CHAPTER - IV

INFORMATION TECHNOLOGY IN HYDERABAD

This chapter aims at general presentation of the development of the IT Industry in Hyderabad keeping in view of the global trends, national policy making and the economic environment of Hyderabad of the pre and post liberal period. The notable feature of this century is the fast growth of Information Technology. In view of the fact that today communication and technology became part of our lives without these it can not be imagined any activity for instance using mobile phones, internet, banking, E-governance, etc are playing most effective role in every country. The change of the communication and technological environment particularly started with the invention of the microprocessor in the early 1970s and has been showed an explosive growth in the demand for software industry. Then onwards the trend could be observed as the widespread use of more powerful and inexpensive computers in various activities. Further the growth of trade liberalizations in various countries, spreading technological innovation, improving communication revolution and the increasing flow of foreign direct and portfolio investment across the borders\(^1\).

Recently no IT business limits its growth with in its national boundaries; travelling across the border because capital, labour, management and information, all are freely transportable among various countries. In other words the world trade is growing as more and more as trade restrictions are being removed. In India there were many policy making factors and the scientist’s efforts contributed a lot for the

promotion of this IT sector prior to the period 1990. The roots can be traced back from 1950s where Homi Jahangir Baba\(^2\) and Mahalonobis\(^3\) took a true initiation for the promotion of IT from the middle of the 1950s. And in the 1960s the great scientists Sarabhai and Menon developed this sector up to the satisfactory level. Later in 1970s the Electronic Commission has concentrated on this area. Further the business environment in India has undergone significant changes since the mid-1980s.

Prior to the 1984 the policies were affecting the software industry were made within the confines of a highly-regulated, state dominated, with inward looking economic strategy that had been in place since the 1950s. There was hardly any software industry to speak of and the few efforts made to promote exports by permitting the import of hardware in exchange for a guarantee to export a certain amount of software, proved ineffective. There were two significant milestones in promoting IT sector prior to the 1990s was the establishment of (TIFRAC) Tata Institute of Fundamental Research and Computer at Bombay by Homi Jahangir BaBa. In 1945, he became director of the Tata Institute of Fundamental Research. TIFRAC (Tata Institute of Fundamental Research Automatic Calculator) was the first computer developed in India at the Tata Institute of Fundamental Research (TIFR) in Mumbai. Initially TIFR was developed a Pilot Machine in 1950s. It was started in 1955 and commissioned in November 1956. The full TIFRAC machine was in use in the early 1960s (until 1965). It was started in 1957 and commissioned in February 1960. It included 2,700 vacuum

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\(^2\) Homi Jehangir Bhabha, FRS (October 30, 1909 – January 24, 1966) was an Indian nuclear physicist who had a major role in the development of the Indian atomic Energy program and is considered to be the father of India's nuclear program. In 1945, he established the Tata Institute of Fundamental Research in Bombay.

\(^3\) Prasanta Chandra Mahalanobis, was an Indian scientist and applied statistician. He is best remembered for the Mahalanobis distance, a statistical measure. He founded the Indian Statistical Institute, and contributed to the design of large scale sample surveys.
tubes, 1,700 germanium diodes and 12,500 resistors. It had 2,048 40-bit words of memory. Both machines were early adopters of ferrite core memory. Further the Indian Statistical Institute (ISI) which was belongs to the P.C. Mahalonobis speed up this sector. From 1960s onwards it is developed as an industry and became as a big business and the companies established like IBM, ICL, ECIL, etc.

TaTa Consultancy Services was set up at the initiative of J R D Tata in 1968 as the first software company in the country. Most of the software companies formed during the 1970s and 1980s experienced similar spectacular growth. Infosys Technologies, Bangalore, Offers the best illustration. Infact the real push to the force of change came with a great emphasis on technological progress to enable India to enter the twenty first century well equipped to face international competition. Govt visualized India it would be a major global player instead of closed cloistered economy behind the walls of protection. This could be achieved only by liberalizing the economy by liquidating the license permit –Raj.

Things began to change in 1984 and the period till 1990, the next phase of the policy regime, saw a liberal shift in the policies affecting the computer industry. The Computer Policy of November 1984, announced, recognized software as an industry, making it eligible for investment allowance and other incentives. The policy also lowered duties on software imports, and made software exports a priority. The 1984-liberal Policies did a greater job in promoting computers in India. This policy mainly aimed to enhance the foreign currency reserves, Liberalization, avoiding the restrictions on imports, giving importance to computers rather than giving importance to the local

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4. Home of Tata Institute of Fundamental Research Automatic Calculator (TIFRAC)
5. www.profiles.incredible-people.com
made products, Liberalization of software Exports, establishment of Software technology Park in 1984. This policy gave good results within two years which it increased to 60% from the 20% traditional growth rate of earlier. And it also gave confidence to liberalize other sectors also.

The Computer Software Export Development and Training Policy (TCSEDTP) of December 1986 was another significant move in this direction, explicitly aimed at increasing India's share of world software production and the means to do this was the ‘flood in-flood out’ feature: Indian entrepreneurs would be provided liberal access to the latest software and software tools so that they could enhance their international competitiveness and exports could have a higher value-added content. Moreover 1986-Software Export Policy enabling that the skillful human resources are the strength to the Indian economy and aimed to protect them by liberalizing all the exports and imports. It also considered availability of skilful resources at low rates would help for the speedy development of our economy. It also lifted the restrictions on software and any computer imports; it also lifted the restrictions on local made exports which would help in promoting the computer sector.

More so in the last phase the establishment of Software Technology Parks, Macro Economic Liberalization -1991-95, IT task force and National Telecom Policy(NTP)-1998 brought Indian IT business into the global business. The first two budgets of his government bore ample proof of this. Taxes and tariffs were lowered; as many as twenty five industries were taken off the list requiring licenses, restrictions on productive diversification were relaxed, when it comes to the IT sector under the
leadership of Sam Pitroda\(^6\) who brought in young software professionals to provide the necessary boost to information technology.

After the collapse of Soviet economy in 1990, the world started experiencing many rapid changes in its economic activities. Predominantly the world made a rapid transition from an Industrial to a knowledge based economy. Predominantly the far-reaching utilization of computers redefined the world economy future. It strengthened the service sector noticed astounding growth fuelled by the explosive demand for knowledge intensive services consequently the activities in which information technologies particularly the internet play the role of enabler.

The Indians IT entrepreneurs in the US were able to encourage US companies to tap the human resources available within Indian itself\(^7\). The high quality secures reliable and inexpensive telecommunications are available between India and the US and other foreign destinations, it is not necessary for Indian engineer, physically to be present in the US. Work can be done in Indian and delivered over telecoms to clients in the US. Two-thirds of the output by price of India’s IT and software companies is destined for export. One-thirds is for internal consumption in government and enterprise.

\(^6\) Satyanarayan Gangaram Pitroda, better known as Dr. Sam Pitroda is an inventor, entrepreneur and policymaker. Currently chairman of India's National Knowledge Commission, he is also widely considered to have been responsible for India's communications revolution [2] He is the Chairman of World-Tel Limited, an International Telecommunication Union (ITU) initiative. He holds many key technology patents, has been involved in several startups, and lectures extensively around the world on management, governance and the implications of communications and information technology. He is the founder and CEO of C-SAM, Inc, which has developed a suite of patented mobile transaction technology called One Wallet. In 1984, Mr. Pitroda was invited to return to India by the then Prime Minister Indira Gandhi. On his return, he started the Center for Development of Telematics (C-DOT), an autonomous telecom R&D organization. In 1987, he became advisor to Mrs. Gandhi's successor, Rajiv Gandhi and was responsible for shaping India's foreign and domestic telecommunications policies. He is largely considered responsible for the telecommunications revolution in India and specifically, the ubiquitous, yellow-signed Public Call Offices (PCO) that quickly brought cheap and easy domestic and international public telephones all over the country.

The most visible effect could be seen on the general industrial scene. New industries not existing before liberalization have come to the fore-front and existing industries have become more productive and competitive. Many industries now started producing goods and services that had virtually no domestic demand earlier; of these, information technology and allied industries have dominated most spectacular rise. The rising fortunes of the IT industry attracted many entrepreneurs already engaged in some other lines these were Azim Premji wipro and ShivNadar's Hindustan Computers Limited (HCL). These success stories encouraged Entrepreneurs from Hyderabad to launch IT-related enterprises. One of these was B.Ramalinga Raju who moved away from the family business of cotton spinning and set up Satyam computers in 1992 and propels it on to the global stage high-capacity satellite link.

Setting an export target of $50 billion by 2008 for software and IT-related services, the Task Force made 108 recommendations broadly relating to improving bandwidth availability and telecommunications infrastructure, fiscal incentives and expanding IT usage to ensure 'IT for all by 2008'. In 2000, the government passed the Information Technology Act\(^8\) to legally recognize electronic commerce and to facilitate electronic filing of documents with public agencies. In addition to national policies, in recent years at least 18 provincial governments have announced their own IT policies, to attract IT investments and to encourage IT proliferation by focusing on e-governance, IT education, etc\(^9\).

Since its beginning its markets were predominantly overseas such as in the US, Western Europe and Japan. Indian engineers and scientists lacking opportunities within the country went to the US attained proficiency and experience and importantly even

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\(^8\) Details of the Act can be found at [www.indiacode.nic.in](http://www.indiacode.nic.in.)

\(^9\) The policies of most provinces can be found at [www.nasscom.org](http://www.nasscom.org.)
business enterprises. They were very successful in the US, first as employed professional and then as entrepreneurs themselves. India has gained a brand name for excellence in IT.

Apart from the entire above historical favourable environment there are some essential conditions helped to promote this sector as a biggest business sector. The essential conditions for Indian enterprises are successful in the competitive international IT markets. The canvas of the IT enabled services like call centres, say on insurance or building loans, bank account, or tourism for market anywhere in the world. Moreover the IT industry requires engineers and masters in computer applications, IT - enabled services require English-speaking graduates with PC skills. Any graduate can be turned into an IT-enabled services employee with in six months and India has millions of such people coming out from the universities every year.

The wider social transformation and change of the character of the politics towards the economic development led to drastic changes in Indian business sector. From 1980 and 90s, on wards continuously governments came up with its liberalization policies. The 1984 computer policy opened shatters for new economic policies towards the development of IT sector further, 1986 software export training policy, 1991-95 Macro Economic Policies, Liberalization Policies, establishment of Software Technology Parks (STPs), 1998 National IT taskforce, National Telecom Policies are the important milestones in promoting this sector and brought international character for Indian business in all spheres of Indian economy.

During the post liberalization period there was a widespread recognition for the E-governance and other means of using technology to improve socio-economic
conditions. Moreover this period also witnessed many initiatives to launch a new phase of the policy regime, to take advantage of the internet revolution and to overcome the limitations facing the software industry. In 1998, the Prime Minister established a National Task Force on IT and Software Development, with representatives from the government and the industry, to make recommendations to transform India into an IT superpower\textsuperscript{10}.

Thus the post liberalization phase witnessed remarkable changes in Indian business sector. Especially the south India came far ahead with new openings of knowledge based business. The cities of south India, Chennai, Bangalore, Hyderabad knows as “Silicon triangle” rivalled the Silicon values in California. Among this “Silicon Triangle” the Bangalore city is far ahead comparing with other two cities from south India\textsuperscript{11}.

\textsuperscript{10} www.it.taskforce.nic.in/
\textsuperscript{11} Nirpam Bajpai, Navi Radjou; Rising Colobal Competetiveness of Tamilnadu IT Industry, Economic Political Weekly, (EPW) - February 5, 2000 PP - 449
The business environment in Hyderabad has undergone many changes after 1990s. The global opportunities and the social, economic, political environment, technological advancement and availability of skilled human resources in Hyderabad have propelled the Information Technology sector. It opened new vistas in Hyderabad business where it has immense potential for the growth Hyderabad business. The large pool of scientific man power and strong commitment of the state government promoted this industry. The wider social transformation and change of the character of the politics towards the economic development led a drastical changes in Hyderabad entrepreneurship. A great thrust showed by the new entrepreneurial aspirants in the nineties which helped for the growth of software industry. The notable shift could be observed in this period is that the shift of entrepreneurship from traditional to knowledge based entrepreneurship, the initiation taken by Ramalinga Raju, which revolutionized the Hyderabad entrepreneurship and reached its heights at the global level.

After 1990s Hyderabad became a home to some of the best fortune 500 global corporations the Microsoft started its development centre in Hyderabad which is its largest product development centre outside the headquarters in Redmond, USA. Computer Associates, GE, IBM, Samsung, Deloitte, Oracle, Yahoo, Dell, Franklin Templeton, Ness Technologies, Qualcomm, Agilent, ADP, Bank of America, CSC, Verizon, Info Spoke, Converges are some of the other fortune 500 companies that have significant presence in Hyderabad. Honeywell was also started plans to open up a new R&D centre at Nanakramguda, outskirts of the city.
Indian IT Giants such as Satyam, Infosys, Wipro, Tata Consultancy Services, Polaris, Info-tech, Apollo Health Street, Zavata Inc and Mayur's group of industries also have set up their development centres in the city. Sonata Software plans to open its new development centre at Gachibowli. Another mega project was also in proposal, providing semiconductor fabrication facility to be built by a consortium of companies, Intellect Inc and Sem India, called Fab City.

The establishment of HITEC City was a notable factor for the promotion of IT business. It stands for the Hyderabad Information Technology Engineering Consultancy, a technology township in Hyderabad, India. The HITECH city has already attracted multinational software giants like IBM, Microsoft, GE Capital, Toshiba, and Oracle and Indian companies like Satyam Computers and Wipro. An earth station has come up in the township which links Hyderabad to the five continents of the world. The development of a township with state-of-the-art facilities called HIT-EC City prompted several IT and ITES companies to set up operations in the city. A hostile support of expansion in this area has led civic boosters to call the city ‘Cyberabad’. City became a notable place for it’s IT and IT Enabled Services like Call centres, Business process outsourcing (BPO, KPO) firms, dealing with IT and other technological services. Most of these were set up in the 1990s making Hyderabad as one of the major IT hub of India. Hyderabad has also been referred to as the second Silicon Valley of India next to Bangalore. After 1990s there have been extensive investments in digital infrastructure within the city promoting the setting up of several campuses by a vast array of companies within the city. This list includes several multinational corporations having established their development centres in the city. The major areas where such campuses have been set up are Madhapur and Gachibowli.
The Software Technology Park of India (STPI) came to Mytrivanam created its own advantage for IT business in Hyderabad. During the post liberalization era, Govt. policies have acted as a catalyst and facilitated the growth of IT exports. Establishment of the Software Technology Park Scheme in 1991 has been a step. STPI's role began in the government's shadow and it was more of an entrepreneurial role of working directly with software companies and working like a corporate. However, this did not mean that STPI functioned like a typical government department. The role of STPI was more of a service provider that could be leveraged by software companies.

The concept of STP Scheme was evolved in 1991 and enunciated the following objectives:

- To establish and manage infrastructure resources such as Data Communication facilities, Core Computer facilities, Built-up space and other common amenities.
- To provide 'single window' statutory services such as Project approvals, import certification software valuation and certification of exports for software exporters.
- To promote development and export of software services through technology assessments, market analyses, market segmentation and marketing support.
- To train professionals and to encourage design and development in the field of software technology and software engineering.\(^\text{12}\).

Mytri Vanam became an important destination for the software professionals located at Ameerpet in Hyderabad city. It is just like a springboard where IT professionals can go to US, Singapore or to Silicon Valley from here; which always it opens its doors to IT professionals. Many software engineers would come here from

\(^{12}\) www.hyd.stpi.in
abroad and from other states like Bangalore, Poona, Orissa, Noida and Chhattisgarh, to update new courses where they can get at cheap rates. Oracle9 course costs around Rs. 20,000 in Poona but in Ameerpet it available at Rs. 2000, Testing Tools costs around Rs.10, 000 in Bangalore but in Ameerpet it costs round Rs.500. Approximately 25,000 students go to classes. There is a general estimation that annually 300 crores worth business going on here besides some other ancillary business. The training available here for the IT related sectors like AT KaTe, Animation, Hardware, Call Centre Training, Medical Transcription etc 13.

It can not be denied that the contribution of government for the development of computer software industry in Hyderabad. Govt formulated an appropriate policy frame-work and provided the necessary infrastructure facilities. Investment procedures have been streamlined to expedite the establishment of new ventures. At the same time a liberalised economic environment has offered to attract advanced technologies from overseas and expand exports to finance the process of technological development. Especially for the capital city Hyderabad, a great thrust has been given during the 1990s. The software industry developed world-class IT infrastructure, including broadband digital connectivity, developed education and research institutions to make Hyderabad a premier IT education centre in India and the software Technology Parks (STP) of India, Hyderabad unit was also set up in 1991-92. A number of Multinational Corporation has set up their offices in Hyderabad. An Indian institute of information Technology (IIIT) was started in 1998, software giants like Metainor, IBM, Signal tree, Oracle, and Satyam have started their faculty chair in this institute Motorola has a

13. Place visited and collected information.
school affiliated to the IIIT. For Microsoft, Hyderabad will be its seemed software development centre outside the US\textsuperscript{14}.

The Government of Andhra Pradesh has identified IT as one of its major growth engines and that it shall play a significant role in achieving its polices objective like economic development. It can not be denied that the real encouragement given by TDP government for the promotion of IT business in Hyderabad. It was well known truth that the major portion of the World Bank Funds he spent on infrastructure in Hyderabad City. TDP Government came to power in 1994 election. Since that time he concentrated on the development of non traditional sectors like Information Technology, Tourism and infrastructure. He made Hyderabad as gateway for the global business and fabricated the Hyderabad city as the resourceful hub for new enterprises and put many efforts to wipe out all apprehensions at all possible levels. The government has provided land for the HITEC city, while the finance investments have been made by Larson and Turbo. Even in the case of High speed digital networks, companies like Reliance are bringing in their own resources for setting up the Network. The Government Played a crucial role in facilitating by defining a right way policy that permits speedy implementation of telecommunications projects. Moreover the world leaders, like Bil Clinton, BilGates, Tony Blair, and Visited Hyderabad in his regime enhanced the chances of private sector enterprise especially in Hyderabad.

After the liberalisation the business trend shifted from industry based entrepreneurship to the knowledge based entrepreneurship in Hyderabad. The knowledge based industries got prominence with enormous potential in Indian business are IT Industries and Pharmaceutical Industry. Entrepreneurship in these areas has

every chance to enhance and create wealth. IIT’s have produced many distinguished persons in the field of information technology like Narayana Murthy, Ramalinga Raju has the distinction of producing successful businessmen in information technology, specialization in Hyderabad IT field has witnessed unprecedented growth with many successful enterprises, recording annual growth rates never seen before in the India Industry this industry has been a big paymaster and has attracted students from every discipline including life sciences and people who have trained in diverse field as Aeronautical Engineering, Molecular Biology, Civil Engineering, have opted to move into information technology industry.

Most of the Software Companies established in 1970’s and 1980’s, experienced spectacular growth, Infosys Technologies at Bangalore, offers the best illustration led by N.R. Narayana Murthy. He has no money to mount a business enterprise and the experience to run it belonging to a South India Brahman Family and the son of a School teacher the leader of the group an Electrical Engineer by training had started his career as a system analyst at the Indian Institute of Management (IIM A) Ahmadabad. In March 1999, Infosys Technologies became the first Indian Company to be listed on an American stock exchange.

The enhancing qualities of life and providing good governance to its citizens, existence of world class institutes such as Indian School of Business (ISB) and International Institute of Information Technology IIIT’s has enabled the Hyderabad to meet the demands for highly qualification managerial and technical talent. More than 15000 IT professionals are trained annually in State especially more in Hyderabad to Join to IT work force. The Hyderabad has emerged as a preference investment destination to BPO and KPO Companies and it has companies ranging from services to
Application, technology to R & D design to fat, telecom animation and gaming. Companies like Microsoft TRM, Motorola, Oracle, Computer Associates, DELL, GE, HSBC, Deloitte, Nokia, Qualcomm, Converges, Google, Satyam, Infosys and Wipro setup their operations in Hyderabad.

Hyderabad based IT Companies like Satyam Computers, and Infotech Enterprises have setup operations even in the USA. Satyam Computer’s subsidiary System Info-way has become the Second Indian Company to be listed on the NASDAQ. The Number of software companies in A.P, has rose just from 15 units in 1992-1993 to 1086 in 2004-05. The state accounts 23% of Software professionals from India in the United States as per NASSCOM’S Survey in 1998. Infrastructure developed by the state government for IT includes the Hi-tech City and Hardware Park being built at Shamshabad.

Against 31 units registered with the STPI-H in 1995-96, the number of companies enrolled with the park had shot up significantly to 1,206 units in 2000-2001. The total number of companies registered with various software technology parks in the country had gone up to avail themselves of the concessions extended to these units. For instance, during the IT sector and dotcom boom this number rose from 194 in 1998-1999 to 977 in 1999-2000.

But from 2001-02 on wards the IT business in Hyderabad started facing serious set back which affected the new entrepreneur’s entry in to this sector. About 229 companies have been de-listed in the financial year 2002-2003 (since they are non-operating) by the Software Technology Parks of India-Hyderabad for not reporting any

16. Ibid.
commencement of work, according to the Director of STPI-Hyderabad, Col M. Vijay Kumar\textsuperscript{17}.

As per the senses reports, Commissionarate of Industries Chirag Ali Hyderabad, there were 3 companies registered with Rs.5.7 crore investment in 1991 especially in Hyderabad, further it increased up to 53 companies registered with Rs.183.41 crores investment in 1998-99, 85 companies with Rs.277.62 crores in 1999-2000 and 77 companies with Rs.192.36 crores in 2000-0. Just two-three years ago software services companies made to be in line to register with the Software Technology Parks of India (STPI) to avail themselves of I-T concessions, but the situation has changed dramatically over the last year( 2002) or so due to the general slowdown and specifically in the technology sector.

\textsuperscript{17} Ibid.
Table-4.1

<table>
<thead>
<tr>
<th>Year</th>
<th>No of Units</th>
<th>Investment in Crores</th>
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<tr>
<td>1991-92</td>
<td>3</td>
<td>5.7</td>
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<tr>
<td>1992-93</td>
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<tr>
<td>1999-2000</td>
<td>85</td>
<td>277.62</td>
</tr>
<tr>
<td>2000-2001</td>
<td>77</td>
<td>192.36</td>
</tr>
<tr>
<td>2001-2002</td>
<td>8</td>
<td>21.89</td>
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<td>2003-2004</td>
<td>4</td>
<td>1.99</td>
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<tr>
<td>Total</td>
<td>350</td>
<td>908.42</td>
</tr>
</tbody>
</table>

Note: - The above mentioned data have taken registered Companies only from Hyderabad city (not taken from entire Ranga Reddy District) which it enables a General Trend of the IT business in Hyderabad.

Source: - Commissionarate of Industries, Chirag Ali, Hyderabad.

Against 1,320 units in 2001-2002, 755 companies were described as operating units and the rest were registered and under pipeline. And in the fiscal ended March 31, 2003, the number of operating units was 820 out of total 1,401 registered with the park.
Since about 229 units out of 1,401 registered units did not report any business, they were classified as non-operating and all of them have been de-listed from the park, Col. Vijay Kumar said\(^{18}\). IT spending is projected to be flat in the near and mid-term and there is consolidation in the industry. With changes in the business, many companies are re-inventing their business models while the existing players are gradually strengthening and consolidating business. Therefore, some of the new entrants are under pressure and this could be one of the reasons for many companies not commencing operations," he explained.

Despite of many ups and downs in Hyderabad business, the socio economic political changes helped the rise of a new class of businessmen. The roots of the many of the entrepreneurs can be traced back from the rural Andhra. The capitalist farmers’ class of this region moulded the advantages of the existing business environment. The emergence of this class is explained by reference to the convergence of several historical processes: the development of a productive and commercialised agrarian economy in the late nineteenth century and the emergence of a 'rich peasant' class, the integration of town and countryside, an early interest in education on the part of the rural elite, the politicisation of caste identity and, later, the green revolution and land reforms. High productivity and profit rates in agriculture have contributed to the development of capitalist tendencies in the system of agricultural production, and the 'capitalist farmers' are accumulating surpluses which they seek to invest in ever more profitable enterprises. The result has been a pattern of urban migration and economic diversification among the rural elite which, over several generations, has produced the

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\(^{18}\) STPI-H
The young Raju graduated from the previligious Andhra loyala college, Vijayawada with a B.com degree in the mid-70. The father sent him Ohio state university to do his MBA. He returned in 1977 and plugged into the promising real

Satyam

The success stories of IT entrepreneurs encouraged and attracted the new entrepreneurial aspirants to Lanch IT related enterprises in Hyderabad. One of these was B. Ramaiah Raju born in a successful agrarian family in Godavari delta from where his father moved to Hyderabad in 1962 to become a pioneer in viticulture. He encouraged fellow Rajus to invest in land in the northern suburbs of Hyderabad and their agribusiness initiative made the outskirts of the city a well known area for growing the Anas-e-shahi and Themson Seelden varieties of table grapes. Initially he was a spinning mill owner later a real estate baron, and now a software entrepreneur whose company SATYAM moved away from the family business and setup Satyam Computers in 1992 as a small software house. He has shifted from body shopping & providing contract services to its present status of software solution provider, world wide and propel it on to the global stage through a high capacity satellite link. Satyanarayana Raju has branched out into real estate by setting up Satyam, hence Satyam constructing which a decade ago marphe into Maytas Infra. Even back thus, the art of cultivating politicians was a lesson that he would pass on to his sons.

The young Raju graduated from the previligious Andhra loyala college, Vijayawada with a B.com degree in the mid-70. The father sent him Ohio state university to do his MBA. He returned in 1977 and plugged into the promising real

estate sector, lunching Dhananjay Hotels and putting up two of the earliest highnesses in central Hyderabad and also Satyam spinning and weaving mills. He showed early vision and entrepreneurship by expanding rapidly, getting residential project as well as getting involved in trading through Satyam Impex, a company dealing in exports of shoe upper granite and other products.

Satyam construction became a cash cow; it fuelled his true ambition to create an Independent enterprise that would ensure fame and fortune outside the confiners of the state. He had developed a curiosity in computers and software as part of his MBA course and Raju felt it was the Right time to invest in information technology this was 1987 when IT was in this infancy. Along with electronics and communication engineer D. Venkata Satynarayana Raju and brother D. Rama Raju, he launched Satyam computer that year in 1990, its turnover was Rs. 56 lakhs. Then riding the stock market boom in 1992, the company went for a public issue that was oversubscribed 17 times. Within two decades he had taken the company into the $ 2 billion – level. It made him icon reverend than any politician or Tollywood star in his native state. He became people’s hero by his simplicity, often wearing the light blue shirt with a Satyam logo like other employees whom he called Satyamites.

He was an adept networker attempting conferences and conventions and a voracious reader of management books. From this sprang many ideas that he introduced with the role objective of building Satyam. The prince of Cybarabad has indeed built a soft ware empire with a turnover of Rs.400 crore and a net profit of Rs. 80 crore that ranks among the top five in the country, operating in 28 countries with a work force of a strong 4,500 people in the group.
Visualsoft D.V.S.Raju.

There is another important IT icon who created a new way to achieve the computer world is D.V.S. Raju, electronics and communication engineer D. Venkata Satynarayana Raju and brother D. Rama Raju, a self styled entrepreneur, Became a global player in the Shrink wrapped software market. He is so care full in Identifying opportunities. In 1997 the 39 year old CEO of it Hyderabad based software shop visual soft broke up with former partner Ramalinga Raju (Satyam Computers). He setup visual soft in 1995 using a seed capital of Rs. 2crore raised from relatives and friends. He started his career as Software assistant crossed many positions and hurdles setup visual soft, played a major role in Satyam Computers.

When Raju holds a masters degree in Computer Engineering from the University of Ohio booted up visual soft, he followed the conventional solutions rout, in the first six months the company developed B2B transaction relation solutions for technology creators like Ajillon and Addecco, based in Europe. But simultaneously he set a team of five developers different targets created an office at shelf package for companies setting up their own entrants and entrants a market segment that he had suffered out as a lucrative one.

Today, the overvelming majority of Indian software firms are building their fortunes on the safe bet of providing solutions, meeting the specific Infotech needs of a client with specially created software, a form of business when revenues are contract driven and therefore guaranty but not Raju. He is navigating his company into the chop’s waters of products, shrink wrapped software packages whose rate will be decided in the market place where both the risks ad the rewards are higher.
“Raju’s secrete?” we are careful when identification opportunities” soft pedals the born again risk taker. The template every time VisualSoft bags a solution project form a client, it sniffs around to measure the potential for developing the solution into a full fledged product. “The objective is to ensure that we minimize the risks and do not have to kill product halfway” says Raju on the process Raju has had to take on giants. Visual soft has completed globally against Mega corps that have marketing muscle. So far Raju has got by on a combination of internal accruals. Reserves stood at Rs. 74 crores on March 31st, 2000 and the Rs. 42.74 Crore that he raised through a private placement Shares in August, 1999. Raju is not inclined towards raising money from equity, locally or through a NASDAQ listing20.

India Info’s Raju Koneru

Raj (Kumar) Koneru a self styled ‘Fast Track Technology Entrepreneur’ who made his fortune in the U.S. by setting up Intelli Group an infotech business solutions company in the ERP Business. Raj Koneru was a large man but a college dropout a master’s degree in management studies from BITs Pilani. It’s the American MBA he dropped because the professor he wanted wasn’t there follows by a Masters in Computer Science because he found it too theoretical. He didn’t he found in too theoretical. He didn’t stay in his AT & T Job as technology consultants too long either. He set up a “Technology Business” with a Pilani friend called Arjun Valluri21. In 1993 Koneru, Vallur and Ashok Pandey merged their fielding Business together their revenues reached upto $1million in 1999 that figure jumped to $200millions which made their company (Intelle group) the fastest growing technology firm in new Jersey

and one of the fastest in the USA. In 1996, Intelli group was listed on NASDE the first IT services company founded by Indians to do so the company won many awards.

Intelli group had spread its wings much further becoming by end 1999 one of the leading global providers of ERP implementation, ASP and Internet solutions, with 2600 employees, spread over Japan, Denmark, New Zealand, Australia, Pher to Rico and Many other countries, last year Seranova was spun off intelligroup with koneru as CEO, with the aim of providing interu services and consultancy.

He is now running the show a chairman of India info.com. As it happens India Info is only the flagship company of an enterprise with a simple business plan, ‘Straddle the Whole Space’. So Koneru went on an acquisition spree, buying up India abroad New services so that NRI’s could have an India Abroad portal, India impression.com to become a hub for advertising space for portals, share bazaar.com phase an auction site, an online travel agency, an online shopping Hall. In other words ecommerce B to B, B to C and all other alphabets which dot the dot com world, Koneru has also acquired “Just dial the service which answer when you dial 8888888 soon when you ring them and ask for the number of shop, they’ll offer to do the shopping for your and deliver it home.” Since March, 1999 when Koneru took a hands on role Indian info has acquired six companies including visual Interactive, Miscarry, Kodenet, Just Dial and India Arabia.

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23. Ibid.
Progress of IT Related Industries

The progress of the Software Industry has resulted in the rise of another industry Business Process Out sourcing (BPO) in the cast few years. The development of IT sector in Hyderabad have promoted substantially the ancillary business activities of IT such are BPOs, KPOs and Tele working industries within and abroad and helped to Hyderabad entrepreneurs to extended their tentacles at global level. This is expressively reflected in the turnover of the Indian software industry. There examples are illustrative of how liberalization transformed the atmosphere for Software companies.

Infact little was hard of it in India until 1999. BPO is basically a cost cutting device involving transfer of Mundave white collar Jobs such as preparing routine reports, processing voluminous financier's data and compiling statutory reports for Government by large companies to specialized firms thus absorbing the need for maintaining in house staff for the purpose. Indians BPO Industry started with large foreign companies opening their own captive organizations in the country for this purpose. This inspired the rise of call centres owner and managed by Indians which could offer the required services at much cheaper rates because of the lower labour cost. The ability to handle the English language along with Computer Technology has given a great deal of competitive advantage of Hyderabad people resulted a great flood of BPO centres in Hyderabad. So successfully have the Hyderabad call centres been that developed in the west have become handled by their own. Thus IT related industries have been the fastest growing sector in Hyderabad with Almost to percent sales coming from abroad.

The post liberalization period witnessing that the networking Industry in Hyderabad gets smartest fighter and more value added. The National Association for Software and Service Companies (Nasscom) heavily promoted this industry as the way to the future. Since then Tele-work has become a commonly used term and it has found champions that range from Multinationals like General Electric (GE) to Management giant Tom Peters. Here in India Hyderabad appears to be all set to become Tele-working capital Hyderabad along with the rest of the station bags over 75% of Data entry projects from the U.S.

For instance take the case of Transcription Industry. There were 45 transcription outfits in Hyderabad up from 10 in 1999. In 1998 Nasscom’s estimated that the size of the medical transcription business in India was 75 crore. Assuring that the Industry has doubled in 1999-2000. The Market should be Rs. 150crore, and that means that if there are 45 companies doing this business in Hyderabad alone they would only need to be doing a turnover of about Rs. 2.2corec on average to have a 75% strong hold. And many corporate in Cyberabad are registering turnovers in excess of this. Again, after having set up a huge Tele working out post in Gurgaon, near Delhi, GE has recently (2000) setup more in Hyderabad.

Many entrepreneurs entered into other more value added services like making catalogues for web business, insurance chain processing and map making, catalogue for instance provides much greater revenue of around 25 cross per line.

Infotech Enterprises: A Rs. 35 crore company which has boldly entered the areas of digital GIS marine navigation, in car navigation and photo geometry. It is also in the field of digital data analysis, having launched a Rs.18crore facility at Hitech City, Madhapur, over 95% of the company’s turnover comes from exports and it provides
services of digital Map making to Majors like, Navionics, Italy, City, Madhapur, Over 95% of the company’s turnover comes from exports and it provides services of digital map making to majors like, Navionics, Italy, City power, Australite, Kazima of Japan etc., Says O.R.S. Rao executive Vice President “Our proficiency has earned us this very Niche Market26.

C.S. Software: It went to public share in 2000 may with its equity share of Rs.10/- openings at twice that. It is moving into portal content management mage exam Hall Ticket formatting etc., in 1999 the company posted a turnover of Rs. 10crore with 25% coming from data entry and management27.

Data Tree: Rakesh Sawhney MD of Data Tree, who make money converting audio tapes into CD’s had grown his company’s business by 20% in 1998-2000 data tree’s output is 2 Million in per week, and he plans to increase the to 5 million by year end 2000. That should more than double his turnover from Rs. 2crore, he estimates28. 

Life Style of Hyderabad: The Work life style of Hyderabad is slowly changing too, the IT industry is allowed to operate three shifts (24 hours) and to later to the red eyed staff pool halls and cybercafés have Mushroomed29.

**IT slowdown**

The software witnessed slowing down from 2001 onwards due to the uncertain global economic environment and economic slowdown with its moorings in the US or ‘underperformance’ by employees that lead to job cuts in the IT industry. The Indian IT-BPO industry is well integrated into the US economy and therefore any change in

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27. Ibid. PP. 32.
28. Ibid. PP. 32.
29. Ibid. PP. 32.
the latter impacts it as well. In the wake of rising inflation, oil prices, among other things, necessitated a change in the recruitment pattern and a greater emphasis on performance leading to some attrition. In addition to that unconfirmed estimates put the number of techies fired in the city alone at a couple of thousand in the last six months. It could be even more, said an industry expert. Virtusa is said to have succinctly reduced the headcount in India by about 200, though efforts to ascertain the facts did not bear fruit. Business Process Outsourcing companies too are relinquishing some of their staff off their duties. “Economic slowdown impacted sectors like BFSI (Banking, Financial Services and Insurance) and also Telecom, blocking the expected projects. Software engineers face grim future Thousands of techies fired in Hyderabad in the last six months.