

INFORMATION TECHNOLOGY IN INDIA- *Present and Future Directions*

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Abstract: Information technology is actually changing the face of the worldwide economy. The IT industries in the world are helping the economy a lot. There is no question that information technology was driving the sensation of the worldwide economy over the last 20 years. In today's IT savvy world, the growth of economy is associated with the growth of information Technology. The paper throws a light on the present scenario of IT in India and how Indian government is playing pivot role in the growth of IT sector in India.

Keywords: *Economic Growth, IT Enabled Services,*

The IT Sector of any nation is an important contributor to the overall economy and speaks of its growth. Although the computer software industry is growing rapidly and is of increasing importance for the international competitiveness of other high- technology industries and national economies, The vision of Indian government is to make India e- governed, IT enable and e-literate on a global level. It also aims at making India a preferred destination for IT businesses and major supplier of skilled IT workers. With the objective, to help India emerge as an Information technology super power, a task force on IT was set up in May 1998. The task force submitted three reports :

- a) IT Action Plan I (Software)
- b) IT Action Plan II (Software)
- c) IT Action Plan III (Long Term National IT Policy)

There reports are forming a solid base for the present policy development to build India's InfoTech industry and proliferate the use of IT in the country. The industry and government are now working together to form suitable strategies to not only capture this market but also add value to it. Government of India introduce following department/organizations for the development in the information technology sector.

Department of Information Technology (DIT)

DIT, which has been set up under the Ministry of Communications and Information Technology, is responsible for the formulation, implementation and review of national policies in the field of Information Technology including hardware and software, standardization of procedures, internet, e- commerce and information technology education and development of electronics.

Initiatives for development of Hardware/Software industry including knowledge based enterprises; measure for promoting IT exports and competitiveness of the industry are looked after by the Electronics Export and Computer Software Promotion Council (ESC) and National Informatics Centre (NIC) along with DIT.

The Department of Information Technology undertakes the following functions:

- Policy matters relating to Information Technology, Electronics; and Internet.

- Promotion of Internet, IT and IT enabled services.
- Assistance to other departments in the promotion of E-Governance, E-Commerce, E-Medicine, E-Infrastructure, etc.
- Promotion of Information Technology education and information Technology-based education.
- It takes care of matters relating to Cyber Laws, administration of the information Technology Act.
- Matters relating to promotion and manufacturing of Semiconductor Device in the country.
- Interaction with IT related matters with International agencies and bodies e.g. Internet for Business Limited (IFB), Institute for Education in Information Society (IBI) and International Code Council- online (ICC)
- Initiative on bridging the Digital Divide.
- It promotes of Standardization, Testing and Quality in IT and Standardization of procedure for IT application and Tasks.
- Electronics Export and Computer Software Promotion Council (ESC)
- National Information Centre (NIC)
- It takes the initiatives for development of Hardware/ Software, Industry including knowledge-based enterprises, measures for promoting IT exports and competitiveness of the industry.

2. National Association of Software and Service Company

NASSCOM acts as an advisor, consultant and coordinating body for the IT-BTO industry in India, and has played key role in enabling the government in India to develop industry friendly policies.

NASSCOM was set up in 1988 to facilitate business and trade in software and service and to encourage advancement of research in software technology. It is a not of profit organization, registered under the Indian Societies Act, 1860.

NASSCOM has been proactive in pushing this cause for ensuring that the Indian Information Security environment benchmarks with the best across the globe. As a part of its Trusted Sourcing initiative, NASSCOM is in the process of setting up the Data Security Council of India (DSCI) as Self Regulatory Organization (SRO) to establish, popularize, monitor and enforce privacy and data protection standards for India's ITES-BPO industry. DSCI shall function as an enabler to the IT and ITES industry to grow at a rapid pace by facilitating the adoption and enforcement of the prescribed security standards and best practices.

3. IT SEZs

Government of India Ministry of Commerce, promotes Special Economic Zone (SEZ) Policy, vide SEZ Act, 2005. SEZ is a specifically delineated enclave treated as foreign territory for the purpose of industrial, service and trade operations, with relaxation in customs duties and a more liberal regime in respect of other levies, foreign investments and other transactions. SEZ can be set up in an area of 10 hectares or 25 acres with a minimum built up processing area in 1- Lakh square meters and at least, 50% of an area shall be earmarked for developing processing area. There will be 57 IT SEZs will come up in the State in the near future and will provide more than 1000 million of office space of international standards.

4. HiTech Habitats

A strong thrust is being provided to facilitate supportive infrastructure for proliferation of IT

enabled service through out the country, especially in non- software cities. 'Hi Tech Habitats' in the rural hinterland adjacent to suitable cities are being promoted. While the location for five such habitats has been decided, the plan is to set up 50 such habitats by empowering the state government to autonomously nucleate them within a technologically progressive and administratively liberal set of guidelines that will be prepared by the special Group on Hi Tech habitats to be set up by the task force. An important amendment of the tax laws has been made that is of high benefit to companies providing some of the IT enabled service.

5. Broadband Internet Connectivity

The Government with BSNL has implemented an aggressive plan to connect rural areas under the National Broadband Plan, which envisages in its Phase-I to connect those locations through ADSL where BSNL has its Exchange in and around the block. In Phase II, Wireless Towers would be used by BSNL to cover the rural areas. In phase III, Pre- Wi-MAX/ Wi Max scenario would be leveraged to cover the rural areas.

6.E- Governance Portal

E-Government (digital government) interacts with the citizens businessmen, and entrepreneurs through various policies and websites. Each citizen has an electronic identity number and the government has an information database of all the citizens. It acts as an interface between the Government, citizen and entrepreneurs. Virtual government implements policies on websites which, in effect, reduces corruption and increase efficiency due to open connectivity and transparency in transactions. It also increases the change of higher penetration due to automation

and higher availability of public domain information.

Some of the successful e- governance projects in India are e- Seva, Bhoomi, Gramdoot, LOKMITRA, e- Mitra, Drishtee, nLogue etc. The main advantage of e- government is citizen- friendly environment and complete transparency. Government provides online business to the citizen through their websites. Government is collaborating with various IT companies and promoting their products. Company sale their product online using government websites.

State Portals have been implemented as a National State Mission Mode Project under the National e- Governance Plan. The objective behind the Portal is to provide a single window access to the information and services being provided by the Government to the citizens and other stake holders. It is a comprehensive, accurate, reliable and one stop source of information. A state's portal also has links to other State Government Portals/ websites as well as to the National Portal. In addition to information services, the portal also provides interactive and payment services to citizen. The content of the Portal is regularly updated and made available to the citizens.

7. E-Learning

IT is being used as a major tool to promote distance learning educations and training programs across the country. Citizens get their higher educations, vocational training courses, management courses and other job oriented training courses through IT based approach. Under distance learning programs focus will be given on the pedagogy/ andragogy, technology, and instructional system design that aim to deliver education to students who are not physically "on

site” Rather than attending courses in person, teachers and students may communicate at times of their own choosing by exchanging printed or electronic media, or through technology that allows them to communicate in real time. Distance education courses that require a physical on site presence for any reason including the taking of examinations is considered a hybrid or blended course or program.

8. Income Tax Exemption

Currently some of the IT Enable Service units are able to claim tax exemption under section 80HHE of the income tax act. However, the government needs to exempt all of the IT enable services of income tax. Exemption from tax. Exemption from tax on IT services or products makes the product more use in the daily life.

9. IT Education

All students in schools and colleges are being given basic IT training. Computer labs have been established for this purpose. Finishing Schools are also being established in colleges to e- enable the graduating students with a view to enhancing their employability.

10. Relief and Concessions

Various reliefs and concessions are provided to IT/ITES units. These are:

- IT/ITES units would be declared as Public Utility Service under the provision of the Industrial Disputes Act, 1947. They would be allowed to work in three shifts (24x7) as continuous processing units. These units would be exempted from the provision of granting a weekly holiday. Also, female employees would be allowed employment in shifts between 8pm and 7am.

- IT/ ITES units being constituents of the Knowledge industry would be exempted from a variety of clearances and routine inspections of the controlling and regulatory authorities of the State Government such as Labor Commissioner, Director of Employment, State Pollution Control Board, Inspectorate of Factories & Boilers, etc.

1. The Factories Act, 1948
2. Contract Labor (Regulation & Abolition) Act, 1970,
3. Employees State Insurance Act, 1948,
4. Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959,
5. Industrial Employment (Standing Orders) Act, 1946
6. Maternity Benefit Act, 1961,
7. Minimum Wages Act, 1948
8. Payment of Wages Act 1936
9. Equal Remunerations Act, 1936
10. Employees Provident Fund & Miscellaneous Provision Act, 1952

Permission to use agricultural land for non agricultural purpose will not be required in case the entire piece of land and building constructed thereon is used exclusively for setting up IT/ITES units subject to approval by the SIPB.

- IT/ITES units shall be exempted from the purview of the Pollution Control Act.
- IT/ITES units shall be exempted from seeking clearance of the Electrical Inspector for approving Contract Demand of Load and appliances to be fitted in an IT unit.

Working from Home- The knowledge workers are given flexible working environment. The concept of “Working from Home” towards this direction enables.

- (i) Many talented men and women, including physically challenged persons, who is required to operate from home because of various reasons, to fulfill their professional aspirations.
- (ii) Provision of gainful employment and the flexibility in work hours, to women who have young children.
- (iii) Mitigates personal security issues related to night shift operations.
- (iv) Eases up pressure on the city infrastructure, traffic congestion, reduced pollution, conservation of fuel, and minimizes hiring and plying of vehicles.
- (v) Uninterrupted 24x7x365 day operations even during natural calamities such as floods and law & order disturbances, such as bridges etc.
- (vi) Work- life balance, reduced stress, etc.
- (vii) Enhances generation of additional employment.

11. Cyber Laws

The proliferation of information technology has necessitated the enactment of a law governing electronic commerce, data transfer and transactions. As information infrastructure evolves in the country, more and more people will use information Technology to exchange Information conduct business and for many other activities including education, research and entertainment. It is critical for the citizens to be assured about the legality of documents and transactions generated on the computer. It is in this context that Standing Committee under the Chairmanship of Secretary, Department of Electronics was constituted at the instance of the Cabinet Secretary to take

stock of draft legislation and proposals on the subject of Cyber Laws and to formulate a draft Bill on Electronic Data Transfer and transactions having regard to international practice. The Standing Committee identified the following five areas that would cover the scope of Cyber Laws:

- i) Electronic Data Interchange (EDI)/ Electronic Commerce (EC)
- ii) Land Records
- iii) Office Management, File tracking, Paperless Office
- iv) Electronic Fund Transfer (EFT)/ Electronic Payment System
- v) Copyright and Digital Intellectual Property (DIP)

The Committee has identified priority areas in terms of existing legislation, namely, all aspects related to company laws, customs and excise, electronic commerce and Electronic Data Interchange; Indian Evidence Act; Indian Penal Code, Civil Procedure Code, General Clauses Act, Telegraph Act, Land Reforms and Land related legislation, Electronic Fund Transfer and Payment. There are a number of issues, which are common in these identified areas such as admissibility of electronic documents as evidence; authentication of electronic documents; privacy of data security standards; cryptography and encryption; and content regulation.

As a primary step to facilitate admissibility of electronic document/ record/ date as evidence, it has been decided to modify core laws such as the Indian Evidence Act, the General Clauses,

Act, the Indian Penal code and the Criminal Procedure Code.

In respect of new legislation, the Committee has suggested the need to draft new legislations such as:

- Digital Signature Act which will cover aspects like ownership and origin of the electronic message and documentation, signature, legal recognition and protection of data messages, primary and secondary evidence, etc.
- Data Protection Act similar in other countries to govern the obligations and responsibilities of data security.
- Abuse managers, and to protect the interest of individuals and organizations;
- Computer offences Prevention Act.

Conclusion: The Indian economy is facing a paradigm shift and It and IT enabled services are playing a significant role in enabling the individuals and organizations to manage their existing operations and to work beyond their physical boundaries and to expand their horizons beyond geographical areas and the Indian government is also facilitating the one and all and has already coined the concept of Digital India and putting its head and heart to realize this dream.

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