Chapter – V
Summary, Conclusion & Suggestions

Summary:
Infrastructure is a key driver of economic growth. The much anticipated further growth in all sectors of the economy will be increasingly contingent on the availability of the physical infrastructure and related services. IT & ITES services are playing a vital role in the development of Maharashtra State. The development of human resources contributes to sustained growth and productive employment. A healthy, educated and skilled workforce can contribute more significantly and effectively in economic development. The year 2010 has been the year of recovery from the unprecedented economic crisis of 2007-09. The Indian Economy has bounced back and has grown at 8.6 percent in 2010-11 as compared to 8 per cent in 2009-10. The Indian IT-BPO Industry has also witnessed robust recovery in 2010-11. The Indian software and services exports including ITES-BPO exports are figured at US $ 59 billion in 2010-11, as compared to US $ 50 billion in 2009-10, an increase of 18.0 per cent. The IT services exports have climbed at US $ 33.5 billion in 2010-11 as compared to US $ 27.3 billion in 2009-10, showing a growth of 22.7 percent. BPO exports has grown from US $ 12.4 billion in 2009-10 to US $ 14.2 billion in 2010-11, a year-on year growth of 14.5 percent. IT services contributed 57 percent of total IT-BPO exports in 2010-11, followed by BPO at 24 percent and Software products/engineering services at 19 percent.

Maharashtra, the single largest contributor to the Indian Economy with its contribution of about 13% to the Gross Domestic Product, has a share of 9.28% in the national population. Government of Maharashtra, therefore, sharing the vision of the National Skill Development Mission, has set an equally ambitious target of equipping 45 million persons with employable skills by the year 2022. Maharashtra IT sector is one of the topnotch sectors in the State with maximum thrust, development and investments, 90% of the India IT-BPO industry is concentrated in 7 cities in India, including Mumbai and Pune in Maharashtra. The Maharashtra State contributes over 30 per cent of the country's total export of software. The State houses more than 1,500
software units. Maharashtra’s IT sector grew at 24% from USD 2.091 billion to USD 8.786 billion in 2008-09. Pune witnessed the highest IT exports, contributing more than half of the total at around USD 5.228 million, followed by Mumbai at USD 3.346 million in 2008-09. The STPI units in Nagpur, Nashik, Aurangabad, and Kolhapur also showed noteworthy growth.

Maharashtra offers software products for all industry verticals such as Automotive, Engineering, Automation, Networking and Hardware, Electronics, Energy, Telecom, Oil and Petroleum, Hospitality, Healthcare, Financial Services, Logistics, Retail, e-Governance, Education etc. Aurangabad, Nagpur and Nashik are the emerging IT centers in Maharashtra. Infosys Pune complex is the second largest facility worldwide. The government of Maharashtra has taken initiatives for IT and ITES sector to reduce the skill gap and required manpower assessment for state on the basis of secondary data available for the sector while giving an overview of global and national scenario.

The State is a major contributor to the nation’s economy accounting for almost 21% of the industrial output, 13% of the national GDP, 13.7% of total factory employment. Mumbai, the capital is regarded as the hub for financial and business activities of the country and is the headquarters of many of the large business establishments and financial institutions. The city also contributes about 60% of customs duty collections and around 40% of income tax to the national exchequer. The state industrial growth rate has remained at around 10% over the past few years.

**Conclusion:**

1) The performance of the industry during the eleventh five year plan clearly shows that in exports, the progress was there from the year 2007 to 2012 contineously. This aggregate progress was found to have a CAGR of 17.0% which is good by all standards. Similarly as regards domestic industry there was a definite growth from 8.2 in 2007 which went up slowly to 20% in 2012 the end period of eleven plan, Hence making a CAGR for domestic industry year wise and also a healthy 19.5 overall was satisfactory especially. This includes the recessionary period post 2008-09 also.
2) The exports revenue of Indian IT-ITES industry has grown from US $ 40.4 billion (164400 crore) in 2007-08 to US $ 59 billion (269630 Crore) in 2010-11 and reached $ 69 billion by 2011-12 with CAGR of 17% in dollar terms. In view of the severe global economic recession in the developed markets, which account for almost 90% of India’s IT-ITES exports, the exports growth rate during the year 2008-09 declined to single digit (5.5%). The export industry is diversified across three major focus segments – IT Services, BPO and engineering services. While IT Services have been the mainstay of the industry, BPO and engineering services sector has built upon the India value proposition and today there exist integrated service providers across the three focus areas as well as niche providers. The over CAGR for the XIth plan IT&ITES exports stands at 11.29% which is quiet satisfactory overall.

3) The domestic revenue of IT-ITES industry has increased from US $ 11.7 billion (\textbf{` 47000 crores}) in the year 2007-08 to US $ 17.2 billion (\textbf{` 78700 crores}) in 2010-11 and is projected to reach US $ 20 billion (\textbf{` 90000 crores}) by 2011-12 with estimated CAGR of 19.5% in dollar terms. Thus, the growth rate of domestic IT-ITES revenue has outpaced the growth rate of IT-ITES exports from the country. The Government is expected to contribute significantly to this growth through spending for the National e-governance Plan (NeGP). Leading Indian firms, multinationals as well as the SMEs is gearing their products and services to tap into the e-governance opportunity.

4) Direct employment in the IT services and ITES/BPO segment touched 2.54 million by the end of FY2010-11, and is gone to 2.8 million by the end of the current five year plan. This also translates to the creation of about 8.7 million indirect job opportunities attributed to the growth of this sector in diverse fields such as commercial and residential real estate, retail, hospitality and transportation, etc. Direct employment generation by the IT-ITES sector during the Eleventh Plan is given below:

5) The growth of the sector has also led to tremendous pay-offs in terms of wealth creation and generation of high quality employment. Over the last five years, net direct
employment creation by the IT-ITES sector is estimated at 1.2 million professionals and indirect job creation is over 4 million. This was a very critical period for India especially because there was steady growth of 7 plus percentage and this positive growth although came down due to recessionary trend but came stagnant at 5.5% after which it going up steadily a sign of stability for economy and IT & ITES sector in India.

6) STPI has 52 centers spread across the country and over 6588 units are operating under STP Scheme. Majority of the STP units are Small and Medium Enterprises (SMEs), which contribute about 15% in the total exports of IT-ITES sector from the country. Besides deployment of STP/EHTP Scheme, STPI has been supporting the smaller units and budding entrepreneurs to graduate up in the value chain. Many of the STPI centers are not yet scaled up and lack in providing the much needed support to the start ups, incubation, plug and play facilities which are available in the Jurisdictional STPI Centers. Such STPI centers need to be appropriately upgraded in the XII Five Year Plan and work closely with the industry and local engineering institutes.

7) As regards revenue from different IT-ITES Sectors it was found that R&D services sector in ITES generated 12 billion dollars from 6.6 billion in 2005. This is quite encouraging because, India’s backbone in IT & ITES is supposed to be software expertise which is evident from the increase in revenue also. Similarly a good consistent CAGR of 12.70% is good by all standards. However in consulting services and system integration and traditional IT areas where India is found to be quite equipped or rather self sufficient can be judged from the fact that basic awareness of the IT & IT trained professionals is there or rather quite high making the CAGR in these areas quite high. The only area where there is a steady growth of 16.08% CAGR is Application Development and Maintenance which further needs to be strengthened and can become a high source of revenue generation considering India as the future economic power.
8) Regarding worldwide spending on software and related services it was found that, the growth in both the areas was optional and not very enterprising like in worldwide services in India the growth was 8.4% which goes to slow the progress is average and rather slow considering the services relating to IT & ITES which could have been phenomenally high and there is a need also. Similarly if you look at the worldwide Software Development & Application, India is far behind where it could have been in double figures certainly low and slow at 6.6% CAGR. This is an area where India needs to work hard and it can become a source of revenue generation in future.

9) Exports are always an advantage for any country India’s projected exports in IT & ITES sector is quite encouraging and slow an increase of 281 billion dollars in 2019-20 from 150 billion dollars in 2014-15. Here one of the heartening features is the average CAGR of 13.38% as regards exports again is good sign. The strength here is the human resource skilled and semi-skilled, which can be the future strong point for the exports to take place from India.

10) IT & ITES sector is one of the fastest growing sectors in the world & India is not an exception. The revenue earning from services sector in IT & ITES showed a consistent double figure considering the outreach in domestic market. Here notable thing was that the end to end outsourcing & discrete outsourcing both showed the average growth of 21.6% & 19.9% respectively. Likewise consulting & system integration was satisfactorily at 17.4% & 20.2% the only area where the revenue in domestic market needed to increase more was not satisfactorily high in case of support system and IT Education & Training lagging behind at 15.3% and 14.3% respectively. This is one area which looks to be slow & needs to generate more as the progress in IT & ITES services among developing countries is very high and this will certainly decide the course of future progress as economic power.

11) The indigenous development of IT, ITES & BPO services in domestic market were found to be average. Here the only Human Resource and Customer Service
which is the strength of India showed high CAGR of 22.44% and 22.01%. While all other areas showed very average growth rate rather a single digit one. This trend is not quite encouraging because when the transformation takes place revenues also matter a lot when there will be high rate of return then more and more finance will be employed in the business and the business will automatically grow then there is investment.

12) Growth of global IT & ITES market was fast in the first decade of new millennium but become rather slow after the recession from 2007-08 to 2011-12. But infact it was found to increase with leaps & bounds again after 2012. Especially in IT sector the CAGR showed 11.77% growth. Secondly ITES sector showed an average growth of 10.74%, CAGR which again needs a little push services when increase then the follow up and repairs do follow, making a chain in the process because from this strategic support comes queries and which leads to Content Development received from the feedback of the customers.

13) Sales Tax Revenue is one of the strong points of the fastest growing states of India and Maharashtra is one of them. The thirteen administrative division of Maharashtra showed as positive CAGR of 7.69% on an average Pune & Aurangabad Division had a distinction being one of the prosperous destinations where you find the CAGR in the first half of first decade in new millennium to 14.79% and 11.61% respectively. Here Mumbai as an Administrative Division was segregated with the adjoining areas of Thane, Raigad and still averaging 6% CAGR is steadily where as the rural division were found to be struggling with only Kolhapur putting up a good show a progress of 8.37% revenue receipts. The revenue receipts of sales tax are solely attributed to the ITES implication which led to a healthy collection for this critical Government of Maharashtra department.

14) The gross receipt of Sales Tax Revenues of Maharashtra State in second half of first decade of new millennium show a great difference from the first five years from
2001 to 2005. Virtually all administrative division of Maharashtra showed an encouraging CAGR barring Amravati & Sholapur Division where CAGR was within 10% rest of the divisions showed marked recovery and averaged collection in double figure notable the Mumbai region and adjoining areas having on an average of 15% CAGR with Raigad topping Maharashtra with 24.07% individually with Pune, Nashik & Aurangabad showing a good average collection from Sales Tax Revenues in the form of 15.30%, 20.11% & 20.32% respectively. The collection of Tax Revenues in time and in advance makes available funds necessary for development. The result of making the system computerized make it mandatory for the evaders as their default can be found at one click only.

15) The information of India who has exported its information technology services to more than hundred countries around the world, but there is a heavy reliance on the USA market, which accounts for 62 percent of the total software exports. The leading software-exporting firms include the companies like Tata Consultancy Services, Infosys and Wipro etc. the exports have increased to USD 17.7 billion in 2004-05 and USD 31.4 billion in 2006-07. The estimated exports of information technology software and services are USD 40.3 billion in 2007-08. The yearly growth rate of these exports have slightly declined during 2001-02 and 2002-03 but from 2003-04 onwards, the growth rate of exports of information technology software and services have increased significantly. During 2007-08, the growth rate was 28.3 percent. Notable thing in this BPO Service exports is that in the recessionary period also when European and other countries of the world were struggling to establish themselves or make themselves stable India’s BPO exports steadily increased and is evident from 2007-08 onwards where you find it was 40.3% billion & showed 68.9% billion in 2010-11 and the graph increasing from 2011 to 2014 as well is a testimony of services being provided is being received well internationally. Maharashtra is one of the leading states of India in IT & ITES provider in terms of business & employment as well this is a testimony when you look at the BPO – exports and its growth percentage
you find it has consistently grown in Maharashtra and is averaging more than 20% per annum growth overall in BPO services exports.

16) Large number of information technology firms have been set-up in India. Initially the information technology industry was developed by a small group of innovative entrepreneurs and later on government of India provided facilitating environment to take advantage of export opportunities. As a result a large number of firms have been set-up but most of these firms are small firms. Sale turnover of many information technology firms is increasing rapidly. As per NASSCOM report, 88 percent of total information technology firms in India have sale revenue less than Rs.10 crore. Today there are only ten companies, whose annual turnover was more than Rs.1000 crore. Increase in sales turnover will indirectly strengthen the states and India automatically as this money when reinvested will provide more opportunities in terms of employment and market outreach. Hence it is imperative for IT companies to increase their sales turnover in order to progress and become global, which Maharashtra have been able to do with the variety in turnover of IT companies.

17) Information on offshore market verticals in 2010. Offshore market verticals include customer interaction and support, finance and accounting, knowledge services, human resource management. Offshore market verticals have attained USD 10.9 billion in 2008. Similarly the contribution of information technology industry in offshore market verticals is customer interaction and support (43.5 percent), finance and account (22.1 percent), vertical specific BPO services (17.1 percent) and knowledge services (8.1 percent). This is evident from the figures of BPO Services that Maharashtra have been able to provide services in areas of Finance, Customer Care and Knowledge Based Services.

18) The locotional distribution of information technology companies in India shows the high concentration of information technology companies in certain regions. Maximum numbers of information technology software and ITES firms are located in
National Capital Region (19.1), Mumbai (16.2) and Bangalore (12.6) respectively. The share of Hyderabad in Locational distribution of information technology firms is 10.7 and that of Chennai is 9.2 percent. More than 80 percent, information technology firms are located in these five locations. It shows that there is need to diversify information technology industry for its proper explosion in future.

19) In ITES industry, number of employees is increasing. In 2001, the number of employees in information technology sector was 430 thousands, whereas in 2010 it has reached at 2,611 thousands. But the percentage growth of employees in information technology industry has declined from 51.4 percent in 2001 to 11.2 percent in 2009 respectively. In 2009, 946 thousand employees are engaged in IT services and software exports. In domestic market, 500 thousands employees and 789 thousands employees are employed in BPO export sector. Hence, information technology is emerging as one of the biggest employment generating industries. The consistent performance of ability of Maharashtra to employ Professionals employed in ITES industry is evident from the growth percentage which for 10 years is averaging more than 20% annual growth. This confidence in Employment of Professional has given a fillip to business of IT & ITES n Maharashtra State making it one of the progressive states in India.

20) As regards the professionals employed in the IT export services it was found that with prediction NASSCOM that there will be a steady demand for IT & ITES services in the coming 15 years from 2016 to 2031 speaks of volume with the IT industry has in store within. Secondly the only encouraging aspect found from the statistics is that there is demand and increase in professional employed in IT Development and Integration/Installation which will make the future business more realistic and provide a realistic opportunity to the business in Maharashtra. The only worrying aspect is the growth Training & Education aspect which is rather slow in growth at 0.06 million as compared to 0.27 & 0.11 million in Installation & IT Development. ITES exports
services in Maharashtra are picking up steadily and will be ITES exports services hub in near future.

21) The professional being employed in the IT & ITES sector is increasing but the most heartening part is the growth of Professionals in IT enabled services which when employed efficiently produce results and earn revenue. Services are the latest phenomena in the post globalization era is also applicable in IT & ITES also as is evident that most IT based services in making or helping in making event faster with less manpower and with perfection. Maharashtra is one state where the manpower is technically prepared and nurtured with the Computer & IT Education widely given in the Institutes & Universities of Maharashtra state. Hence these days classified professionals in virtually every field are present and who provide services and act as facilitators notable services IT based in Finance, Communication Technology all types of Payment Services. This is possible only because of more and more Professionals are available with healthy 0.21 million in Finance, 0.45 million HR Services and 0.45 million in all types of payment services is in itself shows that professionals are increasing in all the IT based areas in Maharashtra.

Suggestions:
1) The State Government should re-direct governmental spending and policies towards high priority area of time bound infrastructure development both physical and social.

2) The state industrial growth rate has remained at around 10 % over the past few years. Efforts are required to push this growth rate by creating an efficient infrastructure for facilitating sustained industrial production specially IT & ITES.

3) State Data Centre has been identified as one of the important elements of the core infrastructure for supporting e-Governance initiatives under NeGP. Under the SDC Scheme, there is a need to establish Data Centers in all the States/UTs so that common
secure IT infrastructure is created to host State level e-Governance applications/Data to enable seamless delivery of Government to Government (G2G), Government to Citizen (G2C) and Government to Business (G2B) services duly supported by State Wide Area Network and Common Service Centers established at the village level.

4) It is suggested to offer E-governance Solutions, Talent Development and setting up IT Parks in all cities of the State.

5) There is a need to strengthen the Information Technology Act 2009, so that it becomes easy for implementation and speedy redressal of bottlenecks in IT & ITES Sector.