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THE ROLE OF INFORMATION TECHNOLOGY (IT) INDUSTRY IN INDIA

G. V. Vijayasri

Research Scholar, Department of Economics, Andhra University, Visakhapatnam, Andhra Pradesh, India
Email: vijayasreeau@gmail.com

ABSTRACT

"Information Technology (IT) is an important emerging sector of the Indian Economy. This paper examines the India's IT industry and also studied the impact of IT on the Indian Economy. The IT sector has served as a fertile ground for the growth of a new entrepreneurial class with innovative corporate practices and has been instrumental in reversing the brain drain, raising India's brand equity and attracting foreign direct investment (FDI) leading to other associated benefits. The Size of this sector has increased at a tremendous rate of 35% per year during the last 10 years. Its contribution to the national gross domestic product is expected to be around 8.5 by the year 2010-11, quite similar to that in the United States today. Special subsidies or export incentives are likely to be inefficient ways of stimulating the growth of the IT sector, or of positive spillovers for the rest of the economy. The same stricture applies, to some extent, to State government policies to encourage the IT sector.

Keywords: Information Technology, Economic Development, Governmental incentives, Employment and Education

INTRODUCTION

The last decade in the global arena has witness a tremendous growth in the area of information technology. Rapid advances in the technologies for communication media like television, computer, internet, printing and publishing has enabled us to get prompt access to required information. Information technology (IT) has become one of the most robust industries in the world. It, more than any other industry or economic facet, has increased productivity, particularly in the developed world, and therefore is a key driver of global economic growth. The IT sector has emerged as a major global source of both growth and employment.

IT Industry in the country has played a major role in placing India on the international map. The Indian IT Industry mainly comprises of instance System Integration, Software experiments, Custom Application Development and Maintenance (CADM), network services and IT Solutions. According to the analysis done by the annual report 2009-10, prepared by the Department of Information Technology (DIT), the IT-BPO industry was expected to achieve a revenue aggregate of US$ 73.1 billion in 2009-10 as compared to US$ 69.4 billion in 2008-09, growing at a rate of over 5 %. The report even predicts that the Indian IT-BPO revenues may reach US$ 225 billion in 2020.

OBJECTIVES

1. To analyse the relationship between Information Technology and Indian Economy
2. To examine the India's IT industry.
3. To analyse the Promotion of IT - governmental incentives of India.

This paper makes an attempt to A multi-pronged approach has been adopted for the study on IT industry of India.

HISTORY

The IT industry has built very valuable brand equity for itself in the global markets. The Indian IT Industry comprises of software industry and information technology enabled services (ITES), which even includes business process outsourcing (BPO) industry. Indian IT Industry is considered as a pioneer in software development and a favourite destination for IT-enabled services. In the year 1974, the origin of IT industry in India can be traced, when the mainframe manufacturer, Burroughs asked its India sales agent, Tata Consultancy Services (TCS) to export programmers for installing system software for a U.S. client.

The Indian IT industry originated under very unfavourable conditions. During olden times local markets were absent and government policy toward private enterprise was hostile. The Indian IT Industry was begun by Bombay-based conglomerates that entered the business by supplying programmers to global IT firms located overseas. During 1970's the Indian economy was state-controlled and remained hostile to the software industry. Even the Import tariffs were high like 135% on hardware and 100% on software. Even the exporters were ineligible for bank finance. In 1984 Rajiv Gandhi became Prime Minister and the Government policy towards IT sector changed. The New Computer Policy (NCP-1984) consisted of a package of reduced import tariffs on hardware and software which reduced to 60%.

Even during this time the recognition of software exports as a "deli censed industry", was done so that banks were eligible for finance and freed from license-permit raj, there was even the permission for foreign firms to set up wholly-owned subsidiaries. All such policies are reasons for the development of a world-class Indian IT industry. Today, IT companies in India such as Tata Consultancy Services (TCS), Wipro, Infosys, HCL are well known in the global market for their IT competency.

Indian IT Industry's development and contribution to the world's information technology sector is of highest reputation. Metro Cities like Bangalore, Mumbai, Delhi, Chennai and Hyderabad have become the favorite destinations for all the big banners like HSBC, Dell, Microsoft, GE, Hewlett Packard, and several Indian multinational firms like Infosys Technologies, Wipro, and Micro land have set up their offices in these cities. As the cities offers good infrastructure, with large floor space and great telecom facilities. This could be reason for the basis of the high growth statistics of India and the changing outlook of the companies towards India. The Indian IT Industry has grown up to US $ 5.7 billion in 1999-2000, with the annual growth rate not sliding below 50 % since 1991.

Information Technology (IT)

Information Technology (IT) is the acquisition, processing, storage and dissemination of vocal, pictorial, textual and numerical information by a micro-electronics-based combination

of computing and telecommunications. Information Technology (IT) is the industry, which through the use of computers and other supporting, equipment helps in the spread of knowledge. Information Technology for some time was synonyms to computers. But with the rapid and advancement in various information delivery system such as Radio, TV, Telephone, Newspapers, Fax and of course computers and computer Networks, information technology refers to the entire gamut of Media and devices used to transmit and process information for use by various target groups in the society. IT has, therefore been rights termed at information and communication Revolution.

Different Sources Provide Different Definitions

A few of these definitions and their sources are included below:

The international foundation for information technology provides three definitions foer information technology.

1. The technology used for the study, understanding, planning, design, construction, testing, distribution, support and operations of software, computers and computer related systems that exist for the purpose of data, information and knowledge processing.
2. The IT industry that has evolved to include the study, science and solution gets for all aspects of data, information and knowledge management and or processing.
3. The organization in an enterprise or business that is held responsible and accountable for the technology used for planning, design, construction, testing, distribution, support and operations of software, computers and computer related systems that exist for the purpose of data, information and knowledge management or processing.

The Information Technology Associate of America (ITAM) defines information technology as:

"The study design, development, information, support or management of computer based information systems, particularly software applications and computer hardware". IT deals with the use of electronic computers and computer software to convert, store protect, process, transmit and securely relative information.

IT is the technology (hardware & Software) requires for the processing of data and other information. IT is a term that encompasses all forms of used to store, exchange and use information in its various forms (business data, voice conversations, still images, motion pictures, multimedia presentations, and other forms including those not yet conceived). It is a convenient term for including both telephony and computer technology in the same word. It is the technology that is driving what has often been called "the information Revolution".

Role of Information Technology in various in the World

Even a single day without computers leaves us feeling paralytic. Information Technology (IT) has made us completely dependent for even the simplest day to day task. The recent incident of system failure at key Swiss government ministries has brought Geneva to a standstill. This proves how information Technology has drastically transformed the way we carry out day to day activities. It is dynamic and vast and its absence for a day leaves a severe effect on us. Internet being the simplest form of IT has a major role to play in our daily lives. It has become the backbone of every organization as well as house hold.

1. It has entered almost all industry verticals for instance, railways, airways and sea networks are connected with the help of IT, as information plays a vital role in the smooth functioning in those sectors and lack of even for a second can create havoc.
2. Banking is another sector that depend a lot on IT. From carrying out important transaction to storage of confidential data, IT has made several complicated and time consuming work a lot simpler and faster with considerable amount of safety. In fact e-commerce has made on line banking as well as online purchasing and selling of commodities and services much easier and faster adding to the convince of the common man. By simply searching on the internet one case orders anything with just a click of the mouse button.
3. Similarly, the travel and tourism sector all over the world has benefited a lot from the development of IT industry. One can avoid the crowd and lengthy procedures of booking air or railway or bus tickets. One can choose from the best deals and book tickets online from the comfort of their living room.
4. IT plays a major role in simplifying various organizational processes. Most business enterprises rely on the power of information technology for carrying out their daily tasks conveniently and faster. IT makes complex procedures easier, faster and also helps a lot in avoiding redundancy. It lets individuals' access necessary data ensuring the safety of confidential ones.
5. The field of education has also been blessed with the benefits of IT. Online application to universities, checking results study materials and much more has made the reach of education broad and easier.

IT industry in India

India's much-vaunted Information Technology (IT) sector is composed of two parts: the software sector, and the IT-enabled sector (ITES). In both cases, work that was earlier done in the developed world, particularly the US, has been 'outsourced', or contracted out, to locations in India. In the case of the ITES, the activities outsourced include call centres, medical transcription, data entry, ticket-reconciliation, claims processing, credit card administration, and such other routine office work as can be performed at remote locations. While this work requires knowledge of English, it does not require superior education or skills.

In IT, India has built up valuable brand equity over the years. In IT enabled services (ITES), India is emerging as one of the most preferred destinations for business process outsourcing (BPO). The importance of IT industry in the Indian economy can be gauged from the fact that its contribution to the national gross domestic product (GDP) has increased by seven fold in a span of just one decade from 0.6% in 1994-95 to 4.3% in 2004-05 (Table 1 on page 5). Although industry figures are not directly comparable with GDP as they are based on revenues rather than value added, they provide an indicator of growing importance of the IT sector in the country. Assuming that the Indian economy and IT sector will replicate the past six years performance during the next six years and value added in IT sector is two third of its sales revenue, the contribution of IT sector to national GDP will be around 8.5% during the year 2010-11, quite similar to that in the United States (US) today. The IT sector revenue is expected to increase from Rs. 1276 billion in 2004-05 to Rs. 6435 billion in 2010-11. The Indian IT industry is broadly categorized into IT services and software, ITES-BPO, and

Hardware segments. Although IT services and software continues to remain the key contributor to the IT sector's revenues, ITES- BPO is emerging as the fastest growing segment of the sector. Between the year 2000-01 and 2004-05, contribution of ITES-BPO to the IT sector's total revenue increased from 7.4% to 20.2% whereas the corresponding figure for IT services and software fell from 64.5% to 58.5%. Presently, ITES-BPO segment of the industry is almost as big as the hardware segment.

Size of the industry

Indian Information Technology industry contributes 5.9% of the country's GDP while providing employment to a significant number of its tertiary sector workforce. In March 2009, annual revenues from outsourcing operations in India was up to US$ 60 billion and this is expected to increase to US$225 billion by the year 2020. The most prominent IT hub is IT capital Bangalore and the other emerging destinations are Chennai, Hyderabad, Mumbai, Pune, NCR, Jaipur and Kolkata. India's growing stature in the information Technology enabled the country to form close ties with both the United States of America and the European Union.

Domestic and Export Share

According to Department of Information Technology, the Indian software and services exports was expected to reach US$ 49.7 billion in 2009-10 as compared to US$ 47.1 billion in 2008-09, with an increase of 5.5% in dollar terms. Further, the Indian IT Industry's services exports is estimated to grow from US$ 25.8 billion in 2008-09 to US$ 27.3 billion in 2009-10, with a growth of 5.8 %.In the year 2008-09, the domestic IT attained revenues worth US$ 24.3 billion as compared to US$ 23.1 billion in FY 2007-08, with a growth of 5.4%. The tremendous demand for IT services and goods by India Inc. has majorly strengthened with the expansion of the domestic market as agreements worth extraordinarily to US$ 100 million. Till 2012, the domestic sector is estimated to expand to US$ 1.7 billion against the existing US$ 1 billion. IT exports software and services of India are to nearly 95 countries around the world.

India's domestic IT market over the years has become one of the major driving forces of the industry. The domestic IT infrastructure is developing in contexts of technology and intensity of penetration. In FY 2008-09, the domestic IT sector attained revenues worth$24.3 billion compared to $23.1 billion in FY 2007-08, registering a growth of 5.4 per cent. Moreover, the increasing demand for IT ser- vices and goods by India Inc has strengthened the expansion of the domestic market with agreements' worth rising up extraordinarily to $100 million. By FY 2012, the domestic sector is estimated to expand to $1.7 billion from the existing $1 billion.

Impact of Information Technology on Indian Economy

A particular industry that has been instrumental in the growth of the Indian economy is the IT sector. The design, development, implementation or management of information systems is referred to as information technology. It describes the production, storage, manipulation and dissemination of information. IT industries account for 6% of the GDP of India and provide employment directly or indirectly for over 2.3 million people. It also contributes very significantly to India's exports: accounting for around 18% in 2001. India produces roughly 150,000 technically and socially adept engineers every year. Most of them migrate to developed countries and form an integral part of the workforce there, thus becoming

India's most beloved export. In the 21st century, India has risen to the position of one of the largest IT capitals of the world. As of 2006, technologically inclined services sector in India accounted for 40% of the country's GDP and 30% of export earnings.

The IT industry has helped the growth of modern India in many ways. Indian engineers and technicians are sought world over for their competency and diligence and strong fundamentals in their field of work and study. India's technology boom has also helped her shed her "Hollywood" image of being the land of mystics, snake charmers and beggars and has put her on the world map for being a global information hub.. Each of the above mentioned industries have grown at massive rates, providing jobs and products to Indians. For example HCL Enterprise is electronics, computing an IT company based in India, has become a leading provider of IT service and technological solutions worldwide. In fact, the IT boom of the 90's and the 2000's in India was also accompanied with the growth of BPOs in the nation. India has come under fire from certain groups of people worldwide for "stealing their jobs", but the fact stands that foreign corporations love India for its abundant availability of skilled labour that can master foreign languages and are satisfied at comparatively low salaries. But with most recent graduates these days being absorbed into IT companies and BPOs and then getting their ticket to America and Europe, India is losing a large chunk of its brains which will perhaps be detrimental to the growth of innovative, indigenous technology and inventions in India.

The IT industry in India has seen massive change, growth and development over the years. The future of this industry seems bright with more growth being predicted. Financial analysts are optimistically predicting strides in software technology development in India. Additionally, the growth of the IT sector is expected to bring about a corresponding growth in other sectors like employment, exports and Foreign Direct Investments. IT sector is also intimately linked to other relevant sectors like biomedical technology, defense and infrastructure. Thus the future of the IT sector will directly impact the growth of the nation.

Growth of India's IT Industry

India's IT industry has recorded phenomenal growth over the last decade. During the period from 1992-2001, the compounded annual growth rate of the Indian IT services industry has been over 50%. The software sector in India has grown at almost double the rate of the US software Sector. The statistics of the India's IT industry substantiates the huge momentum acquired by the IT sector in the recent past. During the financial year 2000-2001, the software industry in India accounted for $8.26 billion. The corresponding figure was $100 million 10 years back. As per the report of a study undertaken by NASSCOM-McKinsey, the software export from Indian IT industry is likely to reach 50 billion US dollars in the year 2008. This growth rate of the software sector for the year 2008 has been projected on the basis of the 35% per year growth rate achieved in the last couple of years.

Export of software and services from India is expected to add almost 41 billion US dollars to the annual revenue of the Indian government in the current year. The share of technology industry in India's GDP is expected to reach 5.5% in 2008; while the corresponding figure in 1998 was as small as 1.2%.The study of NASSCOM has revealed that the growth of India's IT industry has prompted the growth of Indian exports by almost 36%. Another favourable effect of India's IT boom is the expansion of opportunities of employment. By the end of fiscal year 2008, the IT sector of India is expected to employ around 2 million skilled Indian youths. The growth of India's IT sector has brought about many other positive changes in the

Indian economy. The purchasing power of a large section of Indian population has increased dramatically. This has resulted in an increase in the average standard of living of the majority of population of the country. The increase in purchasing power of the common people has propelled the growth rate of the other sectors of the economy as well. There has been considerable increase in the amount of fund available for venture capitalism and equity financing.

The ITES sector has also come up to complement the growth of Indian IT sector. Domestic IT market has shown a 24 per cent growth in the last fiscal as against 17 per cent in software exports, according to Dataquest Top 20 survey. However in terms of size of the market, domestic sector at Rs 33,374 crore in 2003-04 is way behind the export revenue of Rs 40,870 crore. The overall Indian IT industry is estimated at Rs 92,924 crore. If BPO and hardware exports are added to overall IT exports from India then the figure for growth in exports comes to 24 per cent. The growth of domestic IT market in 2003-04 compares favourably with the previous year growth of nine per cent while the pace of increase in software exports slowed down to 17 per cent in last fiscal from 26 per cent in 2002-03. In the domestic market, services grew by 26 per cent and hardware by 23 per cent.

For the 2012 financial year (which ended March 2012), annual business crossed US$ 100 billion in sales revenue, with IT contributing to 7.5 per cent of India's GDP. Furthermore, India had 58 percent of the "global IT services" outsourcing revenue, Indian IT services account for 25 percent of its exports. Most Fortune 500 companies outsource some of their work to Indian IT companies, and many operate either directly or indirectly in India. The IT company Tata Consultancy Services reached $ 10 billion in annual revenue by March 2012, with a healthy bottom line (22 per cent). Another company, Infosys (with $ 7 billion in annual revenue), created the "ACM Infosys Foundation Award for Computing Science" in 2007 to celebrate 25 years of service. Fortune magazine recently named Infosys founder NR Narayana Murthy, who is known for his unique way of combining capitalism and socialism, as one of the 12 greatest entrepreneurs of our time.

India's IT industry is growing steadily. Indian IT companies have reached the global stage and are undertaking interesting IT projects. The IT sector has created jobs for 2.8 million IT professionals and has indirectly employed an additional 8.9 million. The rapid growth or engineering education, with more than 500,000 ungraduate IT engineers graduating per year, feeds into this steadily growing IT industry.

Promotion of IT - governmental incentives

With the formation of a new ministry for IT, Government of India (GOI) has taken a major step towards promoting the domestic industry and achieving the full potential of the Indian IT entrepreneurs. Recently, IT committee was set up by the Ministry of Information Technology, Government of India, comprising Non Resident Indian (NRI) professionals from the United States to seek expertise and advice and also to step up U.S. investments in India's IT sector. The committee is chaired by Minister of Information Technology, Government of India, and the members include Secretary, Ministry of Information Technology and a large number of important Indian American IT entrepreneurs.

The group will:

- Monitor global IT developments and refine Indian IT policy to meet global requirements. Specifically, this will help angel investors, venture creators and incubation;
- Promote the growth of human resource development in the IT sector with the aim of creating quality-based education;
- Promote R&D in the sector by identifying thrust areas and drawing up a blueprint for action.

India's most prized resource in today's knowledge economy is its readily available technical work force. India has the second largest English-speaking scientific professionals in the world, second only to the U.S. It is estimated that India has over 4 million technical workers, over 1,832 educational institutions and polytechnics, which train more than 67,785 computer software professionals every year. Government of India is stepping up the number and quality of training facilities in the country to capitalize on this extraordinary human resource. It is the knowledge industry that will help take the Indian economy to a sustained higher rate of growth and the policy makers are fully aware of this.

Latest Developments

As per a Confederation of Indian Industry (CII) report, the Indian IT industry is growing at an annual rate of 35%.

National e-Governance Plan (NeGP): The Government of India plans to give high priority to improve the quality to the citizens by providing basic services at their doorstep for which it has formulated a NeGP covering 27 mission mode projects.

State Wide Area Networks (SWANs): The Government has started a scheme for establishing SWANs across the country in 29 states with a total estimation of US$ 682.27 million over a period of five years.

State Data Centres (SDCs): SDCs have been identified important for the core infrastructure of supporting e-Governance initiatives under NeGP.

Common Service Centres (CSCs): The main objective of CSCs is to develop a platform that can enable Government, private and social sector organizations to carter their social and commercial goals for the benefit of the rural population in the country with a combination of IT-based as well as non-IT-based services.

Community Information Centres (CIC): Government has initiated the CIC's in the hilly and far-flung rural areas of the country with main objective to bring the benefits of ICT to the people for the purpose of socio-economic development.

Nanotechnology: Department of Information Technology started nanotechnology development programme during the 10th plan with the aim of creating infrastructure for research in nanoelectronics and nanometrology at the national level.

Information technology (IT) is amongst the fastest growing sectors in the country. Its contribution to GDP rose from 1.2 per cent in 1999-2000 to 5.2 per cent in 2006-07 and to an estimated 5.5 per cent in 2007-08. Growth of Indian IT industry has been driven by the IT software and services (IT services) and IT enabled services (ITES). The software and

services (IT services) industry of India has been moving up the value chain, giving India formidable brand equity in the global markets. The Indian software and services exports including ITES-BPO are estimated at US$ 40.3 billion (Rs. 163,000 crore) in 2007-08 as compared to US$ 31.4 billion (Rs. 141,000 crore) in 2006-07, showing an increase of 28.3 per cent in dollar terms and 15.6 per cent in rupee terms.

Department of Electronics and Information Technology (DIT) is the nodal organisation in the country, responsible for formulation, implementation and review of national policies in the field of information technology. All policy matters relating to silicon facility; internet; computer based information technology and processing including hardware and software; standardization of procedures and matters relating to international bodies; promotion of knowledge based enterprises; e-commerce; information technology education; etc are addressed by it.

The department has been making continuous efforts towards making India a front-runner in the age of information revolution. Some of the major initiatives undertaken by it include:-

- A '**National Taskforce on Information Technology and Software Development**' was formed with the objective of framing a long term 'National IT policy' for the country and also for removing the impediments to growth of the InfoTech industry. The taskforce suggested various measures towards building India's IT industry and proliferating the use of IT in the country. It submitted its recommendations in the form of three key reports to the Government.
- Enactment of the **Information Technology Act**, which provides a legal framework to facilitate electronic commerce and electronic transactions; prevent computer crimes; promote electronic filing or documentation and digital signature. It aims to create an enabling environment for e-Governance and to boost e-Commerce in the country.
- **Community Information Centres (CICs)** have been set up in the seven North East States and Sikkim for socio economic development of the region. These CICs provide internet connectivity, e-mail facilities, interface between citizens and government, distance learning programs, information on national programmes, disaster management system, public health awareness, etc to the public.
- **E-Governance** is one of the areas in which Information and Communication Technology (ICT) is having a profound impact on the way governments function and the manner in which government services are made available to the citizens. The e-governance projects are expected to increase efficiency, enhance effectiveness and improve quality of the government services. Hence, National e- Governance Plan (NeGP) has been announced with the vision of making all government services accessible to the common man in his or her locality, through common service delivery outlets and ensures efficiency, transparency and reliability of such services at affordable costs. Besides, various IT activities such as development of software applications packages, creation of e-governance infrastructure, National ID, citizen databases, smart card, etc are being taken up on pilot scale basis.
- **State Wide Area Network (SWAN)** is a scheme for establishing state wide area networks across the country in 29 States and 6 Union Territories over a period of five years. The scheme envisages providing central assistance to States and Union

Territories (UTs) for establishing SWANs from State and UTs headquarters upto the block level with a minimum bandwidth capacity of 2 Mbps.

- State Data Centres have been identified as one of the important elements of the core infrastructure for supporting e-Governance initiatives under NeGP. It is proposed to create data repositories or data centres in various States so that common secured data storage could be maintained to serve host of e-Governance applications.
- **Common Service Centres** (CSCs) are one of the three infrastructure pillars of NeGP and are deemed to serve as the physical front end for delivering government and private services at the doorstep of a citizen. The government has approved a scheme for facilitating establishment of 100,000 broadband internet enabled CSCs in rural areas of the country, to be implemented in public private partnership.
- Unique ID for BPL families is a project launched with the objective of creating a core database of all residents of the country and assigns unique ID number to all such residents over 18 years, in order to facilitate better targeting of government social welfare schemes and poverty alleviation initiatives.
- e-District projects have been launched with the objective of computerising the backend workflows at the district level with appropriate business process reengineering (BPR); reduce the work load at the district level; ensure fast processing of cases or grievances; and enable better monitoring of various government schemes. It aims at bringing a number of services online, in a web-based mode, including applications under the Right to Information Act; applications for house sites, ration cards, transfers of teachers, inclusion in the electoral roll, filing of police complaint, issue of birth/death certificates and copies of land records. Most of these services are provided at the district level and they serve as the primary interface between the government and the citizens.
- **National Informatics Centre (NIC)** has been instrumental in steering Information and Communication Technology (ICT) applications in Government departments at Central, State and District levels. It is facilitating improvement in government services; wider transparency in its functions; and improvement in decentralised planning and management. Some of the major projects undertaken by it include budget computerisation; central excise computerisation; commercial tax computerisation; courts computerisation project for supreme court, high courts and district courts; agricultural census and marketing; parliamentary elections data transmission and analysis; land records computerisation; and utility mapping project; etc.

Future of Indian IT industry

Former Indian Prime Minister Atal Bihar Vajpayee once described IT as "India's tomorrow". With the convergence of computing, communications, and electronics, the scope of IT is changing, as are key industries such as

- Transportation (road, rail, air, sea, and urban transport).
- Financial services (banking, insurance and stock trading).
- Hospitality (hotels, restaurants, and tourism).

- Automotive and aerospace.
- Core industries (oil, gas, steel, and mining)
- Services (education and healthcare) and
- Retail.

Areas such as industrial automation and medical electronics are embracing open standards and starting to use commodity hardware. Leading companies in those domains-such as ABB and Siemens-could soon become "IT companies" Indian IT is thus likely to enjoy steady and sustained growth for at least another decade.

CONCLUSION

The main emphasis of this paper has been to stress that IT has some special characteristics, both in theory and practice, which make it a promising engine of broad based growth in India. Special subsidies or export incentives are likely to be inefficient ways of stimulating the growth of the IT sector, or of positive spillovers for the rest of the economy. Similarly, special central government initiatives to increase the availability of IT training and related education are also likely to represent a mistargeting of scarce government resources. The same stricture applies, to some extent, to State government policies to encourage the IT sector. State governments also may be better off removing general restrictions to doing business, as well as providing an enabling institutional infrastructure (appropriate laws and regulations), rather than attempting to target the IT sector through a form of industrial policy.

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