CHAPTER IV
STRUCTURE AND PERFORMANCE OF INDIAN IT INDUSTRY

4.1 FACTORS CONTRIBUTING TO THE PHENOMENAL GROWTH OF THE INDIAN IT INDUSTRY

Factors contributing to the phenomenal growth of the Indian IT industry can be well grasped from India’s world ranking of 71 variables studied by GITR 2010-2011 across 138 nations. The internet and telephony competition is ranked the best (1st rank). The mobile cellular tariffs (4th rank), business phone installation (5th rank), fixed broadband internet tariff (6th rank), residential phone installation (12th rank), availability of scientists and engineers (15th rank), business monthly phone subscription (21st rank), government’s success in ICT promotion (22nd rank), quality of management schools (23rd rank), freedom of press (25th rank). These factors earned the 10 top ranks. Other than these factors, India has emerged strong in state of cluster development (29th rank), quality of scientific research institutions (30th rank), venture capital availability (31st rank), importance of ICT to a government vision (32nd rank) and capacity for innovation (33rd rank).

The unique factors contributing to industry growth and competitiveness identified by NASSCOM (2013) are optimum cost efficiencies, unparalleled human capital, unique customer centricity, scalability and security and supportive ecosystem.

These factors reflect and contribute to the remarkable industry performance. The encouraging role of institutions and government policies has pushed the industry forward and is highlighted in chapter 1.

The structure of the industry is studied prior to examining the overall industry performance in the ensuing sections.
4.2 FRAMEWORK OF INDUSTRY STRUCTURE

Michael E. Porter, an authority on competitive strategy, in his “Five Forces Model” has established that profits in businesses are not solely generated by rivalry among existing competitors but by four equally strong competitive forces: Customers, Suppliers, Potential Entrants and Substitutes Products. The industry’s underlying structure in terms of these five forces help it to stake a position that is more profitable and less vulnerable to attack by competitors.

Figure 4.1: Five Forces that Shape Industry Competition

The industry may be low or high-tech, regulated or unregulated, developing or developed the underlying drivers of profitability and competitiveness remain the same. Choice of an appropriate strategy can change the strength of the five forces to company’s advantage enabling it to retain profits larger than those bargained away by customers and suppliers. The high force in the Porter’s model can be regarded as a threat to profits whereas a low force can be viewed as an opportunity to generate larger profits.

Profits can further be limited to substitute products and services and constrained by potential new entrants. Certain visible factors (not forces) of an industry – Industry growth rate, technology and innovation, government, complementary products and services – do not determine industry structure. The impact of these factors must be understood through the lens of the five forces by the strategist. It is seen that some fast growing businesses such as personal computers have been among the least profitable industries in the recent years. The industry with advanced technology or innovations such as software and internet which attract competitors do not make the industry structurally attractive. The strategist must trace the positive and negative influence of compliments on all the five forces to ascertain profitability.

The giant Microsoft provided tool sets making it easier to write applications, barriers to entry were lowered and thereby profitability reduced. Porter’s five competitive forces therefore provide a framework for industry structure and attractiveness.

It guides managers to take strategic actions. These could enable managers in positioning the company to better cope up with current competitive forces. The shift in forces could be anticipated and exploited to create a favorable industry structure. Industry boundaries must be correctly ascertained. Each company in the distinct industry needs a separate strategy to boost profitability and competitiveness.

The “Porter’s Five Forces Model” is indeed valuable for a company strategist to comprehend that competition extends beyond industry rivals. In the world of open competition and relentless change, the strategist must be able to detect competitive threats and be equipped to address them if opportunities are to be tapped.
4.3 STRUCTURE OF INDIAN IT INDUSTRY

The structure of Indian IT industry is discussed under the following heads:

1. Industry segmentation
2. IT-BPO Exports Industry Structure: a reflection of healthy co-existence of Indian and Foreign Multinationals.
3. Broad-based / pyramidal industry structure.

4.3.1 Industry Segmentation

Nasscom (National Association of Software and Services Companies) has given the following Indian IT-BPO industry segmentation:

![Figure 4.2: Indian IT-BPO Industry Segmentation](source: NASSCOM, 2012)

To understand the structure of Indian IT industry it is imperative to comprehend the industry segmentation. The Nasscom Strategic Review 2012 clearly outlines the Indian IT-BPO industry segmentation. The non-IT outsourcing segment is referred to as BPO (earlier called ITeS).
“Business process outsourcing (BPO) is a subset of outsourcing that involves the contracting of the operations and responsibilities of specific business functions (or processes) to a third-party service provider. Often the business processes are information technology-based and are referred to as ITES-BPO, where ITES stands for Information Technology Enabled Service” (Tas & Sunder 2004).

“IT-enabled services are those services that have been transformed by information and communication technology, enabling them to be digitized, codified and fragmented and therefore able to be undertaken at any distance from the core business and final customer. These services include those often associated with offshoring including accounting, financial analysis, call-center services, architectural drafting and health-record transcription, among other services activities” (Mann 2005).

The inclusion of BPO in the industry segmentation is meaningful since it complements the IT industry. Firstly, IT Outsourcing is inherently service-based. It’s main objective is to reduce the cost of IT systems and the data centers. The vendors drive it. BPO goes a step ahead and additionally resolves the problem of performance along with seeking to improve the efficiency and productivity for a business.

Secondly, ITO’s progress is measured in IT cost savings. BPO seeks to constantly update and improve a designated process and measures its progress based on business results. ITO is not in conflict with BPO and each cannot replace the other—they are complementary.

The IT and ITeS-BPO industries are, in fact, not separate ones. They complement each other. The industry segmentation by NASSCOM is a witness to it. It has been outlined that IT-BPO industry comprises of three broad segments – services, product and hardware. The spectrum of services – IT services, BPO (Business Process Outsourcing), ER &D (Engineering Research& Design) and OSPD (Offshore Product Development) - has widened with the passage of time, leading to industry growth. It is further seen that the companies in the IT industry are performing multifarious functions ranging from services – ITO, BPO, to the more recent and challenging ESO, all to position itself in the most competitive world of information technology, products and hardware.
4.3.2 IT-BPO Exports Industry Structure

The Indian IT-BPO sector consists of a healthy mix of firms—Indian, MNCs and Global In-house Centres (earlier called captives), successfully operating a range of sourcing models to sustain the industry growth.

![Diagram of IT-BPO Exports Industry Structure, FY 2011](image)

Source: (NASSCOM, 2012)

Overall, Indian firms that account for about 65 percent of IT-BPO exports dominate the industry. Foreign players-third party and GICs-account for the remaining ~35 percent.

The IT services industry is dominated by India/India-centric providers, who constitute more than two-thirds of the market. Large integrated players dominate this
segment, providing services across a number of verticals and geographies. Foreign providers contribute around 10-15 percent of revenues, while IT services GICs constitute the remaining 10-12 percent.

Software products and ER&D have a very high proportion of GICs-around 55 percent, taking advantage of India’s engineering design and development capabilities.

In the BPO industry, Indian firms account for 50 percent export revenue, followed by GICs with a share of about 23 percent and the rest by foreign third party firms.

4.3.3 Broad-Based/Pyramidal Industry Structure

The Indian IT-BPO (excluding hardware) export sector consists of over 5000 large and mid-sized players; emerging and small/start-up players.

Large integrated players: The provider landscape includes eight large integrated players with revenues exceeding USD 1 billion. It accounts for 44-47 percent of total export revenues in FY2011. This includes both MNC and Indian third-party providers, with over 40,000 employees each, accounting for over 35 percent of total workforce in IT sector. These organizations provide bundled IT solutions and near-shoring to reach out to newer customers.

Mid-sized players: In FY2011, 35-37 percent of the market was captured by mid-sized IT players with revenues ranging from USD 100 million to USD 1 billion. This segment includes a number of MNC third party firms and GICs, in addition to Indian firms. Employees range from 5,000 – 40,000 in total constituting 25-28 percent of employment. While the GICs are dedicated offshore delivery centres of global majors, third party firms have developed mature delivery capabilities around select verticals and services and increasingly compete with large players.

Emerging players: In FY2011, 9 – 10 percent of the market’s total export revenues was captured by emerging IT players with revenues ranging from USD 10 to 100 million. Half of this segment is dominated by Indian third party players. The employees constitute about 15-20 percent of total IT export workforce. These players provide a full spectrum of services in certain specialized segments.
Table 4.1: Unique ecosystem - large and mid-sized players; and a hotbed for start-ups

<table>
<thead>
<tr>
<th>Classification</th>
<th>No. of Players</th>
<th>Export Revenues (in %)</th>
<th>Total Employees (in %)</th>
<th>Nature of work</th>
</tr>
</thead>
</table>
| Large-sized          | 8              | 44-47% Revenues > USD 1 billion | ~35%                   | • Comprises Indian and MNC third-party players  
• Fully Integrated players offering full spectrum (IT services, engineering and R&D services, BPO, software products) and complex transformational deals  
• Large scale operations and infrastructure  
• Expanding their onsite/nearshore capabilities, these players have presence in over 70 countries |
| Mid-sized            | 75-80          | 35-37% Revenues: USD 100 million to USD 1 billion | ~25-28%                | • Includes mid-tier Indian IT and MNC firms operating in more than one vertical and offering multiple services such as IT services, engineering and R&D, BPO and software products  
• Nearshore and offshore presence in over 30-35 countries  
• Most of these have large scale operations and infrastructure  
• Dedicated GICs offering IT/BPO/ER&D services |
| Emerging             | ~300-350       | 9-10% Revenues: USD 10 to 100 million | ~15-20%                | • About half of this segment is dominated by Indian third-party players  
• Many of the players provide full spectrum of services with specialization in certain segments like ER&D services and niche IT services  
• Enhancing focus and strategy towards sub-Fortune 500/1,000 firms  
• Dedicated GICs offering niche IT/BPO/ER&D services |
| Small / Start-ups    | >3,500         | 5-6% Revenues: < = USD 10 million | ~15-18%                | • Small/startups focus on specific niches in either verticals or services  
• Includes Indian providers and small niche GICs |

Source: (NASSCOM, 2012).
Small/start – ups players: These small players with revenues of less than or equal to USD 10 million accounts for 5-6 percent of the market in FY2011. These players contribute significantly to employment, employing 15-18 percent of total IT exports workforce. These small players are a hotbed of innovation and potential future growth for the sector.

The market structure of the Indian IT- BPO sector is broad-based/pyramidal with handful of companies (8) contributing 44-47 percent of total export revenues in FY2011. On the other hand more than 3500 companies merely contributed 5-6 percent of total export revenues in the FY2011. It is clearly seen that industry revenues are concentrated in the hands of leading players. While scale is a characteristic of many successful IT services firms, the diverse group of players coexists. Constant technological churn and the lure of entrepreneurial success have enabled many small and medium companies to flourish- underscoring the fact that the key to survival for the company is, therefore not size but sheer innovation and the ability to spot market discontinuities rapidly.

The supplier landscape which shot up to over 16000 firms in the Indian IT-BPO sector offer services across a large number of verticals and service lines to customers across nations. The diverse verticals portfolio ranging from Aero, Auto, BFSI, Hi-Tech, Telecom, Utilities to many more is greater than 25. A full gamut of services including IT services, BPM, SMAC, ER&D, Software Products, OSPD and others fetched an estimated USD 118 billion of revenue in FY2014. The constantly expanding service offerings marks India’s global presence across 78 countries (NASSCOM, 2014).

4.4 OVERALL PERFORMANCE OF INDIAN IT INDUSTRY

Since the inception of the Indian IT Industry in 1968, its growth story is truly amazing. It has emerged as a truly global industry and has served brand ambassador of New India’s business. High aspirations are therefore placed in the industry.

Some data tables presenting the growth of the industry in the past 5 years (FY2008-2012E) are presented below:
Table 4.2: Indian IT-BPO (Domestic + Export) Revenues FY2008-2012E

<table>
<thead>
<tr>
<th>(USD million)</th>
<th>FY2008</th>
<th>FY2009</th>
<th>FY2010</th>
<th>FY2011</th>
<th>FY2012E*</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exports</td>
<td>22,203</td>
<td>25,800</td>
<td>27,290</td>
<td>33,478</td>
<td>39,833</td>
</tr>
<tr>
<td>Domestic</td>
<td>7,882</td>
<td>8,226</td>
<td>9,070</td>
<td>11,004</td>
<td>12,171</td>
</tr>
<tr>
<td>BPO</td>
<td>9,915</td>
<td>11,699</td>
<td>12,401</td>
<td>14,172</td>
<td>15,895</td>
</tr>
<tr>
<td>Exports</td>
<td>9,600</td>
<td>2,690</td>
<td>2,960</td>
<td>11,385</td>
<td>12,959</td>
</tr>
<tr>
<td>Domestic</td>
<td>1,576</td>
<td>1,932</td>
<td>2,304</td>
<td>3,495</td>
<td>3,721</td>
</tr>
<tr>
<td>Software</td>
<td>8,300</td>
<td>2,234</td>
<td>9,999</td>
<td>11,385</td>
<td>12,959</td>
</tr>
<tr>
<td>products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and ER&amp;D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardware</td>
<td>500</td>
<td>395</td>
<td>395</td>
<td>395</td>
<td>415</td>
</tr>
<tr>
<td>Exports</td>
<td>10,293</td>
<td>9,006</td>
<td>9,746</td>
<td>11,732</td>
<td>12,710</td>
</tr>
<tr>
<td>Domestic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>40,918</td>
<td>47,494</td>
<td>50,085</td>
<td>59,430</td>
<td>69,102</td>
</tr>
</tbody>
</table>

Source: (NASSCOM, 2012); E: Estimate
*FY2012E have been successfully met. The actual industry revenue is placed at USD 100.9 billion, well above the targeted industry revenue of 100.8 billion.

Table 4.3: Break-up of Indian IT Services Export Revenues FY 2008-2012E

<table>
<thead>
<tr>
<th>(USD Million)</th>
<th>FY2008</th>
<th>FY2009</th>
<th>FY2010</th>
<th>FY2011</th>
<th>FY2012E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project based</td>
<td>11,610</td>
<td>13,327</td>
<td>13,973</td>
<td>17,086</td>
<td>20,334</td>
</tr>
<tr>
<td>IT Consulting</td>
<td>650</td>
<td>737</td>
<td>764</td>
<td>950</td>
<td>1,102</td>
</tr>
<tr>
<td>Systems integration</td>
<td>680</td>
<td>778</td>
<td>808</td>
<td>1,006</td>
<td>1,179</td>
</tr>
<tr>
<td>Custom application development</td>
<td>8,500</td>
<td>9,728</td>
<td>10,214</td>
<td>12,411</td>
<td>14,842</td>
</tr>
<tr>
<td>Network consulting and integration</td>
<td>280</td>
<td>320</td>
<td>332</td>
<td>398</td>
<td>463</td>
</tr>
<tr>
<td>Software Testing</td>
<td>1,500</td>
<td>1,763</td>
<td>1,855</td>
<td>2,291</td>
<td>2,748</td>
</tr>
<tr>
<td>Outsourcing</td>
<td>8,793</td>
<td>10,428</td>
<td>11,205</td>
<td>13,836</td>
<td>16,545</td>
</tr>
<tr>
<td>Application management</td>
<td>3,100</td>
<td>3,677</td>
<td>3,879</td>
<td>4,725</td>
<td>5,641</td>
</tr>
<tr>
<td>IS outsourcing</td>
<td>3,293</td>
<td>3,930</td>
<td>4,346</td>
<td>5,476</td>
<td>6,576</td>
</tr>
<tr>
<td>Others (SOA&amp; Web Services + E-business/E-commerce)</td>
<td>2,400</td>
<td>2,822</td>
<td>2,980</td>
<td>3,635</td>
<td>4,329</td>
</tr>
<tr>
<td>Support and Training</td>
<td>1,800</td>
<td>2,045</td>
<td>2,112</td>
<td>2,556</td>
<td>2,955</td>
</tr>
<tr>
<td>Software deploy and support</td>
<td>1,440</td>
<td>1,633</td>
<td>1,687</td>
<td>2,041</td>
<td>2,360</td>
</tr>
<tr>
<td>Hardware deploy and support</td>
<td>110</td>
<td>126</td>
<td>130</td>
<td>157</td>
<td>182</td>
</tr>
<tr>
<td>IT education and training</td>
<td>250</td>
<td>286</td>
<td>296</td>
<td>358</td>
<td>413</td>
</tr>
<tr>
<td>TOTAL</td>
<td>22,203</td>
<td>25,800</td>
<td>27,290</td>
<td>33,478</td>
<td>39,833</td>
</tr>
</tbody>
</table>

Source: (NASSCOM, 2012)
Note: E: Estimate
Table 4.4: Break-up of Indian IT Services Domestic Revenues FY2010-2012E

<table>
<thead>
<tr>
<th>(USD Million)</th>
<th>FY2010</th>
<th>FY2011</th>
<th>FY2012E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project based</td>
<td>6,321</td>
<td>7,466</td>
<td>8,008</td>
</tr>
<tr>
<td>IT Consulting</td>
<td>1,099</td>
<td>1,385</td>
<td>1,585</td>
</tr>
<tr>
<td>Systems integration</td>
<td>3,805</td>
<td>4,426</td>
<td>4,672</td>
</tr>
<tr>
<td>Custom application development</td>
<td>1,416</td>
<td>1,655</td>
<td>1,751</td>
</tr>
<tr>
<td><strong>Outsourcing</strong></td>
<td>2,051</td>
<td>2,725</td>
<td>3,303</td>
</tr>
<tr>
<td>Application management</td>
<td>1,586</td>
<td>2,154</td>
<td>2,663</td>
</tr>
<tr>
<td>IS outsourcing</td>
<td>465</td>
<td>571</td>
<td>640</td>
</tr>
<tr>
<td><strong>Support and Training</strong></td>
<td>698</td>
<td>813</td>
<td>859</td>
</tr>
<tr>
<td><strong>Total IT Services</strong></td>
<td>9,070</td>
<td>11,004</td>
<td>12,171</td>
</tr>
</tbody>
</table>

(Source: (NASSCOM, 2012); Note: E: Estimate)

Table 4.5: Knowledge Professionals employed in the Indian IT-BPO sector

<table>
<thead>
<tr>
<th>(‘000 Numbers)</th>
<th>FY2008</th>
<th>FY2009</th>
<th>FY2010</th>
<th>FY2011</th>
<th>FY2012E*</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT services and software exports</td>
<td>877</td>
<td>958</td>
<td>1,033</td>
<td>1,153</td>
<td>1,295</td>
</tr>
<tr>
<td>BPO exports</td>
<td>635</td>
<td>738</td>
<td>770</td>
<td>826</td>
<td>876</td>
</tr>
<tr>
<td>Domestic market</td>
<td>450</td>
<td>500</td>
<td>527</td>
<td>562</td>
<td>601</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1,962</td>
<td>2,196</td>
<td>2,300</td>
<td>2,540</td>
<td>2,770</td>
</tr>
</tbody>
</table>

Source: (NASSCOM, 2012); Note: E: Estimate

*FY2012E have been successfully met. The direct employment generated is placed at 2,776 (in ‘000) well above the targeted number.

Close perusal of these data tables showcase a clear growth trend in IT-BPO revenues. Indian IT- BPO exports revenues (excluding hardware) are expected to reach USD69 billion during FY2012 indicating a y-o-y growth of 16 percent-over 3X global IT-BPO spend growth. Domestic revenue (including hardware) is expected to touch ~USD 32 billion, growing by over 9 percent over FY2011. These estimates for FY 2012 have been successfully met. The actual revenues earned by IT-BPO industry in FY 2012
is placed at USD 100.9 billion, well above the targeted industry revenues of USD 100.8 billion.

IT services export sector has seen the emergence of full service players. They offer traditional services like application development (maintenance till testing), infrastructure and CAD (consulting and system integration). Some niche providers offer end-to-end services in specified customer segments and verticals. It is further observed, that the major revenues of this sector come from Custom Application Development, Software Testing, Application Management, Infrastructure Services (IS) Outsourcing and Support &Training. In the IT services domestic sector, Systems Integration and Application Management contribute a huge chunk of revenues.

The segment-wise direct employment in Indian IT sector in the FY2012 is placed at 1,296 (in ‘000) in IT services and software exports, 879 (in ‘000) in BPO exports and 601 (in ‘000) in domestic market totaling 2,776 (in ‘000) well above the targeted number.

The observations that emerge from these data tables are wrapped up in the following graph and bar charts to give better comprehension of industry performance. Visual presentation gives greater meaning to the data and makes analysis more powerful. The following points emerge:

4.4.1 Milestone achieved – aggregate industry revenue crosses USD100 billion

- Total Revenue ~ USD 101 billion
- Share in India’s GDP: ~ 7.5 %
- Share in total exports: ~ 23-25%
- Value-add: 60-70%
- Exports CAGR: 14%
- Domestic CAGR: ~ 10% - reflects impact of variable rupee
Figure 4.4: IT-BPO Revenue Aggregate for FY2008-12E (USD billion).

Source: (NASSCOM, 2013)

Notes:
1) Exports (IT Services, software products, OSPD, ER&D, BPO, hardware); Domestic (Hardware, IT Services (incl. ER&D), software products, BPO).
2) FY2012E have been successfully met. The actual industry revenue is placed at USD 100.9 billion, well above the targeted industry revenue of 100.8 billion.

The year FY2012 represents a landmark year as aggregate revenue for the Indian IT-BPO crossed USD100 billion mark. The first USD 100 billion is largely a labor arbitrage play; the next USD 100 billion will be a combination of higher value services and increasingly non linear play, in addition to a further extension of the cost proposition. As the proportion of the national GDP the industry revenues have increased from 1.2 percent in FY1998 to about 7.5 percent in FY2012. The share of total Indian exports
(merchandise plus services) went up from less than 4 percent in FY1998 to about 25 percent in FY2012.

The Indian IT-BPO sector has shown tremendous resilience due to its ability to adapt to changing business environment in spite of persisting global uncertainties. With customer exhibiting a cautious mindset, Indian IT-BPO organizations have responded by maintaining a tight control over operating metrics, controlling costs and attrition, expanding to near-shore and onshore locations for customer proximity and partnering with customers to grow their business.

4.4.2 Indian IT-BPO exports approaching USD70 billion

![Indian IT-BPO Exports (USD billion)](image)

- Exports to grow y-o-y 16%: cross USD 69 billion
- Growth exceeds global technology growth
- Increased traction in APAC
- Discretionary spend steady despite global uncertainties
- Emerging opportunities via cloud, mobility, social media, big data

**Figure 4.5: Indian IT-BPO Exports (USD billion)**

Source: (NASSCOM, 2012); E: Estimate

Indian IT-BPO exports are expected to cross USD 69 billion during FY2012 indicating a y-o-y growth of 16 percent-over 3X global IT-BPO spend growth. Discretionary spend remained steady despite global uncertainties. US and APAC led growth among geographies and BFSI and emerging verticals (Retail, Utilities, Healthcare and MPE) drove vertical growth. Future growth is expected to come from opportunities provided by cloud, mobility, social media and big data/analytics technologies.
4.4.3 Overall growth trend in IT-BPO Revenues (in USD million)

![Graph: IT-BPO Revenue Trends (USD million)]

**Figure 4.6: IT-BPO Revenue Trends (USD million)**

Source: (NASSCOM, 2012); E: Estimate

The graph exhibits the dominance of export sector in the Indian IT-BPO industry. It emerges that the growth in the domestic revenues declined marginally from USD 21,985 million in FY2008 million to USD 21,854 million in FY2009. Thereafter, the domestic revenues showed an increase from FY 2009 to FY2012E, marginally at first, picking up later and estimated to move at a faster rate from FY2011 to FY 2012. This growth in domestic revenues is attributed to key drivers for increased technology adoption in India and strong economic growth. India’s customer base—government, large enterprises, micro, small and medium enterprises and household consumers represent a unique set of requirements which has opened up new opportunities for the domestic IT-BPO sector. Increasing spend by the government in several E-governance initiatives, enhanced connectivity and increased levels of IT spending are key factors which make the domestic market lucrative today. Coupled with the fact that organizations are looking to improve competitiveness by adopting global best practices, leverage customized service offerings and new delivery models such as SaaS (Software as a Service), which ensures greater cost savings. Additionally, a new wave of start-ups is driving innovative; India specific solutions are further spicing up the market.
The growth trajectory in export revenues is seen to be slow till FY2010, thereafter picking up sharply to reach USD 69,102 in FY2012. The Indian IT-BPO industry has exhibited rapid evolution especially in exports – in terms of expanding their vertical and geographic markets, attracted new customer segments, transformed from technology partners to strategic business partners imbibing a shared vision, offering considerably wider spectrum of services over the years. At the same time there has been no let down in focus on operational efficiencies. Global in-house centers continue to evolve to higher value added roles further cementing India’s premier position in the global sourcing landscape, accounting for 52 per cent of the market in 2012, up from 50 per cent in 2011.

4.4.4 Traction from both exports and domestic

![Figure 4.7: IT-BPO Revenue Breakup (USD billion)](source: (NASSCOM, 2012); E: Estimate)
Figure 4.8: Breakup of Exports by Segment 2012E (100% = USD 69 billion)

Source: (NASSCOM, 2012); E: Estimate

Within aggregate IT-BPO revenue, in FY2012 exports account for about 69 percent share. Overall industry export is estimated to grow at over 16 percent to cross USD69 billion. On witnessing the break-up of export by segment for the year (Figure 6), IT services exports account for the largest share of about 58 percent; BPO exports contribute 23 percent followed by ER&D and software products that together contribute for about 19 percent. Hardware exports contribute about 0.6 percent of total exports.

The domestic IT-BPO segment (including hardware), accounts for a little over 31 percent of overall industry revenues. This is slightly below previous year’s level and is mainly because of depreciation of the rupee against the dollar. This depreciation has also impacted the growth rate (in dollar terms). The domestic sector is expected to grow a little over 9 percent (vs about 20.5 percent in FY2011) to reach USD32 billion. Share of hardware is about 40 percent, IT services 38 percent, software products 12 percent and BPO about 10 percent.
4.4.5 Segment-wise break-up of (Domestic + Export) Revenues

![Segment-wise Breakup of Revenues](image_url)

**Figure 4.9: Segment-wise breakup of (Domestic + Export) Revenues (USD million)**

Source: (NASSCOM, 2012); E: Estimate

Major chunk of revenues in the Indian IT-BPO industry is provided by IT services during the period FY2008-12. The growth of export revenues in all segments, IT services, BPO, Software Products and ER&D and Hardware is visible. A slight dip in export revenues in the hardware segment is seen in FY2009.

4.4.6 Components of Indian IT-BPO services (export + domestic) revenues in FY2010-12E

![Components of Revenues](image_url)

**Figure 4.10: Components of Indian IT-BPO (export) revenues (USD million)**

Source: (NASSCOM, 2012); E: Estimate
Figure 4.11: Components of Indian IT-BPO (domestic) revenues (USD million)

Source: (NASSCOM, 2012); E: Estimate.

Export revenues from Indian IT services, project-based work remained stable at ~51% from FY 2010 to FY2012. This in contrast to the domestic revenues from Indian IT services, project-based work fetch a smaller percentage of revenue. Export revenues from outsourcing Indian IT services were close to ~41% in the three year period ending FY 2012. Only a marginal increase in percentage is seen. Export revenues from support and training, on the other hand, showed a marginal decline in percentage from 7.73% in FY 2010 to 7.42% in FY2012.

Domestic revenues from Indian IT services, project-based work – IT consulting, Systems integration and Custom application development – declined from 69.69% in FY2010 to 65.80% in FY 2013. The domestic revenues from outsourcing Indian IT services increased from 22.61% to 27.14% in the same time period. The revenue from application management contributed to this increase. The relative importance of outsourcing in the domestic market also increased to 27.14% in FY 2012. Compared to
the export revenues from outsourcing Indian IT services, this percentage is considerably lower. The strength of outsourcing in export market is hence visible. Domestic revenues from support and training showed a declining trend in percent. The absolute US dollar revenues fetched from all the three components in the domestic market however is, on an increase.

4.4.7 Industry adds ~230,000 jobs in FY2012

![Direct Employment (in '000)](chart)

Source: (NASSCOM, 2012); E: Estimate

The Indian IT-BPO Industry has become the growth engine for the economy contributing substantially not only to increase in GDP and exports but has also generated both, direct and indirect employment. Direct employment within the IT-BPO sector is expected to grow by over 9 percent to reach ~2.8 million with over 230,000 jobs being expected to be added in FY2012. IT services exports (including ER&D and software products) shall continue to be the largest employer within the industry with nearly 47 percent share of total direct employment BPO exports generate about 32 percent of total industry employment, and the remaining 22 percent is accounted for by the domestic IT-BPO sector. The FY2012E have been duly met. The industry has successfully generated
direct employment of 1,296 (in ‘000) in IT services and software exports, 879 (in ‘000) in BPO exports and 601 (in ‘000) in domestic market in FY2012.

The IT-BPO sector has become one of the key sectors for the Indian economy because of its economic impact. The sector is responsible for enabling employment to an additional 8.9 million people in various sectors- catering, security, transportation, housekeeping and others -- many of whom belong to rural areas/small towns of India.

Being one of the largest organized sector employers in India, the IT-BPO sector has not only leveraged the vast and diverse talent pool of the nation, but has also focused on the training and development aspects to further improve the skill sets and employability of the ~2.8 million people directly associated with it.

4.5 GROWTH TRAJECTORY PERSIST

FY2013 has been a year of transition and transformation for the Indian IT-BPM (IT-BPO re-christened by NASSCOM in 2013; BPM is Business Process Management) industry as it toiled hard to continue its growth trajectory albeit at a slower pace despite global economic uncertainty. The industry is expected to contribute aggregate revenues of USD 108 billion in FY2013 with the IT software and services sector’s (excluding hardware) share in revenue being USD 95 billion. IT services is a USD 50+ billion industry: BPM is a USD 20 billion segment; and ER&D and products closes in on a USD 20 billion market. The IT services segment is expected to contribute export revenues of USD 43.9 billion, of which total exports were 58 per cent registering a growth of 9.9 per cent over FY2012. The BPM segment is expected to be the fastest growing at 12.2 per cent generating gross revenue of USD 17.8 billion in FY2013. ER&D, OSPD and software products segments are estimated to produce export revenues of USD 14.1 billion, a growth of nearly 9 per cent over FY2012. During this period, direct employment is expected to touch nearly three million, an addition of 188,300 employees, while indirect job creation is estimated to reach 9.5 million. As a proportion of national GDP, the sector revenues have pushed up from 1.2 per cent in FY1998 to about 8 per cent in FY2013. The share of total Indian exports (merchandise plus services) grew from less than 4 per cent in FY1998 to about 23-25 per cent in FY2013 (NASSCOM, 2013).
The industry exemplified the spirit of a warrior, given the uncertainty in 2013, increasing its share in the global sourcing market from 52 percent in 2012 to 55 percent in 2013. Overall industry revenues are estimated to touch USD 118 billion in FY2014, growing by 8.8 per cent over FY2013. Of this IT-BPM exports are estimated to cross USD 86 billion, growing at 13 percent. The sector is expected to provide direct employment to over 3.1 million people and indirectly employ an additional 10 million. As a proportion of national GDP, the sector revenues have grown from 1.2 per cent in FY1998 to over 8.1 per cent in FY2014.

The Indian IT-BPM industry is relentlessly continuing on the growth path. In FY2015, the Indian IT-BPM industry is estimated to account for revenues of USD 146 billion, growing by 13 percent over the last year. Industry exports are over USD 98 billion growing at 12.3 percent, while the domestic segment, which has benefited from the inclusion of ecommerce and mobile app industry, is estimated to touch USD 48 billion growing at 14 percent, faster than the export growth rate. The new governments technology reliant economic growth agenda has significantly boosted domestic IT-BPM market growth prospects and overall business confidence. The industry today is India’s largest and most diverse private sector employer, with a direct workforce nearing 3.5 million, and effecting over 10 million indirect jobs. At the same time the industry’s relative share in India’s GDP has swelled to 9.5 percent and share in total service exports > 98 percent (NASSCOM 2015). The phenomenal growth of the Indian IT sector has had a perceptible multiplier effect on the Indian economy as a whole. In addition to the direct positive impact on the GDP, national income and employment generation, it has triggered an increase in the direct tax collection and propelled an increase in the direct spending, thanks to the significant higher disposable incomes.

4.5.1 Incessant revenue augmentation-aggregate industry revenue to touch USD 146 billion

- Exports to touch nearly USD 100 billion in FY2015
- Exports grow double digit : ~13 percent in FY2015
- Domestic market grow higher than export:~14 percent, driven by the addition of ecommerce segment
- Industry share relative to India’s GDP grew from 8 percent 9.5 percent
Figure 4.13: IT-BPM Revenue Aggregate for FY2013-15E (USD billion)

Source: (NASSCOM, 2015)
Note: E : estimate

Figure 4.14: Break-up of revenue by segment (USD billion)

Source: (NASSCOM, 2015)
Note: E : estimate
4.5.2 ~3.5 million work force contributing to industry growth

- India largest private sector employer
- Promotes diversity in employment
- Share of women employees > 34 percent.
- Foreign nationals ~ 170 K
- > 50 percent employees from non-Tier I India cities
- Indirect employment ~ 3× direct employment

![Bar chart showing employment (direct and indirect) generated by IT-BPM industry](chart.png)

**Figure 4.15: Employment (direct and indirect) generated by IT-BPM industry (in million numbers)**

Source: (NASSCOM, 2015)
Note: E : Estimate
4.5.3 Highest Impact Sector for India

Table 4.6: IT-BPM : Growth Parameters Highlights

<table>
<thead>
<tr>
<th></th>
<th>FY2013</th>
<th>FY2015E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relative to India’s GDP</strong></td>
<td>~8%</td>
<td>~9.5%</td>
</tr>
<tr>
<td>Grew &gt; 6× in the last 15 years (FY 1998-2013)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Relative to India’s exports</strong></td>
<td>23-25%</td>
<td>&gt;38%</td>
</tr>
<tr>
<td>IT-BPM exports &gt; 6× in the last 15 years (FY 1998-2013)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Direct employment</strong></td>
<td>3</td>
<td>3.5</td>
</tr>
<tr>
<td>One of largest organized private sector employers in India</td>
<td>million</td>
<td>million</td>
</tr>
<tr>
<td><strong>Share in Global sourcing market</strong></td>
<td>52%</td>
<td>55%</td>
</tr>
<tr>
<td><strong>PE/VC investments</strong></td>
<td>USD 3.2 billion</td>
<td>&gt;USD6 billion</td>
</tr>
<tr>
<td>Accounts for 37%, of the total investments in India (FY 2013)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Offshore delivery centres</strong></td>
<td>580</td>
<td>640</td>
</tr>
<tr>
<td>Source: Compiled from (NASSCOM, 2013, 2014)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: E: Estimate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.6 CONCLUSION

The Indian IT industry today is at a crossroad – behind lies a scintillating era of exponential growth and global recognition, the future looks markedly different, full of challenges ahead. The challenges around economic volatility, protectionism, competition and customer understanding have to be addressed by the concerned stakeholders to propel industry revenues to USD 300 billion in the digital era by 2020.