.8	27.81

Source: NASSCOM

Figures in US\$ billion

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 center, 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 over 5.4% of India's GDP in 2006-07, an increase from 4.8% 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
1

IT Services – Anchor Segment of the Sector

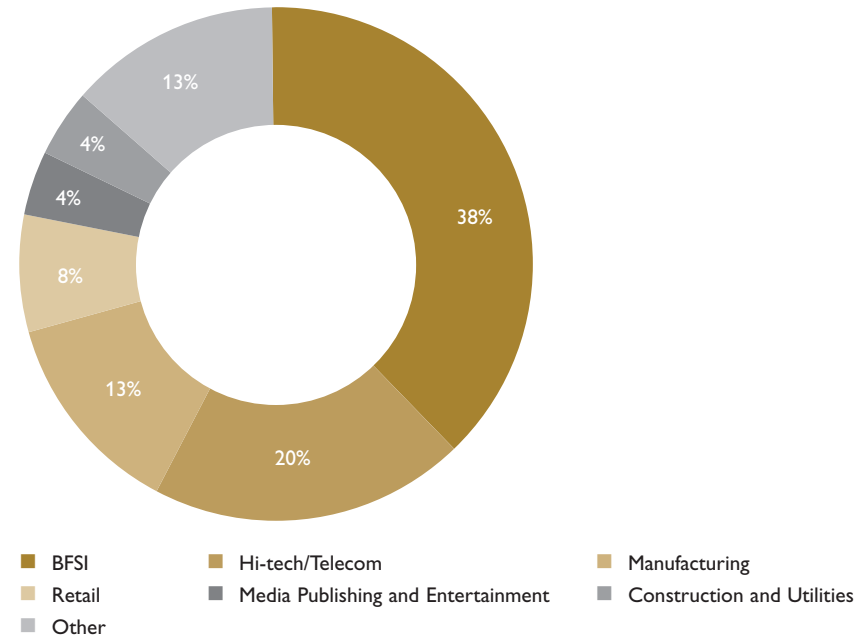
- IT Services remains the mainstay of the sector contributing US\$ 31.3 billion and beating forecasts to register a 32.6% growth in 2006-07
- Increasing traction in offshore product development and engineering services is supplementing India’s efforts in IP creation; segment has grown by 23% to report US\$ 4.9 billion in exports in 2006-07
- While US and UK remain the dominant markets for IT-ITeS exports, revenues from newer markets are growing rapidly

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

- The Banking, Financial Services & Insurance (BFSI) vertical continues to account for largest share of exports at 38%
- Telecom vertical accounts for second largest share of the pie at 20%
- Other verticals such as manufacturing, retail, media and healthcare are rapidly picking up pace

Revenue by Verticals

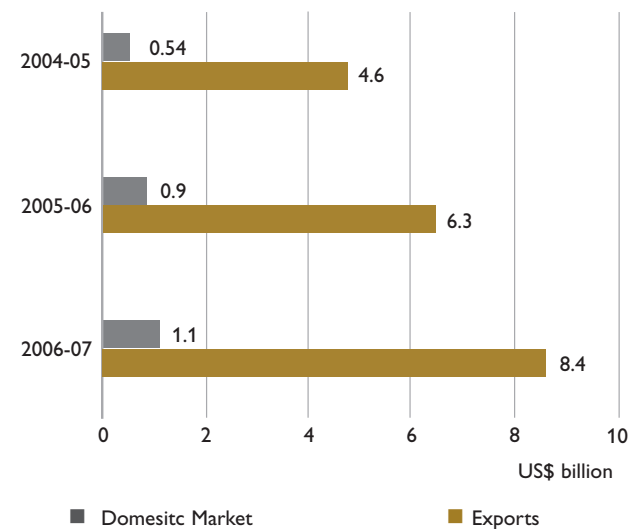


Source: NASSCOM

ITeS-BPO – Outsourcing Growth Story

- BPO exports are growing at about 33.5% and exceeded US\$ 8.4 billion in 2006-07
- Sector is expected to reach US\$ 11 billion in revenues by 2007-08
- Concept of outsourcing is increasingly gaining acceptance in the more conservative markets around the world

ITeS Sector Revenues

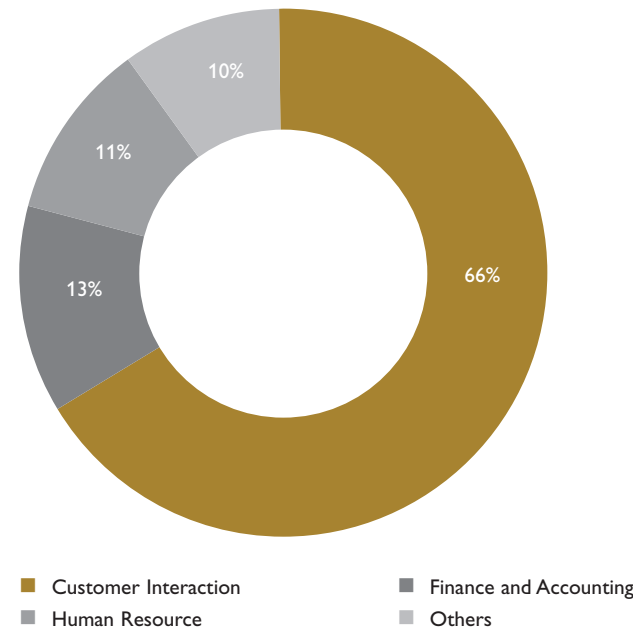


Source: NASSCOM

ITeS-BPO – Outsourcing Growth Story

- Industry has graduated to a high proportion of voice-based services and a wide range of back-office processing activities
- Scope of services has evolved in the last 3-4 years, expanding to include increasingly complex processes involving rule-based decision making and research services requiring informed individual judgment

Revenue by Segments

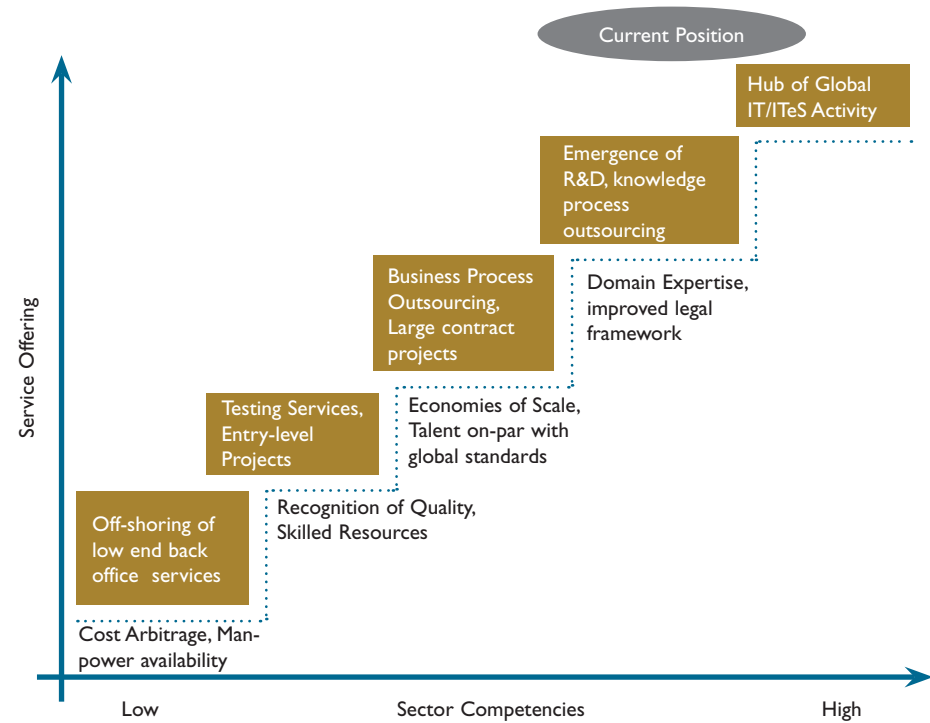


Source: NASSCOM

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 off-shoring destination for low-end back-office services is now emerging as an innovation and research hub
- India is estimated to continue attracting substantive investments in the sector, with the cost-arbitrage factor expected to prevail for another 10-15 years*
- ITeS segment 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% 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% of comparable cost in European Union (EU)
- Selling, general and administrative costs approximately 80% of comparable cost in EU
- Average offshore billing rate of US\$ 20 – 35 per hour; about 50 – 70% lower than EU

Ease of Scalability

- 675,000 technical graduates per annum, of which 400,000 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% in the IT segment and by 6% in ITeS (2000-01 to 2005-06)
- India has maintained its position as the preferred outsourcing destination; Indian IT/ITeS companies now offering a global delivery model, at par with the highest global standards
- India offers low costs, technical and language skills, large skilled pool, mature industry players and supportive government policies

Top 5 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 GSI 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% of the world's CMM Level 5 companies are based out of India; India is host to second highest number of ISO certified companies in the world
-

India: Strong Offshoring Credentials

- ITeS industry stakeholders recognize information security as a critical element of global service delivery. Individual firm's 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 are registering impressive growth and providing supportive business environment
 - Infrastructure availability is set to complement the industry growth, with the government of India working towards capacity building measures
-

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
 - Additional demand for 850,000 IT and 1.4 million ITeS professionals estimated by 2009-10
 - India positioned strategically with large talent pool; produces 675,000 technical graduates p.a, of which 400,000 are engineers
-

Firm Foundations in Talent and Infrastructure

- Industry stakeholders including individual firms, associations undertaking initiatives to address issues concerning suitability of talent
 - Some of 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 5 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 – 60% for MNCs
- Cost of an engineer is about 20 – 40%, SG&A about 80% and offshore billing rates about 50 – 70% lower than costs in EU
- Average offshore billing rate at US\$ 20 – 35 per hour is about 50 – 70% 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 5 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: AT Kearney GSLI 2007

Value Addition at Competitive Costs

Value Addition

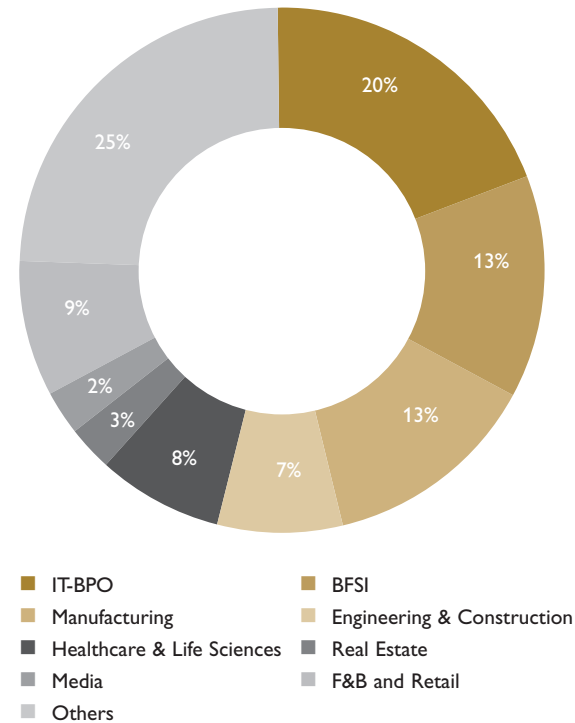
- Companies aggressively investing on innovation and R&D to differentiate their service offerings. Change Management and Process Consulting services are increasingly becoming part of the end-to-end service requirements of clients
 - R&D divisions of various MNCs being set up in India; number of patents and licences being filed from Indian firms increasing rapidly; India's IPR laws now WTO TRIPS compliant
 - HP, Microsoft, Cisco, Oracle, Motorola and Qualcomm are some of the leading IT giants who have set up their R&D centers 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
- Total number of PE deals in 2006 were 302, valued at US\$ 7,474 million

Breakup of VC/PE Investment in 2006 (Value)



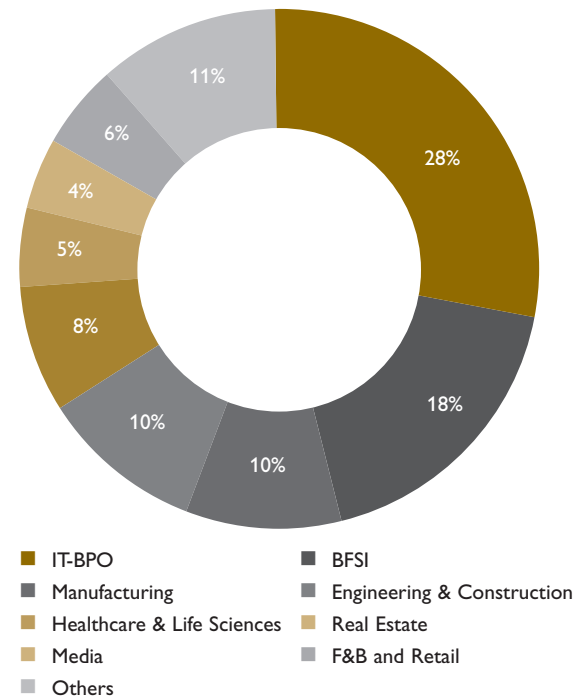
Source: NASSCOM

Increasing Investment Activity

Sustained Investor Confidence

- Number of PE deals in the IT/ITeS sector: 87 valued at US\$ 1.47 billion which accounts for 28% of all deals
- Majority of these relate to outbound acquisitions by Indian companies

Breakup of VC/PE Investment in 2006 (Volume)



Source: NASSCOM

Increasing Investment Activity

Mergers and Acquisitions

Target	Acquirer/Investor	Value in US\$ million	Stake
Flextronics Software Systems	Kohlberg Kravis Roberts & Co.	900	85%
MphasiS BFL Ltd.	Electronic Data Systems Corporation (EDS)	398	52%
Syndesis	Subex Azure Ltd.	158	100%
Azure Solutions, UK	Subex Systems	141	100%
eSys Technologies	Teledata Informatics	141	51%
Hexaware Technologies	General Atlantic Partners	68	14.9%
Enabler, Portugal-based retail solutions provider	Wipro Technologies	55	100%
Saraware Oy, Finland	Wipro Technologies	34	100%
Scandent Solutions Corporation Ltd.	Indopark Holdings Ltd.	31	56%
BPM Inc.	First Source Solutions Ltd.	30	100%

Source : News Articles

Established IT/ITeS Hubs in India

NCR - Delhi

- Total STPI Registered Units by 2006-07: 1400
(150 added in 2006-07)
- **IT/ITeS Majors: IBM, Genpact, Oracle, Am Ex, Convergys, HP, General Motors, HCL**

Kolkatta

- 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**



Source : STPI, Trammell Crow Meghraj

Established IT/ITeS Hubs in India

Hyderabad

- Total STPI Registered Units by 2006-07: 1060
(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**



Source : STPI, Tramell 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**



Source : 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 Kolkatta.
- 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
 - 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 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% of the capital expenditure for manufacturing units located inside SEZs and 25% for those outside SEZs
 - Emphasis on wafer fabrication and ancillary manufacturing plants
-

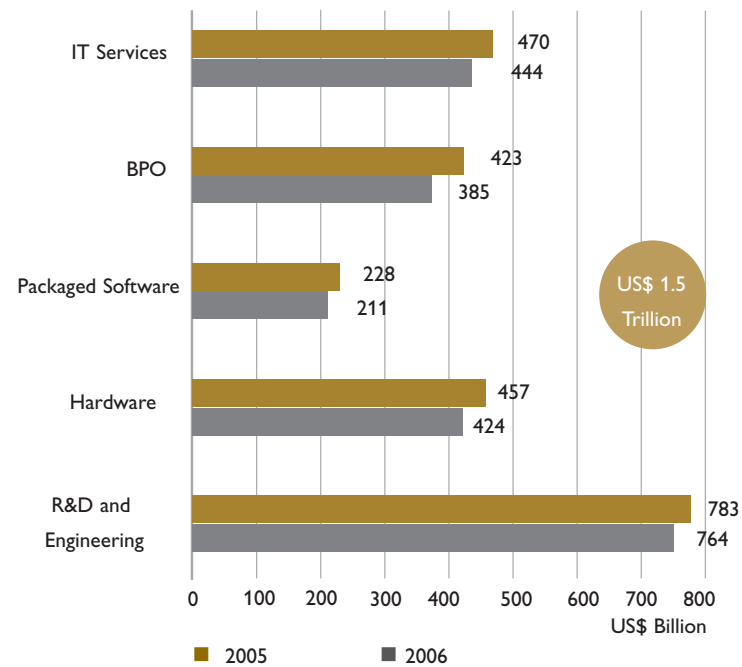
KEY TRENDS & DRIVERS

Increase in Global IT Services Spend

Technology Related Spending

- Market size estimated at over US\$ 1.5 trillion
- Global technology spending growth in 2005-06 estimated at 7.7%
- Software and IT-BPO services account for over 70% of the total technology spend
- Spend on engineering and R&D estimated at US\$ 780 billion

Global Technology Spend



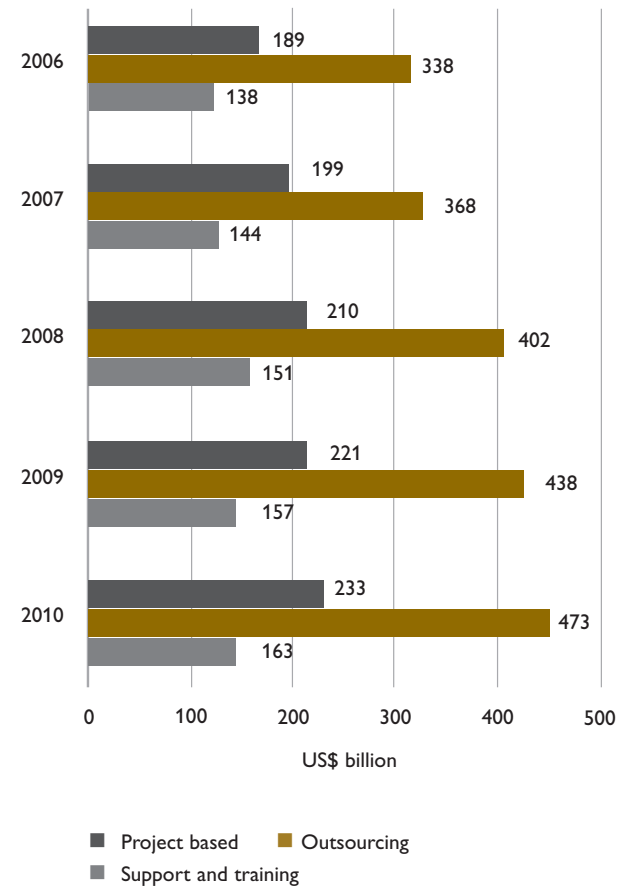
Source: IDC, NASSCOM

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% 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% of the total technology spend

Worldwide Services Spending



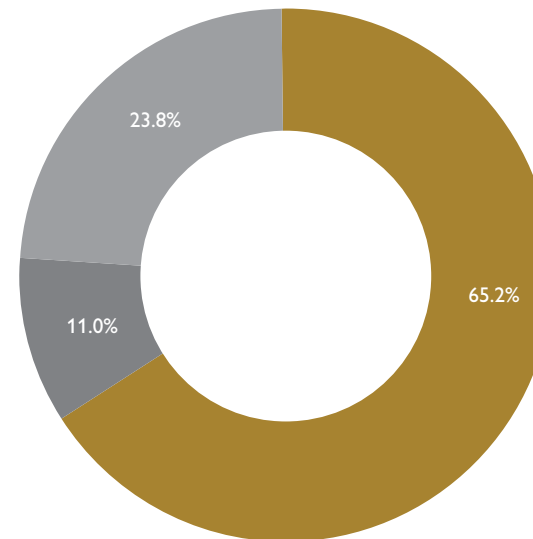
Source: IDC, NASSCOM

Emerging Countries – Demand & Supply Centres

Increasing Importance of Emerging Countries (BRIC)

- Importance of emerging countries as both supply and demand centres being recognized
- Technology spends 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% in the Hardware segment, 17% in the Packaged Software segment and 18.1% in the IT Services segment
- Global multinational corporations increasingly focusing on tapping opportunities in these markets

2007 Share



BRIC Spending - US\$ 94.9 billion

■ Hardware ■ Packaged software
■ Services

Source: IDC

Emerging Countries – Demand & Supply Centres

Demand for Off-shoring Accelerating

- With maturing socio-political attitude, Europe is witnessing increased adoption of offshoring; growth rates from Europe 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 5 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 Off-shoring Contracts

- Large players building further scale, 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 5-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 5-year contract to TCS, Infosys and Patni
 - TCS and Satyam together signed a 7-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 3rd parties (e.g.Vodafone – EDS)
- 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 (16000+), IBM (39000+), EDS (15000+) and Cap Gemini (4000+)
-

Increasing Presence across the Globe

Emergence of Indian IT Multinationals

- Expansion of global footprints 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 of diverse cultures
-

Mergers and Acquisitions

Industry Consolidation through Acquisitions

- Value of Mergers & Acquisitions (M&A) deals struck in IT sector touched US\$ 2.4 billion in the first 10 months of 2005-06, compared to US\$ 1.3 billion last year
 - Number of outbound deals has risen sharply and even the average ticket size of the deals has increased over the last 2 years
 - Enhanced M&A activity by service providers seeking to add expertise in specific industry vertical or domain areas to their portfolio of services; enables service providers to move up the value chain
-

Mergers and Acquisitions

- With scale being key to acquiring larger, and more prestigious contracts; relatively smaller service providers are now actively looking for opportunities to be acquired by larger firms or to form partnerships
 - MphasiS' agreement with EDS is a good example of the trend; agreement extends EDS' reach in India while giving MphasiS access to clients
 - Companies in India expected to acquire western firms to gain a global footprint and venture into services that demand a significant onshore presence
 - Companies based in the West expected to take keen interest in organizations in India to stay competitive as well as explore local markets, which is now, not only a cost effective delivery location but also rapidly emerging market
-

Mid-Cap Growth Story

- Mid-cap companies (US\$ 50-250 million revenues) 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 estimated to grow to US\$ 8-11 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\$ 50-250 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	Focused on key niche areas of operations	<ul style="list-style-type: none"> • Focused 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% growth over revenues of US\$ 3.23 billion in 2005-06
- Profitability for the year was at 22% of revenues
- Workforce of over 85,000 professionals by 2006-07, with growth of 36% 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



Source: Dataquest, EY Research and Analysis

Indian IT Giants

Wipro Technologies Ltd.

- Revenues of US\$ 3.28 billion in 2006-07 recording a 41% growth over revenues of US\$ 2.37 billion in 2005-06
- Profitability for the year was at 21% of revenues
- Workforce of over 67,000 professionals by 2006-07, with growth of 26% over 2005-06 employee base of 53,742
- Acquired 6 companies and entered into a joint venture (JV) with another 2, increasing offshore delivery centers and expanding service offerings



Source: Dataquest, E&Y Research and Analysis

Indian IT Giants

Infosys Technologies Ltd.

- Revenues of US\$ 3.21 billion in 2006-07 recording a 41% growth over revenues of US\$ 2.2 billion in 2005-06
- Profitability for the year was at 29% of revenues
- Workforce of over 72,000 professionals by 2006-07, with growth of 37% over 2005-06 employee base of 52,715
- Infosys has chosen primarily the organic route for developing its overseas operations



Source: Dataquest, E&Y Research and Analysis

International Players

Hewlett-Packard India

- Revenues of US\$ 2.91 billion in 2006-07 recording a 37% growth over revenues of US\$ 2.12 billion in 2005-06
- Workforce of over 29,000 professionals, constituting 19% of the global workforce of HP in 2006-07, with a growth of 87% over 2005-06 employee base of 15,454
- Domestic market contributed 81% of HP India's revenues with a share of domestic product sale revenues



Source: Dataquest, E&Y Research and Analysis

International Players

IBM India

- Revenues of US\$ 2.01 billion in 2006-07 recording a 52% growth over revenues of US\$ 1.32 billion in 2005-06
- Workforce of over 55,000 professionals constituting 15% of the global workforce by 2006-07, with a growth of 34% 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\$ 6 billion in India over the next 3 years



Source: Dataquest, E&Y Research and Analysis

ITeS Giants

Genpact

- Workforce of over 28,000 employees by 2006-07
- Spread across more than 25 global delivery centres
- Revenues of US\$ 613 million in 2006-07, recording 24.6% growth over revenues of US\$ 491.9 million in 2005-06



Source: Dataquest, E&Y Research and Analysis

ITeS Giants

Transworks

- Workforce of over 9,978 employees in 2006-07
- Spread across 8 global delivery centres
- Revenues of US\$ 368 million in 2006-07, recording 826% growth over revenues of US\$ 40 million in 2005-06

Source: Dataquest, E&Y Research and Analysis



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% 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 and Analysis

KEY OPPORTUNITIES

Domestic Market

India-One of the Emerging Markets

- Overall size of the domestic market in 2006-07 was US\$ 15.9 billion, a 20.4% growth in revenues of US\$ 13.2 for 2006-07
- Domestic IT market is dominated by the hardware spend accounting for over 50% of total spend
- 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 the 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 Banking, Financial Services, Insurance and Manufacturing

Prominent Domestic ITeS Deals in 2005-06	
Vendor-Client	Engagement Type
MphasiS BPO-State Bank of India	Voice based customer support operations
Nortel & IBM Daksh & MphasiS & HTMT & Teletech – Bharti Tele Ventures	Call center 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

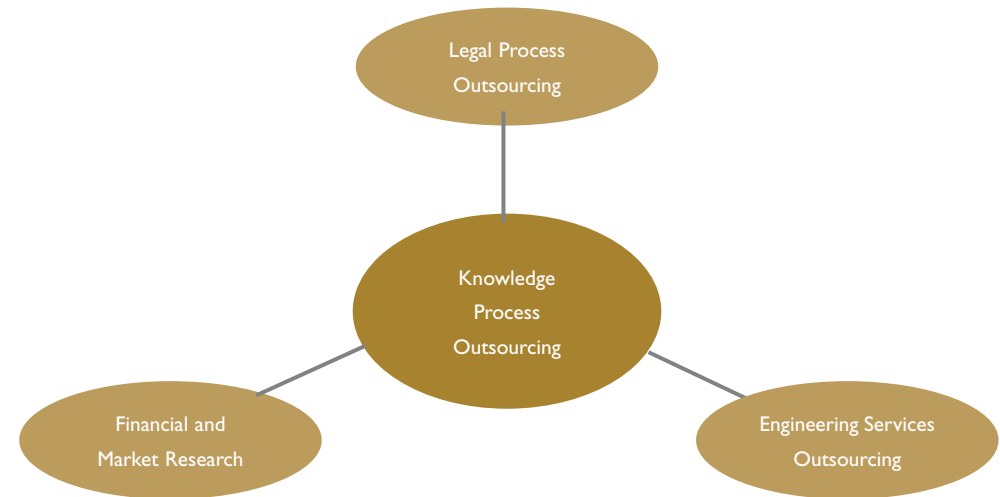
Prominent Domestic ITeS Deals in 2005-06	
Vendor-Client	Engagement Type
TCS-Central Bank of India	System Integration
Wipro-Ashok Leyland	Wipro-Ashok Leyland
HCL-Bangalore Development Authority	Application Development
IBM-Bharti	End-to-End IT Outsourcing
Wipro-YES Bank	End-to-End IT Outsourcing
HP-Bank of India	End-to-End IT Outsourcing

Source: NASSCOM IDC IT Report 2006

Knowledge Process Outsourcing

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 – 70% Indian share, translating into a US\$ 12 billion worth opportunity



Source: EY-IACC Global Offshore Outsourcing Summit 2006

Knowledge Process Outsourcing

Knowledge Process Outsourcing – Growth Driver for ITeS Sector

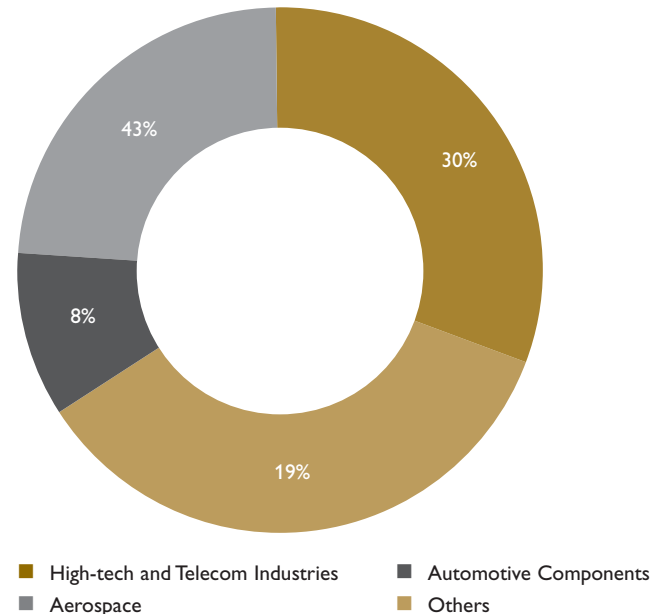
- Growth drivers for this business include high productivity of Indian resources and growing adoption of KPO by Small and Medium Enterprises (SMEs)
 - Opportunities span across several service offerings; Legal Process Outsourcing, Financial and Market Research and Engineering Services Outsourcing are expected to be 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 \$1 trillion by 2020
- India’s share about US\$ 1.5 billion of the US\$ 10-15 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: EY- IACC Global Offshore Outsourcing Summit 2006

‘Engineering’ a new Outsourcing Opportunity

- Labour cost arbitrage in this sector is about 60% 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: EY-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\$ 40-60 in India compared to US\$ 350 per hour in the US)
-

Legal Process Outsourcing

- While most of the business presently comes from the USA, 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, Summarizing, Annotating Managing Content 	<ul style="list-style-type: none"> Contract Drafting Due Diligence Contract Review Preparation of Model Contracts 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 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 Prior Art Searches IP Asset Management 

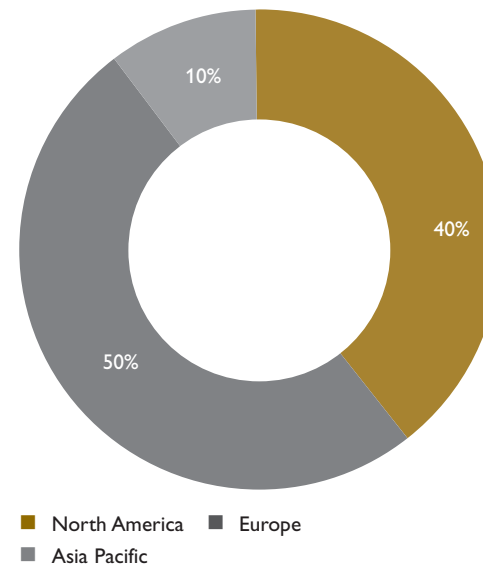
Source: EY-IACC Global Offshore Outsourcing Summit 2006

Research and Analytics

Business, Financial and Market Research

- Wave of new entrants comprising captive research centers 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 centers by McKinsey & Co. (for business and financial research) and General Electric (for financial research)

Revenues by Geographies



Research and Analytics

- Leading third-party service providers have reported growth of over 100% per annum over the past 4-5 years
 - The Big Four of Accountancy and Professional Services - Ernst & Young, Deloitte, PWC, KPMG have their presence in India, along with other leading firms like Datamonitor, Standard & Poor. India emerged as the chosen destination for their front-end research and analysis divisions, migrating from back-room services off-shoring
-

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: EY-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% increase from US\$ 282 billion in 2005-06
 - Leading players like Infosys and Wipro obtained 7-10% 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, resulting in the outsourcing of bulk assignments, 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% increase over 2004-05; Top 10 companies contributed 85% 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

Source: NASSCOM, DataQuest

DISCLAIMER

This presentation has been prepared jointly by the India Brand Equity Foundation (“IBEF”) and Ernst & Young Pvt. Ltd. (“Authors”).

All rights reserved. All copyright in this presentation and related works is owned by IBEF and the Authors. The same may not be reproduced, wholly or in part in any material form (including photocopying or storing it in any medium by electronic means and whether or not transiently or incidentally to some other use of this presentation), modified or in any manner communicated to any third party except with the written approval of IBEF.

This presentation is for information purposes only. While due care has been taken during the compilation of this presentation to ensure that the information is accurate to the best of the

Author’s and IBEF’s knowledge and belief, the content is not to be construed in any manner whatsoever as a substitute for professional advice.

The Author and IBEF neither recommend or endorse any specific products or services that may have been mentioned in this presentation and nor do they assume any liability or responsibility for the outcome of decisions taken as a result of any reliance placed in this presentation.

Neither the Author nor IBEF shall be liable for any direct or indirect damages that may arise due to any act or omission on the part of the user due to any reliance placed or guidance taken from any portion of this presentation.