

## Challenges and Strategies in it Industry in the Global Perspective

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**Abstract** — With the advent of the globalization the competition in the field of Information Technology has intensified manifold. The phenomenal growth of the IT industry has brought about new challenges and great opportunities for the IT companies. Those companies that can successfully counter the challenges would be the leaders. Now the time has come to develop new advantages. Sustaining business on a global scale is more difficult than operating. India is one of the fastest growing IT markets in the world, the fastest growing market in the Asia-Pacific region. The country has also the fastest growth in Internet usage in this region. India today has a substantial share in the developed world, amongst those involved in information technology (IT) software and services.

This article meticulously presents the major challenges before the Indian IT industry in the present scenario. It throws light on the opportunities available for the Indian IT industry and how the Indian IT companies can take the advantage to compete globally with the help of various strategies.

The I. T. industry's contribution to the Indian GDP has increased from 1. 4% in 1989-1999 to 3% in 2003-2004. The different companies in India contribute to the export revenue and they have been ranked on the basis of their contribution which is revealed from the table no 1. The Indian I. T. industry includes hardware, peripherals, networking, training, domestic and export market for software and services and BPO. Indian software and services industry global delivery model neared towards offshore outsourcing expected to account for Rs 33, 000 crore in 2003-2004, onsite services will touch 22, 500 crore in same period. This is revealed from the table no. 2 that reveals the data for the onsite and offshore exports. In 2003-2004, total revenues of the Indian software and services industry were US\$15. 9 billion, with domestic revenues of US\$ 3. 4 billion which are expected to grow to US\$20. 5 billion and US\$4. 2 billion respectively. In 2003-2004 the total value of software and services export grew at 30. 5% with revenues of \$ 12. 5 billion or Rs 55, 500 crore accounting for an increase of 20. 4% over the previous year which are expected to grow to 30-32% in exports enhancing revenues to reach US\$ 16. 3 billion. The table no. 3 provides the information about it. The I.

T. and electronics exports registered a growth of 22% showing exports of Rs 63, 200 crore in 2003-2004. The Indian I. T. industry's has been constantly increasing the European share in total software and services exports. Indian companies are trying to explore Japan, Germany, France and Asia Pacific. India's share in the world software and service market was just 1. 82% in 2001-2002, 2. 09% in 2002-2003 which increased to 2. 4% in 2003-2004. Information technology enabled services accounted for Rs. 16, 380 crore showing a growth of 45%. Hardware exports grew by 37. 5% reaching Rs. 7, 700 crores and software and services accounted for Rs. 55, 500 crore exports. Share of I. T. in the total Indian exports is 21. 3% accounting for 2. 64% of the GDP which is projected to grow to 7% of GDP and 35% of exports by 2008. Government estimates that by time exports potential would be of the range of \$ 57-\$65 billion accounting to 6% share of the global market.

**Keyword** - Strategies, Structure Services, Opportunities, Challenges.

### PRESENT STATE

According to Nasscom ITES-BPO exports contribution is likely to be \$ 21-24 billion by 2008. According to Nasscom study I. T. services exports is expected to touch \$28-30 billion by the year 2008 and ITES will account for \$21-24 billion and product and technology services industry will contribute around \$8-10 billion to overall revenues. According to Govt. data 70% of Indian software exports was to North America during 2003-2004 which accounts for over 55% of the global I. T. spend. European Union was second with 22. 25% of total export North America accounting for 80% of the business remaining dominant market for ITES –BPO services. I. T. software and services market in India continued to be driven by exports exhibiting a growth in 2003-2004. Close to 60% of the revenues of the overall I. T., software and services market were accounted for exports increasing from Rs 461 billion (US\$9. 55 billion) in 2002-2003 to US\$ 12. 2 billion in 2003-2004. The table no. The export segment, which logged in revenues of Rs. 461 billion. ITES-BPO industry grew at 52. 3% during 2003 –2004. Indian continued to expand its

presence in two of 10 major I. T. services line--Custom application development and maintenance and application outsourcing accounted for nearly 88% of the total exports in 2003-2004. Indian companies have begun moving up the value and are offering services in I. T. consulting, system integration, IT outsourcing, network consulting and integration. India's key advantage in the global IT and ITES-BPO industry is the availability of an abundant, high quality and cost-effective pool of skilled knowledge workers. The skills in demand include software analysts, domain specialists, information security, integration specialists, database administrators, network specialist and communication engineers, data warehousing and semiconductor design. 81 percent of all software professionals have a graduate degree or above – 13 percent are M. Tech, MBA, CA, ICWA, 67 percent are B. Tech, BE or MCA. 20 percent are diploma-holders or graduates. The table no. 4 provides the complete detail about it. The Indian I. T. market accounts for the 12. 5% of the software and services exports, 3. 75% of the hardware, peripherals and networking, 0. 26% by the training and the remaining 3. 4% of the domestic, software and services. The figure no. 1 in the form of pie diagram depicts it.

## STRUCTURE OF INDIAN SOFTWARE AND SERVICES INDUSTRY

The Indian I. T. services industry comprises-- large, global companies and small start-ups, Indian companies and multinationals.

- Tier 1 companies (i. e. the top 5 firms) accounting for 32% of total software exports; benefited from customers' recent scaling of operations.
- Tier 2 companies (with revenues of between Rs. 1 billion and Rs. 10 billion) accounting for about 24% of the industry, facing the challenge of differentiation from tier 1 players. The revenues of these companies are under pressure because of fierce bidding by those in Tier 1.
- MNC back-ends accounting for about 26% of the industry.
- Focused companies (about 3-4% of the industry) include those with a focus on a particular domain /service line /products, who are facing the challenge of cutbacks in key markets such as telecom, and managing to diversify their offerings.
- Small companies, with revenues of less than Rs 1 billion, accounting for 12-14 % of the market, and many have witnessed a slow growth due to excessive dependence on staff augmentation. The table no. 5 clearly reveals the structure of various exporting companies.

## OPPORTUNITIES

Following are the opportunities –

### 1. Scope in new service lines:

Application development and application outsourcing are the two service lines tapped by the Indian I. T. services industry. New service lines which are expected to be tapped by the Indian I. T. companies include packaged software support and installation, I. T. consulting, network infrastructure management, systems integration, IS outsourcing, I. T. training and education targeting.

### 2. Targeting under penetrated countries:

Markets in Japan and Western Europe need to be penetrated by the Indian industry, which offer \$5-6 billion in export potential to Indian industry. Other geographies like Canada, Netherlands, Sweden and Australia, France, Italy are also high growth geography for Indian companies in the coming years.

### 3. Penetrating high potential sectors:

Indian companies have focused on three areas –services, telecom and manufacturing that account for 45% of the industry's revenue today. Indian companies need to aggressively target under penetrated areas like retail, telecom, service providers and healthcare, which offer great opportunities for the industry.

### 4. Tapping product centric opportunities:

India has been able to capture 0. 2% of US\$ 180 billion market. There are vast opportunities waiting to be tapped in the areas such as embedded software, development and delivery of specialized components, tapping offshore product developments.

### 5. Internet and E-commerce:

E-commerce having great potential in India and Internet access being now liberalized, Indian IT firms are eager to tap the internet and services market. Goldman Sachs Asia predicted more than 9 million Internet users and 400 ISP's till 2004. IDC (India) predicted the growth of Indian e- business revenues from US\$14 billion to \$162 million in 2001 and more in years to come. E-commerce would give opportunity to small and medium Indian enterprises to project their capability globally and thus participate more proactively in such ventures. The handicraft, textiles, art and other industries could find an ideal medium through internet. E-commerce is the IT tool that can do wonders to the Indian economy in many fields.

### 6. Employment:

One of the most appealing opportunity aspect of this sector is to provide employment opportunities According to Gartner group the employment opportunity potential is immense. Germany needs 20, 000 professionals and has instituted immigrant policies such as Green card for professionals. France signed a memorandum of understanding with the Indian chamber of commerce and is keen to hire 10, 000 Indian software engineers and 50, 000 technicians. Ireland has instituted free visa to over 10, 000 software engineers from India.

### SWOT ANALYSIS OF I. T. INDUSTRY

The SWOT analysis reveals that the Indian I. T. industry needs to focus on the weaknesses like low level of infrastructure, Geo political risks and try to convert them into their strengths. The opportunities like searching and penetrating high potential areas and expansion of exports overseas should be grapped to grow in today's global scenario. The strengths such as high qualified and abundant workforce and robust project management experience should always be kept in mind while entering the global market, which will provide a confidence in competing with the rivals. In today's world of cutthroat competition the industry need to be aware of the threats like --recession in market and competition at domestic and global level in business and salary packages, which might affect the overall functioning of the I. T. industry. The Table no. 6 describes the various aspects related to the SWOT analysis.

### CHALLENGES

The Indian I. T. services industry, one of the fastest growing industries in the country, is confronting new challenges. The industry has grown at a compound annual growth rate of nearly 50% over the past decade, but an anti-outsourcing wave looming on the horizon threatens to wreak havoc on the sunshine exports.

1. If the Indian I. T. has to grow tenfold or more than there is need of ten times the amount of capital to be deployed today. In order to be commensurate with respect to the task the technology has to be cost effective.
2. The mind set should be global so that high quality and cost effective solutions to be provided to the customers. Having a global mindset means willing to exploit the software products through resources available within the competitive environment.
3. The innovative thinking is very important in order to survive. There is need to straddle technologies, domains and processes and create a self-sustaining process to docation so continuously.
4. Branding must be the key factor in the value appropriation strategy. Today Indian I. T. industry has created its Indian software brand therefore India should look for its own brand and build and sustain it.
5. There is need to form alliances and collaboration to work within India and with other global organizations as partners. This would help to make, buy and sell on a global basis.
6. There is also need to increase the management and leadership talent and to build the entrepreneurs for the future.
7. Human talent is required to make all dreams true. The talent should be well trained to harness their talent to compete globally.

### STRATEGIES

According to Fiegenbaum, Hart and Schendel (1996), a firm's performance and competitive advantage depends on three dimensions—internal capabilities, external conditions and time. These three important dimensions of competitive strategy need to be analyzed by the companies. They have also explained the four types of organizations according to their internal and external adaptability.

A company having low internal adaptation competencies but high external competency is an externally focused company. Such companies take into considerations the external occurrences ignoring internal adaptation. Therefore such company should develop its strategic capabilities by recruiting better people, modern technology.

An adaptive company has high internal and external adaptation competencies. For a company to be globally competitive a company should be an adaptive type of company.

An internally focused company is one which has high internal adaptation and low external competencies. therefore such type of company focuses on internal efficiencies ignoring the external competencies. It should focus on customer satisfaction stakeholder's demands and domestic competencies.

A company is called a stagnant company if it has both low internal and external adaptation competencies. Such company does not understand the internal capabilities and the external environment in which it operates. It requires hard work to improve its both the competitors.

So for the Indian I. T. industry to be globally competitive, it is important that it should focus on both internal and external competencies both. The table no. 7 shows the different types of strategies. Therefore Indian I. T. industry must focus upon—

- Reducing risk through engagement with stakeholders
- Increasing revenues by reducing environmental impacts and benefiting local economy.
- Improving access to capital through proper governance.
- Better human resource management.
- To improve the infrastructure.

Today India is recognized worldwide for its consistent growth and development in IT industry. The best brains are putting in their efforts to help the Indian IT industry soar to greater heights of success. The Indian IT companies can overcome the barriers while entering into the global market by making proper use of the human skills and creativity. If the company wants to succeed in the world market then it must re-evaluate its internal environment by focusing on the human skills in order to accommodate the changes taking place in the environment Thus the IT industry has immense potential for steering the growth of country's economy by tapping the potential fully by tackling the challenges fully.

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