

# Impact of Information Technology on Employment in India

## Abstract

India is a preferred global destination for information technology and information technology enabled services (ITES) in the world. The contribution of IT sector to India's GDP rose to approximately 8.1% in Financial Year 13. The total IT software and Services employment is estimated to touch 3.1 million in 2013-14. The indirect employment attributed by the sector is estimated at about 10 million in 2013-14.

To promote investment in the Information Technology (IT)/Information Technology Enabled Services/Electronic Hardware Manufacturing units, the Government of India had notified policy on Information Technology Investment Regions (ITIRs) in May 2008. ITIRs will be self contained integrated township to accelerate growth of IT/ITeS /EHM.

Accordingly, the Government has initiated several initiatives for the development of electronic sector in India. The Government has recently approved National Policy on Electronics (NPE). An important objective of the policy is to significantly upscale high-end resource creation to 2500 Ph Ds annually by 2020 in electronic sector. One of the important objectives of the NPE is to achieve employment to around 28 million by 2020.

IT-BPM is the highest impact sector for India. Relative IT-BPM industry share in National GDP is 8.1%. IT-BPM has largest share in total services exports. IT-BPM is the LARGEST private sector employer. This sector is 4<sup>th</sup> LARGEST URBAN WOMEN employer in India, which makes 35-38% share in total employees.

Approximately 400 new breed of internet firms are creating new markets every year. Around 500 e-commerce firms are creating new markets in India.

The present study examines the growth performance of India's IT industries, with particular attention paid to the impact on direct and indirect employment created by IT and ITeS sector in India.

**Keywords:** Employment, Information Technology, National Policy on Electronics

## Introduction

The annual growth rate ranges between 20-22% in IT services and nearly 55% in IT-enabled services (ITeS), such as Call Centres, Business Process Outsourcing (BPO) and other administrative support operations. IT industry is highly export oriented and the exporters are predominantly Indian.

Software and IT enabled services have emerged as a niche sector for India. This was one of the fastest growing sectors in the last decade with a compound annual growth rate exceeding 50%.

The present study examines the growth performance of India's IT industries, with particular attention paid to the **impact on direct and indirect employment created by IT and ITeS sector in India.**

IT firms were actually required to export software in the early days of the industry. This gave fillip to the software industry and exports. The 1990s and early 2000 saw the rise of Software Technology Parks and formation of the Ministry of Information Technology, respectively. The Ministry of Information Technology is meant to act as a nodal institution for the promotion of the IT sector, facilitating and co-ordinating the various initiatives of the central and state governments and the private sector.

Information and Communication Technology has brought revolution in India because it has reduced intermediation in business and society, provided solutions across sectors and is increasingly becoming an important tool for **EMPLOYMENT GENERATION.**

## Employment

The IT-ITeS sector is a large employment generator. This sector has generated both direct and indirect employment in India. IT-ITeS sector has

**Samreen Fatima Jamal**  
Faculty  
Deptt. of Management  
Integral University  
Lucknow

catalysed growth of several ancillary industries such as transportation, real estate and catering, security and housekeeping. etc.

The total IT Software and Services employment is estimated to touch 3.1 million in 2013-14. The indirect employment attributed by the sector is estimated at about 10 million in 2013-14.

The IT-ITeS exports constitute the major source of employment in this industry and its share has increased over the years. The details of direct employment by the sector both for exports segment and domestic market segment over the last 5 years are given below.

**Employment in IT-ITeS Industry (in millions)**

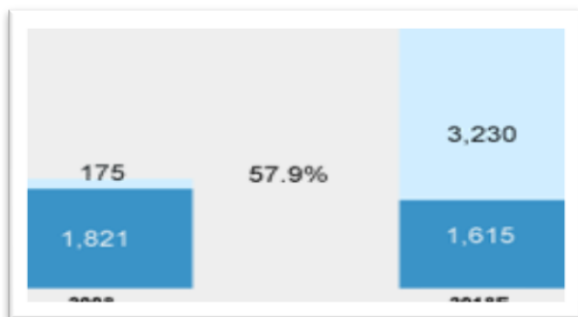
Year/ Segment	2009-10	2010-11	2011-12	2012-13	2013-14
IT Services & Exports	1.0	1.15	1.29	1.4	1.5
BPO Exports	0.77	0.83	0.88	0.92	0.95
Domestic Market	0.53	0.56	0.60	0.64	0.68
Total Employment	2.30	2.54	2.77	2.96	3.13

Source: Nasscom, E: Estimated

Indian IT companies have set up over 600 delivery centres across the world. Indian IT companies provide services with presence in over 200 cities across 78 countries. The contribution of the IT sector to India's GDP rose to approximately 8.1% in Financial Year 13. India has the fastest internet traffic growth globally and is expected to have 348 million users by 2017, up from 138 million in 2012. Approximately 400 new breed of internet firms are creating new markets every year. Around 500 e-commerce firms are creating new markets in India.

**IT Sector Employment Distribution**

India is a preferred global destination for Information Technology (IT) and Information Technology enabled services (ITeS). The Indian IT-business process management (BPM) sector is estimated to expand at a compound annual growth rate (CAGR) of 9.5 % to reach US \$ 300 billion by 2020. The sector increased at a CAGR of 25% over 2000-13, which is 3-4 times higher than global IT-BPM spends.



Export of IT services accounted for 57.9% of total IT exports in FY 13.

**India as a "soft power"** The Indian IT-ITeS industry has emerged as one of the most dynamic

sectors in India's economic development and is responsible for the global recognition of India as a "soft power". The IT-ITeS industry has been influencing the lives of its people through active direct and indirect contribution to various socio-economic parameters such as **employment, standard of living and diversity.**

**Government Policies for Export Promotion are Software Technology Parks (STPs)**

For the promotion of software exports from the country, the Software Technology Parks of India was set up in 1991 as an Autonomous Society under the Department of Electronics and Information Technology. The STP Scheme which is a 100% export oriented scheme has been successful in fostering the growth of the software industry. The STP scheme allows software companies to set up operations in convenient and inexpensive locations and plan their investment and growth driven by business needs.

**Benefits Under STP Scheme**

- 100% FDI is permitted through automatic route.
- Depreciation on computers at accelerated rates up to 100% over 5 years is permissible.
- All relevant equipment/goods including second hand equipment can be imported.
- Use of computer imported for training permissible subject to certain conditions.

**ii) Special Economic Zones (SEZ) Scheme**

In 2005, the Department of Commerce, Ministry of Commerce & Industry, Government of India has enacted the Special Economic Zone (SEZ) Act, with an objective of providing an internationally competitive and hassle free environment for exports. A SEZ is defined as a "specially demarked duty-free enclave and shall deemed to be foreign territory (out of Customers jurisdiction) for the purpose of trade operations and duties and tariffs".

The SEZ act, 2005, supported by SEZ Rules, came into effect on 10<sup>th</sup> February, 2006. It provides drastic simplification of procedures and a single window clearance policy on matters relating to central and state governments. The scheme is ideal for bigger Industries and has a significant impact on future Exports and Employment.

The SEZ policy aims at creating competitive, convenient and integrated Zones offering World class infrastructure, utilities and services for globally oriented business. Salient features of SEZ scheme are as under:

- Duty free import/domestic procurement of goods for development, operation and maintenance of SEZ units.
- 100% Income Tax exemption on export profits available to SEZ units for 5 years, 50% for next 5 years and 50% of ploughed back profits for 5 years thereafter.
- Exemption from Central sale Tax.
- Exemption from Services Tax.
- Single window clearance for Central and State level approval.

**India: A knowledge based Economy**

In addition to fuelling India's economy, Information Technology is also positively influencing the lives of its people through an active direct and

indirect employment generation to the various groups of people. The Information Technology industry has played a significant role in transforming India's image from a slow moving bureaucratic economy to a land of innovative entrepreneurs and a global player in providing world class technology solutions and business services. The Information Technology industry has helped India transform from a rural and agriculture-based economy to a knowledge based economy.

India is a fast emerging economy as a growth story driven by a growing middle class, consumer spending, and technology innovation.

The increased adoption of technology and Telecom by consumers and focused Government initiatives has led to increased Information and Communication Technology adoption by the people of India.

The IT-BPO sector in India has provided employment to 58% of workforce from Tier II/III cities, out of which 31% are women, 74% are below 30 years, 5% from economically backward classes.

IT-BPO sector has created innovative platform which has led to 30 times increase in patents filed in last 5 years. Research and Development expenditure has grown over years. IT-BPM has improved access and delivery of services, bridging technological divide, e-governance solutions, Corporate Social Responsibility activities, etc. IT-BPO sector has share of 6.4% of India's GDP, 14% of total exports, 10% of India's service sector revenues.

IT-BPO sector also contributes to State GDP. It has generated *employment and created infrastructure*. IT-BPO sector has put India on the global map. It has presence in 52 countries, with over 500 global deliveries. It has *employed more than 60,000 foreign nationals* across the world. Information Technology industry has added over 2 million people in the last decade. There are 676,000 people employed in the field of IT-BPM domestic, 956,000 people employed in BPM exports, and 1500,000 people employed in the field of IT services exports.

Information Technology industry has created 10 million Indirect employment which is 3 times more than the direct employment.

There is an increased demand for data scientists, user experience designers, platform engineering, SMAC specialists, etc.

### Top 20 IT-BPM Employers

The top 20 IT-BPM Employers are Consultancy services Ltd., Infosys Ltd., Solutions India Pvt. Ltd., Technologies Ltd Tech., Mahindra Limited Capgemini, India Pvt. Ltd., Genpact Ltd. Serco., Global Services, Mphasis Ltd, Aegis Ltd, iGate Global Solutions Ltd, CSC, India WNS Global, Services (P) Ltd., Syntel Ltd L&T, Infotech Firstsource, Solutions Ltd., EXL Hinduja, Global Solutions Ltd., Mindtree Ltd., The above list is based on annual survey of NASSCOM.

### Government Initiatives to Promote IT & ITeS

The Government of India played a key role with public funding of a large, well-trained pool of engineers and management personnel who could forge the Indian IT industry. The Central Government and the respective State governments are expected to collectively spend US \$ 6.4 billion on IT products and

services in 2014, an increase of 4.3% Over 2013, according to a study by Gartner.

The Government of India plans to reduce the requirement of the built up area from 50,000 square metres to 20,000 square metres and capital conditions for FDI from US \$ 10 million to US \$ 5 million for development of smart cities. It has also allocated a sum of Rs 7,060 crore in the current fiscal for the project of developing "one hundred Smart cities". The government of India also to launch a pan India programme "Digital India" with an outlay of Rs 500 crore.

The Government of India has pledged to support the growth of domestic information technology capabilities in both hardware and software focused on enabling the timely delivery of citizen services and creating new jobs opportunities, especially in rural areas.

India plans to set up industrial parks in the pharmaceutical and information technology (IT) sectors in China to strengthen India-China trade and investment ties.

The Government of India will develop new manufacturing clusters for electronic goods in eight cities as a part of its agenda to boost manufacturing, according to Mr. Ravi Shanker Prasad, Union Minister for Communications and Information Technology.

### Conclusions

Globalization has had a profound impact in shaping the Indian IT industry with India capturing a sizeable chunk of the global market for technology sourcing and business services. The growth drivers for this sector have been the verticals of manufacturing, telecommunication, insurance, banking, finance and the fledging retail revolution.

As the new scenario unfolds there would be new customers and more and more of SMEs will go for IT application and services.

It is getting clear that the future growth of IT and ITeS will be fuelled by the verticals of climate change, mobile applications, healthcare, energy efficiency and sustainable energy.

### Reference

1. Shukla, Yogeshwar (2004), Information Technology Industry in India, KALPAZ PUBLICATIONS, DELHI-110052
2. Ministry of Information Technology <http://www.mit.gov.in/dbid/producti.html>
3. NASSCOM (2014), Directory of Indian software and Services Companies, NEW DELHI
4. GoI: STP Info Database, Department of Electronics, NEW DELHI
5. <http://www.IT-Taskforce.nic.in> (National Information Centre)
6. Heeks, R (1996): India's Software Industry: State Policy, Liberalisation and Industrial Development, Sage Publication, New Delhi
7. [http://www.nasscom.org/business\\_in\\_india/vc\\_sc\\_enario.asp](http://www.nasscom.org/business_in_india/vc_sc_enario.asp)
8. [http://www.nasscom.org/business\\_in\\_india/vc\\_sc\\_enario.asp](http://www.nasscom.org/business_in_india/vc_sc_enario.asp)
9. Ibid
10. Vision for VC in [http://www.nasscom.org/business\\_in\\_india/vc\\_sc\\_enario.asp](http://www.nasscom.org/business_in_india/vc_sc_enario.asp)