

# [The indian information technology industry](https://assignbuster.com/the-indian-information-technology-industry/)

The world has made immense strides in recent years with economic progress linked to the explosion in Information Technology (IT), accompanied by globalization led shrinking of national boundaries. Physical borders no longer define markets and organizations have the freedom to source products from the lowest cost locations. The Indian information technology industry has not only been among the fastest growing industries globally, it has played a key role in transforming India from a largely inward looking economy to an emerging knowledge power that is being recognized as one of the most dynamic and entrepreneurial in the world. As Dahlman and Utz (2005) note, ‘ the success of the IT industry on the whole influenced competitiveness in other sectors as well by building confidence in Indian industry, enhancing the country’s brand equity in the world, and offering entrepreneurial opportunities on a global scale’. The success of this industry has had profound effects on the political decisions, economic growth, social outlook and norms, and technological structure of this nation apart from being a prime mover of the Indian economy. This industry’s contribution to the country’s GDP has increased from 1. 4 per cent in 2001 to about 7 per cent in 2009 and is expected to contribute nearly 20 per cent of incremental GDP growth between 2001 and 2009. The industry, which employed 0. 8 million people in 2001, is expected to employ over 2 million people directly and create direct employment opportunities for at least an additional 2 million people by 2008 (Nasscom, 2002). This study shall present an analysis of the industry landscape of Indian Information Technology industry using analysis frameworks and tools such as PESTEL Analysis, SWOT Analysis, Porter’s 5 Forces Analysis, 8Ps of the Industry, Porter’s Generic forces analysis, 7S analysis, Ansoff Matrix, BCG Product categorization, Analysis of Indian Software Companies using financial ratios, PIMS Analysis, Gap Analysis, Environment Scanning Analysis, 6 Forces Model Analysis, Product life cycle analysis.

For the purpose of analysis, the study shall focus on the Big 5 of Indian Information Technology Industry that includes – TCS, Infosys, Wipro, HCL Technologies Ltd, and Mahindra Satyam.

### PESTEL Analysis of Indian Software Industry

The business environment of an industry consists of all the external influences that affect its decisions and performance. Given the vast number and range of external influences, Political, Economic, Social, and Technological or PEST analysis framework provides a system for organizing information regarding external forces that affect the business. Secondly, an

### Political:

1. Political Stability – Indian political system is very stable. India is the world’s largest democratic nation, where elections are held democratically every five years. All political parties strongly believe in democracy – Positive
2. Relations with major powers – Indian government maintains good relations with all major powers and power blocs of the world. This leads to Indian firms not getting excluded in the tendering process – Positive
3. Government Policy – IT The Indian government as well as the government owned companies have decided to award more IT Projects to Indian IT companies – positive
4. Possibilities of war – Skirmishes with Pakistan could lead to major terrorist attacks or a full-fledged war – Negative

### Economical:

1. Global IT Spending – The recent financial crisis and ensuing recession has led to major firms and banks cut down their IT Spending affecting Industry growth – Negative
2. Domestic IT Spending – Indian domestic market grew by 20 % to reach USD 20 billion in 2008 and is poised to maintain this growth rate owing to most government and governmental agencies going in for digitization – Positive
3. Currency Fluctuation – As most of software services are exported, strengthening of Indian Rupee vis-á-vis major currencies such as US Dollar, UK Pound leads to a decrease in profits and vice-versa for companies – Negative
4. Real Estate Prices – There has been a sharp decline in real estate prices, resulting in reduction in Rental expenditure – Positive
5. Attrition – Owing to recession, layoffs and job-cuts have resulted in low attrition rate – Positive
6. Labour Cost – Indian Programming costs are among the lowest in the world, giving a cost advantage – Postive.
7. Government Support – Indian government sees software exports as a major foreign exchange earner, hence provides plenty of support – Positive.

### Social:

1. Language Spoken – Indian software staff is comfortable in English language and in doing business in English.
2. Education – large number of technical institutes, colleges and universities all over the country provide IT education.
3. Working age – easy availability of young computer literate staff.

### Technological:

* Telephony – Positive

1. India has among the world’s lowest telephone call rates.
2. Telephone subscribers base expected to cross 500 million by end 2009.
3. Enterprise telephone services such as 3G, Wi-max, VPN poised to grow

* Internet backbone – India is well connected with multiple undersea optical cables – positive
* New IT Technologies – Positive

Technologies such as SOA, Web 2. 0, grid computing, High definition content are presenting new opportunities and growth potential.

We shall analyze the industry landscape

The primary driver of the growth and expansion of software industry in India has been cost. The cost of a developer in India varied from $17, 000 to $25, 000 annually. The cost of sending the same developer to the US came to about $32, 000-42, 000 per annum. Compare this with US developer rates of about $60, 000-140, 000 yearly – the cost proposition was clear.

In a world where information technology has become the backbone of businesses worldwide, ‘ outsourcing’ is the process through which one company hands over part of its work to another company, making it responsible for the design and implementation of certain business process under the requirements and specifications of the outsourcing company.

Describe the Industry Structure – Identify key elements of industry’s structure

1. who are the main players – the Indian software industry is dotted with numerous players however, the large firms with more than USD 1 billion of annual revenue are TCS, Infosys Technologies, Wipro Technologies, HCL Technologies, and Tech Mahindra. These can also be denoted as the Big 5 of Indian software industry landscape. Next come the mid-tier firms those whose revenue have been between 500 million to 1 billion dollars. These are EDS Mphasis, Patni Computers etc. At the next rung are firms with revenues between 250 million and 500 million dollars. However, the industry landscape is dotted with numerous small firms who perform tasks outsourced by the big 5 firms. These organizations are also the producers of software services.

the producers – given above

1. Customers – the main customers of Indian software industry are United States based Fortune 500 firms, Fortune 5000 firms, companies based in UK, Japan and from other geographies as well. Other big customers include the Indian government and other Indian firms, and agencies.

Suppliers

And the producers of substitute goods

Then Examine each of the key structural characteristics of each of these groups to determine Competition and bargaining power.

landscape – how many companies, locations situated,

Whether monopoly, oligopoly or perfect competition

Seller concentration – refers to no. and size distribution of firms competing within a market.

Measured by concentration ratio: the combined market share of leading producers.

Eg. 4 firm concentration ratio (CR4) is the market share of the 4 largest producers.

How easily can a firm be setup – very easy, just manpower, pcs, and software.

Employees not unionized.

The Indian Software industry can be perceived to an Oligopoly with near perfect competition with many players dotting the industry landscape.

No. of companies by Revenue:

> 1. 0 Billion USD – No. of firms – Also the Big Four – TCS, Infosys Tech, Wipro Tech, HCL Tech

Between 0. 5 – 1. 0 Billion USD

Between 0. 25 – 0. 50 Billion USD

### Product life cycle analysis

Indian IT Exports – billion so Indian IT market has been able to capture only % in 2009. There

Revenue of Indian IT firms have been increasing at Compounded Annual Growth Rate (CAGR) of % from 2001 – 2009. However, as the Total World IT market is – trillion, there is a lot of scope for growth both within the domestic as well as export markets. Hence, we can conclude that the Indian IT industry is in a growth phase.

### The Structure of Competition in Industry

The Indian IT industry is in a state of perfect competition with thousands of companies dotting across the country. There are no Entry and Exit barriers. It is easy to enter this industry and exit if the need arises. Product differentiation is low as most players offer similar services, which can be taken to be homogenous. There are no impediments to information flow.

### Financial Analysis of Indian Software Companies

### a. Economic Value Added

In the past couple of years, the ‘ cost advantage’ model has come under serious threat with competition from the likes of China and Philippines. ‘ As a result, the industry has started moving up the value chain towards consulting and product development,’ says Pandey.

### Indian IT-BPO Industry: NASSCOM Analysis

### I. Highlights

2007 was a year of continued growth for the technology and related services sector, with the worldwide spending aggregate estimated to reach nearly USD 1. 7 trillion, a growth of 7. 3 per cent over the previous year.

### – Global market

* Software and services continue to lead, accounting for over USD 1. 2 trillion – over 71 per

cent of the total spend in 2007

* Hardware spends, at USD 478 billion, accounted for over 28 per cent of the worldwide

technology spending aggregate in 2007

### – Indian Market

* Underlying the sustained growth were a range of economic, regulatory and demographic

drivers – including a continued emphasis on trimming operational costs, dealing with

increasing compliance and regulatory requirements, remaining price competitive,

transforming into a global services oriented business model and addressing challenges of

rising skill shortages, across several developed markets

* Strong optimism of the industry to achieve its aspired target of USD 60 billion in exports

by 2010

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### Segmentation Targeting and Positioning Analysis of Indian Software Industry

### Segmentation

Market segmentation is a process that segments a market into smaller sub-markets called segments. Segments are to be homogenous or have similar attributes. Purchasing patterns and trends can appear prominently in certain segments. Good market segmentation is to create segments where prominent patterns can emerge. Market segmentation can be used to analyze the following:

Market Responsiveness analysis: useful in direct marketing since responsiveness of product offerings can be readily available.

Market Trend analysis: Analyzing segment-by-segment changes of sales revenues can reveal market trends. Trending information is vital in preparing for ever changing markets.

Segmentation offers deal with a specific function within the enterprise such as data processing, accounting, human resources, etc. this is the most likely domain for a product or service but must recognize that other domains may also get involved if the purchase of the product or services becomes a high profile decision.

### Targeting

The dynamics of IT industry is changing and IT firms are now preparing to meet new challenges. Traditionally Indian ITfirms have been sales from the Americas and Europe but going forward, the CAGRs of these regions will be low whereas the Asian market is expected to grow at a very fast pace and approach the market size of European markets by 2011. The emerging Latin American and Middle East / African markets, though smaller in size are also expected to have a higher CAGR.

The growth in Asia-Pacific region is expected to be higher mainly on account of growth in spends in India and China.

### Positioning

India has firmed up its position in the Global software industry and global software biggies too are setting up huge R&D facilities in the country. However, as per NASSCOM, India still accounts for only about 2. 5% of the global IT market. Over the years, Indian IT companies have established firmly on the global stage. More than two-thirds of fortune 500 companies turn to them for part of their IT and business process outsourcing needs. Some such as Tata Consultancy Services, Infosys Technologies, and Wipro Technologies have become global brands, competing head on with multinational IT service providers.

### 8 Ps of Indian IT industry

1. Product –
2. People
3. Place
4. Process
5. Physical Evidence
6. Productivity
7. Price
8. Performance

### Porter’s 5 Forces Model:

### I. Threat of Substitutes: MEDIUM

1. Other Software locations such as Eastern Europe, the Philippines and China are emerging and are posing threat to Indian IT Industry owing to their cost advantage. However, this should have an impact from medium to long term.
2. Price quoted for projects is a major differentiator, the quality of products being the same

.

### II. Barriers to Entry: LOW

1. Low capital requirements.
2. Large value chain space for small enterprises.
3. MNCs are ramping up capacity and employee strength.

### III. Rivalry among firms: HIGH

1. Commoditized offerings.
2. Low-cost, little differentiation positioning.
3. High industry growth.
4. Strong competitors.

### IV. Bargaining power of Suppliers: Shift from High to Low

1. Due to slowdown, the job-cuts, the layoffs, and bleak IT outlook.
2. Demand and Supply of IT professionals no longer that favorable to employees.
3. Availability of vast talent pool – freshers and experienced.

### V. Bargaining power of Customers: Very High

1. Large number of IT companies vying for IT Projects – resulting in high competition for projects.
2. Huge decline in IT expenditure – Indian IT companies are dependent on United States and on BFSI sector in particular for majority of its revenues, and with the recent financial crisis, new spending from this source has reduced considerably.
3. For existing products and services, the clients continue with the old companies.

### SWOT Analysis

### Strengths:

1. Leadership in sophiscated solutions that enable clients to optimize the efficiency of their business.
2. Proven ‘ Global Delivery Model’.
3. Commitment to superior quality and process execution.
4. Strong Brand and Long-standing client relationships.
5. Ability to scale Innovation and leadership.

### Weaknesses:

1. Excessive dependence on United States for revenues – 67% of revenues from USA.
2. Too much dependence on BFSI (Banking Financial Services and Insurance) sector.
3. Low R&D spends as compared to global peers.
4. Low expertise in high-end services such as Consultancy and KPO.

### Opportunities:

1. Plenty of scope for Indian Software industry to tap Global IT spending of 1. 7 trillion USD.
2. Indian domestic market set to grow by 20%.
3. Can expand into newer geographies such as – Latin America, Nordic nations, middle-east market, Japan, and western Europe.
4. Creating near shore offices and development centers in cost advantage countries such as – Latin America and Eastern Europe.

### Threat:

1. Global IT slowdown that may continue for some more years, will lead to lower IT spending.
2. Increased competition from foreign companies such as – IBM, HP.
3. Increased competition from low-wage countries such as – China.
4. US government is against outsourcing of IT contracts.
5. Shrinking margins owing to rising wage inflation, currency fluctuations affects revenue and hence margins.
6. Breakup of total Global IT Spending
7. Financial attractiveness of software locations
8. India IT Sector – Market Size
9. Contribution of India IT Industry to GDP
10. Number of employees in IT Sector (Direct Employment)
11. Market share of various Indian IT Firms
12. Sources of Revenue
13. Software Exports Revenue by Global Geography
14. R & D Spending of IT Majors
15. Established IT hubs

### Advantage India:

Largest Pool of Technical Talent

Comparatively high exchange value

Young working population compared to the West

Highly educated workforce fluent in English.

High-end technological infrastructure to connect and communicate with any part of the Globe

Low salary compared to other countries.

Government support for setting up companies

Tax Holidays under STPI for 100% EOU (Export Oriented Units)

Forces driving the Industry

Three major factors affecting software industry is given below (Wilson, 2001):

### Threat of new entry:

The barrier of entry which lies in some industry does not exists in IT or software services industry. Software Company can be started with very less capital investment. It basically needs computer and the knowledge to do software. Because of this low barrier to entry and high rate of success, competition tends to be acute.

Another…

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