

# Information Technology and its Role in India's Economic Development

Abhishek Saxena<sup>1</sup>, Pooja Darda<sup>2</sup>

<sup>1</sup>Faculty of Management (PG), Department of Telecom Marketing & Management, MIT World Peace University, Pune, India

<sup>2</sup>Professor, Faculty of Management (PG), Department of Marketing, MIT World Peace University, Pune, India

**Abstract:** *The Indian IT services sector has grown up from tiny beginnings at all-time low useful creation to a significant player within the world info Technology (IT) business. It commands a fifty fifth share within the world marketplace for IT services. India IT sector value proposition in terms of low cost with large supply of high-quality talent is compelling. India being a extremely connected and digital-ready economy remains a high potential market worldwide giving multiple opportunities. As a result, India has become the premier selection not just for outsourcing IT services by the developed - world's international companies (MNCs) however additionally for locating their own Global In-house Centres (GICs), with simultaneously compete and partner with local firms. Indian IT industry has contributed considerably to the economy in terms of GDP, employment and foreign exchange earnings. The pace growth of this business is taken into account as a growth driver for the economy. This paper examines however will the IT business is taking part in its predominant role in Asian nation economy with its numerous trends within the contribution to the gross domestic product in India, its exports, IT revenue trends and employment opportunities.*

**Keywords:** Information Technology, Indian Economy, GDP, NASSCOM, Revenue

## 1. Introduction

Indian Info Technology (IT) business has via a key role in putting India on the world map. The IT sector has become one of the significant growth sector for the Indian economy. Other than fuelling India's economy, IT sector is additionally completely impacting the lives of its individuals through an energetic direct and indirect contribution to numerous socio-economic parameters like employment, standard of living and diversity. IT sector has contended a major role in remodelling India's image from a slow moving functionary economy to an area of innovative entrepreneurs and a worldwide player in providing world class technology solutions and business services.

There are five principle components of IT industry – (i) Online business (ecommerce) (ii) IT services, (iii) ITES (IT Enabled Services) e.g. BPO (iv) Software Products (v) Hardware. All these parts are progressing well and are chargeable for current growth curve of India's economy with a gentle rise in revenues as witnessed within the past few years.

India's IT & ITeS trade increased to US\$ 181 billion in Financial year 2018-19 with export revenue standing at US\$ 137 billion in Financial year 2019 whereas domestic revenues (including hardware) advanced to US\$ 44 billion, as stated by NASSCOM.

IT/ITeS business in India has seen a unique growth since the last decade. Various initiatives of Government of India and the State Governments like, liberalization of external trade, elimination of duties on imports of information technology products, setting up of Export Oriented Units (EOU), Software Technology Parks (STP), relaxation of controls on both inward and outward investments and foreign exchange, and Special Economic Zones (SEZ), have helped IT industry to gain dominant position in world's IT scenario. So we

will say that the IT business has matured over the years and has proven to be a significant contributor to the world economic process. It has helped India to emerge as a worldwide force in today's ever-increasing competitive and stern atmosphere.

## 2. Evolution of IT Industry in India

The evolution of IT trade in India will be copied back to 1974 once Tata consultancy Services (TCS) got its initial United States of America client – Burroughs Corporation, U.S.

The job allotted was to write down software system code for the Burroughs machines. With that opportunity started the growth story of TCS, now a \$10 billion company. During this era non-public businesses weren't straight forward in India because of Government's strict restrictions and rules. Things brightened up only after 1991 with the government's policies of liberalization. Evolution of the IT sector can be described in 5 stages –

- **Stage 1 (Before 1980):** In this 1<sup>st</sup> stage, Indian software system trade was virtually non-existent. IT industry in India started with hardware products. This sector was guarded by the Indian Government through licensing and high tariff rates. When Indian Government accomplished the potential of software system sector to earn exchange, it allowed import of hardware and export of software system through its new software system export scheme developed in 1972. TCS was the primary beneficiary of this scheme in 1974.
- **Stage 2 (1980-1990):** Though the software exports were started by some high profile companies like TCS, WIPRO, Infosys etc., the results were not very encouraging. There were some issues with government policies just like the export of software system was dependent on imports of

hardware. Moreover there have been no applicable infrastructure facilities for software system development.

- **Stage 3 (1990-2000):** During this stage, there have been some substantial changes in Indian economy, as well as relaxation within the entry barriers, trade relaxation, gap from Indian economy for foreign investments and devaluation of rupee. Due to liberalization, a flow of foreign investments came in India and MNCs in India were introduced. During the period, “Offshore Model”, “Onsite Model” and “Global Delivery Model” (GDM) were initiated as a part of the IT services. By early 90s, U.S. based firms began to source work on low price and proficient talent pool in India. During this period, with increased investment in R&D, India become a product developing destination.
- **Stage 4 (2000-2010):** This period has been a period of rapid growth of the IT industry. Special Economic Zone (SEZ) Act was passed in the year 2005. It helped in importing duty free hardware, and income tax exemption on exports for 10 years. The result was a rise within the variety of software system firms. Information Technology Act passed in 2000 gave a boost to e-commerce. National broadband policy proclaimed in 2004 created broadband accessible to twenty million Indians by 2010. The policy of allowing companies to have 100% ownership without the need for an Indian partner helped large multinationals open their development centres in India (Accenture, CISCO, Dell, GE, Oracle, Adobe, HP, and Google etc.). Another necessary development throughout the period 1998- 2010 was the increasing use of computers altogether walks of life like banks, offices, railway stations, airports, income tax department etc.
- **Stage 5 (Post 2010):** Post 2010, India has become world’s largest sourcing destination for IT industry. Online marketing, cloud computing and e-commerce square measure all conducive to speedy growth of the IT trade. India ranks 3rd among global start up ecosystems with more than 5300 tech start-ups. Indian IT and BPM industry is expected to grow to US\$ 1.26 billion by 2025.

### 3. Factors Contributing to IT Growth in India

The top IT corporations in India that provide job opportunities are key players that contribute to the expansion of the Indian economy through telecommunication, software system development, design, mobile commerce, e-commerce, BPO and knowledge process outsourcing (KPO). The IT trade is one that isn't restricted to software system development alone. Technology are often applied in libraries, hospitals, banks, shops, prisons, hotels, airports, train stations and plenty of different places through management systems, or through custom-built software system as seen fit. Among different sectors, the IT sector in India has been driving growth for the last decade and additional, and has the potential to continue doing thus for subsequent couple of years if shortcomings are met and challenges are faced.

Some other factors contributing to IT growth in India are as follows:

- Low cost of operation and tax advantages.
- Supportive Government policies.

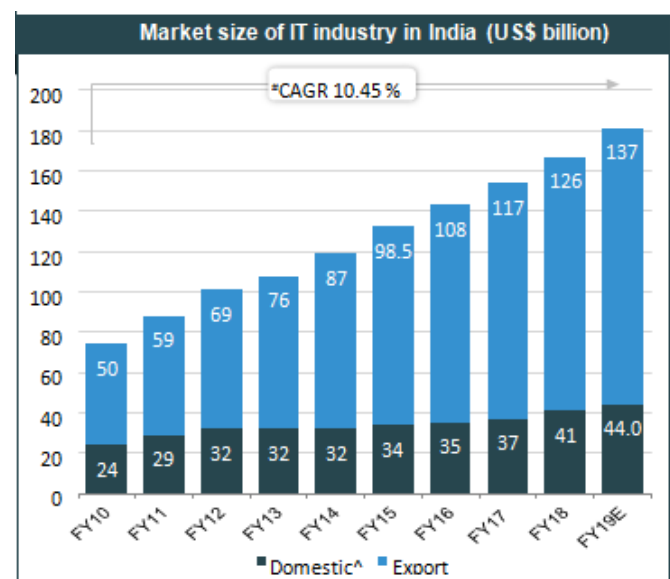
- Availability of technically skilled manpower.
- Rapid introduction of IT technologies in major sectors like telecommunication, BFSI.
- Strong growth in export demand.
- Use of latest technologies like cloud computing.
- Government established SEZs.

### 4. Contribution of IT Sector to India’s Growth Story

#### 4.1 Contribution to Indian Economy in terms of Market Size & GDP

- The contribution of the IT sector to India’s GDP stood at 7.9 per cent in 2017-18.
- IT BPM industry revenues (excluding hardware) was estimated at around US\$ 167 billion in FY 2017-18 and grew to US\$ 181 billion in FY2018-19.
- The domestic revenue<sup>^</sup> of the IT industry is estimated at US\$ 44 billion.
- Export revenue is estimated at US\$ 137 billion in FY19.
- The market size of India’s IT-BPM sector is expected to grow to US\$ 350 billion by 2025 and BPM is expected to account for US\$ 50-55 billion out of the total revenue.
- Spending on Information Technology in India is expected to grow over 9 per cent to reach US\$ 87.1 billion in 2018.\*
- Outsourcing of large technology contracts by clients is expected to accelerate the growth of the industry in FY20.
- The cloud market in India is expected to grow three-fold to US\$ 7.1 billion by 2022 with the help of Growing adoption of Big Data, analytics, artificial intelligence and Internet of Things (IoT), according to Cloud Next Wave of Growth in India report.

India’s digital economy is estimated to reach US\$ 1 trillion by 2025.

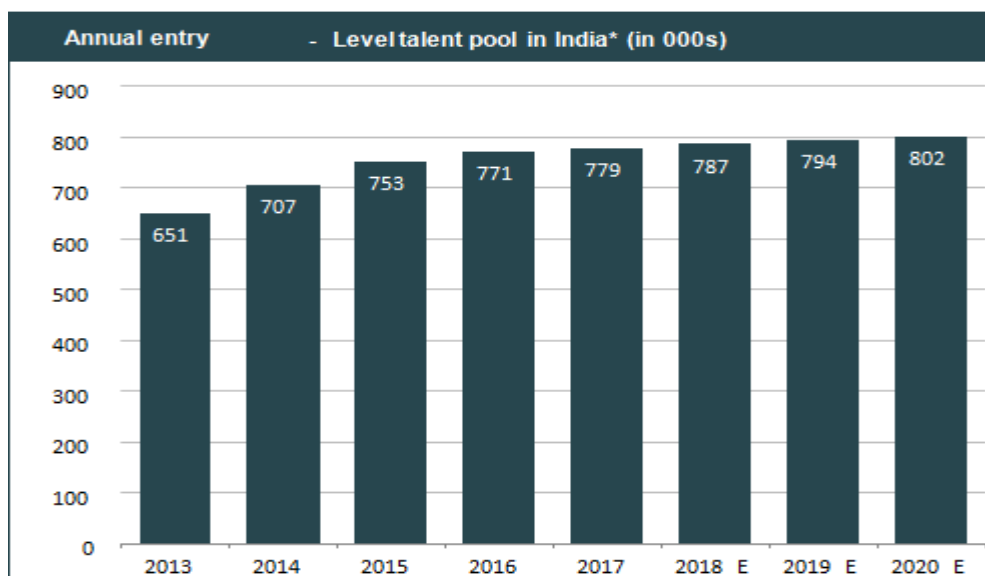


Source: NASSCOM & www.ibef.org / IT-ITES-July-2019 Report.

### 4.2 Earnings from Offshore Destinations

- The export sector crossed US\$ 137 billion of revenues in FY19 growing at 7-9 per cent.
- Exports rose at a CAGR of 12.26 per cent during FY09–18.
- Export of IT services has been the major contributor, accounting for 57.00 per cent of total IT exports (including hardware) during FY18

- BPO and E R&D and software products exports accounted for 21.20 per cent and 21.80 per cent of total IT exports during FY18, respectively.
- ER&D market is expected to grow to US\$ 42 billion by 2022 from US\$ 28 billion, currently.



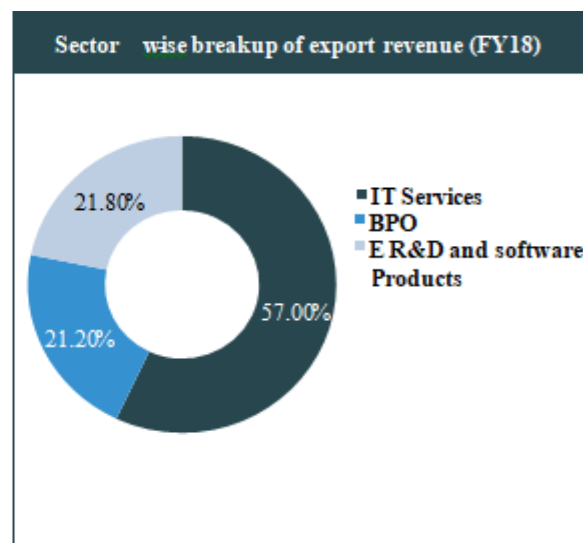
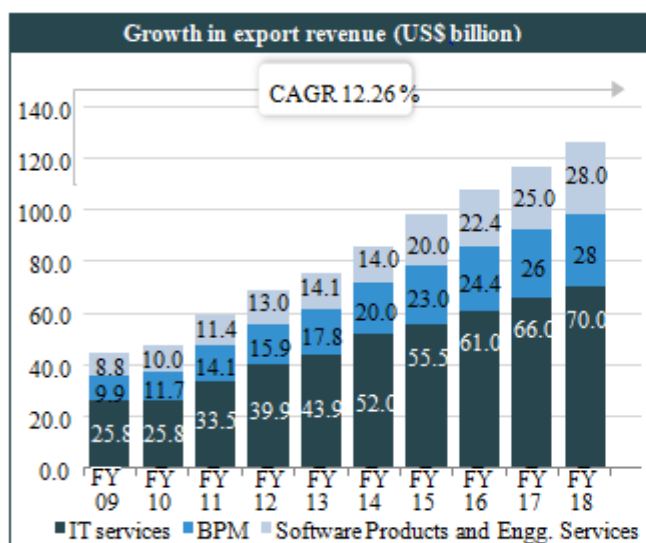
Source: NASSCOM & [www.ibef.org](http://www.ibef.org) / IT-ITES-July-2019 Report

### 4.3 Generation of Employment Opportunities

- Availability of trained communicative manpower has been a significant reason behind India’s emergence as a world outsourcing hub.
- The number of engineering graduates has raised from 651,000 in 2013 to a calculable 779,000 in 2017 and is additional expected to grow to 802,000 by 2020. Indian IT trade is predicted to feature around 250,000 new jobs in 2019
- Employment in the sector reached 3.97 million in 2017-18. Increase of 105,000 was witnessed in 2018. Online

hiring activity in IT software sector increased 28 per cent year-on-year.

- India BPO promotion scheme was approved underneath Digital India programme. It aims to create employment opportunities for the youth and promote investments in the IT & ITes industry. Under the theme employment has already been created for quite 10 thousand people.
- India’s prime 10 Information technology firms added regarding 114,390 engineers to its workforce in 2018 against 22,156 in 2017.



Source: NASSCOM & [www.ibef.org](http://www.ibef.org) / IT-ITES-July-2019 Report.

#### 4.4 Towards Gender Parity

[7] The IT-BPM Sector in India: Strategic Review 2015. NASSCOM.

- According to NASSCOM'S 'Strategic Review 2015', the IT industry contributes a staggering 9.5% to the National GDP & employees quite 1.2 million women. Some of the biggest multinational technology firms, including IBM India & HP, are headed by women.
- In an empowering move, Infosys has all set a target to have 25% women in senior leadership roles by 2020. Infosys currently has 35% women employees, though most occupy junior & mid-level positions.

#### 5. Conclusion

The IT business in India has shown an interesting growth within the last 20 years. It has affected terribly off from stripped-down proportion of gross domestic product to a powerful proportion. As the world economy improves, and client confidence will increase, investment in new technologies such as internet of things, product and platforms, cloud computing, quality and analytics etc. will change vendors to realize potency, agility, access to consumers, and innovation. The Indian IT-BPM industry's continued success is providing a big boost to business and is expected to provide revenues up to US\$ 300 billion by 2020.

The industry's potential to boost the semi-permanent growth prospects through raised productivity in virtually each sector of the economy. The Information Technology will play a serious role in overall economic development of the country. The IT service corporations have enclosed new service lines like package computer code implementation, system integration, R&D engineering and remote network management whereas, ITES-BPO companies have started offering more complex services such as financial research and analytics, actuarial modelling and corporate & business research. There are strong complimentary between IT and rest of the economy. IT will enhance the productivity and potency in alternative industries. It can improve efficiency in areas such as accounting, procurement, inventory management, and production and operations management.

From the analysis, it is clear that the IT industry has potential of not only accelerating the growth in the Indian economy but also promoting the broad-based economic development.

#### References

- [1] NASSCOM
- [2] [www.ibef.org](http://www.ibef.org) / IT-ITES-July-2019 Report.
- [3] Singh, S.K (2006). Information Technology in India: present status and future prospects for economic development.
- [4] <http://www.granthaalayah.com>
- [5] Ishmeet Singh and Navjot Kaur, (June, 2017). Contribution of Information Technology in growth of Indian Economy. International Journal of Research-Granthaalayah.
- [6] Trends of IT Industry in Indian Economy – An Analysis.