

*EMPLOYMENT GENERATION IN  
POST GLOBALISATION ERA IN GREATER MUMBAI*

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**EFI - SOLAR FOUNDATION  
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**EMPLOYMENT GENERATION IN GREATER MUMBAI**

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## *EXECUTIVE SUMMARY*

### *MUMBAI - OPPORTUNITIES GALORE*

Mumbai's prosperity and employment generating potential attracts migrants from across the country. Once a textile manufacturing hub, the city's socio-economic structure has witnessed a sea change due to a paradigm shift in business activities – a switch from 'manufacturing activities' to 'services'. This has resulted into a dramatic change in employment opportunities and job profiles in virtually every sector.

In the changing scenario, we look at the employment trends in important sectors like: Financial, Construction, Tourism, IT, Telecommunication, Courier Services, Entertainment, Shops, Automobile Garages and Photo Copy Centre, which is expected to provide huge employment opportunities, both direct and indirect, over the next five years.

In brief, we present to you the findings of each of the above mentioned sectors, which is as follows:

### *FINANCIAL SECTOR*

As per the research study undertaken by an international organisation, Mumbai is said to have an edge over Shanghai to emerge as the 'Financial Centre of Asia' because of its strong and organised financial infrastructure. It is estimated that 90 per cent of all merchant banking transactions and 70 per cent of the total investment in mutual funds take place in the city. Moreover, 16-18 per cent of the overall banking sub sector GDP in the country is estimated to be generated in Mumbai.

Now, aggressive marketing on the part of banks and financial institutions, over the last decade, has resulted into creation of several dynamic product/service delivery channels, which in turn have created several openings for skilled/specialised people. Over the last few years, the sector has witnessed a gradual switch from 'manual' to 'mechanised' system of working, which in turn has brought about significant change in job profiles pushing financial companies to conduct massive re-skilling of their existing employees. Furthermore, the infusion of technology and stiff competition has created several openings for 'savvy frontline' and 'efficient backend' personnel. In short, most financial institutions are now focussing on recruiting multi-skilled, technically sound and customer-friendly personnel to drive their businesses.

The city has witnessed a phase of restructuring and downsizing by PSUs and cooperative financial units, and over the next five years expects several mergers and consolidations resulting into further job cuts. Though the sector has witnessed a visible drop in direct employment (VRS schemes), there has been a sharp rise in indirect employment figures (contracting services). Of late, the drop in direct employment has been largely on account of companies investing heavily in technology, resulting also in increase in indirect employment (via DSAs, franchisees, courier services, etc.) has been in the area of marketing, sales, customer service and logistics. The concept of people-free banking and marketing approach - Internet banking, tele-banking, ATMs, online marketing of product and services, etc., adopted by the companies are likely to further reduce the level of human participation in transaction processing.

As for changing in job profiles, the sector is witnessing a paradigm shift - a rise in demand for MBAs, CAs, CFAs and other post-graduate finance specialists as against conventional college graduates seeking employment a decade ago. As far as non-graduates and graduates are concerned, they still continue to find employment (indirect) with distributors and marketing agencies. On the other hand, the increased use of IT has created demand for IT personnel at every level, not to mention newer specialisations which weren't existing just a decade ago, for instance specialist in data warehousing, data mining, database architects, and other integrated backend operations.

#### **CONSTRUCTION SECTOR**

The Chief Minister of Maharashtra has submitted an ambitious city modernisation plan to the union government that proposes heavy investments in construction of roads, flyovers, slum redevelopment, subways, public-housing, underground water and drainage system, etc. Nonetheless, the city has been witnessing a tremendous increase in construction activities in housing sub sector with existing players undertaking mega projects and the entry of several large corporate/private players. These developments have created a huge demand for skilled and unskilled workers. Considering the magnitude of these projects most companies are being forced to invest heavily into technology, resulting into a gradual shift from 'manual' labour to 'mechanised' labour (more so in infrastructure construction sub sector). This is not to say that future employment opportunities in the city belong to only skilled labourers, unskilled labourers are also expected to play a crucial role and cannot be simply discarded. Presently, the unskilled component in this sector is to the tune of approximately 55 per cent, and it is largely controlled by *mistris* and *jamadars*.

This paradigm shift (manual to mechanised) has resulted into a rise in demand for trained and high skilled personnel, but then the sector demands that they be multi-skilled. For instance, a project engineer is expected to have an in-depth

understanding of materials and inventory management, finance, administration, etc. so as to ensure that projects are completed in time and as per the projected cost. There is a huge demand for skilled technical professionals - civil engineers, project managers, materials managers, quality assurance managers, safety engineers, work engineers, quantity surveyors, contract managers, project administrators, machine operators, project managers, computer operators, etc. Though traditional professions like accountants, marketing executives, administration executives, site supervisors, etc. continue to be demand, it is emerging careers like billing engineers, quality surveyors, quantity engineers, etc. that are gaining greater prominence.

Another visible development in the construction sector is that of companies preferring degree and diploma holders to conventional graduates in areas like marketing, engineering, accounts, HR, legal, etc. Due to increasing competition, construction companies have been found to give greater emphasis to customer service. Several construction companies have already set up full-fledged customer-care departments. Though companies are recruiting quality manpower, yet majority of the players continue to make little or no investment in training and development of their personnel, and leave them entirely to learn on-the-job.

The construction sector does generate a huge amount of indirect employment through backward linkages in areas related to cement, steel, bricks, flooring, etc. which are basic raw materials required in construction activities. In addition, it also generates tremendous indirect employment in allied industries like aluminium, glass, plastic, furniture, décor, paint, etc. In short, there are more than 100 allied industries that directly or indirectly depend on construction for survival.

#### *TRAVEL & TOURISM SECTOR*

Mumbai - the Gateway to India - is also the business capital of the country. Growing at a phenomenal rate of 25 per cent, the city continues to attract a large number of international business travellers. Though several airports across the country have now been connected to international destinations, Mumbai airports continue to offer a far better international flight connections than all Indian airports put together. More so, there has been a complete metamorphosis in Mumbai's image from being a 'global business destination' to 'an exciting leisure tourism destination'. The city's well-defined coastline and rich cultural heritage is attracting foreign tourists from across the world. The city's ability to provide quick and cheap medical treatment has caught the fancy of tourists; of late, it is also emerging as the medical tourism destination of the world.

The travel & tourism sector in the city is emerging to be a major source of revenue and employment in the recent years. And this is largely on account of the huge investments being made by the government to improve city's infrastructure. The entry of several new airlines has further enhanced the growth of travel & tourism activities in the city, thereby creating several new employment opportunities. Presently, the sector is witnessing an acute shortage of trained and qualified people, which is forcing companies to provide individuals on-the-job training. Though there is a huge supply of qualified manpower i.e. diploma and degree holders in travel and tourism, most of them have been found to possess only theoretical knowledge. For instance, there is a huge scope of 'holiday consultants' who can sell holidays concepts, plan itineraries, make travel arrangements and accompany tourists, but then diploma and degree holders have been found wanting in these skills.

Some important attributes necessary for a successful career in the sector are: a graduation degree, pleasing personality, interpersonal skills, communication skills, marketing abilities, empathy, multi-lingual, computer literacy, etc., which is found to be missing with most individuals pursuing a career in this sector. With travel & tourism companies adopting technology driven marketing approach (web based), the sector has created several new opportunities for web technicians and web marketing professionals.

Agreeably, the scope for indirect employment in the travel & tourism sector is tremendous as it touches practically every sector in some way or the other. Businesses activities in restaurants and hotels, airlines, transport companies, guides, media/publicity agencies, etc are directly or indirectly influenced by performance of the travel & tourism sector.

#### ***INFORMATION TECHNOLOGY SECTOR***

According to NASSCOM, the IT-friendly policies announced by the state government on issues related to tax incentives, infrastructure facilities and other sops have resulted into a scenario where one in five ITES/BPO companies registered in the country have a presence either in Mumbai or Pune. An added advantage, the easy availability of skilled and quality manpower has made the city the most preferred destination for ITES/BPO companies. In the near future, factors like digitisation of the media, proliferation of broadband, adoption of convergence technology, consolidation of industry players, emphasis on use of technology by mainstream business, etc. are likely to further drive the growth of the sector.

In the recent years, the ITES sub sector has opened several new employment avenues for not only for English-speaking graduates, but also for undergraduates. Mumbai being the financial capital of the country, the Financial

Process Outsourcing (FPO) business is witnessing an explosive growth, especially in areas like insurance underwriting, risk assessment and equity research, financial data mining and modelling, corporate and market research. BPOs in the city have already ventured into diverse areas like medical transcription, research and analysis, actuarial modelling, corporate and business research for overseas institutions, and are now broadening their product portfolios. The above developments are likely to create several new employment opportunities within the sector, thereby creating a huge demand for trained and skilled personnel. Currently, most companies are visiting colleges and management campuses for recruitments, but of late, the sector is also witnessing a rise in lateral recruitment for strategic positions.

The indirect employment opportunities in the IT/ITES sector (software) touches virtually every sector - be it infrastructure, telecom, cyber cafes, etc. The indirect employment in the hardware sub sector has more to do with contract manufacturing involving assemblers and those engaged with components and peripheral manufacturers. Another avenue for indirect employment is the IT-hardware sub sector, which comprises of a pool of maintenance and service professionals.

#### *TELECOM SECTOR*

Over the last five years, the telecom sector has witnessed an unprecedented growth in areas like: mobile telephony, radio paging, value-added services, Internet and satellite services. Ambitious business expansion by private telecom players has resulted into a sharp increase in employment opportunities. Experts are of the opinion that the demand for telecom professionals in the city over the next five years would increase by 10 per cent in case of direct employment and 15 per cent for indirect employment. The sector is witnessing a sharp rise in demand for professionals at the middle and high end i.e. circle manager, EDP managers, networking managers, telecom engineers, administration and marketing personnel, specialised technically people, etc.

With service providers offering customers user-friendly hi-tech services (broadband, digital and wireless connectivity), the sector is creating employment opportunities in practically every business areas - sales, marketing, customer care, technical, etc. Considering the diversity of manpower requirements telecom companies are giving considerable importance to training and employee development programs, where they are emphasizing more on technology, behavioural and customer sensitivity training. In the current scenario, employees in addition to having requisite technical and vocational skills are expected to deliver on multiple responsibilities. Regarding changing job profiles, the future emphasis is likely to be on software development skills, technical skills, soft skills, communication skills, interactive technology, etc.

Mumbai - the business capital of the country, is likely to see a rise in the usage of state-of-the-art services like E-commerce, global roaming, high-speed mobile Internet services, video-on-demand, wireless ATM service, etc. As these segments are sunrise areas for the sectors, individuals skilled in these areas would be in great demand over the next few years. Several educational institutions have already taken a cue from the existing and future demands for professionals and have initiated tailor-made and specialised courses in telecommunication management. Nonetheless, success of these courses is yet to be tried and tested.

In addition to creating a large number of direct employment opportunities, the sector is also likely to create several indirect employment opportunities with retailers, vendors, call centres, DSAs and collection centres. The indirect employment generated by the telecom sector is huge and complex as it extends across several specialisations like: marketing, services, hardware, maintenance, etc. It is estimated that a large number of future indirect employment would be generated with service providers like couriers, banks, collection agents, etc.

#### ***COURIER (EXPRESS SERVICE) SECTOR***

Over the last decade, due to increased competition and recessionary trends several large players were forced to streamline and consolidate their business operations in the city. In order to meet customer expectations, most of these companies invested heavily into technology so as to efficiently manage information on: consignment movement, auditing and payment, and so on. The heavy investment in technology has had a direct impact on the employment prospects, because technology began replacing manpower at the lower end. But at the same time, the investment in technology created a huge demand for qualified and skilled professionals. But then that is past, now with economic indicators looking robust and corporate houses, MNCs, BPOs, call centres, etc. expanding their business network the growth prospects for city's courier sector is huge.

It is estimated that the sector (organised) would grow at an awesome pace of 50 per cent per year over the next few years. The promise of future being bright has not yet been a reason of celebration for the sector, as it continues to face several problems on the employment front. The sector is witnessing high turnover of employees at the lower end of the hierarchy - delivery and pick-up departments, and it is largely on account of low salaries and lack of incentives. In order to overcome these impediments some established companies have tried to bring in a greater degree of professionalism. They have announced a dress code, introduced delivery and pick-up vehicles and are undertaking several employee growth initiatives.

As for job profiles, earlier individuals with HSC certificate would find place in the delivery and pick-up team (in the organised sector), but now graduation has become a must. Small and medium sized courier companies and the unorganised sector continue to provide employment opportunities to matriculates and non-matriculates (SSC fail). But then, at the higher levels of management hierarchy, most of the companies opt for individuals with a graduation degree and relevant experience and skills in the same or similar industry. Companies are investing heavily in technology, as business processes are getting technology-driven. This has necessitated individuals down the line using the system to possess certain basic skills. By making graduation degree mandatory, companies are ensuring that new recruits have a good command over language, good personality and are customer-oriented. Some companies have even resorted to training employees via well-structured training programs.

IT is playing a major role in the growth of the sector as it has enabled companies provide end-to-end solutions to its customers, and also offer value-added services and tailor-made products. Presently, mobile computing tools and laser scanning is being used to capture data for accurate tracking and tracing, while wireless communication is providing real-time decision-making information. Though the sector has registered a considerably high growth rate over the last decade, there is no commendable growth of employment in this sector.

#### *ENTERTAINMENT SECTOR*

The launch of several new television channels and radio stations in areas like: news, kids, lifestyle, entertainment, spiritual, travel, etc., has seen the sector grow at an incredible rate. This has resulted into a huge demand for professional and skilled personnel in virtually every segment, and more so in areas like: production, direction, scripting, casting, camera, light, art direction, music, dance, special effects, stunts, wardrobe, make-up and hair styling, editing, sound recording, etc. Now, traditionally, uneducated, experienced, and semi-skilled individuals dominated the entertainment sector, but in recent times with corporate houses and financial institutions investing the sector is attracting the best of talents - MBAs, Chartered Accountants, etc. Interestingly, aspects like person's attitude, aptitude, language, personality, etc. are now being considered at the time of recruitment.

At the moment, the sector is experiencing a high level of employee turnover due increasing competition, adoption of state-of-the-art technology, expansion of products and services, implementation of management practices, etc., and these are directly impacting the evolution of job functions and profiles. The present turnover of employees is forcing several production houses, television and radio companies to recruit personnel throughout the year. Interestingly, the sector is

witnessing job segmentation (scheduling, HR, programming, etc.) taking place faster than ever, which was not visible a decade ago.

IT technology is playing a crucial role in growth of the television, radio, entertainment and film sub sectors. Majority of the television channels have already been digitalised, and the old radio stations are being converted into FM transmission centres. It has resulted into a huge requirement of technicians with engineering background in electronic, electrical and sound. Understandably, future job opportunities are likely to be technology oriented. Constant introduction of newer technology would require future employees to be skilled and technically sound. Presently, companies are investing considerably on employee training and skill upgradation. The city is already witnessing emergence of several training schools that are promise individuals training in diverse areas of specialisations. There has also been a significant rise in the number of people going abroad to for advanced training in technical and creative areas.

Considering the fact that television channels require a huge amount of software on a daily basis to air programs and realising that it is impossible to generate all programs in-house, channels are forced to depend on external production houses. This has resulted into a huge amount of indirect employment opportunities with programming houses. At the networking, distribution and customer level, the sector is likely to see indirect employment opportunities with cable operators and television manufacturing companies.

#### *RETAIL (SHOPS) SECTOR*

The rate at which malls and stores are springing-up across the city is an apt indication of the enormity of retail revolution. Not only do we see real estate builders opening malls in the city, but even corporate houses and international organisations are setting up (or preparing to set up) shops in the city. The ambitious expansion plans to grab a bigger pie of the retail business is creating several new job opportunities for skilled and unskilled individuals. It is estimated that the organised retail sector would grow approximately 10-times over the next five years, and it would be largely due to the high purchasing power of consumers in the city. As for the unorganised sector (family-run businesses), they are likely to be at the receiving end due to lack of financial muscle to take on large format stores. Business uncertainty amongst the unorganised players is a cause of major concern for the sector as job security is likely to take a severe beating over the next few years. Unorganised sector offers customer-friendly services such as sale-on-credit, home delivery, etc.

As for organised players who are growing rapidly, in all likelihood the pressure would continue to build due to lack of trained manpower at every level. The

sector is already facing an acute shortage of trained manpower especially at the management level. Allowing FDI in retailing sector and entry of international majors is likely to put further pressure on availability of trained and skilled manpower. Increased use of computers is likely to help retail stores cut manpower to certain extent, but it would not be a long-term solution.

A decade ago, retail shops used to recruit individuals with SSC and HSC qualification, but now the basic criteria with majority of the stores is graduation with specialisation in business areas like sales, accounts, administration, merchandising, shop floor management, etc. In the near future with more and more educational institutes offering retailing courses with specialisations in merchandising, customer service, client management, shop managers, etc. the scenario is expected to get better. Understandably, management colleges and retail training institutes would continue to be the fountainhead for qualified and trained personnel for the next few years.

As far as job profiles are concerned, the future belongs to specialised people like designers, merchandisers, shop floor managers and so on, as it is required that people have thorough understanding of products and customers. Presently, the retail sector is spending a miniscule amount on employee training and that too is visible only with large format stores and malls like Shoppers' Stop, Crossroads, etc. The indirect employment generated is largely in the area of low-end jobs and logistics, i.e. distribution, housekeeping, security, packaging, transportation and so on.

#### *AUTOMOTIVE GARAGES SECTOR*

The growth curve of automotive sector in the city has been on an upswing for past few years. Launch of contemporary models, easy availability of finance at relatively low rate of interest and price discounts has made vehicles accessible to a larger cross section of the population. Growth of vehicles on the city roads is generating several new employment opportunities for those engaged in vehicle maintenance business. But much of the action is being stolen by the manufacturers who are offering these services directly to their customers via their own network of service stations.

Withdrawal of maintenance dealerships by manufacturers, space constraints, pressure from the builder lobby, strict traffic and city laws, license bottlenecks, high taxation, etc. have been bothering the sector for a long time now. These factors have reduced the employment opportunities. Non-availability of spare parts and increase in warranty period is adding to the chaos and they are directly impacting the garage business as customers are visiting manufacturers' service centre.

Conventionally, automobile garages recruited skilled personnel on the basis of their experience and the unskilled labour were made to learn on-the-job. The decades old recruitment practice has seen some makeover during the last few years. Though experience is still a prerequisite, established garages are now looking for individuals with degree or diploma in automobile engineering. The ever-changing technology in automobiles has made it mandatory that individuals maintaining them read technical manuals to do a good job. Earlier mechanics were dependent on spanners and other conventional tools, but now power tools are replacing conventional tools, it has drastically reduced the role of unskilled and ill-qualified personnel.

Qualified personnel seem to be joining manufacturers on high pay scale as supervisors, works managers, etc., while the small and medium sized garages are doing their best with skilled, semi-skilled and unskilled employee. The roadside garages are now looking for employees with at least HSC, as reading manuals has become a must.

The sector is witnessing a gradual shift from unskilled to skilled labour. There is an indication that only big garages and manufacturer's service stations will survive in the future, as 'automation' would be the buzzword. Future garages are expected to be 'one-stop-shop'. In the changing scenario, individuals with ITI qualification would be in great demand and they can seek positions like supervisor, works manager, sales manager, etc.

#### ***PHOTOCOPYING SECTOR***

A low investment business, the competition in photocopying business has been on the rise due to mushrooming of innumerable businesses in the neighbourhood. In most cases businesses have been found to reach saturation leaving little scope for business expansion. On the flip side, there exists great opportunities for business diversification into related services. It is the reason why most photocopying shops seem to have diversified their product offering by venturing into selling of: office stationery, computer related items, school books, fax rolls, ink cartridge, etc. On the other hand, several small and medium sized businesses in the city are offering photocopying as a side business, since these services have become a necessity.

In order to maintain economies of scale, most photocopying shops have recruited freshers and then trained them on the job; it is because skilled, experienced and technology-literate individuals demand higher salary. Even today, in a majority of the shops the staff is uneducated and unskilled, who over a period of time they have gained requisite skills and basic operating knowledge. Most of the businesses are family managed shops and the pressure for employing trained personnel is minimal. As for sourcing personnel the shop have had no problems

in the past and nor do they foresee any difficulties in the future. This is largely because job skills requirements are basic, and shops don't require skilled and educated individuals. However, with shops offering value-added services one doesn't rule out the possibility of employing highly trained and skilled people in the future. Investment in IT has not had any major impact on the job profiles, as majority of those involved are unskilled and uneducated.

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## GLOBALISATION AND INDIA

### 1.1 'REFORMS' MISUNDERSTOOD

Economic reforms in India, since 1991, were geared towards integrating the Indian economy with the global economy. Reforms in the urban sector were aimed at increasing the urban productivity and thereby the national income. Though the macro-economic reform policies were framed by the central government and pursued with varying degree of vigour by different state governments, the urban policy changes continued to be largely a state government subject. However, there has been more pressure for change in states that had mega-cities and potentials to compete for global stakes.

The term 'Reforms' has been found to be largely misunderstood and misleading. This is because it aimed at changes required to make the cities more liveable for those who could afford, i.e. offer a quality of life at par with the developed world. As a result, sections of the society were at loggerheads on the issue of 'Globalisation', as they felt that the quality of life must improve for all citizens of the city, and not just a few. The country debated on the issue of how to create 'inclusive cities' that were sensitive to interests of local economies, and marginal and vulnerable sections, and not 'exclusive cities' that are enclaves of the global business class, global service class, global bureaucrats and global capital.

### 1.2 THE EXPERIENCE SO FAR...

'Globalisation' in India has led to economic restructuring and global linkages of select regions in the nation, select cities in the region and select geographical segments within the cities. In the excitement to push rapid global economic integration, the process of exclusion through fragmentation of employment, housing and social services, have been strengthened. In the process of globalisation, as nations compete, cities too have begun to compete with each other. The competition has forced city governments to adopt innovative and entrepreneurial approaches to achieve local growth.

Cities are embarking on programmes to improve the quality of urban life through various policies. Though there is scope to enhance the quality of life of citizens, the truth is that local governments have taken up selective projects to improve the urban environment, which has ended into either displacing or excluding segments of population. An increase in inequality in the cities has raised serious internal security issues, thus pushing the rich to live in enclaves that are well protected. The cities are increasingly getting segmented between 'the rich' and 'the poor'.

### **1.3 THE WIDENING DIVIDE**

Basic infrastructure of the city - social security, education and health, transport, housing, water supply and sanitation - start responding to the wealthy minority. For example, infrastructure projects based on the principle of public-private partnership or privatisation, including those for water supply and sanitation, increase the cost of living for the poor and yet altogether exclude the poorest.

Moreover, the vast majority of low-skilled workers in industries or industrial zones, services, and the informal sector, congregate at the fringes where systems are inadequately developed, or the areas in mega-city that are environmentally stressed or hazardous. Thus, even though the overall poverty in mega-cities may show a decline over time, the fact is that vulnerability of such population continues to be high.

### **1.4 GOVERNMENT'S ROLE IN CREATION OF 'INCLUSIVE CITIES'**

Major government policies should ensure that the poor in cities in India are included in the process of globalisation by instituting re-distributive mechanisms. Experiments have shown that it is possible to protect low-income groups from the adverse impact of infrastructure projects by organising the poor, developing their capacity and introducing viable alternatives.

But still much more needs to be done. Along with such activities, there is a crying need for congenial macro-policies such as provision of basic services, access to primary and secondary education, healthcare services, introduction of safety nets, and social security. There is also a need for a strong re-distributive role by the local government. Local and national governments have choices, and it is the exercise of these choices that determines the impact of globalisation in cities.

An inclusive city is a political effort that would ensure access to adequate and secure habitats, livelihoods and basic services not only for the present population, but also for the migrants from the countryside that will continue to flow in for years to come.

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## IMPACT OF GLOBALISATION ON INDIAN ECONOMY

### 2.1 INTRODUCTION

India is among the fastest growing economies in the world today, and there is a strong sense of confidence in the future. The recent revival in the economy, the renewed expectation of peace with Pakistan and the continuous stream of capital flows into the country justify this pervasive confidence. In the changing scenario, mobile phone and email account form a part of the normal identity of the average urban Indian, while two-wheeler has become an integral part of the vast rural landscape – there is an expectation of prosperity. As the government puts it, 'India is changing and shining'.

The economy witnessed an impressive 8.5 per cent increase in real GDP during the period 2003-04. Correspondingly, the real GDP growth of 2004-05 worked out to 6.9 per cent. Nevertheless, the growth this year had been achieved in spite of a poor monsoon.

### 2.2 AGRICULTURE

With nearly two-third of the population dependent on agriculture, the sector holds the key to India's progress. The growth in 2003-04 was agriculture-driven. Foodgrain production was placed at 210.4 million tonnes in 2004-05, as compared to the 213.5 million tonnes produced in the previous fiscal. Rabi acreage rose by 1.7 per cent and was 8.6 per cent higher than the normal area sown. Foodgrain procurement during April-January 2004-05 was 36.7 million tonnes as against 29.6 million tonnes procured in the corresponding period of 2003. Growth in agriculture has had an automatic benefit for the industrial and services sectors as it directly feed the demand for industrial goods and services.

### 2.3. INFRASTRUCTURE

#### 2.3.1 Railways

The performance of railways has been commendable in 2004-05 and is likely to surpass the budgeted target for the third consecutive year. During April-May 2004-05, railways loaded 601.89 million tonnes of revenue earning freight. In May 2005, railways carried 55.3 million tonnes of revenue earning goods, reflecting a 13.3 per cent rise as against 6.6 per cent growth seen in the corresponding period of last year.

#### 2.3.2 Ports & Shipping

Cargo traffic at major ports saw an impressive rise of 19 per cent to 35.5 million tonnes in May 2005 as against a growth of 9 per cent in the corresponding period last year. Cumulative cargo traffic during April-May 2005, went up by a robust

17.3 per cent to 68.4 million tonnes as against 7.8 per cent growth recorded during the corresponding period of last year.

### **2.3.3 Civil Aviation**

The air transport sector saw an upswing in passenger traffic in December 2004. Domestic and international passenger traffic reached an all-time high at 39.5 lakh and 19.1 lakh, respectively. As a result, total air passenger traffic peaked at 58.6 lakh reflecting growth of 25.2 per cent, on top of an 11.9 per cent increase witnessed in December 2003. The amplification of the sector is largely aided by aggressive pricing strategies announced by airlines in anticipation of competition from a number of new low-cost airlines that started operations in fiscal 2005-06.

### **2.3.4 Telecommunication**

Growth in the telecom sector continued to be reigned by cellular services. During each month of fiscal 2004-05, new additions to the GSM subscriber base were more than one million. As a result, till May 2005, 12.2 lakh new GSM subscribers were added as against 10.1 lakh added in the same period of 2003-04. This reflects year-on-year growth of 21.7 per cent. The total subscriber base (fixed and mobile) rose to 1025 lakh at the end of May 2005.

### **2.3.5 Power**

During 2004-05, growth in power generation was 5.2 per cent, same as in the preceding fiscal year. In June 2005, electricity generation saw a healthy growth of 9.8 per cent to 50.9 billion KWH as against 4.8 per cent rise witnessed in the same month last year. During the month, thermal and nuclear power generation was up by 10.9 per cent to 43.1 billion KWH, while hydel power generation recorded a modest increase of 2.9 per cent to 7.7 billion KWH.

## **2.4 INDUSTRY**

During 2004-05, the industrial sector grew by 7.7 per cent as against the growth of 6.6 per cent recorded in 2003-04. Industrial growth was largely driven by the manufacturing sector, which clocked a robust 9.2 per cent increase in 2004-05 as against a 6.9 per cent rise recorded in the previous year.

### **2.4.1 MANUFACTURING**

Though the Indian manufacturing sector, as a whole, has been slow in restructure itself to meet the challenges of a new and aggressively competitive world, there are select sectors and individual companies that have made substantial progress in becoming competitive. The automobile ancillary industry, for example, is gearing itself to become an integral part of the global manufacturing chain. Similarly, Indian pharmaceutical companies are finding a niche for themselves in the global market for cheap drugs. The cement industry saw some consolidation to obtain economies of scale. The Index of Industrial

Production grew by 8.1 per cent in 2004-05 as compared with the seven per cent growth recorded in 2003-04.

#### **2.4.2 SERVICES**

The services sector was the largest contributor to real GDP growth in 2004-05. Its growth has been higher than the growth registered in the agricultural and industrial sectors in almost each of the four quarters of the year. The services sector grew by 8.9 per cent in 2004-05. This was marginally lower than 9.1 per cent growth registered in 2003-04. Growth in this sector has largely been driven by the trade, hotels, transport and communications segment, which was backed by the performance of civil aviation, railways, ports and the telecom industry.

#### **2.4.3 FINANCE**

##### **2.4.3.1 Capital Markets**

The total resources raised from the domestic primary markets amounted to Rs. 59,163 crore in the fiscal 2004-05, higher than the Rs. 52,692 crore raised during 2003-04. From the overseas markets, Indian companies raised Rs. 14,500 crore as against Rs. 3,883 crore raised during 2003-04.

##### **2.4.3.2 Money & Banking**

In 2004-05, money supply growth remained under control on account of hike in CRR and funds mobilised under the market stabilisation scheme. Short-term interest rates, such as call money rates, reverse repo rate and yield on treasury bills moved up marginally. However, lending rates have remained stable. Incremental non-food credit was Rs. 2,46,146 crore in 2004-05. This level of increase is the highest, compared to the increases recorded in the corresponding period of any fiscal year. The spurt in non-food credit is largely on account of the surge in loans to housing, wholesale trade, real estate and agricultural sector.

#### **2.5 KEY ECONOMIC INDICATORS**

##### **2.5.1 Inflation**

Fiscal 2004-05 ended with average inflation of 6.4 per cent, compared to 5.5 per cent recorded in the previous fiscal. Fuel products and manufactured goods were the main sources of inflation. High prices of crude oil in international markets led to a 10 per cent rise in prices of petroleum products during the year. The rise of WPI was mostly concentrated in raw materials or intermediate goods such as iron & steel and coal. Inflation based on consumer price indices was modest. CPI-IW recorded a 3.8 per cent rise during April-February 2004-05, lower than the 3.9 per cent rise seen during the same period of 2003-04.

##### **2.5.2 GDP Growth**

Real GDP grew by 6.9 per cent in 2004-05. This is 1.6 percentage points lower than the 8.5 per cent rise witnessed in 2003-04. After growing by 7.6 per cent in

the first quarter, GDP growth slowed down to 6.7 per cent and 6.4 per cent, respectively, in the following quarters due to poor performance of the agricultural sector. However, the economy recovered strongly in the last quarter registering a growth rate of seven per cent.

### **2.5.3 Employment**

As per the results of the 55th Round (1999-2000) of the Economic Survey, the rate of growth of employment, on Current Daily Status (CDS) basis, declined from 2.7 per cent per annum in 1983-1994 to 1.07 per cent per annum in 1994-2000. The decline in the overall growth rate of employment in 1994-2000 was largely attributed to a near stagnation of employment in agriculture. As a result, the share of agriculture in total employment dropped from 60 per cent in 1993-94 to 57 per cent in 1999-2000.

As per the data available from the 947 employment exchanges as on September 2004, 4.08 crore jobseekers were registered with the employment exchanges, 70 per cent of which were educated (10th standard and above) and 26 per cent were women job seekers.

### **2.5.4 Population**

India accounts for sixteen per cent of global population with the risk of achieving dubious distinction of becoming the most populous country in the world by about 2050. The only heartening fact is that the country has fared well in terms of socio-demographic parameters. The Tenth Plan targeted a reduction in Infant Mortality Rate (IMR) to 45 per 1,000 by 2007 and 28 per 1,000 by 2012, reduction in Maternal Mortality Rate (MMR) to 2 per 1,000 live births by 2007 and 1 per 1,000 live births by 2012.

**Table: 2**  
**Important socio-economic indicators for India (1999-2005)**

	Units	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
Population	mln. nos	1001	1019	1037	1055	1073	N.A.
GDP at market price	Rs. bln.	19368	20895	22724	24633	27600	N.A.
Railways freight Traffic	mln. tns.	456.4	473.5	492.5	518.7	557.4	600
Cargo at major ports	mln. tns.	271.9	281.1	287.6	313.5	344.5	N.A.
Power Capacity	MW	97884	101626	105046	107877	112683	N.A.
Foodgrains	mln. tns.	209.8	196.8	212.8	174.2	213.4	210.4
Market Capitalisation	Rs. bln.	11462	6424	7432	7259	13795	18757
Exports	\$ mln.	36760	44147	43976	52856	63623	75000
Imports	\$ mln.	49799	50056	51588	61572	77237	98000
Forex Inflow (net)	\$ mln.	10184	8814	8551	10840	20542	N.A.
FDI Approvals	\$ mln.	4153	5527	3043	1638	1358	N.A.
Employment (public)	mln. nos.	19.3	19.1	18.8	18.6	N.A.	N.A.
Employment (private)	mln. nos.	8.6	8.7	8.4	8.4	N.A.	N.A.
Registered jobseekers	mln. nos.	40.3	41.2	41.6	N.A.	N.A.	N.A.

(Source: Economic Intelligence Service - CMIE, Monthly Review of the Indian Economy April 2005)

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## IMPACT OF GLOBALISATION ON EMPLOYMENT IN INDIA

### 3.1 MACRO CHANGES

Though the process of globalisation has touched every section of society, the impact on the working class has been more direct and intense. It is evident, considering the drastic reduction in number of strikes and lockouts from 1201 to 489 over a period of last ten years, i.e. 1994 to 2003. The most-affected were: West Bengal, Tamil Nadu, Andhra Pradesh and Gujarat, who together form a category of 'progressive states'. The number of units affecting closure has also decreased to 88 in 2003 as compared to 213 in 2002, and consequently the workers affected due to it also declined to 6978 in 2003 from 10025 in 2002.

### 3.2 ARRESTING RISING 'UNEMPLOYMENT' LEVELS

According to the recent round of the national surveys, the unemployment rate in India is 7.2 per cent. This is despite the fact that about 55 per cent of the people are 'self-employed'. But still there is a strong feeling that these figures are grossly under-reported, because the poor never get themselves into the registers. According to the latest World Bank report, the poverty in India is about 32 per cent, which implies that the employment is not adequately remunerative.

The clashes in Assam and elsewhere in the country on the issue of Railway recruitment is a glaring example showing the acuteness of the problem. According to a report, railway officials had received about 74 lakh applications for 2000 vacancies. Another startling fact that came to fore is that though the qualification required for these posts were Class VIII, yet graduates and post-graduates including 20,000 engineers and 3,000 MBA degree holders applied for the vacancies.

### 3.3 DE-INDUSTRIALISATION RESULTING INTO 'UNEMPLOYMENT'

The major reasons for escalating unemployment are the 'de-industrialisation process' swaying throughout the country, and the reduction of jobs on account of 'cutting costs' at a feverish pitch as globalisation is underway. Because of liberalisation policies, Indian markets have been flooded with MNC products. Unable to face the competition from the MNCs many small-scale industries, which were a source of employment to many, are closing down. It is estimated that during the last few years over six lakh units have closed down, and millions of people have been thrown out of their jobs. Even the report of National Commission on Labour (NCL), 2002 which avowedly supported the globalisation process (suggested anti-labour policies) could not ignore the stark reality - A large number of workers have lost their jobs due to VRS, retrenchments and closures both in organised and unorganised sector.

Cutting down the wage bill has become the thrust area for several organisations. All the technological improvements and mechanisation are revolving around the concept of 'jobless growth', i.e. increasing production, but reducing workforce. The new industries established by foreign capital have not been able to create enough jobs to absorb those who lost jobs due to de-industrialisation.

### **3.4 OUTSOURCING - A NEW TREND**

The new trend in industrial production is outsourcing. 'Outsourcing' or 'job contracting' is a process to get certain activities beyond a company's expertise through contractors. This not only reduces the management's burden but also becomes economical. Though outsourcing is an age-old practice in the manufacturing industries, now it has become an important phenomenon to reduce the cost of production. Since the contractors mostly employ casual workers who are generally unorganised and don't have any job protection or wage protection, they become a most vulnerable section of the working class.

### **3.5 CASUALISATION OF WORKFORCE**

It is another important feature in the current production process. Most of the firms are taking casual workers in place of regular employees. Even for regular and continuous production work they are using temporary workers. With a large reserve army of unemployed, it is not difficult for the industrialists to find a continuous inflow of temporary workers. Using contractors for supplying labour is another important method of getting casual labour. The casual labour is denied benefits like minimum wages, compensation, insurance, medical, provident fund, etc. Their right to form unions to protect their interests is also undermined. In this way workers are the direct victims of Globalisation.

### **3.6 MULTI-SKILLING OF WORKERS**

Another trend in the present day production system is using multi-skilled workers. This has considerably increased the work pressure on workers and saved money for the company. In modern management terminology this is also called as 'functional flexibility'. As a result of bringing so-called labour flexibility and the international competition through increased emphasis on reducing labour costs, labour saw the erosion of many benefits? It has led to further segmentation of the labour market and the expansion of low-income informal sectors in the economy. This process has been accompanied by increase in casualisation, contract labour, subcontracting and lengthening of working hours, etc.

### **3.7 WOMEN AND WORK**

The impact of globalisation is more severe on women. Many supporters of globalisation claim that it is creating more employment opportunities but the fact is that woman employment has increased only marginally. However, the work

participation rate continued to be substantially less for females than for males. Majority of women workers continued to be employed in the rural areas. Amongst rural women workers, 87 per cent were employed in agriculture as labourers and cultivators. While amongst women workers in urban areas, about 80 per cent were employed in unorganised sectors like household industries, petty trades and services and construction, etc.

### **3.8 USE OF NEW TECHNOLOGY**

New technologies are supposed to trigger economic growth by bringing about increased level of productivity, efficiency and profitability. From the management point of view the speed of operation, cost cutting, accuracy, job flexibility, quality assurance and reliability, are the most distinguishing characteristics of new technologies. Yet major undesirable side effects of the new technologies are related to its negative impact on quality of employment: The gap between remuneration to skilled and highly skilled as against low skilled is increasing sharply. The downsizing of industrial units on account of adoption of new technologies is part of the changing industrial scenario in the post-globalisation era.

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## MUMBAI - ECONOMY AND EMPLOYMENT

### 4.1 MUMBAI UNDER THE SCANNER

Mumbai continues to have an undisputed significance in the Indian economy. The financial capital of India, Mumbai, is probably the best-known face of India to the international community. Mumbai handles approximately one-third of the country's foreign trade, in terms of value, and a similar proportion of India's software exports originate from the city. Once a textile manufacturing hub, the city's socio-economic structure has undergone a sea change over the years. The manufacturing enterprises in the city have gradually given way to service-based businesses mainly in sectors like Finance, IT, Telecom, Tourism, Entertainment, Advertising & Communication, etc.

### 4.2 TRANSITION FROM MANUFACTURING TO SERVICES

The replacement of manufacturing jobs by service sector has been a gradual process. In 1981, the industrial sector accounted for 44 per cent of the jobs while the services sector accounted for 54 per cent. By 1991, the share of the industrial sector in employment declined to 39 per cent, while that of the services sector increased to 60 per cent. This transition during the eighties has much to do with the closure of the textile mills, followed by the prolonged strike of textile workers. Subsequently, there was also a large-scale relocation of engineering, chemicals and pharmaceutical industries.

Consequently, the service sector has come to occupy a place of pride, contributing a lion's share of 64 per cent to the city's Net Domestic Product. In 2000-01, Mumbai's Domestic Product was estimated at Rs 58,000 crore representing over one-fourth of that of Maharashtra. While the city's per capita income was about twice that of Maharashtra, it is about three times the average of the country.

Mumbai is one of the costliest cities in the world in terms of real estate prices. If one were to benchmark the land prices against the city's level of development, then Mumbai beats even advanced cities like London and Tokyo. According to the McKinsey Global Institute estimates, Mumbai's real land price works out to over twelve times that of Tokyo. Mumbai is rapidly emerging as the centre of financial services, information technology and entertainment services.

### 4.3 MUMBAI: THE FINANCIAL CAPITAL OF INDIA

Mumbai is the financial and commercial capital of India. Its per capita income is Rs 48,954 and contributes over Rs 40,000 crore or approximately one-third of the

country's annual taxes. Mumbai accounts for 16 per cent of income tax collections and 35 per cent of corporate tax collection in the country.

The Bombay Stock Exchange (BSE), the oldest stock exchange in Asia, has around 3,500 companies listed. The market capitalisation of BSE is Rs 5 trillion. As of 2005, it is among the five biggest stock exchanges in the world in terms of number of transactions. The share of both the BSE and National Stock Exchange is about 92 per cent with respect to total turnover. They virtually represent the total market capitalisation of India's corporate sector. Mumbai handles one-third of the country's total foreign trade, and accounts for 30 per cent of the FDI in the state. Practically, all FII transactions, and over 90 per cent of the merchant banking transactions take place in Mumbai.

In terms of banking transactions, Mumbai's share is as much as three-fourth of the total cheque clearances. Mumbai accounts for a significant share in deposits mobilisation (14 per cent of total deposits) and deployment of credit (21 per cent of total credit) of scheduled commercial banks. Of the 29 mutual funds in the country, 26 of them are registered in Mumbai and form 90 per cent of the industry's total assets under management.

#### **4.4 EMPLOYMENT OVERVIEW**

Because of the prosperity and employment generating potential, Mumbai has always attracted migrants from across the country. Demographers estimated the migrants contributed to increase in city's population at approximately 80 per cent during 1941-51. This contribution, however, fell to 17 per cent in the '80s and is estimated to remain at approximately the same level during the '90s.

Even though it is the employment generating capacity of Mumbai that keeps attracting migrants to this city, the bulk of new jobs that have been created in the recent years have been in the unorganised service sector. The formal sector employment has, on the contrary, been virtually stagnant. The total employment in the formal sector that was about 11 lakh in 1971, increased to 12.7 lakh in 1981, but has since declined to 11.8 lakh in 1991 and further to 11.5 lakh in 1998. This decline in the formal sector employment, which is concentrated primarily in the private sector, indicates the decay of manufacturing industries in the city. Unfortunately, the growth of formal sector jobs in the services sector has not been adequate to fill the void created by the decline in manufacturing jobs. On the other hand, a number of manufacturing units in engineering, pharmaceutical and other industries relocated outside Mumbai, taking advantage of newer technology and lower input costs.

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**MUMBAI UNDER SCANNER – SCOPE AND COVERAGE OF THE RESEARCH**

**5.1 DEFINING GEOGRAPHICAL BOUNDARIES**

**5.1.1 Changing geographical boundaries**

The city's linear expansion northwards is a result of geographic limitations. The density of population in Mumbai is over 62 times than that of the country's average. Though, in recent years, the growth rate of Mumbai's population has phenomenally slowed down from 44 per cent during 1961-71 to 20 per cent during 1991-2001, yet it continues to be an issue of grave concern for the city planners.

An interesting development that the city has witnessed, over the last decade, is the high-paced growth in population in the neighbouring regions. For example, during 1991-2001, the population of Thane increased by 57 per cent, while that of Navi Mumbai by 129 per cent and Mira-Bhayander by as much as 196 per cent. The rapid development on the outskirts of the city has resulted into creation of several satellite townships beyond the city's formal geographical limits, thus changing geographical boundaries.

**5.1.2 Geographical boundaries for the study**

Though the city has witnessed these geographical changes in recent years, we have decided to restrict the study to areas well within the defined geographical limits of Greater Mumbai, i.e. up to Borivali in the western suburbs, up to Thane in the central suburbs and up to Mankhurd on the harbour line. This is primarily because though the city has expanded beyond these boundaries, yet bulk of the business and economic activities continue to be transacted within the said geographical limits of Greater Mumbai. Hence the term 'Mumbai' in the research findings should be interpreted as the city of Mumbai with the boundaries extending up to Borivali, Thane and Mankhurd.

**5.2 SOURCE OF 'EMPLOYEES' IN MUMBAI**

**5.2.1 Employment sourced from the suburbs**

It is a known fact that a considerably large amount of employees engaged in Mumbai are sourced from the townships. Rapid urbanisation, escalating real estate prices and the quest for better living standards have pushed the employee class (middle class families) to migrate to townships like Mira-Bhayander, Kalyan-Dombivili, Navi Mumbai. The present trend of middle class families migrating to suburbs is likely to be fuelled in the coming decades largely due to improving infrastructure facilities in these townships.

Mumbai being the financial and business capital of the country, several business and companies with national and regional presence have head offices in the city. An interesting observation with few companies is that some of the employees appointed by the office may be on the rolls of their Mumbai office, but may not be stationed/operating within the city limits. In such cases, we were faced with the dilemma of whether or not to include them into the research findings.

### **5.2.2 Definition of 'Employment Generation' for research study**

During the course of this research study, we included such employees, who are on the company rolls in Mumbai, and are operating within the city and surrounding areas. Now, this would also include those employees who are employed in the city, but reside in the townships around Mumbai. However, it would not include those residing in the city, but employed in companies/businesses in townships around Mumbai. It also doesn't cover those individuals who are on company rolls in Mumbai, but are operational (i.e. branch offices, resident employees, etc.) in other cities/states across the country.

## **5.3 OBJECTIVES OF RESEARCH**

### **5.3.1 Mapping employment opportunities**

The main objective of this study is to examine areas where new employment opportunities have emerged in recent years and to understand future employment trends in the city. Through this study, we are to arrive at concrete recommendations that would enable economic planners devise policy guidelines aimed at meeting city's future expectation. The study is an earnest attempt towards understanding changing employee job profiles in various service sectors, especially at a time when the city is preparing itself to ride the boom in service sectors.

An attempt has also been made towards understanding relevance of the courses and skill training currently offered by ITIs and engineering colleges, and comparing them with expectations of the service sectors (under study).

### **5.3.2 Defining prime objectives for the study**

Broadly, the field research activities undertaken has been aimed at understanding and gauging the extent of change witnessed over the last decade and also for projecting trends for the next five years in each of these areas:

- Employment trends in high employment growth service sectors.
- Industry's requirements of employees - 'Projected Numbers' and 'Skill Mix'.
- Impact of IT in various sectors from the point of view of generating employment opportunities.

- Extent of shift in employment among job losers due to downsizing/restructuring.
- Understanding the relevance of employment skills imparted by ITIs and engineering colleges.

#### **5.4 CLASSIFICATION OF SECTORS**

The ten service sectors under study have been broadly divided into two categories - organised and unorganised sectors and likewise different approaches have been used so as to ensure that a higher degree of accuracy is achieved during the course of the study. Sectors like IT, Telecommunication, Courier Services, Financial, Tourism, Entertainment, Construction and Shops (Retail) have been classified as organised sectors. It has been done on the assumption that there is a certain degree of professionalism and standardisation in their business operations. Now, in case of the organised sector, we have fixed the sample size at 'six business units' for the research.

While sectors like Automobile Garages and Photo Copy Centres that have a dominant unorganised component has been classified as unorganised sector. We find that most of these units are family-run businesses, having smaller turnovers, engage unskilled and uneducated individuals, and lack proper documentation and accounting standards. Realising that most of the business units in these two sectors are enterprising ventures, and that authentic data may not be readily available, we have increased the sample size from six units to 12 units.

#### **5.5 SAMPLING OF SUB SECTORS WITHIN THE SECTORS**

Since some of the organised sectors are further classified into several sub-sectors, during the course of research, we have tried to cover as many sub-sectors as possible. Here the selection of sub-sectors has been on the basis of the overwhelming impact an individual sub sector has on the performance of the sector. For instance, in case of the Financial Sector, which comprises Banking, Insurance, Mutual Funds, Stock Market, Commodity Trading, etc., we have selected the Banking sub sector, as it is the oldest and biggest sub sector in the segment. While the selection of Mutual sub sector has been on the premise that it is the sunrise sub sector and it offer huge employment opportunities in the near future. The field results from these two sample sub sectors have been used to arrive at the required employment projections for the Financial Sector.

Table 5.5  
List of sub-sectors covered in each of the sectors:

<b>Sectors</b>	<b>Sub-sectors covered</b>
IT	Software, Hardware and Services
Telecommunications	Basic Telephony & Cellular Services
Financial	Banking and Mutual Funds
Tourism	Domestic & International Tour Operators
Entertainment	Films, Television, Radio & Amusement Park
Construction	Infrastructure & Housing Construction
Courier	Courier & Freight Services
Retail (Shops)	Shops, Super Stores & Malls

## 5.6 METHODOLOGY

During the course of the study a two-pronged approach – macro and micro - has adopted, and the sample units selected have been such that they provide us with employment trends at both macro and micro level.

At the macro level, we have included at least one-industry associations (except Telecom and Photo Copy Centres) to gain an insight into broad sectorial performance over the last decade and projections for the next five years. While on the micro level, we met unit heads of companies from various sectors/sub sectors to understand business and employment trends over the last decade and projections for next five years. Apart from this, we studied the impact of globalisation and IT on changing employee job profiles over the last decade and trends for the same over next five years.

The sector-specific projections made are based on the macro-level fact and figures provided by individual industry associations, which later have been coupled with micro-level employment trends and figure derived from individual business units so as to arrive at projections on ‘Employment Generation in Greater Mumbai’ over next five years.

## 5.7 PROFILE OF INTERVIEWEE

In case of the industry associations representing various sectors/sub-sectors we met members of the managing committee, i.e. President, Chairman, Director, Secretary-General... In addition to interviewing these representatives, an attempt was made to collect sector-specific research data available from the associations on ‘sector performance’ and ‘employment trends’ for the last decade and projections for the next five years. In case of individual business units, we interacted with CEOs, Directors, Business Heads, HR Heads, Proprietors, etc.

While choosing the business units we kept in mind that units were operational for a minimum period of ten years so as to understand the trends for the last decade. However, in case of sunrise sectors like Mutual Funds, Retailing, etc.,

where the sector has evolved recently, we have taken the liberty to include even business units with shorter period of existence. While the other criteria for the choice of business units was their existing 'leadership position', as we are of the opinion that leading business units have greater understanding of the sector and are well placed to represent issues concerning 'business' and 'employment' related to their sector.

## **5.8 SECTORWISE SELECTION OF SAMPLE UNITS**

### **5.8.1 Financial Sector**

Mumbai, the financial capital of the country, is home to several reputed financial institutions. The financial sector can be broadly divided into the following sub sectors: Banking, Insurance, Mutual Funds and Stock Market. Of these, we have focused on Banking, as it is the oldest and largest sub sector, and Mutual Funds, because it is the sunrise sub sector and holds great promise for future employment opportunities.

In order to get an overview of the Banking sub sector, we interacted with Indian Banks Association (IBA), State Bank of India (PSU bank), ICICI Bank (Private bank) and Saraswat Bank (Co-operative bank). To gain an insight into the Mutual Fund sub sector, we met the respective association for Mutual Funds in India (AMFI), and ICICI Prudential (Private) and UTI (Public sector).

### **5.8.2 Construction Sector**

Much of the economic upswing in the country can be attributed to the liberalisation policies that were set in place over a decade ago. It led to a construction boom unparalleled in the history of the country in terms of sheer scale, complexity, and quality. One finds billboards advertising new residential and commercial complexes across the country and newspapers full with advertisements of residential and real estate listings. Mumbai has been one city that has immensely benefited from the boom in construction sector - residential and commercial complexes. In order to understand the changing landscape of the city and its impact on employment, we banked on the information and opinion from industry associations like National Institute of Construction Management and Research (NICMAR), Builder's Association of India (BAI) and Maharashtra Chambers of Housing & Industry (MCHI). In addition, we have interacted with established infrastructure construction companies like Shapoorji Pallonji, Gammon India, Hindustan Construction Company (HCC), while builder's perspective was obtained from leading companies like Evershine Builders and RNA Builders.

### **5.8.3 Tourism Sector**

Though tourism sector comprises of several sub sectors, viz. Airlines, Hotels, Travel & Tour sub sectors, etc.; during the course of this study, we decided to

focus on the Travel & Tour sub sector in Mumbai as it controls a considerably large portion of tourism business. And most of the other sub sectors are directly or indirectly dependent on the Travel and Tour sub sector for growth.

In order to understand the employment trends in Mumbai, in addition to interacting with the Department of Tourism (GOI), we approached select large and medium sized Mumbai-based travel & tours business units like Orbit Tours & Travels, Kesari Tours & Travels and Garha Tours; small tour operators like Kumar Travels and Lagu Travel Consultants.

#### **5.8.4 Information Technology Sector**

The very fact that IT can have a resounding influence on the performance of practically every business makes it the fastest growing sector across the globe. The overwhelming presence of IT in every business has resulted into several business units branching out into various specialisations and sub-specialisations. Broadly, the sectors can be divided into the following sub sectors: Software services, hardware, IT education and IT Enabled Services (ITES).

In order to gain an insight of employment generation in Greater Mumbai in the IT sector we interacted with two industry associations, i.e. NASSCOM (covering software services and ITES) and MAIT (covering the hardware services). In addition, we interacted with leading business houses like TCS to get company specific views in these areas. Furthermore, to get an overview of IT education we approached Aptech; while IT-enabled services in Mumbai were represented by Adventity and e-Funds (BPO services).

#### **5.8.5 Telecommunications Sector**

Over the last decade, the Indian telecom sector has witnessed amazing growth in cellular phones, fixed lines and broadband connectivity. The Mumbai region has seen phenomenal growth in connectivity over the last few years, so much so that we find middleclass households opting for multiple connections.

The city of Mumbai has six telecom players offering fixed line and cellular services. In order to map the growth of telecommunications sector in the city, we interacted with leading units in the sector: MTNL, BSNL and Tata Indicom.

#### **5.8.6 Courier Services Sector**

Globalisation and economic liberalisation has led to increased competition amongst companies/businesses, which in turn has necessitated delivery of goods and services in a timely and reliable manner. Over the last two decades, the entry of the MNCs and state-of-the-art technology has metamorphosed the courier services industry from the obvious delivery/pick-up of documents to handling turnkey logistics.

During the course of the research we interacted with associations like the Express Industry Council of India (EICI) and Air Cargo Agents Association of India (ACAAI) to understand the overall performance of the sector. In order to understand the business and employment growth, we spoke to MNCs like TNT and DHL Express India, and Indian companies like Vichare Couriers, Skypak Services and Jeena & Co.

#### **5.8.7 Entertainment Sector**

According to CII-KPMG report released in April 2005, the Indian entertainment industry is estimated at Rs 22,200 crores and is expected to grow at 18 per cent per annum to reach Rs. 58,800 crores by 2010. The report titled 'Indian Entertainment Industry – Focus 2010: Dreams to Reality', critically analyses and evaluates the effect and interplay of various forces that shape the landscape of the television, films, radio and music sectors – which cumulatively account for over 96 per cent of the Indian entertainment industry.

Due to dominant presence of Bollywood, Mumbai spearheads the growth of the entertainment sector in India. Representing business units of the four major contributing sub-sectors, we spoke to Balaji Telefilms (production house), ZEE TV (television channel), Film Producer's Guild (an association), All India Radio (radio channel), 93.5 Red FM (radio channel) and Essel World (amusement park).

#### **5.8.8 Shops (Retailing Sector)**

Post liberalisation, the rising purchasing power of buyers is driving the evolution of a retail sector in the country. Organised retailing has definitely made headway in the upper class. However, retailing of items such as milk, fruits, vegetables, etc. continue to be done at traditional outlets. The middle-income class prefer shopping for processed food and personal care in supermarkets and fall back on traditional outlets for bulk shopping. Organised retailing does not seem to have made an impact on the lower class. Retailing in India is at a nascent stage of its evolution.

In order to understand the growth of the retail sector and its impact on employment trends we spoke to Retailing Association of India (RAI). In addition, we also met business units both in the organised segment- Shopper's Stop, Sahakari Bandar, Apna Bazaar, and unorganised segments - Hilton and K Dinesh & Co.

#### **5.8.9 Automobile Garage Sector**

Although automobile sector has been on an upswing for the past few years notching an annual growth rate of 15.1 per cent, backed by introduction of contemporary models, easy availability of finance, rising price discounts. Though

the technology used has witnessed a paradigm shift, the state of automobile service centres in the city is experiencing the going tuff.

The Automobile Garages sector is dominated by unorganised players, and bulk of them operate from a makeshift location by the street side. Though automobile manufacturing has seen a marked change in usage of technology, the technology literacy amongst garage workers has not changed much. By and large, the automobile garages is disorganised, thus we have selected six automobile garages from across the city which include Andrade Motors, Apsara Scooters, Frank Auto Repairers, Vijay Auto Works and Mahesh Garage to enable us to arrive at realistic employment numbers. In addition, we have involved the Two Wheelers' Association to gain a broader outlook on the state-of-affairs of the two-wheeler garages.

#### **5.8.10 Photocopy Sector**

Mumbai - business hub of the country has photocopy centres scattered all across the city, more so concentrated in areas that have high business activities and educational institutions. Geographically also, we find photocopy centres concentrated in and around suburban railway stations and marketplaces that have more than average human traffic. While selecting photocopying centres for research, we have focused on business units that are located in and around the railway stations in four different areas with diverse socio-economic structure i.e. Fort (commercial hub), Bandra (W) (educational hub), Kandivili (W) (residential locality) and Andheri (emerging business centre). As mentioned earlier, photocopying sector being unorganised we have interviewed 12 business units from these four areas. Here, the units vary both in size and business specialisation, but have one common feature - they have been in business for years and have a commitment towards their business.

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## EMPLOYMENT GENERATION IN THE FINANCIAL SECTOR

## 6.1 FINANCIAL SECTOR IN INDIA (over last decade)

Macro Scenario

The financial sector in India is divided into several sub-sectors: stock exchanges, banking, mutual funds, insurance, FIIs, etc. Over the years, each of these sub sectors has shown promising growth in business. However, the entry of private players in the banking, mutual fund and insurance sector triggered a spate consolidation, mergers and acquisitions. While the banking sub sector had private entrants early on, the first mutual fund to be set up by the private player was in 1993. The insurance sub sector witnessed private participation as late as 2000. Over the decade, each of these sub sectors resorted to technology intensive and customer-friendly business model with strong focus on customer convenience. Though each of these sub sectors have an important role to play in the country's economy, the banking sub sector hold a pivotal place in the country's financial health. In an inaugural address by the RBI Governor, Dr Y V Reddy at the Banker's Conference held last year highlighted that banking to be the most dominant sub sector and claimed that the share of banking assets in total financial sector assets to be around 75 per cent as of end-March 2004.

## 6.1.1 Banking sub sector

Almost 80 per cent of the banking business in India is controlled by Public Sector Banks (PSBs). However, the face of banking has been changing rapidly. Deregulation has opened several new opportunities for banks to increase revenues by diversifying into areas like investment banking, insurance, credit cards, depository services, mortgage financing, securitisation, etc. This has resulted into a marked improvement in the financial health of commercial banks in terms of capital adequacy, profitability and asset quality. It has also resulted into greater choices for consumers and an increased level of sophistication and technology in banks. As banks benchmarked themselves against global standards, they became more transparent and greater stress was given to corporate governance.

**Table 6.1.1- A**

*Performance of banks in terms of total deposits - All India (1995-2004)*

*(Figures in Rs. crore)*

<b>Year</b>	<b>Total Banks Deposits</b>
1995	4,05,810
1996	4,57,437
1997	5,37,557
1998	6,44,118
1999	7,71,129

2000	9,00,307
2001	10,55,386
2002	12,01,306
2003	13,55,654
2004	15,75,143

(Source: IBA)

### Industry Perspective

**Indian Banks Association (IBA)** attributes the entry of private sector banks in 1996 to have significantly influenced 'qualitative' and 'quantitative' changes in performance of banks in the country. The extent of this influence can be gauged by comparing growth of deposits of both private sector banks and PSBs over the last decade. Figures provided by IBA confirm the growth of deposits of PSBs for the period 1995-2000 by 2.11 times, while private sector banks grew by 4.3 times during the same period. Though the growth of private sector bank deposits was slower at 2.36 times for the period 2000-2004, yet they continued to grow at almost double the rate as compared to those of PSBs, which grew at 1.66 times during the same period (Refer table 6.1.2 - B).

**Table: 6.1.1 - B**

*Performance of banks in terms of deposits- All India -Category -wise*

*(Figures in Rs. crore)*

Type	1995	2000	2004	Growth (%) 1995-2000	Growth (%) 2000-2004
Public Sector	3,48,938	737,313	1,226,838	111.30	66.39
Private Sector	26,406	113,670	268,549	330.47	136.25
Foreign Banks	30,466	49,324	79,756	61.89	61.69
Total	405,810	900,307	1,575,143	121.85	74.95

(Source: IBA)

According to projections for 2010 made by IBA, the total deposits of banks in India are expected to increase to Rs. 3,500,000 crore from Rs. 1,575,143 crore in 2004. In addition, the total liabilities/assets are also expected to rise to Rs. 4,090,000 crore in 2010 from Rs. 1,975,020 crore in 2004. While the investments in government and other securities are estimated to double from Rs. 802,066 crore in 2004 to Rs. 1,640,000 crore in 2010.

### **6.1.2 Mutual Fund Sector in India**

Though the opening of mutual fund sub sector to PSUs (other than Unit Trust of India) took place as recent as 1987, private players had to wait till 1993 to formally enter into business. The sub sector has grown at a CAGR of 11.57 per cent, while the CAGR for the private players has been 68.56 per cent. Almost 65

per cent of the Indian mutual fund assets are with institutional investors, however this situation is fast changing due to the focus on customisation, innovative products, and greater investor awareness.

**Table 6.1.2 - A**  
**Performance of Mutual Funds sub sector in India (1995-2004)**  
**(Figures in Rs. crore)**

Year	Mutual Funds AUM
1995	72,967
1996	74,315
1997	71,197
1998	68,984
1999	68,472
2000	93,717
2001	83,131
2002	94,017
2003	75,306
2004	1,37,626
2005	1,49,600

(Source: AMFI)

### **Industry Perspective**

**Association of Mutual Funds in India (AMFI)** attributes the recent dramatic rise in mutual fund investment figures to the entry of private sector units. The restructuring of UTI into two companies UTI – I and UTI – II in the year 2003 and the eventual consolidation the sub sector saw reduction in the total number of operators from 32 to 29 between 2000–2005. Though there was a drop in the number of operators, the total Assets Under Management saw an appreciable increase from Rs. 93,717 crore in March 2000 to Rs. 1,49,600 crore in 2005, a growth of 59.62 per cent.

The extent of impact the private players had on the mutual fund sub-sector can be gauged from the range of products that are now being offered to customers. In 1995, the sub-sector offered approximately 10-15 plain vanilla schemes to its customers, which after the entry of private players dramatically rose to 421 schemes in 2005.

**Table: 6.1.2 - B**  
**Growth of Mutual Fund sub sector (1995-2005)**

	1995	2000	2005	Growth (%) 1993-2000	Growth (%) 2000-2005
No. of operators	10-15	32	29	113	-9.37
AUM (in crore)	72,967	93,717	1,49,600	28.43	59.62

(Source - AMFI)

Increasing investor interest has seen that AUM of mutual fund sub sector grow eightfold in five years, i.e. from March 1999 to December 2003 (Refer table: 6.1.2 – B). Studies have revealed that by 2010, the size of Indian Mutual Fund sub sector would grow to over Rs. 3,00,000 crore.

*Table: 6.1.2 - C  
Growth of Mutual Fund sub sector in India (2000-2005)*

<i>Year</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>
MF AUM's (Rs. crore)	93,717	83,131	94,017	75,306	1,37,626	1,49,600
Percentage to GDP	6.41	4.76	4.83	3.52	5.54	5.37

*(Source - AMFI)*

## **6.2 FINANCIAL SECTOR IN MUMBAI (Over last decade)**

A research study undertaken by James Laurenceson and Abhaya Kamalakanthan, School of Economics - The University of Queensland, Australia on 'Emerging Financial Centres in Asia' - has put Mumbai and Shanghai as the primary candidate cities to emerge as International Financial Centres (IFC). Both, Mumbai and Shanghai, are situated in countries of enormous international significance - China and India - and are domestic financial centres of their respective countries. Although Indian and Chinese economies continue to grow rapidly and are integrating into the global economy, the study gives Mumbai an edge over Shanghai because it has a comparatively stronger and organised financial infrastructure.

Mumbai's domestic financial dominance is primarily based on the premise that it houses the country's two largest stock exchanges, i.e. the Bombay Stock Exchange (BSE) and the National Stock Exchange of India (NSEI). The two stock exchanges clearly dominate all the other Indian exchanges in terms of both turnover and market capitalisation. The historical development of credit markets in Mumbai has also been significant with the headquarters of many of India's major banking institutions being based in the city, including India's Central Bank, the Reserve Bank of India (RBI). Many of the world's top banking institutions such as ABN AMRO, Bank of America, American Express, Citibank, Deutsche Bank, HSBC, Barclays Bank, ING, Standard Chartered Bank and J P Morgan Chase are also housed in Mumbai. In addition to the stock exchanges and banks, the headquarters of other critical financial institutions such as the Over-the-Counter Exchange of India, the Securities and Exchange Board of India (SEBI), insurance companies, capital market intermediaries and mutual funds are now located in Mumbai. There are also close to 500 Foreign Institutional Investors (FIIs) and 800 merchant banks based in Mumbai. As a result, virtually

all FII transactions and over 90 per cent of merchant banking transactions occur here.

Another important factor that goes in Mumbai's favour; China has been tagged as "Manufacturer to the world", while India is emerging as the "Back office to the world". The combination of a relatively cheap, English proficient and highly educated workforce, along with continued improvements in the quality and price of international telecommunications, are working in favour of Mumbai's claim to become the International Financial Centres in near future.

### 6.2.1 Banking sub sector in Mumbai

Mumbai's prominence in the Indian Banking sector is evident from the fact that in March 2002 with bank deposits of over Rs. 141,800 crore, Mumbai accounted for about 13 per cent of the total bank deposits in India. While Delhi with deposits of Rs. 117,890 crore trailed at 10.7 per cent during the same period. Mumbai's dominance in bank credit is even more striking as it contributes a whopping Rs. 181,158 crore, i.e. 26.5 per cent to the total credit. While the other three metros - Delhi, Kolkata and Chennai - collectively contributed to 24.8 per cent of bank credit. Moreover, the national credit-deposit ratio of banks stood at 62.5 per cent as of March 2002. For Mumbai, the ratio is more than double at 128 per cent. This signifies that Mumbai has truly developed as a financial intermediation centre rather than only being a deposit mobilisation centre.

*Table: 6.2.1 A*

*Bank deposits and credit in metropolitan cities (Figures in Rs crore)*

	Amount (Rs. crore)		Share in all-India (%)	
	Deposits	Credit	Deposits	Credit
March - 91				
Mumbai	28,605	21,839	14.3	17.6
Chennai	5,932	6,654	2.9	5.3
Kolkata	11,994	7,730	5.9	6.2
Delhi	19,079	10,460	9.5	8.4
March - 96				
Mumbai	65,388	57,463	15.3	22.6
Chennai	12,504	13,870	2.9	5.4
Kolkatta	17,659	13,870	4.1	5.3
Delhi	41,724	26,341	9.8	10.3
March - 02				
Mumbai	141,837	181,158	12.9	26.5
Chennai	30,188	35,941	2.8	5.3
Kolkata	39,732	28,205	3.6	4.1
Delhi	117,890	105,329	10.7	15.4

*(Source: Bombay First)*

**Table: 6.2.1 B**  
**Performance of banks (Percentage share of Mumbai in all India)**

Type	1995 %	2000 %	2002 %
Public Sector	12.3	10.5	9.8
Private Sector	43.1	30.4	28.5
All banks	16.9	14.1	13.5

(Source: Bombay First)

In term of clearance of cheques, Mumbai's share is as much as three-fourths of the total clearances (worth Rs. 765,600 crore in March 2002). A total of 90 per cent of merchant banking transactions happen in Mumbai. The city accounts for about 16-18 per cent of the overall banking sub sector GDP in the country. Likewise, the banking sub sector's contribution to the city's economy is estimated to be around 12-13 per cent.

### 6.2.2 Mutual Fund sector in Mumbai

According to AMFI, of the 29 mutual funds operating in the country, 90 per cent of the companies, i.e. 26 mutual fund companies are registered in Mumbai. As for Assets Under Management (AUM), 80 per cent of the mutual fund business in India is transacted in Mumbai alone. Over the last few years, mutual fund has captured a greater mind space in the investment horizon of big corporate houses. Presently, more than 70 per cent of the total investments in funds come from corporate houses and as most corporate investors are based in Mumbai mutual fund transaction is high in the city.

The Mutual Fund sub sector has grown tremendously, over the past one decade, with the entry of private and foreign players. The sub sector has witnessed a paradigm shift from retail investors to corporate investors and is presently witnessing a shift in business from metros cities to smaller towns.

**Table: 6.2.2**  
**Estimated growth of Mutual Fund sub sector in Mumbai**  
**(Figures in Rs crore)**

Year	2000	2001	2002	2003	2004	2005
MF AUM in Mumbai	74,974	66,505	75,214	60,245	1,10,101	1,19,680

(Source: AMFI)

### 6.3 EMPLOYMENT TRENDS IN INDIA (Over the last decade)

#### Industry Perspective

According to details provided by IBA, the 'Voluntary Retirement Scheme (VRS)' launched by several PSBs, beginning 2001, saw the total number of employees reduced from 8,73,569 in March 2000 to 7,52,627 in March 2004. Primarily due to a sizeable number of employees opting for VRS, during this period, the total number of employees in the banking sector (public, private and foreign banks) shrunk from 9,44,593 as of 31<sup>st</sup> March 2000 to 8,49,179 as of 31<sup>st</sup> March 2004. On the other hand, the total number employees in the private and foreign banks saw a steep rise in employment figures from 71,024 in March 2000 to 96,552 in March 2004, an increase of 35.9 per cent, as these banks strengthened their business network across the country.

*Table: 6.3.1*

*Employment figures for banking sector in India*

	2000	2004	% change between 2000-2004
Total number of bank employees in India	9,44,593	8,49,179	-10.10
Total number of employees in PSBs	8,73,569	7,52,627	-13.84
Total number of employees in Private and Foreign banks	71,024	96,552	35.94

(Source: IBA)

During this period, banks across the spectrum (PSB, co-operative, private and foreign banks) resorted to outsourcing of mundane back-office functions and marketing of retail banking products. Between 2000-2004, the sub sector saw prudent recruitment practices, whereby they recruited only specialists and skilled personnel in areas like data management, IT, marketing, treasury operations, agriculture officers, finance executives, economists, etc.

### 6.4. EMPLOYMENT TRENDS IN MUMBAI (Over the last decade)

#### Industry Perspective

According to **State Bank of India** (SBI), aggressive marketing on the part of banks, over the last decade, has resulted into creation of several dynamic product/service delivery channels, which in turn have created openings for skilled/efficient people. During this period, the sector witnessed a gradual switch over from manual to mechanised system of working, thus forcing banks to undertake massive re-skilling programmes for their existing employees and recruitment of 'savvy frontline' and 'efficient backend' personnel. Further, the 24x7x365 service approach taken by the bank resulted into increased competition for creation of efficient delivery channels. This led to the bank create newer

squads of efficient and technology-savvy employees for maintaining their efficient customer service channels.

**Table: 6.4.1- A**  
*Performance of SBI (over the last decade)*

	1995	2000	2005	% change bet. 2000-2005
Deposits for India (figures in Rs crore)	851.22	1968.21	3670.48	86.48
Number of employees in India	2,32,000	2,36,000	2,06,000	-12.71
*Number of employees in Mumbai	24,360	24,780	21,630	-12.71

(Source: SBI) \*estimated

**Saraswat Bank** also agrees to the strong impact of factors like aggressive retailing by private and foreign banks and change of interest rates from 'regulated to flexible' on the recruitment preferences. While the number of direct employment in the sector reduced, there has been a sharp rise in the figures of contractual employment. Banks are distinctly focussing on recruitment of multi-skilled, technical and customer service personnel.

Figures provided by the bank show an 8.2 per cent fall in direct employment between 1995-2005, as the total number of employees shrunk from 1,938 in 1995 to 1778 employees in 2005. However, the reduction in employees had no direct impact on the bank's expansion plans. It expanded its network in Mumbai from 52 branches in 1995 to 75 branches in 2005, a rise of 44 per cent. The bank's conscious attempt to streamline operations (reduce direct employment) and expand branch network has shown a good effect on the bank's business - deposits rose by 434 per cent from Rs. 91,120 crore in 1995 to Rs. 4,86,700 crore in 2005. The bank has gained largely from business process restructuring, investment in technology and retail banking.

**Table: 6.4.1B**  
*Performance of Saraswat Bank (over the last decade)*

	1995	2000	2005	% change between 1995-2000	% change between 2000-2005
Deposits for India (figures in lakhs)	91,120	2,37,952	4,86,700	161.14	104.53
No. of employees in Mumbai	1,744	1,730	1,600	-0.8	-7.5
No. of branches in Mumbai	47	58	67	23.4	15.5
No. of ATMs in Mumbai	None	2	28	-	1300

(Source: Saraswat Bank)

As compared to PSBs and co-operative banks, which witnessed a gradual reduction in direct employment figures (due to VRS), over the last decade, **ICICI Bank** has seen a 'sustained' rise in direct employment. Between 1995-2000, the employment figures in Mumbai rose by 72 per cent from 530 employees to 865 employees, while between 2000-2005, the direct employment rose by an astonishing 230 per cent from 865 employees to 5037 employees. Though the bank perfected the art of automated banking (people-free banking), it continued to expand its branch network in the city. During the period 1995-2000, it added 23 new branches in Mumbai, while from 2000-2005 it added a total of 16 new branches.

Leading the retail revolution in the country (retail market share is 35 per cent), the bank has depended largely on business automation (people-free banking) to push business growth. Understandably, as the bank gave emphasis to technology-driven banking it recruited personnel with strong technology (IT) and technical (finance) background. As for the expanding branch network, it is seeking personnel with product/service retailing background (marketing, sales and customer service personnel).

*Table: 6.4.1 C  
Performance of ICICI Bank (over the last decade)*

	1995	2000	2005	% change between 1995-2000	% change between 2000-2005
Deposits for India (figures in Rs crore)	331	9866	99819	2880 %	911 %
Total employees in Mumbai	530	865	5037	72 %	230 %
Total branches in Mumbai	1	24	40	2300 %	66.6 %
Number of ATMs in Mumbai	2	64	214	-	-

*(Source: ICICI Bank)*

According to AMFI, the vertical split of **UTI** (a major player) into two divisions: UTI-I and UTI-II and the consequent VRS offers to its employee saw the number of UTI employees from across the country reduce from 2,500 employees to 1,200 employees. Consequently, in an effort to right sizing, the company resorted to outsourcing product-marketing activities.

**Table: 6.4.1 D**  
**Performance of UTI (over the last decade)**

Parameter	2000	2005
AUM for India (Figures in Rs crore)	76,000	21,103
Total employees In Mumbai	2,500	1,200
No. of Products	60	149

(Source: UTI Mutual Fund)

A new entrant into the mutual fund sub sector, **Prudential ICICI** has witnessed a virtual doubling of direct employment from 65 employees in 2000 to 130 employees in 2005. The rise in employment was largely on account of recruitment of marketing personnel, which is the reason why the company witnessed astonishing growth in AUM from Rs. 4230 crore in 2000 to Rs. 15,298 crore in 2005, a rise of 261 per cent, as the company offered as many as 30 mutual fund products as compared to 10 products offered in 2000.

**Table: 6.4.1 - E**  
**Performance of Prudential ICICI (over the last decade)**

	2000	2005	% change between 2000-2005
AUM for India (Figures in Rs crore)	4230	15,298	261
Total employees in Mumbai	65	130	100
No. of products	10	30	200

(Source: Prudential ICICI Mutual Fund)

## **6.5. INFLUENCE OF IT ON JOB PROFILES IN MUMBAI (Over the last decade)**

### **6.5.1 Banking sub sector**

As per the research study - 'Evolution and outlook for banking in Mumbai' undertaken by Bombay First, telecommunication and information technology is bringing about sweeping changes in the banking sub sector. These technological advances are helping banks strengthen customer relationship, thus helping them move towards 'Relationship Banking'. Installation of Automated Teller Machines (ATMs), introduction of Smart Cards, Phone Banking, and more recently Internet Banking is gaining prominence in the city. The high cost of property is not a constraint for Mumbai's competitive banking sub sector. With phone banking, net banking, and ATMs gaining prominence, the sector is in fact using physical space very economically.

The increasing competition from private and foreign banks and the business paradigm shift to retail banking has forced SBI to move from the conventional manual banking to mechanised system of working. Phased introduction of ATMs, tele-banking, Internet banking, etc. necessitated re-skilling of employees in the area of technology and marketing so as to achieve business objectives and maximise profits.

**ICICI** has had a major advantage in terms of technology. Core banking solutions, Internet banking, mobile and phone banking and many more technically upgraded services have already been integrated into its business processes. The bank had already started on a superior IT platform since its inception and there hasn't been any dramatic change in job profiles.

**Saraswat** was among the first to shift to a technological platform way back in 1991. Last year, the bank implemented core-banking solutions that entailed investment of Rs. 3,73,24,811. All the existing staff has graduated to the technology platform and manual jobs have become almost redundant.

#### **6.5.2 Mutual Fund sub sector**

As most of the mutual fund companies were set up post-1993, business units were set up on a highly efficient technology platform. A highly technology intensive business, the mutual fund industry has not witnessed any downsizing due to IT. **UTI** the largest mutual fund company with a market share of 65 per cent retail investors (Rs. 21,102.89 crore asset management funds, 149 schemes) spends approximately Rs. 10-12 crore per annum on Information Technology.

Like all other private mutual funds, **Prudential ICICI** was set on a high technology platform, thus there is no distinct change in job profiles on account of IT.

### **6.6 SHIFT IN EMPLOYMENT DUE TO DOWN SIZING (Over the last decade)**

#### **6.6.1 Banking sub sector**

According to figures provided by **IBA** in 2000, the PSBs offered a VRS package and approximately one lakh employees were directly affected in the banking sub sector. By 2010, most of the employees who have been employed in 1970's would move out via the retirement route. The sub sector had to resort to downsizing as the banks found the operating cost to be significantly high due to the extraordinary wage bill. Most banks found the cost of maintaining employee to be higher than the cost of maintaining and upgrading technology; hence they resorted to investment in technology and reduction in wage bill. In addition to improving profitability of business operations, downsizing was necessary to improve productivity.

In 2001-02, the VRS scheme offered by **SBI** led to reduction of 20,700 employees, thereby bringing the total number of employees down to 2.07 lakh. The change in business focus of the banks and emerging competition from private and foreign banks has forced banks to realign and re-orient their employees, resulting into cutting the flab wherever required.

#### **6.6.2 Mutual Fund Sector**

Except for **UTI**, which had a Voluntary Service Scheme (VSS) in 2003, the sector hasn't witnessed any major downsizing. The business restructuring undertaken at UTI saw employee reduction from 2,500 to 1,200, as the company was split into UTI MF and UTI.

A new entrant into the business, **Prudential ICICI** hasn't witnessed any business reverses or downsizing over the last decade.

### **6.7 EMPLOYMENT REQUIREMENT IN MUMBAI (next five years)**

#### **6.7.1 Banking sub sector**

According to **IBA**, the banking sub sector is likely to witness a paradigm shift in systems, processes and strategies, and this would warrant creation of new competencies and capabilities on an on-going basis. The sub sector is likely to see several mergers and consolidations over the next five years, which in turn would make integration of human resource very challenging. The change in banking environment will necessitate the need for recruitment of specialists like economists, marketing, treasury operations, agriculture officers, finance executives, etc.

In terms of direct employment for the next five years, Internet banking, Tele-banking, ATMs are likely to further reduce the level of human participation as non-core business operations are likely to be outsourced to specialists. Customer relationship management would be the order of the day, thereby creating greater demand for marketing oriented staff. IBA is of the opinion that business schools would be the fountainhead for future employees as they would be required to cross-sell products from mutual fund, insurance, etc.

Over the next five years, due to increasing competition from private sector and foreign banks, **SBI** anticipates improvement in the overall performance of PSBs. Moreover, as these banks are giving greater thrust to areas like retail banking and agri-banking, future recruitments (if any) would be in the area of customer service and marketing/sales. It expects a setback for Treasury Income, as the present era of low interest rates is likely to continue over the next few years. The bank expects a dramatic growth in hitherto virgin business areas like virtual banking and electronic banking, i.e. ATMs, tele-banking, Internet banking, etc.

resulting into growth in indirect employment and outsourcing. According to SBI, the sub sector would witness an increase in employment in specialised cadres only. Presently, the bank is in the process of Business Process Engineering (BPE), which would culminate into an exit policy thus resulting into further exodus of employees.

**Saraswat bank** is of the opinion that over the next five years the sub sector would witness a series of mergers and acquisitions, thereby leading to further business consolidation. The bank has already submitted a proposal to the RBI for its amalgamation with South Indian Co-operative bank, Maratha Mandir Co-operative bank and Nashik Urban Co-operative bank. The amalgamation is likely to result into displacement of several staff, thereby creating a need for their redeployment into newer jobs or offering of VRS. The bank doesn't foresee any substantial rise in direct employment in the short term but reaffirms that whatever recruitment done would be in specialised area like technical and marketing.

**ICICI bank** is bullish on the growth of Indian banking sub sector in the next five years. It feels that all private banks would focus on expanding their operational network beyond the metro cities (rural banking) over the next five years. It feels that the present retail banking approach of 24x7x365 product/service delivery system will provide huge scope for business expansion, which in turn would create several jobs in the area of customer relations/client servicing. At the same time, experts cautioned that the employment generated would depend on a number of parameters because technology and manpower are interchangeable. Further, they emphasised that there is no direct co-relation between business growth and number of employees.

#### **6.7.2 Mutual Fund sub sector**

Expansion of business network by existing mutual fund companies (beyond metros), entry of retail distributors and entry of banks into distribution business is expected to create greater awareness for mutual fund business in the country. According to **AMFI-UTI**, the sub sector is expected to witness a growth of 15-20 per cent in the next five years. A recent industry study by AMFI and ASSOCHAM (The Associated Chamber of Commerce and Industry of India) estimates the sub sector to grow from the present six per cent of the country's GDP to 40 per cent in the next 10 years.

A sunrise sub sector, AMFI-UTI is bullish on increase in employment, but cautions that it would not be 'mass employment' but 'class employment'. A paradigm shift is expected in the profile of those employed in the sub sector, as it is likely to create employment opportunities for MBAs, CAs, CFAs and postgraduate finance specialists and not for conventional college graduates.

Nonetheless, non-graduates, graduates would find indirect employment with distributors to market mutual fund products (subject to passing AMFI certification test).

**Prudential-ICICI Mutual Fund** plans to increase its employee strength to 280 by March 2006. Most of the recruitment will be in the area of sales and distribution.

## **6.8. AVAILABILITY OF TRAINED PERSONNEL IN MUMBAI (next five years)**

### **6.8.1 Banking sub sector**

According to **IBA**, though the PSBs have a common training institution – National Institute of Banking Management (NIBM), that help train new recruits acquire job skills and expertise, yet banks are seen to pick skilled and specialised personnel directly from the market. In order to meet global standards and remain competitive, banks are recruiting specialists in areas like treasury management, credit management, risk management, IT-related services, human resources management, etc. Moreover, for certain specific banking operations such as risk management, forex dealings, treasury operations, derivatives, securitisation, hedging, infrastructure lending, etc. banks continue to face problems sourcing experienced and qualified personnel.

According to **SBI**, in order to meet the anticipated requirement of high-end skilled and specialist personnel, the bank resorts to campus recruitments route. Later these individuals are given in-house training in diverse areas of job specialisations. Recently, the bank recruited 20 IT personnel and 500 personnel for agriculture officers on a contractual basis. The bank has a college for computer training, research & development, human resources, etc., which look into the training and orientation of the employees. All probationary officers undergo a one-year training programme, which includes requisite IT training.

Both **ICICI bank** and **Saraswat bank** are significantly dependent on campus recruitment for skilled (finance and technology) personnel, each of these banks believes in further orientation of the personnel. While ICICI bank has a well structured induction programme varying between 3-21 days for new recruits, Saraswat bank organises a series of 2-3 week induction programme followed by a week long on-the-job training on soft skills and job skill acquisition. The bank also imparts a six-day training for all staff once a year. Last year, it invested approximately Rs 6 crore on employee training.

### **6.8.2 Mutual Fund sub sector**

In case of Mutual Fund sub sector, as most of the direct personnel are required to have a strong finance background, campus recruitment is quite rampant. Through campus recruitments companies get personnel with the right skills who

are later honed by way of in-house and on-the-job training. As for indirect employment, **AMFI** conducts a certification test, which is mandatory for all distributors/marketers of mutual fund products.

Most of the recruitments that **Prudential ICICI** has undertaken have been through campus placements, and it hires MBAs and CAs only. And once the recruitment is done, the company undertakes a one-and-half month training, which covers functional and soft skills. The institution invests to the tune of 30-40 per cent of a new recruit's compensation package on training.

## **6.9 TRENDS IN INDIRECT EMPLOYMENT (Over the Next Five years)**

### **6.9.1 Banking sub sector**

Further, as the sub sector moved from 'Regulated Interest Rate' regime to 'Customised Interest Rate' regime, the customers benefited from tailor-made investment and loan products. This in turn created a huge scope for indirect employment, as banks appointed Direct Selling Agents/Franchises to spread their marketing and customer service reach.

Most banks continue to be engaged in re-training and re-skilling existing staff. Future employment growth in the sub sector would be fuelled largely by indirect employees, i.e. franchising and outsourcing. Both **IBA** and **SBI** share the opinion that government's economic policies and the business approach pursued by individual banks in the coming years would determine the magnitude of indirect employment. Larger the retail focus adopted by the bank, greater would be the scope for indirect employment generation.

The product and service diversification undertaken by banks have led to creation of several business subsidiaries offering distinct products. For instance, **SBI** has subsidiaries like **SBI Life**, **SBI Mutual Fund**, **SBI Capital Markets**, etc. Each of these subsidiaries besides engaging direct employment also hire franchisees and other agents to market and distribute their products. As the retail segment expands, the scope for indirect employment will also increase accordingly.

Contrary to the industry trends, **Saraswat bank** has been conservative in the area of indirect employment. The bank is undertaking the allied activities on its own including security, courier, encoding of clearing, cash van services, etc., and it doesn't see any significant requirement for hiring external agencies. The bank did try to create a network of DSAs, but hasn't achieved great success.

### **6.9.2 Mutual Fund sub sector**

According to figures provided by **AMFI**, the mutual fund sub sector provides huge scope for indirect employment through its distributor channel, R&T agents, franchisee and collection centres. Though a relatively new sub sector, already

30,000 individuals have been registered with AMFI to market the products. Further, with the growth of retail investors beyond the metro cities, the number of distributors and indirect employment will also increase. The association has introduced set guideline for engaging indirect employees, where distributors and commission agents are required to pass AMFI certification test prior to transacting business. **UTI** alone has 16,000 AMFI certified agents and 264 chief representatives in 56 branches (March 2005) across the country.

**Prudential ICICI** has outsourced most of its non-critical activities like payroll processing, etc., thus indicating that indirect employment will be on the rise over the next few years.

## **6.10 CHANGING TRENDS IN EMPLOYMENT SKILLS (Next Five Years)**

### **6.10.1 Banking sub sector**

In addition to experts in finance, **ICICI** is of the opinion that banks are on a look out for individuals with strong technical background. There is an increased demand for MCAs and commerce graduates with an aptitude for software development and Oracle certified professionals. Database administrators is another emerging area in the sector, however banks are looking for individuals who are flexible with job profiles, job preferences and technology. In addition to being technically sound, individuals are required to have good interpersonal skills as they have to interact with system analysts, end users and the management, during the course of their business assignments.

Besides requisite academic qualifications, **Saraswat** is giving greater emphasis on individuals having sound understanding of balance sheet analysis and scrutiny of stock and financial statements at the executive level. While at the senior levels, individuals are required to master soft skills like project management expertise, leadership, planning, etc. Last but not the least, good communication skills is a must as individuals are required to interact with people at different levels within the company and with the customers.

On the other hand, **SBI** is giving emphasis to personnel with marketing, technical and other specialised skills. Realising the omnipresent nature of technology in business, the bank is ensuring that in all future recruitments individuals possess requisite technology skills. In the area of retail banking, in addition to seeking customer service executives, the bank is laying greater emphasis to individuals with knowledge of database management and basic programming skills. Here again, individuals with experience in banking applications and skills in Oracle application are much sought after. While in the area of marketing, individuals with sound understand of strategies and concepts in product cross-selling are high in demand. With the bank focussing on rural

marketing it is seeking individuals who have agriculture background coupled with rural marketing skills.

### 6.10.2 Mutual Funds sector

According to **AMFI**, individuals seeking a career in the mutual fund sub sector are required to have a sound knowledge of the capital markets because mutual fund companies primarily invest in equity markets. Besides having requisite academic qualifications, some of the basic necessities that one requires is the ability to read and understand financial statements of companies, ability to use IT tools for tracking and projections, ability of decision making, sound understanding of industry/company performance trends, etc.

Most of the recruitment in **Prudential ICICI** is done through campus recruitments. So people with requisite knowledge are recruited and then skills are imparted through induction. As for fund managers, the company only doing lateral recruitments in this category, as it requires experienced people.

### 6.10.3 Assumed percentage point for employment skills

The employment skills that individuals are expected to possess to find gainful employment in the financial sector are given below along with their respective weightages (percentage points). These percentage points are purely based on our assumptions derived from interactions with individual interviewee during the course of the research activities. The percentage points should be read in the following manner – number of individuals expected to possess the said skill per 100 individuals entering the sector.

*Table: 6.10.3E*

*Weightage assigned to employable skills for individuals entering Financial Sector over the next five years*

<b>Employment skills</b>	<b>Percentage Points (per 100 individuals)</b>
Technical background	15
Computer literacy	100
Proficiency in IT	60
Interpersonal skills	100
Analytical skills	35
Management soft skills	20
Strong communication skills	100
Sales & marketing skills	40
Technology skills	20
Customer relations	35
Database management skill	5

## 6.11. DIRECT & INDIRECT EMPLOYMENT PROJECTIONS (Next five years)

### 6.11.1 DIRECT EMPLOYMENT FOR BANKING SUB SECTOR

In lieu of the research findings and statistics derived from the sub sector, we have made the following projections on direct employment in the banking sub sector.

From the figures made available by IBA on the total number of bank employees in India and using the share of Mumbai in all-India bank deposits, we have estimated figures for employment in Mumbai for the year 2000.

*Table 6.11.1 - A* gives us the employment figures for banking sub sector in India for the PSBs, private and foreign banks and all banks (excluding co-operative banks).

**Table: 6.11.1 - A**  
*Employment figures for banking sector in India*

	2000	2004	% change bet. 2000-2004
Total number of employees in PSBs	8,73,569	7,52,627	-13.84
Total number of employees in Private and Foreign banks	71,024	96,552	35.94
Total number of bank employees in India	9,44,593	8,49,179	-10.10

(Source: IBA)

*Table 6.11.1 - B* gives the percentage share of deposits of PSBs, private and foreign banks and all banks of Mumbai in all-India deposits. Here banks deposits include the percentage share of co-operative banks as well.

**Table: 6.11.1 - B**  
*Percentage share of Mumbai in all-India banks (deposits)*

Type	2000
Public Sector	10.5
Private Sector & foreign banks	30.4
All banks	14.1

(Source: Bombay First)

Based on tables 6.11.1-A and 6.11.1-B, we have estimated employment in PSBs, private banks and co-operative banks in Mumbai for the year 2000.

Given that Mumbai accounts for 10.5 per cent of all-India PSBs share in deposits, we have taken a conservative approach and assumed that the city accounts for 10.5 per cent of employment in India. Similarly, we have estimated employment figures for private and foreign banks. The differential between the total of these figures and all banks has given the employment figures for co-operative banks for the year 2000.

Based on the reasoning that SBI represents the PSBs and ICICI Bank represents the private banks and Saraswat Bank represents co-operative banks, we have made the following projections.

Using the estimated employment figures for 2000, and using the growth per cent of employment as given by SBI, ICICI bank and Saraswat bank, we have arrived at employment figures for 2005. The employment of these banks for year 2000 has been taken as the base figures to make the below calculations.

*Table: 6.11.1 - C  
Number of employees in Mumbai*

<i>Bank</i>	<i>2000</i>	<i>2005</i>	<i>% change (2000-2005)</i>
SBI	24,780	21,630	-12.7
ICICI Bank*	865	5037	230%
Saraswat Bank	1,730	1,600	-7.5%

*(\* explained in private banks paragraph given below)*

The percentage change in employment for the period 2000-2005 have been used for making projections for employment for the year 2010.

### **PSBs**

Due to VRS, conventional recruitment and halt in new recruitment, has arrested the growth of employment in PSBs at -12.7 per cent for the period 2000-2005. The trend is likely to continue due to mergers and consolidation. Given this trend, the employment figures projections for 2010 are estimated to grow at the same percentage (-12.7).

### **Private Banks**

Branch expansion, greater market penetration and increased retail focus has augmented employment in private banks. The employment growth rate of ICICI Bank at 230 per cent for the period 2000-2005 reflects the evolution of private sector.

*(\* This figure seems unrealistic in the context of all private sector banks. As per the RBI roadmap for foreign banks, there is a likelihood of a series of consolidations within the private sector as well. Keeping this in mind and taking industry opinions, the*

calculations for employment in the private banks have been scaled down to from 230 per cent to approximately 100 per cent. Now, assuming that growth of private sector banks would be at 100 per cent the projected employment in Mumbai for 2010 would be 1,42,500.

### Co-operative Banks

Saraswat Bank, the leading urban co-operative bank, witnessed a negative growth in employment during the period 2000-2005. This indicates that with more consolidations taking place in this sector, lesser scope for product innovations and a limit on branch expansion, this trend will continue. Based on this, projections for employment in co-operative banks were made at the rate of -7.5 per cent.

**Table: 6.11.1 - D**  
*Estimated employment in Mumbai's banking sector for 2010*

Type	2000	2005	2010
Public Sector Banks	91,725	80,067	69,351
Private Sector & Foreign	21,591	71,250	1,42,500*
Co-operative Banks	19,922	18,428	17,046
Total	1,33,238	1,69,745	2,28,897

As per the above calculations, the estimated direct employment for Mumbai for the year 2005 is 1,69,745 employees, while projections for 2010 is 2,28,897 employees. This indicates an increase of 35 per cent in total employment in the banking sector in Mumbai by 2010.

### 6.11.2 DIRECT EMPLOYMENT FOR FINANCIAL SECTOR

According to reports by RBI, the banking sub sector holds a 75 per cent share in the total financial assets of the economy. Assuming that employment pattern in the Financial Sector follows a similar pattern (Banking being the dominant sub sector), and using this percentage we have made projections for employment in the Financial Sector for the year 2010.

**Table: 6.11.2 A**  
*Projected employment for the financial sector in Mumbai*

Sector	2005	2010
Banking	1,69,745	2,28,897
Others	88,267	57,224
Total	2, 58,012	2,86,121

We have arrived to a conclusion that total employment in the Financial Sector would be 2, 86,121 in 2010.

### 6.11.3 INDIRECT EMPLOYMENT FOR BANKING SUB SECTOR

Based on a study done by Prof. Neeraj Hatekar and Prof. L Deshpande of Mumbai University for Bombay First on 'Employment in the Finance Sector' for 1995-98 and our understanding from observations given by industry authorities, we have estimated indirect employment in the financial sector for Mumbai for the year 2010.

*Table: 6.11.3 A*

*Estimated direct and indirect employment in financial sector in Mumbai (1995-97)*

<i>Year</i>	<i>Direct Employment</i>	<i>Indirect Employment</i>	<i>Ratio of Direct to Indirect</i>
1995	51268	42767	1.2:1
1996	82319	45093	1.8:1
1997	81866	49049	1.67:1

*(Source: Bombay First)*

From the above table, it can be inferred that the average ratio of direct to indirect employment for the period 1995-97 has been 1.6:1. Assuming that similar trend continues for the period 2005-2010, the projections for indirect employment for the financial sector in Mumbai.

*Table: 6.11.3 B*

*Estimates of direct and indirect employment in financial sector in Mumbai (2005 and 2010)*

<i>Year</i>	<i>Direct Employment</i>	<i>Indirect Employment (P)</i>
2005	2, 58,012	1,61,257
2010	2,86,121	1,78,826

*(P) projected*

### 6.11.4 PROJECTED EMPLOYMENT FOR FINANCIAL SECTOR

With calculations based on our research findings the projected direct employment in the city of Mumbai for 2010 will be 2,86,121 employees and indirect employment will be 1,78,826. This implies that the total employment generated by the financial sector in 2010 will be 4,64,947 employees.

*Table: 6.11.4*

*Projected direct and indirect employment for 2010 in the financial sector for Mumbai (in lakhs)*

<i>Year</i>	<i>Direct Employment</i>	<i>Indirect Employment</i>	<i>Total Employment</i>
2010	2.86	1.79	4.65

*(figures have been rounded off to the nearest decimal)*

## 6.12 RESEARCH FINDINGS

- With India is emerging as the “Back office to the world”, Mumbai has a greater potential to evolve as the “International Financial Centre”. The city is already blessed with the presence of premier financial business units, (relatively) low cost labour, English-proficient and educated workforce, high quality and low priced telecommunication infrastructure. These attributes work in favour of a robust Financial Sector, thus the city hold great potential for creation employment opportunities in the sector.
- Over the last decade, the Financial Sector has witnessed a gradual switch over from manual to mechanised system of working, forcing several public sector and co-operative financial business units to undertake massive re-skilling programmes for their existing employees. Competition has created a scenario of ‘Change or Perish’, whereby the slow movers are being forced to ‘adopt and adapt’ technology.
- Over the decade, the number of direct employment in the Financial Sector has reduced significantly due to VRS schemes offered by several public sector and cooperative units. The process of downsizing/right sizing is likely to continue, though at a lesser pace, over the next five years. While there has been a cut in direct employment, the sector witnessed a sharp rise in the figures of contractual employment.
- Most public sector and cooperative financial business units have terminated new recruitments at the middle and lower end of the management hierarchy. Recruitments of only specialised and highly skilled personnel are underway; here again the focus is for multi-skilled, technical and customer-services personnel.
- Public sector and cooperative financial business units are stressing on basic IT literacy amongst employees across the board, and have taken necessary steps to ensure the same. In the changing scenario, apart from the sector-specific orientation and requisite financial aptitude, future executives are required to have basic IT skills.
- Over the next five years, increased focus on strengthening retail businesses is expected to create a higher demand for ‘savvy frontline’, ‘efficient backend’ and ‘technically skilled’ personnel at every level.
- Maturing Financial Sector is expected to create high demand for IT professionals, CAs, CFAs, investment analyst, portfolio managers, agriculture officers, specialists in derivatives, futures, commodities... and other highly specialised professionals.
- Presently, financial sector is sourcing personnel from management colleges. Though most of these candidates have basic financial qualification, they seem

to be lacking requisite job skills. Resultant, the companies are forced to provide rigorous training and orientation in soft skill and on-the-job training.

- Presently, co-operative banks are governed by strong RBI guidelines, thus have to cater to certain procedures while undertaking network/product expansion. A greater degree of autonomy to co-operative banks for deciding products/business expansion could result into several new employment opportunities.
- Financial business units across the sector are unanimous that increased focus on small towns and retail investors will result into proportionate increase in employment opportunities in key sub sectors like: banking, mutual fund, insurance, equity market, commodities...
- By following private sector approach of outsourcing mundane business processes and product/service marketing to external agencies, the public and cooperative sector financial units could create several indirect employment opportunities. Sub sectors like banking, insurance and mutual funds, offers immense opportunities for indirect employment generation.
- Increased use of IT and networking of branch operations across the Financial Sector has created demand from not only IT personnel, but also for those skilled in areas like data warehousing, data mining, database architects, and other integrated backend operations.
- Financial business units are increasingly moving towards remote electronic transactions – introduction of ATMs, Smart Cards, Phone Banking, Internet Banking, etc. has necessitated re-skilling of employees in the area of technology, marketing and customer service, so as to help achieve the set business objectives and maximise profits.

### **6.13 RESEARCH RECOMMENDATIONS**

- The Indian financial sector is gradually moving onto higher technological platform leading to higher investment by companies so as to enable faceless product/service (financial) transactions. In the changing scenario, it is required that the future employers in the sector are trained extensively in customer-interface technology and IT.
- Future employees are expected to not only be strong in finance, but also have strong orientation in marketing and sales. Thus, in addition to imparting education in finance, educational institutions are required to attune themselves with the requirements of corporate sector and churn out market-savvy employees.

- Increased focus on small town and retail investors is likely to result into increase in employment at the district level. Hence, it is required that quality manpower - right aptitude and attitude, are available at local level.
- Presently, co-operative banks are governed by strict RBI guidelines, and they are limiting their expansion plans and introduction of retail products. It is required that RBI change its approach and provide level playing fields to the co-operative banks, it would enhance employment opportunities within the sector.
- Gradually, financial companies are moving towards 24x7x365 service mode (online and off-line) due to increased competition for efficient delivery channels. It is creating a new breed of tech-savvy and customer-friendly, which calls for paradigm shift in employee-orientation.
- Aggressive retailing by private and foreign financial institutions has resulted into sharp rise in contractual employment. Presently, institutions are outsourcing mundane business processes, and are recruiting only multi-skilled, technical and customer service personnel. Educational institutions are required to be sensitive to the industry needs and likewise tailor-make their courses.
- High cost of property and technological advances are influencing financial companies to move towards 'Relationship Banking' - ATMs, Smart Cards, Internet Banking, Phone Banking, etc. These areas are likely to witness high growth rates over the next decades provided there is availability of trained and skilled manpower. The existing courses are ill-equipped to cater to the emerging needs of the sector.
- The change in environment has necessitated recruitment of highly specialised manpower like: economists, investment planners, portfolio investors, treasury operations, agriculture officers, finance executives, etc. The courses presently offered by the educational institutions do not provide flexibility to diversify in various specialisations.
- In certain specific financial operations such as risk management, forex dealings, treasury operations, derivatives, securitisation, hedging, infrastructure lending, etc. the sector continue to face problems sourcing experienced and qualified personnel. In the absence of structured courses in these micro specialisations there is an acute shortage of trained manpower.
- Future employment growth in the sub sector would be fuelled largely by indirect employees, i.e. franchising and outsourcing. Larger the retail focus

adopted by the financial institution, greater would be the scope for indirect employment generation. This calls for creation of efficient and quality-driven outsourcing units at the backend.

\* \* \* \* \*

## EMPLOYMENT GENERATION IN THE CONSTRUCTION SECTOR

### 7.1 CONSTRUCTION SECTOR IN INDIA (Over the last decade)

#### 7.1.1 Sector overview

After agriculture, the construction sector is the second largest economic activity in the country and has been valued at Rs. 2,80,000 crore as on March 31, 2004. It contributes approximately five per cent to GDP, employing 320 lakh workers. In other words, construction constitutes for 40-50 per cent of the capital expenditure on projects in various sectors such as energy, transport, irrigation, social sector, communication, defence, and rural and urban infrastructure. The Government of India (GOI) in its 10<sup>th</sup> Five Year Plan (2002-07) has aimed to achieve eight per cent growth in GDP, and while doing so it plans to improve physical infrastructure facilities such as roads, ports, telecom and power. The recent annual budget laid emphasis on infrastructure facilities and likewise allocated resources for the same.

#### 7.1.2 Infrastructure construction sub sector

##### Macro Scenario

Under construction, the National Highway Development Project (NHDP) is already making an impact on the economy and lives of Indians. In addition to Rs. 1,72,000 crore investment plans in NHDP to cover the balance 5768 km., the Surface Transport Ministry has plans for approximately 10,000 km. of new expressways, and 2,500 km. of roads in North-East. It is also inviting tenders for the North-South and East-West corridors at an investment of Rs. 25,956 crore. Under the NHDP Phase - III, the government proposes to take up 10,000 km. road connectivity between state capitals and nearest national highways at a cost of Rs. 45,000 crore. The Prime Minister Gram Sadak Yojna slated to connect approximately 1,70,000 villages by a 3,69,000 km. of rural road will require an investment of Rs. 1,33,000 crore.

Of late, urban infrastructure development is gaining increased attention from the government. On the lines of the Delhi Metro Project, the government is contemplating similar rail projects in other metros namely Mumbai, Chennai, Bangalore and Hyderabad. In addition to upgrading the existing major ports, the government also plans to add new ports under the Rs. 50,000 crore "Sagarmala Project". The project would not only interlink the new and old ports, but will also connect the ports to the nearest National Highway. The Asian Development Bank and the World Bank has assured support for projects involving water supply and sanitation to the tune of \$200 crore over the next five years.

In the oil and natural gas sector, the last two-years have seen few companies discover huge gas reserves in Krishna-Godavari basin and Rajasthan. Now, considering the fact that petroleum transportation via pipeline cost 50 per cent less as compared to road transportation, large oil companies plan to build 1871 km. long domestic pipeline network, thus investing approximately Rs. 40,000 crore. Over the next four years, the country is likely to see four new terminals for importing LNG at Kochi, Dahej, Hazira and Kakinada. Recently, Indian Oil Corporation has announced a total investment of Rs. 25,000 crore, a bulk of which is set aside for refinery upgradation and modernisation. While the smaller PSUs - Bharat Petroleum and Hindustan Petroleum - are expected to make investments to the tune of Rs. 10,000 crore over the same period.

In the aviation sector, efforts are being made to restructure and modernise the Mumbai and Delhi Airports through the joint venture route with an estimated investment of Rs. 4,000 crore. Two new greenfield airport projects with an approximate investment of Rs. 1,300 crore is planned with private sector participation at Bangalore and Hyderabad. The Airport Authority of India (AAI) is considering development of ten non-metro airports namely - Ahmedabad, Amritsar, Goa, Guwahati, Lucknow, Madurai, Jaipur, Mangalore, Trivandrum and Udaipur, and has invited Indian Financial Consultants (IFC) and Global Technical Advisors (GTA) to conduct a study on the same.

In the power sector, the targeted generation by 2007 is 40,702 MW, of which 20,717 MW are to be installed by the central power utilities. Among them, the lion's share is going to be taken up National Thermal Power Corporation (NTPC) and National Hydropower Corporation (NHPC), while of the state's share of 13,974 MW, 1,865 MW have already been commissioned and another 5,993 MW is under execution.

*Table: 7.1.2  
Projected infrastructure spending for India  
(figures in Rs. crore)*

<i>Sectors</i>	<i>FY01-FY04</i>	<i>FY04-FY07</i>
Roads	33,000	63,000
Power	40,000	85,000
Oil & gas	38,000	66,000
Ports/Airports/Shipping	9,000	16,000
Railways	32,000	48,000
Telecom	66,000	73,000
Total	218,000	351,000

*(Source: The ET Knowledge Series)*

### **Industry Perspective**

Against this backdrop of bullish sentiments, **Gammon India** expresses the concern that companies are yet to meet emerging challenges like adopting best

international practices, expert project management, adoption of state-of-the-art equipment, better utilisation of material and resources, etc. so as to make the most of the opportunities. On the issue of growth of the sector, Gammon is of the opinion that the sub sector has grown by 35-40 per cent over the last five years.

However, **Shapoorji Pallonji & Co.** believes that growth has been around 25 per cent in the last two years. The company feels that the above growth has been largely on account of MNCs setting up shops in India, good economy, FDI, political stability, government policies changes in housing and construction.

**Hindustan Construction Co. Ltd. (HCC)** pegs the growth at an average of 10 per cent during the last four years. It expects high growth in infrastructure construction sub sectors over the next five years, as it feels that the infrastructure construction has seen many decades of neglect, and large investments would require to be made to get it back in shape.

Both **HCC and Shapoorji** shared the view that the last decade saw several policy initiatives in the area of infrastructure development by state and central governments, however the effect of liberalisation was visible only after the year 2000.

### **7.1.3 Housing Construction Sector**

#### **Macro Scenario**

The fiscal incentives introduced by the government three-years ago have unleashed market forces. A research conducted by CRIS-INFAC predicts the sub sector to grow at an average rate of 24 per cent between 2003-07. This is however against the high growth rate of 36 per cent achieved in 2000-01, 35 per cent in 2001-02 and 33 per cent in 2002-03. The present growth in real estate sub sector is largely influenced by developments in retail (e.g. malls and super stores), hospitality and entertainment industry (e.g. hotels, resorts, cinema theatres), basic infrastructure (e.g. hospitals, schools) and IT & IT-enabled services (e.g. call centres) to name some. The extent of the growth of the housing construction sub sector can be gauged from the fact that it grew from Rs. 12,000 crore in 1998-99 to Rs. 62,000 crore in 2002-03, an amazing jump of 416 per cent.

#### **Industry Perspective**

**HCC** claims that in metro cities several real estate companies registered double and triple growth rate in turnover during the last few years. It credits this growth to banks and financial institutions that made available easy and low interest loans to retail customers.

**The Maharashtra Chambers of Housing & Industry (MCHI)** also airs a similar view and claims that except for the slowdown that began in 1996-97 and lasted

till 2000, the housing sub sector has performed exceptionally well over the last decade. Currently, the association pegs the total shortage of housing units in the country at 320 lakh and forecasts that the sub sector needs to build approximately 2 lakh houses per year to bridge the widening gap.

**Evershine** and **RNA** blame the crash of stock market for the slump in housing sub sector between 1995-2000. They agree that since then the sub sector has grown phenomenally on account of the customer-friendly approach by banks and the government's decision to allow 100 per cent FDI. Evershine pegs the growth rate during the last 3-4 years at 40 per cent and claims that it has been largely due to change in customer profile - 'investor' to 'real user'.

## **7.2 CONSTRUCTION SECTOR IN MUMBAI (Over last decade)**

### **Macro Scenario**

#### **7.2.1 Infrastructure construction sub sector**

Recently, Maharashtra's Chief Minister, Vilasrao Deshmukh submitted an ambitious four-year, \$800 crore plans for modernising Mumbai, including new roads, slum clearance, underground subway system and massive public-housing project. Prime Minister Manmohan Singh has committed Federal Funds to cover 20 per cent of the plan. With population multiplying manifolds in the 437 square-kilometres Mumbai city, the land usage is a sensitive issue. This would require moving of millions of people from the slums to the outskirts of the city, thus making room for sidewalks, roads, and parks. According to McKinsey report, transforming Mumbai could cost the city upwards of \$ 4000 crore over the next decade. Informally, the World Bank has agreed to lend the city \$ 100 crore and guarantee public and private loans for its infrastructure programs.

Recently, a seven-member World Bank (WB) mission completed its seven-day visit to Mumbai after endorsing the Maharashtra government's aspirations to transform Mumbai into a world-class megapolis. The mission has asked for the inclusion of representatives of the Thane and Navi Mumbai municipal councils on the task force that will work out the business plan for the city.

*Table: 7.2.1*

#### ***Major infrastructure projects in Mumbai***

<i>Project</i>	<i>Investment (in Rs crore)</i>	<i>Completion Date</i>
Bandra-Worli Sea Bridge	Rs. 1,306 crore	2007
MUIP (road infrastructure)	Rs. 2,600 crore	2007
Versova-Andheri-Ghatkopar Light Rail Project	Rs. 1,500 crore	2009-10
Mumbai Trans Harbour Link	Rs. 4,000 crore	N.A.

*(Source: BAI)*

### **7.2.2 Housing construction sub sector**

The Newsweek April, 2005 issue states that 60 per cent of Mumbai's 150 lakh residents live in slums. The Chief Minister has set a target to remove more than 60 lakh people living in the shanties across the city over the next five years. Since December 2004, more than 73,000 shanties and illegal buildings have been demolished. Though the Chief Minister is faced with the challenge of finding new homes for 3.5 lakh dislocated slum dwellers, he has assured that 58,000 new, low-cost housing units were already available. The McKinsey & Co. report for 2003 has predicted that the city urgently needs to build at least 11 lakh affordable housing units in the next decade for slum dwellers and migrants who continue to pour into the city at the rate of some 400 families a day.

One of the prime reasons that fuelled growth of housing construction sub sector in Mumbai post-2002 was the Municipal Corporation of Greater Mumbai's decision to offer an additional 50 per cent FSI than consumed in cessed buildings. Another important factor that fuelled the spurt in housing construction was the government's decision to release textile mill lands in Parel, Lalbaug, Worli and Sewree areas for development. An added advantage was the increased conversion of properties once occupied by industrial/manufacturing companies into housing complexes in the Eastern suburbs.

The low growth period between 1995-2000 saw consolidation in the housing construction sub sector, but as competition increased due to entry of FDI the sector witnessed a paradigm shift as companies moved from 'unstructured' to 'professional' business approach. It has been observed that pre-1995, most of the builders operated through a small set-up, but as the competition increased several builders set-up their full-fledged offices and started recruiting specialists in areas like accounts, marketing, engineering, client servicing, etc.

## **7.3 EMPLOYMENT TRENDS IN INDIA (Over the last decade)**

### **Macro Scenario**

Construction being the second largest economic activity in India, any change in the level of construction activity has an affect on the GDP, general employment and income of the people. The National Commission Report states that over the last 45 years, construction sector has accounted for approximately 40 per cent of the total investment in the country, and approximately 16 per cent of the nation's working population depends on it for their livelihood. The report has ranked construction among the top four of the twenty economic sectors in terms of inter-sectoral linkages as it provides gainful employment to a large number of workers. However, much of the demand for labour in the construction sector is met by unskilled workers from rural areas who are subsequently trained for more demanding jobs.

A NICMAR report titled 'Employment Projections in Construction Sector' highlights the need for developing human resources to combat the current shortages in skilled and semi-skilled workers in the sector. In addition to requiring skilled labour, it states that the infrastructure construction sub sector requires a huge change of perspective with respect to technology adoption. Bulk of the employment in the construction sector came from the housing sub sector, which is estimated at 2,04,45,000 in 2004-05, as compared to infrastructure construction sub sector, which is estimated to employ 1,22,02,000 in 2004-05. This is to say that employment generated by the housing sub sector was much higher at 62.6 per cent in the year 2004-05, as compared to 37.4 per cent employment generated by the infrastructure construction sub sector.

**Table: 7.3.1**

*Estimated employment generation by the housing and infrastructure construction sectors (in '000 nos.)*

<i>Years</i>	<i>Housing</i>	<i>Infrastructure Construction</i>	<i>Total</i>	<i>Annual % increase in Employment</i>
1995-96	8580	6041	14621	-
1996-97	9380	6465	15845	8.38
1997-98	10273	6943	17216	8.65
1998-99	11273	7472	18745	8.88
1999-00	12392	8063	20455	9.12
2000-01	13650	8721	22371	9.37
2001-02	15065	9456	24521	9.61
2002-03	16660	10278	26938	9.86
2003-04	18445	11190	29635	10.01
2004-05	20445	12202	32647	10.16

*(Source: NICMAR)*

### **7.3.2 Infrastructure construction sub sector**

The employment generation in the infrastructure construction sub sector is estimated to have increased from 60,41,000 in 1995-96 to 1,22,02,000 in 2004-05, an increase of 102 per cent. The percentage growth of employment is estimated to have gradually risen from seven per cent in 1996-97 to nine per cent in 2004-05. The increase in employment over the 9-year period is estimated at 62.8 per cent for unskilled workers, whereas for skilled workers it is pegged at 229.2 per cent. The estimated high increase in employment for skilled workers is largely due to the fact that several companies invested heavily to gain the additional advantage from state-of-the-art technology.

Of the estimated 1,22,02,000 employed (i.e. 37.4 per cent) in the infrastructure construction sub sector during the year 2004-05, the skilled workers (excluding engineers, technicians and clerical staff) comprised of 30,52,000 (i.e. 25 per cent), while the unskilled workers were 71,89,000 (i.e. 58.9 per cent). At the higher end,

the composition of professional for the year 2004-05 looked like this: 9,36,000 engineers (i.e. 7.6 per cent), 4,90,000 high-end technicians (i.e. 4 per cent), and clerical staff totalled to 5,37,000 (i.e. 4.4 per cent).

**Table: 7.3.2**  
*Employment generation in infrastructure construction sector in India*  
(in '000 nos)

Years	Engineers	Other Technicians	Clerical	Skilled Workers	Unskilled Workers	Total	Annual % Increase
1995-96	284	149	265	927	4414	6041	-
1996-97	326	170	284	1064	4618	6465	7
1997-98	375	195	305	1219	4847	6942	7.3
1998-99	427	223	329	1394	5098	7473	7.6
1999-00	488	255	355	1592	5373	8062	7.8
2000-01	558	291	383	1815	5675	8721	8.1
2001-02	634	331	416	2068	6005	9456	8.4
2002-03	723	378	452	2356	6369	10279	8.7
2003-04	823	431	492	2683	6762	11191	8.8
2004-05	936	490	537	3052	7189	12202	9

(Source: NICMAR)

### 7.3.3 Housing Construction Sector

According to the NICMAR report, the housing construction sub sector though labour intensive, absorbed less skilled manpower as compared to infrastructure construction sub sector. The employment generated in the housing sub sector is estimated to have increased from 85,80,000 in 1995-96 to 2,04,45,000 in 2004-05, an increase of 138 per cent over the decade. Moreover, the annual growth of employment in the housing construction sub sector varies from 9.33 per cent in 1996-97 to 10.84 per cent in 2004-05.

**Table: 7.3.3**  
*Employment generation in housing sector by trades*  
(in '000 nos)

	Unskill	Mason	Carpenter	Plumber	Electrician	Others	Total	% Annual Change
1995-96	4670	2610	682	27	40	551	8580	-
1996-97	5106	2854	745	30	44	602	9380	9.33
1997-98	5592	3126	816	33	48	659	10273	9.52
1998-99	6136	3429	895	36	53	723	11273	9.72
1999-00	6745	3770	984	39	58	795	12392	9.93
2000-01	7430	4153	1084	43	64	876	13650	10.15
2001-02	8200	4583	1197	48	70	967	15065	10.37
2002-03	9068	5068	1323	53	78	1069	16660	10.59
2003-04	10040	5611	1465	58	86	1184	18445	10.71
2004-05	11128	6220	1624	65	96	1312	20445	10.84

(Source: NICMAR)

## **7.4. EMPLOYMENT TRENDS IN MUMBAI (Over the last decade)**

### ***Industry Perspective***

#### **7.4.1 Infrastructure construction sub sector**

**BAI** is of the opinion that the sub sector is witnessing a paradigm shift on the technology front as companies are gradually moving from 'manual' labour to 'mechanised' labour by engaging higher numbers of trained and skilled personnel in areas like crane operators, machine operators, engineers, etc. It asserts that mechanisation has come to stay in the infrastructure construction sub sector.

A similar opinion is aired by **HCC**, who claim that there is a spurt in demand for skilled people like engineers, project managers, materials managers, quality assurance managers, safety engineers, work engineers, quantity surveyors, contract managers, project administrators, etc. In the same tone, the company airs dissent for the manner in which the government has categorised labour - highly skilled, semi skilled, skilled and unskilled. Instead it appeals to the government that people be identified on the basis of their professional skills, i.e. plumbers, electricians, masons, and so on.

**Gammon** felt that earlier civil engineers were required to do only structural work, but today the sector demands engineers who have specialised qualification and experience in diverse areas like building dams, bridges, flyovers, roads, etc. Furthermore, the company highlights on the recent trend where engineers are also required to have sound finance background so as to do projections of cost and time overruns. In short, modern engineers are required to be multi-skilled in materials management, inventory, finance, civil engineering, etc. so as to ensure that projects are completed in time, and also save cost.

**Gammon** feels that the sub sector suffers from capacity constraints, lack of trained manpower and managerial skills and that there were islands of excellence in a sea of mediocrity. While highlighting that companies should aim at becoming global players it suggested that they modernise, provide for intensive training of manpower and change of mindset.

#### **7.4.2 Housing construction sub sector**

Considering the fact that after agriculture, construction is the only sector that has the largest employment **MCHI** opined that the government has given a step-motherly treatment to the sub sector. The very fact that 100-allied industries (big and small) depend on housing construction vindicates that the government should give more incentives to the sub sector. It is of the opinion that greater support from government could result into higher growth of the sub sector, which in turn could provide gainful direct and indirect employment to several in the country.

According to **RNA**, the industry slump during 1995-96 has had a significant impact on the companies as they are now recruiting only qualified and experienced personnel. It feels that the traditional jobs like accountants, marketing executives, administration executives, etc. although continue to play a vital role, it is the newer job profiles like billing engineers, quality surveyors, quantity engineers, etc. that are gaining greater prominence. Another visible development in the sub sector is that of companies preferring degree and diploma holders to conventional graduates, i.e. management diploma holders or MBAs in marketing, civil engineers as head of projects, etc. Companies are also seen to be giving greater emphasis to customer service, thus setting up full-fledged customer-care department that offer single-window clearance for paper work.

**Evershine** agrees that hiring of professionals by companies has resulted into an increased demand for qualified and experienced manpower. It states that earlier companies operated from a small set-up where an individual handled multiple portfolios, but today companies have bigger team with well-defined job profiles and departments. Over the next few years, it estimates a rise in demand for accountants, engineers, sales personnel, structural engineers, civil engineers, lawyers and marketing personnel.

## **7.5. INFLUENCE OF IT ON JOB PROFILES IN MUMBAI (Over the last decade)**

### ***Industry Perspective***

#### **7.5.1 Infrastructure construction sub sector**

According to **BAI**, the infrastructure construction sub sector not only requires highly paid IT-skilled manpower, but their requirement also increases with change in technology. In order to cope with the demand for IT-skilled manpower there is an urgent need to upgrade the IT-skills of the skilled manpower and the association feels that technological progress in the sub sector would offer faster growth of employment opportunities for skilled manpower.

**Gammon** has invested approximately 10 per cent of its turnover (i.e. Rs. 1,500 crore) in IT. The company has integrated all its operation across the country via VSAT. Individual offices are interconnected through LAN, and it has also implemented ERP and Autocad package.

Like Gammon, **HCC** is also an IT-enabled company, with employees being fully equipped with Internet and Intranet; while the company has in place state-of-the-art software such as Autocad, quantity estimation, Rebar software (material inventory management), etc. In the last five years, the company has invested 15-20 crore to upgrade its IT system.

**Shapoorji** is paying greater attention to IT upgradation and has so far integrated all its branches across the country. The company has introduced ERP module, which has facilitated integration of different departments.

#### **7.5.2 Housing construction sub sector**

So far, **Evershine** has not made any huge investment in IT; however it has plans for streamlining and customising its sales and marketing department.

**RNA** has basic IT infrastructure in place. The company computerised its business operations in areas like data entry and accounts, marketing and engineering in the last few years. It claims to have already achieved 60 per cent computerisation.

#### **7.6 SHIFT IN EMPLOYMENT DUE TO DOWN SIZING (Over the last decade)**

Both **Shapoorji** and **Gammon** share the opinion that the sector had faced some constraints as the industry witnessed an economic slowdown, but rule out the possibility of any major setbacks.

**HCC** believes that growth of the sub sector could have been much faster if the government had initiated policies to cut import duty on construction equipments and implement proper policies in the hydro sector. It feels that government has also failed to identify overseas projects. A similar grouse is aired by **MCHI**, who feel that the housing sub sector has encountered a setback due to astronomical municipal tax, lease and stamp duty.

**RNA** and **Evershine** agree that despite the sub sector witnessing a slump due to crash of stock market during 1995-2000, the business continued to grow at a steady pace. It rules out any serious impact of the slump phase on the employment front. Contrary to the general negative sentiments about the low growth during 1995-2000, **RNA** states that the silver lining of the low growth phase was that it saw several fly-by-night operators wind up business operations leaving only 60-80 serious players in the city.

#### **7.7 EMPLOYMENT REQUIREMENT IN MUMBAI (Next five years)**

##### ***Industry Perspective***

##### **7.7.1 Infrastructure construction sub sector**

**HCC** feels that with the initiation of new road, hydro and power projects, the future belongs to skilled labourers, as these projects would require high level of automation. The company is of the opinion that unskilled labour cannot be simply discarded as they have their own role to play in the sub sector. It however foresees a huge demand for highly specialised professionals like marine engineers, traffic engineers, etc. and not to forget those specialising in repairs and rehabilitation, as mega projects would require maintenance on a long-term basis.

An optimistic **Gammon** forecasts annual growth of the sector at 40-50 per cent over the next five years. It sees an immediate increase in long-term projects in areas like pipeline, road, power and infrastructure. However, it cautions that to meet the future high growth phase, companies are required to shift their focus from skilled to multi-skilled employees. It also highlights on the growing influence of IT on business performances and call for recruiting employees with IT background in diverse areas, including excavation, concreting, piling, etc.

**Shapoorji** feels that automation will play a key role in shaping the job profiles of future employees as the next five years would see a huge demand for machine operators, civil engineers, accountants, project managers, computer operators, etc. with strong technology background. The company is sceptical that institutes do not offer formal training in highly specialised areas like tunnelling or dam constructions and warns that the gap for specialised manpower will only widen in the near future.

#### **7.7.2 Real Estate construction sub sector**

**MCHI** feels that to meet the demand of the sub sector there is a need to develop human resources to combat shortages in skilled and unskilled workers. It suggests that the government should estimate the employment potential in the sector in terms of trades and by skilled, semi-skilled and unskilled worker for the next ten years. After doing so, the government should chalk out a plan to provide employment opportunities in the sub sector.

**BAI** projects the housing sub sector growth at the rate of 10 per cent over the next five years and it foresees the employment growth to be to the tune of 7-8 per cent during the same period.

Both **RNA** and **Evershine** agree that the housing sub sector provides a huge scope for marketing executives and civil engineers. Evershine feels that with the increase in competition, the sub sector would also require professionals like lawyers, structural engineers, architects, CAs, company secretaries to name some. It forecast the growth in employment for the next five years to be anywhere between 5-10 per cent.

### **7.8. AVAILABILITY OF TRAINED PERSONNEL IN MUMBAI (Next five years)**

#### ***Industry Perspective***

##### **7.8.1 Infrastructure Construction Sector**

Presently, **HCC** is sourcing skilled people by way of campus recruitment at management and engineering colleges. For HR functions and engineers, the company is seeking MBA and BE with management and civil engineering

background. But post-recruitment it ensures job orientation at its in-house training institute. For accounting purposes, it prefers B.Com graduates with diploma/degree in finance at the executive level and CAs at senior levels. For technical functions, it envisages a huge demand for machine operators. The company is also contemplating training the unskilled tradesman like plumbers, electricians, masons, carpenters, etc.

Though **Shapoorji** recruits trained personnel and specialists directly from the market, it ensures regular training and orientation in emerging skills by way of short courses organised by NICMAR and in-house programmes.

Another company that engages NICMAR for job orientation is **Gammon**. This ensures that new recruits adhere to systems and upgrade their skills. The company sources both skilled personnel – engineers, machine operators, crane operators, mechanical persons, etc. through campus recruitment, advertisements and recruitment agency. Nonetheless, it agrees that there is more demand for specialists and skilled personnel but the supply is scarce.

### **7.8.2 Real Estate construction sub sector**

**BAI** agrees that in general the housing sub sector doesn't offer any formal training to personnel and that most of the learning is done on-the-job. It admits that there are only few institutions like NICMAR and National Academy of Construction, which can be credited for doing commendable work in the area of training manpower. It stresses that only the large corporate houses like L&T, HCC, Gammon, etc. that part with in-house training programmes.

**MCHI** backs **BAI's** claim and feels that majority of the people in the construction sector are unskilled. It is only in areas like marketing, engineering, accounts, HR, legal, etc. where one finds skilled personnel; else the sector is purely dominated by untrained and unskilled personnel.

Due to lack of structured training procedures, **RNA** recruits technical personnel from reputed institutes and then places them under skilled employees so as to ensure on-the-job training. In case of areas like marketing and sales, it recruits individuals by way of campus recruitments and advertisements then trains them on issues like registration, stamp duty booking, payment, possession, sales services, legal issues, etc.

On the other hand, **Evershine** recruits people through advertisements, acquaintance and placement agencies. It feels that there is no dearth of semi-skilled graduates with diploma and MBA degree, but what the industry really lacks is quality people with background in law, marketing, engineering, etc.

## **7.9 TRENDS IN INDIRECT EMPLOYMENT (Over the next five years)**

### **Industry Perspective**

According to **HCC**, construction sector generates a lot of indirect employment through backward linkages in areas related to cement and steel industry, which are some of the prime raw materials for construction. Other related allied sectors where indirect employment is generated are aluminium, glass, plastic, etc. In case of **HCC**, it offloads almost 30 per cent of its work to contractors in the field of earthmoving, gravels, transportation, and logistics management.

Both **Gammon** and **Shapoorji** claim that construction sector is one of the largest employers of indirect employment. It attributes around 25-30 per cent towards indirect employment and most of it is created in areas like cement, steel, fabrication, transportation, logistics, etc.

**MCHI** feels that the indirect employment generated by the construction sector is enormous and that it would not be feasible to estimate the figures, as there are more than 100 allied industries that directly or indirectly depend on construction.

On the other hand, now that the sector is witnessing a boom, **RNA** contemplates a huge demand for indirect employment for those engaged in areas like tiling, plumbing, electrical, RCC, etc.

## **7.10 CHANGING TRENDS IN EMPLOYMENT SKILLS (Next five Years)**

### **Macro Scenario**

#### **7.10.1 Infrastructure construction sub sector**

The technological change in infrastructure construction sub sector may not decrease the wage bill, but will change the skill mix in favour of skilled manpower. The effect of technological change is shown in *Table 7.10.1 - A*. The ratio of skilled workers to unskilled workers was 27:73 in the year 1995-96, and it changed to 45:55 in the year 2004-05 in favour of skilled workers. The change in technology provided better employment opportunities to skilled labour force. In order to cope up with the demand for skilled manpower there is an urgent need to upgrade skills of the skilled manpower and impart requisite skills to the unskilled.

**Table: 7.10.1 - A**  
**Compositions of skill mix in infrastructure construction segment in India**

Years	Skilled Workers	Unskilled Worker
	%	%
1995-96	27	73
1996-97	29	71
1997-98	31	69
1998-99	33	67
1999-00	35	65
2000-01	37	63
2001-02	39	61
2002-03	41	59
2003-04	43	57
2004-05	45	55

(Source: NICMAR)

Following is the percentage distribution of workers by skills in Infrastructure construction sub sector in the year 1995-96 and 2004-05. The difference in the skill distribution between the years is seen due to the rapid technological progress made over the years.

**Table: 7.10.1 - B**  
**Skill distribution for infrastructure construction segment in India**

Skill Distribution	1995-96 (per cent)	2004-05 (per cent)
Engineers	4.71	8.47
Other Technicians	2.46	4.43
Clerical	4.40	4.40
Skilled Workers	15.35	27.62
Unskilled Workers	73.08	55.08

(Source: NICMAR)

### **7.10.2 Housing construction sub sector**

Housing construction sub sector is labour intensive and absorbs less skilled manpower compared to infrastructure construction sub sector. *Table 7.10.2* gives the distribution of manpower requirement by trades in housing construction sub sector. Not much technological progress has taken place using housing sub sector as the construction activity takes place with the traditional and low cost technology. The unskilled component in the sub sector is to the tune of 54.43 per cent and it is controlled by *mistris* and *jamadars* who also act as the bridge between unskilled labour seeking work and contractors who offer work. It has been found that workers in the housing construction sub sector are often rural migrants who were mostly landless labour.

In the skilled category, much of the employment is likely to be generated for masons, as they comprise of 30.42 per cent of the total labour. The next category

that is in demand is carpenters, who comprise of almost eight per cent of the total employment (refer table 7.10.2).

**Table: 7.10.2**  
**Composition of employees in housing segment in 2004-05**

<i>Categories</i>	<i>Percentage</i>
Unskilled	54.43
Mason	30.42
Carpenter	7.94
Plumber	0.32
Electrician	0.47
Others	6.42
Total	100

(Source: NICMAR)

### **Industry Perspective**

Over the last few years, Mumbai has been witnessing tremendous growth in construction activities, both in housing and infrastructure construction segment. Bulk of the construction projects have been executed by established industry players. These players have been investing heavily into technology to derive better economies of scale, which has resulted into a huge demand for skilled technical professionals like: civil engineers, project managers, materials managers, quality assurance managers, safety engineers, work engineers, quantity surveyors, contract managers, project administrators, machine operators, project managers, computer operators, etc.

Construction firms are looking for qualified and trained personnel to take on complete responsibility of planning and execution of construction project. Broadly, some of the important skills that constructions companies want their prospective employees to have are:

- Land and hydrographic surveying
- Building and quantity surveying
- Attend to all legal issues related to project/site
- Seeking requisite approval and clearances from government and administrative bodies
- Devising an overall design for proposed project
- Estimating the cost of construction
- Supervising feasibility study and site investigation
- Taking responsibility for accuracy of drawings and quantity of materials required for the project.
- Taking responsibility for actual construction work.
- Interpreting the architects design
- Surveying work progress
- Providing for procurement of construction equipment.
- Supervising the work schedule and conducting periodic checks.

These branches require knowledge of construction industry, construction management, civil engineering, construction and arbitration laws, tendering procedures and contractual agreements. And it involves interacting with insurance companies, government and various construction firms.

In the infrastructure construction segment, there is a huge demand for specialist to handle projects of highways, bridges, pipelines, irrigation, environment, and undertake the job on large civil projects.

In case of individual seeking employment in areas like: administration, marketing, sales, accounts and business development, they are expected to have the following prerequisite skills:

- Graduation/MBA
- Good communication and interpersonal skills
- Aptitude for marketing/sales/administration/accounts
- Leadership qualities
- Fluency in English, Hindi and local language.
- Basic computer literacy

### 7.10.3 Assumed percentage point for employment skills

The employment skills that individuals are expected to possess to find gainful employment in the Construction Sector are given below along with their respective weightages (percentage points). These percentage points are purely based on our assumptions derived from interactions with individual interviewees during the course of the research activities. The percentage points should be ready in the following manner – number of individuals expected to possess the said skill per 100 individuals entering the sector.

*Table:7.10.3*

*Weightage assigned to employable skills for individuals entering Construction Sector over the next five years*

<b>Employment skills</b>	<b>Percentage Points (per 100 individuals)</b>
Technical background	5
Basic Computer literacy	15
Proficiency in CAD/CAM	3
Interpersonal skills	60
Analytical skills	15
Management soft skills	5
Communication skills	100
Sales & marketing skills	25
Technology skills	5

Customer relations	35
Supervisory acumen	30
Legal know-how	3
Trade skills (mason, carpenter...)	80

## 7.11 EMPLOYMENT PROJECTIONS

### Macro Scenario

#### 7.11.1 Employment estimation for 2004-05

Cement is the most preferred building material in India, and there exist a direct co-relation between the demand for cement and growth of construction activities in the country. In India, cement is the real driver for infrastructure and housing construction sector.

According to CMIE Monthly Review June 2005, cement consumption in the country went up by 6.4 per cent from 113.8 million tonnes in 2003-04 to 121.1 million tonnes in 2004-05. According to Gujarat Ambuja Cements Annual report for 2003-04, Mumbai with presence of 15 brands was the largest cement-consuming center with an annual consumption of 4.5 million tonnes in 2003-04.

*Table: 7.11.1 - A  
Cement consumption 2003-04  
(in million tonnes)*

	2003-04	Share
India	113.8	100
Mumbai	4.5	3.95*

(\* estimated)

Table 11.1-A provides us with the estimated share of cement consumption in Mumbai (i.e. 3.95 per cent) vis-à-vis consumption of cement in India. Since cement consumption directly reflects the state of construction activities, we have assumed that the construction activities in Mumbai account for 3.95 per cent of that in the country.

Based on the above premise we have derived the employment figure for construction sector in Mumbai. Here we have assumed that employment in construction sector constitutes 3.95 per cent of the employment in India's construction sector. (Projections made by NICMAR for the housing and infrastructure construction sector in the country)

Furthermore, according to NICMAR, the employment in construction sector in India grew by 10.16 per cent in 2004-05. Though the city of Mumbai has a higher growth rate of construction activities vis-à-vis that of India, here we take a

conservative approach and assume that growth in employment for the year 2004-05 in Mumbai was 10.16 per cent, the same as that of India. Based on this assumption, we have calculated the employment in construction in Mumbai for the year 2004-05 (refer table 7.11.1-B).

**Table: 7.11.1 - B**  
**Employment projections for construction sectors in Mumbai 2003-04**  
*(in '000 nos.)*

<i>Employment</i>	<i>Housing</i>	<i>Infrastructure Construction</i>	<i>Total</i>
India (2003-04)	18445	11190	29635
Mumbai (2003-04)	728.5*	442*	1170.5*
Mumbai (2004-05)	802.5*	486.9*	1289.4*

(\* estimated)

Therefore the employment in housing construction sub sector in 2004-05 was 8,02,500 employees, and 4,86,900 employees for infrastructure sub sector, while the employment in the construction sector in Mumbai was 12,89,400 employees in 2004-05

## **7.11.2 EMPLOYMENT PROJECTION FOR 2009-10**

### **Industry Estimates**

- BAI estimated the growth of infrastructure construction sub sector at 10 per cent per annum over the next five years.
- Gammon India estimated the total growth of the infrastructure construction sub sector at 40-50 per cent over the next five years.
- Evershine projected the housing construction sub sector to grow at approximately 10 per cent over the next five years.

From the above observations, it can be derived that the construction sector, on the whole, would grow at 10 per cent per annum for the next five years or at a cumulative growth rate of approximately 55 per cent between the years 2004-05 and 2009-10. Based on the industry feedback, if we assume that employment in the sector would grow by approximately 55 per cent, the projected employment for the construction sector in Mumbai for the year 2009-10 is 19,98,400 employees, which is divided into 12,43,800 employees in the housing construction sub sector and 7,54,600 employees in the infrastructure construction sub sector (refer table 7.11.2).

*Table: 7.11.2*

*Total employment projections for construction sectors in Mumbai 2009-10  
(in '000)*

<i>Employment</i>	<i>Housing</i>	<i>Infrastructure Construction</i>	<i>Total</i>
Mumbai (2004-05)	802.5	486.9	1,289.4
Mumbai (2009-10)	1,243.8	754.6	1,998.4

As business units were not forthcoming in disclosing their turnover and employment figures, we have been unable to provide the break up of direct and indirect employment. Here the total employment projections made covers both direct and indirect employment in the construction sector in Mumbai.

### **7.11.3 PROJECTED EMPLOYMENT FOR CONSTRUCTION SECTOR**

As per the calculations based on our research findings the projected direct employment in the city of Mumbai for 2010 will be 19.98 lakh employees. As for projection of indirect employment, it has been seen that more than 100 allied industries directly depend on the sector for their survival and estimating and projecting the indirect employment figures for the same would be a complex task.

*Table:7.11.3*

*Projected direct and indirect employment for 2010 in the construction sector for Mumbai  
(in lakhs)*

<i>Year</i>	<i>Direct Employment</i>	<i>Indirect Employment</i>	<i>Total Employment</i>
2010	19.98	*	-

### **7.12. RESEARCH FINDINGS**

- Few years ago, most of the builders operated through a small set-up, but as the competition increased several builders have set-up full-fledged offices and have started recruiting specialists in areas like accounts, marketing, engineering, client servicing, etc. Bulk of the employment in the construction sector comes from the housing sub sector.
- A visible development in the construction sector is that companies prefer degree and diploma holders to conventional graduates – MBAs and engineers to head projects.
- Presently, most of the people in the construction sector are unskilled. It is only in areas like marketing, engineering, accounts, HR and legal that one finds skilled personnel.
- Most construction companies are yet to meet emerging challenges like adopting best business practices, expert project management, adoption of

state-of-the-art equipment, better utilisation of material and resources, etc. so as to make the most of the opportunities.

- Automation will play a key role in shaping future job profiles as there would be huge demand for those with technical and technology background - machine operators, CAD & CAM designers, computer operators...
- High cost over-runs due to high turnaround of construction/site worker require immediate attention. Industry players feel proper structuring of salaries could address the issue to a certain extent and also help motivate workers.
- Considering the fact that over 100-allied industries depend on the construction sector, there is a feeling that with greater support from government could provide gainful direct and indirect employment to many.
- Presently, the government classifies construction workers as highly skilled, semi skilled, skilled and unskilled. Instead, the sector feels that the government should identify individuals on the basis of their professional skills, i.e. plumbers, electricians, masons, and so on, as it would bring greater dignity and value to individuals involved.
- Due to an increase in construction activities in the city, the sector is witnessing a severe shortage of skilled personnel in all the areas of activities. There is a spurt in demand for skilled people like engineers, project managers, materials managers, quality assurance managers, safety engineers, work engineers, quantity surveyors, contract managers, project administrators, etc.
- Technology adoption is visible only with large infrastructure construction companies undertake turnkey projects. A large number of medium and small construction companies have made marginal or virtually no investment in IT and high-end technology. Bulk of investments in IT made by construction companies is aimed at organising the office administration, marketing and accounting activities.
- For better economies-of-scale and quality in construction activities, the sector foresees gradual shift from 'manual' to completely 'mechanised' operations. This in turn is likely to further reduce involvement of unskilled workers, and increase the demand for skilled and semi skilled manpower.
- The sector suffers due to lack of trained manpower with managerial skills. In order to compete with MNCs, it is required that local companies modernise their construction methods, undertake intensive training of manpower and bring about change of customer mindset.
- Undoubtedly, unskilled labourers will have a role to play in specific areas, however the need for highly specialised professionals like: marine engineers, traffic engineers, civil engineers, project managers, computer operations,

accountants, lawyers, structural engineers, architects, CAs and company secretaries, is likely to expand over the years.

- A handful of construction companies are sourcing skilled manpower through campus recruitment. Some have also gone a step further and have resorted to investing in training of semi-skilled and unskilled manpower.
- For decade, few institutions like NICMAR and National Academy of Construction have been doing commendable job in training manpower.
- With established players investing heavily into technology, it is anticipated that there would be a huge demand for skilled professionals like civil engineers, project managers, materials managers, quality assurance managers, safety engineers, work engineers, quantity surveyors, contract managers, project administrators, machine operators, project managers, etc.

#### **7.12. RESEARCH RECOMMENDATIONS**

- Companies are heavily investing into technology to cut construction time and manpower, and enhance quality and efficiency. In order to bridge the huge demand-supply gap of high-skilled trained professionals there is a need for dedicated specialised courses for effective usage technology and equipments.
- The traditional categorisation of labour into skilled, semi-skilled and unskilled have to be replaced by classification based on special skills i.e. masons, plumber, electricians... It would bring about great degree of credibility and acceptability for the trades. Certification will enable improvement of skill sets and wages.
- Launch of dedicated training centres catering to needs of the Construction Sector, which would not only make available conventional structural engineers, civil engineers, marketing personnel, but also produce professionals to perform unconventional role of materials manager, quality assurance, safety engineers, quantity surveyors...
- Indian institutes do not offer formal training in highly specialised areas like tunnelling, dam construction, marine engineering...it has resulted into the widening of gap for specialised manpower. It is recommended that institutes launch courses that offer specialisations and micro specialisations in the both infrastructure and housing construction sub sector.
- There is a huge shortage of skilled workforce in the construction sector. Formal training and orientation especially in trades like plumbing, electrician, mason, carpenters, etc. should be made more accessible and attractive for individuals to opt for it.

- Construction companies are gradually moving from 'manual' labour to 'mechanised' labour by engaging higher numbers of trained and skilled personnel in areas like crane operators, machine operators, engineers, etc, which calls for training of manpower in these areas.
- More than 100-allied industries (big and small) depend on housing construction vindicates that government should give more incentives to the sub sector. Appropriate support from government would result into higher growth of the sub sector, which in turn would provide several gainful direct and indirect employment in the country.
- Of late, construction companies are giving greater emphasis to customer service and IT, thereby setting up full-fledged customer-care department that offer single-window clearance for paper work. In the absence of trained customer-service personnel, the sector is forced to train requisite personnel on-the-job. Considering the fact the construction companies are getting increasingly marketing savvy, training institution are required to tailor-make courses to meet future manpower requirements.
- It is felt that growth of the sector could have been much faster if the government had initiated policies to cut import duty on construction equipments. There is also the feeling that the housing sub sector has encountered a setback due to astronomical municipal tax, lease and stamp duty.
- It is suggested that the government should estimate the employment potential in the sector in terms of trades and skills - skilled, semi-skilled and unskilled worker, for the next ten years. After doing so, the government should chalk out a plan to provide employment opportunities in the sector.
- There are only few institutions like NICMAR and National Academy of Construction, which are credited for doing commendable work in the area of manpower training. There is huge demand for training institutions like these that can help the sector bridge the huge gap between skilled and unskilled personnel.

\* \* \* \* \*

## CHAPTER- 8

### EMPLOYMENT GENERATION IN THE TRAVEL & TOURISM SECTOR

#### 8.1. TRAVEL & TOURISM SECTOR IN INDIA (Over the last decade)

##### Macro Scenario

With the sector growing at 10.1 per cent per annum, the World Travel and Tourism Council (WTTC) has predicted that in the near future India has every potential of becoming number one tourist destination in the world. The WTTC study shows that though the inbound traffic has remained static at 27 lakh arrivals, the outbound tourism in India has grown from 760 lakh to 1790 lakh in last 10 years. The Council is of the opinion that with the existing infrastructure, marginal investment in certain areas and rational management of business issues, the sector could achieve foreign exchange earnings upwards of \$ 1000 crore, thereby attracting over 100 lakh tourists by 2008.

In the year 2004, the foreign tourists arrivals in India registered an all-time high growth rate of 23.5 per cent as it crossed the magic figure of three million tourist arrivals (refer table 8.1). The foreign exchange earnings in 2004 showed a stimulating growth of 33.6 per cent, reflecting strong positive impact of the 'Incredible India' campaign undertaken by the government. The year 2004 saw the total capital investment in the tourism sector to the tune of Rs 48,530 crore or 7.2 per cent of total investment in the country and it is estimated that it would grow to Rs 1,66,390 crore by 2014 or 7.8 per cent of total investment in the country. At a seminar organised by CII recently, Mr. Amitabh Kant, Joint Secretary, Ministry of Tourism (GOI), projected the growth of Indian travel and tourism sector at 8.8 per cent per annum (in real terms) and estimated the sector to generate a business of Rs. 7,02,770 crore by 2014.

Another decision that is likely to have a dramatic impact on tourist arrivals is the government's decision to upgrade 28 regional airports in smaller towns by 2006.

**Table: 8.1**

*Tourist arrivals in India and foreign exchange earnings*

Years	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Tourist Arrivals (in lakhs)	21.23	22.87	23.74	23.58	24.81	26.49	25.37	23.84	27.26	33.67
% Change in Arrivals	12.6	7.7	3.8	-0.7	5.2	6.7	-4.2	-6.03	14.3	23.5
Forex Earnings (in Rs. crore)	8430	10046	10511	12150	12951	14238	14344	14195	16429	21828
% Change in Earnings	18.2	19.2	4.6	15.6	6.6	9.9	0.7	-1.04	20.1	33.6

(Source: Ministry of Tourism - GOI, World Tourism Statistics & RBI)

### ***Industry Perspective***

**The Department of Tourism** (GOI) reaffirmed that India has a great potential to turn into a major global tourism destination and highlighted the fact that over the last few years it had been second highest contributor of foreign exchange. It said the sector had helped maximise productivity of India's immense natural resources, human capital, technical and cultural resources, and that tourism being a labour intensive sector, it had created several job opportunities in the rural areas for women, youth and disabled persons.

**Orbit Tours & Travels** was of the opinion that the last decade had seen major change of perception towards tourism sector - from a 'foreign exchange earner' to 'supporting balance of payments and promoting international understanding' to 'being a means for creating jobs in the country'.

The 'Incredible India' campaign helped portray a positive image of India worldwide, which has resulted into a spurt in foreign tourist arrivals, feels **Garha Tours & Travels**. It claimed that post-9/11 disaster; the year 2004 was the best for the Indian tourism sector.

**Kesari Tours & Travels** has shown great faith in the country's immense untapped potential - diverse culture, festivals, history, deserts, palaces, coastline, beaches, mountains, religious places, tropical forest, etc. Though the sector had grown steadily over the last decade, the company is confident of an exponential growth over the next few years.

Highlighting that Travel & Tourism sector is one of the largest foreign exchange earners amongst industries across the world, **Kumar Travels** points out that the sector could generate millions of direct and indirect employment in the country. It stressed that in recent years, Travel & Tourism sector in India has seen a rise in generation of wealth and employment.

### **8.2 TRAVEL & TOURISM SECTOR IN MUMBAI (Over the last decade)**

Mumbai is the Gateway to India. The city's imposing Indo-Gothic edifices, a legacy of the British Raj, contemporary culture, theatre, cinema, music, literature, cuisine, fashion and sea are a big attraction for tourists. Moreover, Mumbai being the business capital of India, it attracts a large number of international business travellers. Mumbai is also the largest film and TV producing centre in the world. Despite the country having several international airports, Mumbai continues to offer far better international flight connections than all the airports put together. These are some of the facets that make Mumbai the most attractive tourist destination in the country.

Of late, Mumbai is also emerging as the medical tourism destination of the world as the city offers quick and cheap medical treatment to foreigners with post-operative recreational tours. For instance, Thomas Cook India offers package covering operation at a Mumbai hospital, post-operative sightseeing at South Indian temples or recuperation on the beaches at Goa. According to a research study, it has been found that heart surgery that costs 30,000 pounds in Britain is done for 6,000 pounds in Mumbai.

There is already a surge in the foreign tourist arrivals in Mumbai; last year Mumbai registered an all-time high growth of 21.19 per cent in tourist arrivals an increase from 8.13-lakh tourists in 2003 to 9.86 lakh tourist in 2004.

**Table: 8.2**  
**Tourist arrivals in Mumbai (1995-2004)**  
**(In lakhs)**

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Tourist Arrivals	6.15	6.66	6.95	6.89	7.07	7.57	7.69	7.49	8.13	9.86
Percentage Change	5.62	8.27	4.39	- 0.81	2.55	7.13	1.52	- 2.62	8.63	21.19

(Source: Ministry of Tourism, Govt. of India)

### 8.3 EMPLOYMENT TRENDS IN INDIA (Over the last decade)

#### Macro Scenario

According to the World Travel and Tourism figures, the travel and tourism sector in India generated Rs. 1,84,630 crore of economic activities (total demand) in 2004. This year the sector creation of 11,404,000 direct employment jobs, which constituted 2.6 per cent of the total employment in the country. Moreover, as the travel & tourism sector touches all sectors of the economy, its real impact on job creation is even greater. The Indian travel and tourism sector had generated employment for 245 lakh jobs in 2004, i.e. 5.6 per cent of total employment in India. It is forecasted that by the year 2010, the sector would generate 248 lakh jobs, accounting for 6.5 per cent of total employment in the country, and by 2014, this should total 27,790,000 jobs, i.e. 5.7 per cent of total employment in the country.

**Table: 8.3**  
**WTTC employment projection for India**  
**(in lakhs)**

	2004	2010	2014
Direct Employment	114	-	-
Total Employment	245	248	278

(Source: WTTC)

### Industry Perspective

A recent survey figures provided by the **Department of Tourism** (GOI) indicates that the rate of employment (direct and indirect) in tourism is 52 persons per Rs. 10 lakh of investment. The survey forecasts a spurt in the employment figures over the next few years, especially considering the fact that the country has moved beyond promoting monuments and the recent rise in the number of airline companies.

However, **Orbit Tours** puts the existing employment figures in the country at approximately two crore jobs as it creates 79 different types of direct and indirect employment opportunities. The company feels that though the sector provides highest employment opportunity as compared to any other sector, there is a dearth of trained, experienced and skilled personnel. Making matters worse is the huge exodus of trained personnel in recent years to highly rewarding industries like BPO (Call Centres) and airlines. It agrees that over the last decade there hasn't been any major change in the job profiles, but mentioned that employees across the board need to upgrade IT skills. It feels that in the near future, there will be a need for skilled personnel to take on specialised operations like customer service, online ticketing, marketing, etc.

Accepting the fact that technology has made an impact on employment patterns and job profiles, **Garha Tours** stressed on the trend where companies are trying to attain a 100 per cent paperless business operations. Thus, indicating the end of an era where individuals with SSC certificate and good communication skills could find employment in the sector. In addition to a degree in travel & tourism, companies are presently seeking candidates with good communication skills.

**Kesari Tours** also feels that the last decade hasn't seen major changes in employment patterns. They, however accept that there has been a dramatic change in customer service standards and business approach. It is primarily because companies are using advance technology and Internet to gain information and transact business. It cautions the traditional travel agencies that they are loosing their relevance and are required to train personnel so as to offer sophisticated travel advisory services to gain customer confidence and loyalty.

According to **Kumar Travels**, the last decade saw high infusion of Technology, and the sector witnessed introduction of online information and reservation booking verticals for airlines, rail, hotel and tours. Technology-driven business expansion saw several new jobs that were earlier non-existent.

**Lagu Travel Consultants Pvt. Ltd.** highlights that Travel & Tourism sector is probably the only sector, which offers employment opportunities to educated

and uneducated, skilled and unskilled individuals alike. It feels that the government needs to invest more on development of tourism circuits, preservation and maintenance of monuments, human resource development and IT to make more jobs available in the sector.

#### **8.4 EMPLOYMENT TRENDS IN MUMBAI (Over the last decade)**

##### ***Industry Perspective***

**The Department of Tourism** (GOI) believes that in recent years, there has been a metamorphosis in Mumbai's image - from being a global business destination to leisure tourism destination. With the government investing heavily into city's infrastructure and proactively organising festivals, tourism business in Mumbai is likely to see high growth figures. Already, there has been an appreciable rise in the number of star cruises in Mumbai.

Apart from being the centre of business tourism, **Garha** feels that the Mumbai's well-defined coastline and rich cultural heritage offers a huge potential for development of leisure tourism. It agrees that over the last few years, the city has seen a dramatic rise in number of companies dealing with outbound tours, which have created several new employment opportunities, but is of the opinion that the job profiles have remained more or less the same.

In order to capitalise on the rise in outbound tours, **Orbit** has reinforced its sales teams in the city. While doing so, it has ensured that they are more customer-friendly and reach customers instead of vice versa.

Taking a more holistic business approach, **Kesari** is looking for individuals who are capable of not only selling 'Holiday Concepts' but also accompanying the groups to the destinations. In addition to possessing requisite travel & tourism qualifications, the company is seeking individuals with friendly, pleasing and outgoing personality. In short, they want individuals who can make tours pleasant for their clients.

Since companies have to sell concept and accompany tourists to the destinations, **Kumar Travels** also feels that the industry requires personnel who are friendly, helpful, pleasing and outgoing personality. It stresses that those who have done a course of tourism would be very resourceful for the sector.

#### **8.5 INFLUENCE OF IT ON JOB PROFILES IN MUMBAI (Over the last decade)**

##### ***Industry Perspective***

Lauding the role of IT in business, **Department of Tourism** highlighted that customers could now book tickets and make inquiries online. The introduction of technology had not only created an opportunities for IT professional, but also created the need for companies to undertake technology orientation of their

existing customers service staff. It also suggested that companies should aim at 100 per cent integration of IT into business processes.

In order to survive in the technology savvy world, **Garha** has made a conscious decision to undertake 100 per cent computerisation of its services. The IT investments made over the last few years have started bearing fruits as the company has started conducting business online of late. The company feels that the introduction of IT has already created the need for IT professionals and in the near future, the inclusion of web marketing by companies would create a huge requirement for web technicians and web marketing professionals.

In order to keep up with the competition, **Orbit** has ensured that its investment in IT is continuous and sustained one. Presently, at the executive level, the company is recruiting personnel with sound tourism background and is providing on-the-job training on the use of information technology.

**Kesari** has invested more than Rs. 2 crore in IT over the last five years, so as to ensure total integration of its business processes. It is in the process of providing the requisite IT training to its employees.

**Kumar Travel** agrees that companies need to invest heavily into IT in order to face competition and provide best possible services to customers. The company has made significant investments in the area of employee training and IT training is one of the areas of priority.

## **8.6 SHIFT IN EMPLOYMENT DUE TO DOWN SIZING (Over the last decade)**

### ***Industry Perspective***

**The Department of Tourism** (GOI) reiterates that tourism is highly vulnerable to any socio-economic-political and environmental changes happening in the world. It accepts the fact that the sector suffered a serious setback due to 9/11 incidents, SARS and tsunami. Moreover, it highlighted that tourism in the country has always been affected due to the cold war between India and Pakistan. However, now that terrorism is under control and peace talks with Pakistan on track, it is optimistic that the golden days of Indian tourism will be back.

Post 9/11 and SARS, **Garha Tours** witnessed a temporary setback in business. During these two years, although the company decided to cut down on bonus and increments due to employees, it did not resort to retrenching of people. During height of recession, the company had resorted to 25 per cent cut in salary for four months, however once the business bounced back to normalcy it paid the employees its dues.

A similar feeling was aired by **Orbit Tours, Kesari Tours, Kumar Travels and Lagu Travel**, who accept that their businesses had experienced a temporary setback post 9/11 and SARS, but despite these hiccups they have had a smooth going. Neither of these companies had ever resorted to retrenching of people no matter what magnitude of difficulties they faced.

## **8.7 EMPLOYMENT REQUIREMENT IN MUMBAI (Next five years)**

### ***Industry Perspective***

With the entry of several new airlines, the **Department of Tourism (GOI)** foresees an extraordinary growth in the aviation sector over the next few years. This in turn is likely to create several new employment opportunities in the city. Considering the fact that the country is experiencing a spurt in medical and leisure tourism, the department feels that Mumbai - the Gateway to India - would also see a corresponding rise in employment in related areas.

According to **Garha Travels**, the tourism sector has a huge potential to emerge as a major source of revenue and employment generation in coming years, especially considering investments made by the government in city's infrastructure. The company projects that, in future, at least 2 out of every 10 people employed in Mumbai would be directly or indirectly working for the tourism sector. However, it cautions that the sector needs to stop the flow of its skilled personnel to call centres (BPOs) by giving them better job packages and remunerations. One area where the city is likely to see an immediate rise in employment is towards catering to the tourists arriving via cruise liners. The company agrees that there is a huge shortage of guides and escorts who can speak in foreign languages. Further, there exists a huge demand for drivers who could speak English. As the sector is forced to embrace technology to enhance customer service standards, it is likely to create a huge demand for IT professionals in the short term.

According to **Orbit Tours**, the changing lifestyle, higher disposable income, media publicity, rise in number of international airlines to the city and introduction of new domestic airlines, are some of the factors that will drive the growth of tourism in the city. The company estimates an average growth of 15 per cent over the next five years. The above favourable factors coupled by government's investment in infrastructure are likely to result into 100 per cent increase in the number of jobs over the next five years.

On the other hand, **Kesari Tours** feels that there is a huge scope of 'holiday consultants' who can sell holidays concepts and also plan itineraries, make travel arrangements and accompany tourists. It stressed that with people having little time, these consultants are expected to make all arrangements to ensure an enjoyable holiday.

Agreeing that increase in number of airlines would create several new jobs in the tourism sector, **Kumar Travels** is of the opinion that the sector should explore opportunities in leisure tourism, which in turn would create several new employment opportunities for specialists in adventure and hospitality related areas. The company feels that the future employees in the sector would require marketing skills, computer skills, knowledge of sites, good communication skills, etc.

Considering the increased world interest in tourism sites in India and government's encouragement to the sector, **Lagu Travels** forecasts a bright future for all those who choose to make a career in the travel and tourism sector. Pointing at the severe shortage of skilled labour in the sector, Lagu Travel foresees a huge scope for qualified professional in travel agencies, airlines and hotels.

#### **8.8 AVAILABILITY OF TRAINED PERSONNEL IN MUMBAI (Next five years)**

##### ***Industry Perspective***

**The Department of Tourism** (GOI) agrees to the fact that due to acute shortage of trained and qualified people, several companies are being forced to train individuals on-the-job. The department feels that in order to maintain international standards in customer care and service, the sector needs trained and skilled manpower.

**Garha Tours** airs a similar concern; it feels that getting skilled personnel is very difficult. The company ensures that it provides requisite training to new recruits, as it feels that most of the degree and diploma holders possess theoretical knowledge. Occasionally, it even sends the new recruits to government and private institutes for short-term courses, as it feels that to excel, individuals need to have practical experience, which can only be acquired through intense training.

**Orbit Tours** reiterates that there is a shortage of proficient staff, and that degree and diploma holders possess only theoretical knowledge. In order to fulfil its requirements, the company has started a travel & tourism school, which offers one-month full time courses to graduates in tourism. The company is ensuring that individuals attending these courses are given on-the-job training, thus ensuring that all practical requirements of the industry are met. Nevertheless, the company shares the feeling that getting skilled personnel and retaining them has become a serious problem for travel and tour operators.

**Kesari Tours** and **Kumar Travels** agree that students with travel & tourism diploma/degree have bookish knowledge, and this is precisely the reason why

they require grooming. The companies conduct regular in-house training courses and seminar for its employees.

According to **Lagu Travels**, some of the traits necessary for a successful career in the tourism are interpersonal skills, communication skills, marketing techniques, empathy, multi-lingual, computer literacy, etc. and these are achieved through training or experience. These skills are seen to be missing with the small companies as they lack in-housing training set-up, hence the large companies that have structured training programmes enjoy the edge.

## **8.9 TRENDS IN INDIRECT EMPLOYMENT (Next five years)**

### ***Industry Perspective***

In addition to hiring transporters and freelance guides from government tourist offices, **Garha Tours** also hires students from local travel and tourism institutions at the time of peak season. Especially, when foreign cruises and ships come to Mumbai, they heavily depend on external manpower to meet the seasonal rise in manpower requirement.

Both **Orbit Tours** and **Kesari Tours** are unanimous in their claim that the indirect employment generated by the tourism sector cannot be estimated as it touches every industry in some way or the other. For instance, restaurants and hotels, airlines, transporters, guides, media and publicity agencies, etc are influenced by the tourism sector. The **Department of Tourism (GOI)** also shared a similar opinion.

However, **Kesari Tours** and **Lagu Travels** are of the opinion that the increase in the flow of tourist would see a corresponding rise in employment opportunities in allied industries like hotels, restaurants, retailing, transportation, leisure, recreation and cultural, etc. Further, it foresees a growth in exclusive private agencies offering a variety of services like planning economical viable tours, coordinating transport services, reservations, sorting exchange problems, assisting tourists, etc.

## **8.10 EMPLOYMENT PROJECTIONS FOR MUMBAI**

Foreign tourist arrivals in Mumbai for the year 2004 were placed at 9.86 lakh tourist (refer table: 8.1), as compared to 33.67 lakh tourist arrivals for India (refer table 8.2), hence it can be concluded that the city enjoys 29.28 per cent share of the total foreign tourist arrivals in the country.

**Table: 8.10-A**  
**Tourist arrivals in India & Mumbai**  
**(in lakh)**

<b>Years</b>	<b>2004</b>	<b>% share of India</b>
Tourist Arrivals in India	33.67	-
Tourist Arrivals in Mumbai	9.86	29.28 %*

(\* estimated)

Taking a conservative approach, we have assumed that Mumbai's share of total tourist traffic in the country is the same as that of foreign tourist arrivals in the city, i.e. 29.28 per cent. This implies that travel & tourism sector in Mumbai constitutes 29.28 per cent of the total travel & tourism sector in the country.

According to the WTTC report, the direct employment and total employment in Indian travel & tourism sector is estimated at 114 lakh and 245 lakh for the year 2004. As the travel & tourism is a highly manpower intensive sector, there exists a direct correlation between the growth of tourists activities and employment numbers.

As we have stated that Mumbai forms 29.8 per cent of total travel & tourism sector in the country, we have assumed that the employment share of Mumbai is also 29.8 per cent as that of the country. Hence, from the projections made by WTTC on employment generation for India (refer table: 8.3), we have derived the direct and total employment figures for Mumbai in 2004.

**Table: 8.10-B**  
**Employment projection for India**  
**(in lakhs)**

<b>India</b>	<b>2004</b>
Direct employment In India	114
Direct employment In Mumbai	34*
Total employment in India	245
Total employment in Mumbai	73*

Source: WTTC (\* estimated)

From the above projections, it can be stated that total direct employment generated by the Mumbai-based travel & tourism sector in 2004 is approximately 34 lakh jobs. As we are drawing a direct correlation between businesses generated in Mumbai (i.e. foreign tourist arrivals) with employment generated,

we have to also factor the direct employment generated by Mumbai-based companies in Mumbai and other locations.

*Industry sources estimated the total percentage of direct employment generated by the travel and tourism sector in Mumbai is approximately 70 per cent, while the balance is stated to be scattered across the state.*

Therefore the total direct employment generated by travel & tourism sector in Mumbai is estimated at approximately 23.8 lakh jobs.

#### **8.10.1 Projections for Direct Employment 2005 & 2010**

For the period 2004-14, WTTC has forecasted an annual growth in employment at 1.3 per cent in travel & tourism sector in India. Assuming that a similar growth would be witnessed by the travel & tourism sector in Mumbai, we have made the following projections for direct employment

*Table: 8.10.1  
Direct employment projections for 2010  
(in lakh)*

Year	2004	2005	2006	2007	2008	2009	2010
Mumbai	23.8	24.1	24.4	24.7	25.1	25.4	25.7

Therefore the total direct employment in travel & tourism sector in Mumbai for the year 2005 is estimated at 24.1 lakh jobs, while in 2010 it is estimated at 25.7 lakh jobs.

*Note: Ghara Tours has also projected that, in future, at least 2 out of every 10 people employed in Mumbai would be directly or indirectly working for the travel & tourism sector.*

#### **8.10.2 Projections for Indirect Employment for 2010**

According to employment figure derived from WTTC estimates, the total employment generated by the travel & tourism sector in Mumbai is estimated at 73 lakh (refer table 8.10-B). If the total direct employment generated by Mumbai is estimated at 23.8 lakh, the indirect employment for travel & tourism sector in Mumbai for the year 2004 is pegged at 49.2 lakh jobs.

Assuming that the growth rate of indirectly employment is the same as growth of directly employment, i.e. 1.3 per cent p.a. over the next five years, we have made the following estimation.

*Table: 8.10.2*

*Indirect employment projections for 2010*

*(in lakh)*

<i>Year</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
Mumbai	49.2	49.8	50.5	51.1	51.8	52.5	53.2

Here, we need to realise that the indirect employment generated by travel & tourism sector in Mumbai may not necessarily confine within the city limits. This is to say that the travel and tourism sector in Mumbai can have employment implications in other parts of the country as well. For instance: A tourist buying a Kolhapur silverware or Paithani saree in Mumbai would generate indirect employment in Kolhapur and Paithan respectively.

On the basis of the above premise, we conclude that the direct employment generated by the travel & tourism sector in Mumbai is 25.7 lakh jobs, while the indirect employment is 53.2 lakh jobs in 2010.

### **8.10.3 PROJECTED EMPLOYMENT FOR TRAVEL & TOURISM SECTOR IN MUMBAI FOR 2010**

Based on the above calculations the projected direct employment for Mumbai in 2010 will be 25.7 lakh employees and indirect employment will be 53.2 lakh employees. This implies that the total employment generated by the travel & tourism sector in 2010 will be 78.9 lakh employees.

*Table: 8.10.3*

*Projected direct and indirect employment for 2010 in the travel& tourism sector for Mumbai*

*(in lakhs)*

<i>Year</i>	<i>Direct Employment</i>	<i>Indirect Employment</i>	<i>Total Employment</i>
2010	25.7	53.2	78.9

### **8.11 SKILL MIX**

Although Tourism offers employment opportunities to educated and uneducated, skilled and unskilled individual alike, the sector is witnessing a huge demand for individual with requisite travel & tourism qualification (degree/diploma). In addition to some of the other desirable qualification include interest in travelling, knowledge of major tourist destinations, hotels, customs and traditions, good inter-personal skills, strong communication skills, pleasing personality, sound marketing techniques, sound IT background, multi-lingual, good understanding of planning, time management, sensitivity to travellers need and enthusiasm. Last but not the least, patience and an ability to gain the confidence of clients are also useful qualities that would help an individual gain employment into this field.

If an individual is pursuing an executive level job, one needs to have a PG Diploma in Tourism/MTA/MBA, to have an edge over general graduates. MBAs are generally recruited for marketing. If an individual has a diploma or degree in Hotel Management, he can get a good job in the executive cadre.

Some of the departments which are likely to witness a huge growth over the next five years area:

- **Air transport:** The launch of several new airlines has resulted into hordes of jobs in this segment.
- **Road transport:** Mumbai – the gateway to India. Foreign tourists continue the journey to nearby tourist destinations by road, thus engage local road transport and guides.
- **Travel Agencies:** Mumbai enjoys the best air connectivity in the country, which is the reason why travel agencies in the city are more organised vis-à-vis any other city.

### 8.11.1 Percentage point for employment skills

The employment skills that individuals are expected to possess to find gainful employment in the Travel & Tourism Sector are given below along with their respective weightages (percentage points). These percentage points are purely based on our assumptions derived from interactions with individual interviewees during the course of the research activities. The percentage points should be ready in the following manner – number of individuals expected to possess the said skill per 100 individuals entering the sector.

*Table: 8.11.1*

*Weightage assigned to employable skills for individuals entering Travel & Tourism Sector over the next five years*

<b>Employment skills</b>	<b>Percentage Points (per 100 individuals)</b>
Pleasing personality	100
Proficiency in IT	60
Interpersonal skills	100
Analytical skills	35
Management soft skills	25
Strong communication skills	100
Sales & marketing skills	60
Technology skills	20
Customer relations	80
Database management	15
Fluency in English	100
Fluency in foreign language	15

## 8.12 RESEARCH FINDINGS

- According to industry projections, at least 2 out of every 10 people employed in the city would be directly or indirectly working for the tourism sector.
- Travel & tourism sector suffered a serious setback due to 9/11 incidents, SARS and tsunami. However, now that terrorism is under control and peace talks with Pakistan are on track, the sector is optimistic that the golden days of tourism will be back.
- State government's focus on tourism, improvement of city's infrastructure, rise in number of airline companies, promotion of leisure tourism and medical tourism, etc. are likely result into spurt in employment opportunities in Mumbai.
- Companies are no more looking for individuals with mere SSC certificate instead are seeking candidates with degree in travel & tourism. There is a huge demand for skilled personnel to can take on specialised operations like customer service, online ticketing, marketing, etc.
- The last decade has seen high infusion of technology in the sector, which has created several new jobs that were earlier non-existent.
- There is a huge scope for professionals who can sell holiday concepts, plan itineraries, make travel arrangements and accompany tourists, thus making holiday an enjoyable affair for the tourists.
- Companies are using advance technology and Internet to transact business; this has had a strong impact on the employment patterns and job profiles. The sector is witnessing a huge demand for skilled personnel in areas like customer service, online ticketing, web technicians, web marketing, IT, marketing, holiday consultants, guides, etc.
- There is a growing concern about the huge exodus of trained personnel in recent years to highly rewarding sectors like BPO and retailing, as they offered better job packages.
- Most of the degree and diploma holders are found to have theoretical knowledge, thus forcing companies to provide requisite on-the-job training to new recruits. Some companies have gone to the extent of sending the new recruits for short-term courses prior to assigning them with responsibilities.
- Some of the basic qualifications that companies are seeking in new recruits are: graduation degree, pleasing personality, strong communication skills interpersonal skills, marketing techniques, empathy, multi-lingual, computer literacy, etc.
- Tourism sector is highly vulnerable to any drastic social-economic-political development across the world (i.e. 9/11, SARS, tsunami, etc.), however these

developments in the past have had any significant impact on direct employment figures.

### **8.13 RESEARCH RECOMMENDATIONS**

- With the introduction of online information and reservation booking verticals for airlines, rail, hotel and tours, the sector have witnessed several new jobs in areas were earlier none existed. The government should not only encourage infusion of technology, but also create avenues for training personnel in state-of-the-art communication and Internet technology.
- Customer-relations being of paramount importance at every level of business transactions, individuals are expected to have pleasing personality, fluency in English and strong communication skills. In addition to training individuals on different specialisation, there is a strong need to focus on these basics.
- There is a need to invest more on development of tourism circuits, preservation and maintenance of monuments, as these would result into new business opportunities thereby leading into increase in employment.
- The 'Incredible India' campaign helped portray a positive image of India worldwide, which has resulted into a spurt in foreign tourist arrivals. Aggressive campaigning of medical, leisure and adventure tourism in Maharashtra could result into rise in employment opportunities within the sector.
- There is an acute shortage of trained and qualified people, and several companies are being forced to train individuals on-the-job. Now, in order to maintain international standards in customer care and service, the sector needs trained and skilled manpower.
- There is a need to overcome a huge shortage of drivers, guides and escorts who can speak in foreign languages. There is a need for creating awareness about learning foreign languages amongst those entering the sector, and likewise training institutes should be encourage to conduct dedicated courses in foreign languages and set up language labs.
- The entry of new airlines is likely to create several new employment opportunities in the city, capitalising on these opportunities training institutes are required to gear up to provide trained professional across all specialisations.

\* \* \* \* \*

**EMPLOYMENT GENERATION IN THE INFORMATION TECHNOLOGY SECTOR**

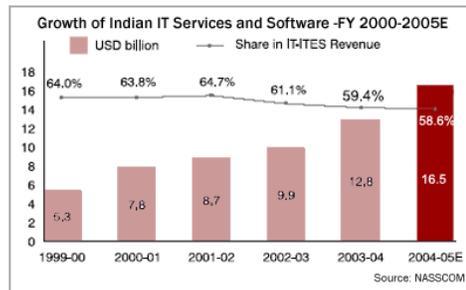
**9.1 IT SECTOR IN INDIA (Over last decade)**

**Macro Scenario**

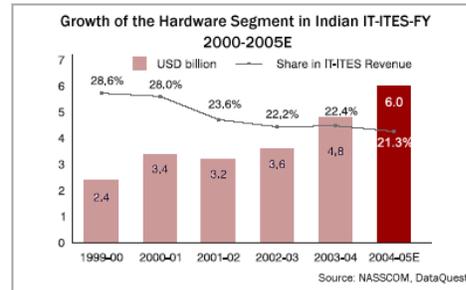
The Indian software and services sub sector grew at about 28 per cent in the last five years making it the highest performer within the Indian market. The domestic IT software and services sub sector recorded healthy growth of 26.1 per cent during 2003-04, with revenues of US\$360 crore. While the ERP market in India generated revenues of around US\$600 lakh in 2003-04, the domestic market for CRM applications during 2004 was estimated to be around US\$ 165 lakh in India.

The growth of the Indian IT hardware sub sector has traditionally lagged behind the software and services sub sector, especially because the hardware exports continued to remain low-key. The share of hardware sub sector in the overall revenues of the Indian IT/ITES industry has been witnessing a decline over the past few years on account of competitive pricing pressures and relatively faster growth in services segment revenues. Almost 90 per cent of the revenues generated by the hardware sub sector came in India from domestic market in 2003-04. Domestic demand for IT hardware sub sector grew from US\$ 330 crore in 2002-03 to US\$ 430 crore in 2003-04.

*Figure 9.1- A*



*Figure - 9.1 - B*



**Industry Perspective**

According to NASSCOM, the IT software services sub sector was on a high growth mode between 1995-2000. The sub sector has registered a double-digit growth, the aggregate revenue for 2004-05 was expected to touch US\$ 2800 crore, a fivefold growth from 1998 at a CAGR of 28 per cent. Although the IT software services registered high growth, NASSCOM highlighted that the IT hardware sub sector had not kept pace with it. The export earnings from IT/ITES were US\$

1330 crore (i.e. 61.9 per cent of the total industry revenue) in 2003-04, and were expected to touch US\$ 1790 crore (i.e. 63.7 per cent) in 2004-05.

Some of the key drivers business drivers, according to NASSCOM, were growing adoption of IT outsourcing and rapid expansion of ITES/BPO by Indian companies, growth in BFSI (Banking, Financial Services, Insurance), government and telecom segments.

**Tata Consultancy Services (TCS)** agrees that IT sector has seen a phenomenal growth over the last decade. In terms of business volumes, the sector has grown from Rs. 18,640 crore in 1997-98 to a staggering Rs. 1,27,580 crore in the year 2004-2005. The company highlights that the sector's contribution to the national economy has tripled from 1.2 per cent in 1997-98 to 3.5 per cent in 2003-04, and it was extremely positive on the revenue and employment, projecting a growth of 30 per cent revenue-wise over the next few years.

More than 250 of the Fortune 500 firms outsource their IT needs to India, highlights **Aptech**. Considering that IT is the fastest growing sector in the country, it claimed that the demand for IT training has witnessed an apparent rise in areas like programming, networking, databases, hardware, multimedia, animation, filmmaking, etc. With IT having to play an important role in virtually every sector, it claims that the awareness levels among students regarding IT is at an all-time high as more and more students were approaching training institutes to seek degrees in specific IT areas.

**Adventity**, a leading Mumbai-based BPO, draws attention to the gradual shift in the range of activities of BPOs, who are now evolving into KPOs (Knowledge Process Outsourcing). Elaborating on the scope of ITES/BPO services, the company stressed that the total revenues in 2003-04 were US\$ 390 crore, a growth of 45.3 per cent over the last year, while the sector touched US\$ 570 crore by the end of 2004-05, a rise of 44.4 per cent. Though exports accounted for almost 92 per cent of the revenues, financial services remained the largest user of Indian ITES/BPO services, followed by telecom, healthcare and airline segments.

Content with the growth prospects in BPO sub sector, **e-Funds** feels confident of India's potential of developing into BPO hub of the world. Explaining the relationship between the business growth and employment generation, the company explained that rising BPO business in the country would directly translate into a corresponding rise in jobs.

## 9.2 IT SECTOR IN MUMBAI

### Macro Scenario

According to NASSCOM, the IT-friendly policies announced by the Maharashtra government on issues related to tax incentives, infrastructure facilities and other sops have resulted into a scenario where one in five ITES/BPO companies registered in India has a presence either in Mumbai or Pune. Also, the availability of skilled and quality manpower has made Mumbai the most preferred destination for ITES/BPO companies. The association pegs the total number of people employed in the IT sector at 1.6 lakh in Maharashtra, in 2003, which is estimated to be approximately 20-35 per cent of the total people employed in the sector. It also lauded the significant growth of the Mumbai-Navi Mumbai-Thane cluster, which with 59 ITES/BPO companies accounts for 14-15 per cent of the total ITES/BPO companies in the country.

The IT-hardware sub sector being highly capital intensive, companies prefer setting up operation in places where special incentives are offered by the government. This is the reason why we find them concentrated in places like Pondicherry, Bangalore, Noida, etc. According to Manufacturers Association for Information Technology (MAIT), the hardware sub sector has not flourished in Mumbai, except for few pockets in SEEPZ, due to lack of incentives from the state government.

## 9.3. EMPLOYMENT TRENDS IN INDIA (Over the last decade)

### Macro Scenario

According to NASSCOM, the Indian IT software and services sub sector added 98,000 jobs, which the ITES/BPO sub sector added about 73,500 jobs during 2003-04. During the FY 2004-05, the IT sector (software + ITES/BPO) has witnessed a 24 per cent rise in employment, and the total employment in the IT sector was 10,45,000 as of March 2005 (refer Table 9.3). Over the last five years (i.e. 2000-2005), employment in the IT sector has grown at CAGR of 29.8 per cent and the sector had crossed the one million mark in the year 2005.

*Table: 9.3  
Employment in the IT sector for 2000-2005*

<i>Employment (in lakh nos)</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>
IT Software & Services	2.42	3.60	4.16	4.90	5.88	6.97
ITES-BPO	0.42	0.70	1.06	1.80	2.54	3.48
IT Sector (total)	2.84	4.30	5.22	6.70	8.42	10.45

*(Source: NASSCOM)*

Compared to the high growth witnessed in IT software & services sub sector, the growth of employment in the IT hardware sub sector has been slow, accepts MAIT. The association pegs the number of hardware engineers in the IT hardware manufacturing industries at approximately 1.25 to 1.5 lakh employees. Consider the country's huge population, low PC penetration and booming telecom sector, the association is optimistic of rise in employment opportunities in the IT hardware sub sector over the next few years.

***Industry Perspective***

According to **NASSCOM**, earlier IT services were restricted to engineering and software professionals only. However, the new ITES sub sector has opened avenues for not only English-speaking graduates, but also undergraduates.

On the quality of employment generated by the IT sector, **TCS** claims that IT sector was generating huge employment opportunities for the high-skilled workforce. The number of employees in the company has registered unparallel growth from 6000 employees in 1994-95 to 45000 employees in 2004-05, an increase of 650 per cent. During the said period, the revenue registered a jump of 1900 per cent, from US\$ 1120 lakh in 1995 to US\$ 22,400 lakh in 2005. The very fact that the growth in revenue has been three-times the growth of employment speaks of the high returns per employment in the sector.

**Table: 9.3-A**  
**Revenue and employment figure for TCS**

	1994-95	2004-05
Turnover (in US\$ lakhs)	1120	22,400
India Employment	6000	45000
Mumbai Employment	-	9646

(Source: TCS)

In 2005, the IT/ITES sector has been the biggest job generator creating 2.75 lakh jobs highlights **Aptech**. The company felt that India's cost advantage, quality assurance and huge pool of skilled manpower provided the sector with unparallel advantage vis-à-vis other countries. Backed by the huge growth potential of the sector and the rising demand for skilled manpower, the company foresees a huge demand for IT skilled people.

Being an IT education company, Aptech depends largely on its franchisee network for business growth. As on 31<sup>st</sup> March 2005, the company employed 500 personnel, and its franchisee network was to the tune of 3,206 across the world, and each of these franchisees employed an average of 5-6 personnel.

**Table: 9.3-B**  
**Revenue and employment figure for Aptech**

	<b>2004</b>
Turnover (in US\$ lakh)	1054.6
India Employment	500
Mumbai Employment	258

*(Source: Aptech)*

Elaborating on the paradigm shift in business approach, **Adventity** opined that from offering mere voice operations related call-centre activities, BPOs had got into area such as financial research and analysis, actuarial modelling, corporate and business research. It stressed that the broadening of service portfolio by service providers would create newer opportunities in segments and that there would be huge demand for trained and skilled personnel in the sector. Highlighting that customer care employed the largest number of people followed by content development, administration and finance, the company said that in 2003-04, the ITES/BPO sector added about 73,500 more jobs and another 94,500 jobs were added during 2004-05.

According to **e-Funds**, the BPO sub sector was providing huge job opportunities to fresh graduates and that the high pay packets offered by the companies had resulted into rise in the standard of living of several families. Further, explaining the requirements of the sub sector, it explained that major stress is laid on the 'communication' skills and that companies hiring new recruits are investing in these areas. Though, it agrees that many institutes have come up who provide training and other skills required for the sub sector and sheer range of services offered by the BPOs is posing several challenges to these institutes.

#### **9.5 SHIFT IN EMPLOYMENT DUE TO DOWN SIZING (Over the last decade)**

According to **NASSCOM**, the major setback that the sector faced was after the 9/11 incident, which saw confidence of the western countries at an all-time low? The slump in business during that period had a direct impact on IT exports and employment situation in the country.

Though **MAIT** shared a similar view, it felt that more than external factor, it was the lack of government support that was hindering the growth of IT Hardware sub sector. The sub sector was plagued due to issues like high customs duty on capital goods, high interest rates, non-friendly investor policy, poor infrastructure, etc.

As for **TCS** and **Aptech**, the companies claimed that they have not yet encountered any major set backs, nonetheless it did not rule out speed breakers.

The other two companies, **e-Funds** and **Adventity**, are relatively new entrants into the ITES/BPO sub sector. While e-Funds launched its business activities in 2000, Adventity came into operations in January 2004. During the short period of their existence, the two companies have claimed that the going had been smooth without any setbacks.

#### **9.6 EMPLOYMENT REQUIREMENT IN INDIA (Next five years)**

**NASSCOM** has projected that the Indian IT software and services market would grow to US\$ 5000 crore by 2009, recording a CAGR of 27 per cent. In view of this growth, it forecasted creation of 2,35,000 new jobs by March 2006, and to meet these requirement there is a need to create IT-skilled manpower with global competency levels. It doesn't foresee any immediate shortfall in skilled IT manpower, however it cautions that there is a need to address the issue like shortage of skilled faculty, industry-oriented training, enhancement of the developed quality of skills, synchronisation between technical education and industry requirements, rigidity of the existing curriculum system, etc. else the country may face a shortage of skilled manpower by 2009.

According to **MAIT**, the IT/Hardware sub sector would generate direct employment of approximately 12 lakh by 2010, and an equal amount of indirect employment opportunities, thus taking the total amount of direct and indirect employment to 24 lakh by 2010.

**TCS** believes that IT outsourcing job opportunities will continue to stay. The company is setting up an IT outsourcing service joint venture with Microsoft in China, and two software parks in the country.

**Aptech** also agrees that networking would be the most important application in IT over the next couple of years. Over the next five years, it not only foresees a shortfall for networking professionals, but also for multi-media professionals. Another area that is likely to witness promising growth is content development and E-learning.

Earlier the employment in the BPO sub sector was at the low-end and it required fluency in English language. However, **Adventity** feels that now when the sub sector is evolving, the requirements have also changed and even IIM and IIT graduates are today considering KPOs as an employment option. The company stresses that with the value of outsourcing work increasing there is an urgent need for competent manpower with skills meet to international standards.

### **9.7 AVAILABILITY OF TRAINED PERSONNEL IN MUMBAI (Next five years)**

Though recruitment is mostly done through market (ads, placement agencies, etc.), **NASSCOM** believes that there is a need for induction programme. For instance, in the BPO sub sector, individuals need to be groomed according to the company policies and requirements of the clients, while in the case of offshore work there is a need for in-depth training of the IT professionals.

**NASSCOM** opines that practically all the companies in the IT software services depend on employee referral scheme for recruiting trained personnel. In case of ITES/BPO sub sector, the companies visit colleges and management campuses for recruitments. A study undertaken by **NASSCOM** on 'recruitment cycles', it has found that on an average 37 per cent and 88 per cent were recruited through campus and lateral hiring process.

**MAIT** foresees the need for more engineers in the coming years to cater to growing need of the sector. With nearly 240 universities and over 1,000 engineering colleges, India has one of the largest pools of scientific and technological manpower in the world. As against the current rate of enrolment of 85,000 per year in graduate engineering courses, India would need nearly 1,00,000 engineers per year by 2010 in the core discipline of electronics alone. The government should therefore identify the manpower profile and create additional capacity in appropriate disciplines.

Conventionally, **TCS** hires fresh talent from engineering colleges and then polishes them through means of world class training programs in software and personality development. However, it agrees that of late there is a momentum gain in lateral entry in strategic positions, as for functional experts, the company is hiring them directly from core industries.

**Aptech** recruits faculty from professional institutes and it has stringent training programmes as well. It ensures e-induction programme for all its employees (direct and indirect) and the faculty is given training and ISO 9000 test online.

**Adventity** believes that with Financial Process Outsourcing (FPO) is witnessing explosive growth knowledge of high-end activities such as insurance underwriting, risk assessment and equity research, financial data mining and modelling, corporate and market research would be in great demand.

**e-Funds** is of the opinion that with the industry growing at an high pace, the need for job opportunities will increase. The changing trend will see many young people are joining the BPO bandwagon, which is a 24x7 organisation.

### **9.8. TRENDS IN INDIRECT EMPLOYMENT (Over the next five years)**

According to **NASSCOM**, the indirect employment in the IT-ITES sector is to the tune of 25 lakh as of 2004-05. According to **NASSCOM**, the growth in indirect employment would be approximately 2.5 lakh jobs every year until March 2008. The association claims that the indirect employment generated by the IT/ITES sector exists in virtually every industry - be it infrastructure, telecom, cyber cafes, etc. The association stressed that the scope for indirect employment generation via IT is immense. For instance, BPOs have groomed a new breed of youngsters (average age 24 years) who with disposable income of Rs. 10,000 per month are fuelling the growth of the entertainment and retail segment, thus generating indirect employment in these sectors.

According to **MAIT**, the indirect employment in the hardware sub sector has more to do with contract manufacturing, which involves assemblers and those engaged with components and peripheral manufacturers. Another set of indirect employment in the IT-Hardware sub sector comprises of a pool of maintenance and service industry people. **MAIT** estimates the indirect employment in the IT-Hardware sub sector at approximately 2.5-3 times of the total direct employment.

The indirect employment generated by **TCS** is largely in the form of support staff in areas like catering, housekeeping, etc. Here, it expects the growth in proportion to the increase in the employee base of the firm.

### **9.9 CHANGING TRENDS IN EMPLOYMENT SKILLS (Next five years)**

The skills requirements in the IT/ITES sub sector are very diverse and it changes from business to business. According to **NASSCOM**, the following factors would drive skill requirements in the sector in near future:

- Digitisation of the media
- Proliferation and expansion of broadband
- Rapid adoption of new converged devices
- Consolidation of industry players
- Enterprise level innovation focused on mainstream business applications that emphasis on ease-to-use computing.

According to **MAIT**, networking, data integration, data warehousing and business intelligence (BI) applications are expected to drive the job profile in the hardware segment. Availability of appropriate skills in areas like RF design and VLSI design is crucial for realising opportunities in the hardware segment. Design opportunities include product, PCB, ASIC, Field Programmable Gate Arrays (FPGA), controller boards and peripherals, and these opportunities means scaling up of engineers working in these areas.

At the operational level, a large pool of skilled technicians is required to be trained to meet individual needs. While engineers with training in areas such as wireless communications and microelectronics are in great demand. Some of the other skills that are likely to meet with great demand are conceptualisation of tailor-made products.

According to **TCS**, 62 per cent of Indian technical workforce has more than four years of experience and over 70 per cent has an engineering degree. This ensures the availability of skilled personnel in the software services sub sector.

For marketing professional, **Aptech** recommends that they be familiar with their products, i.e. software/services and possess effective communications skills. In case of others, it opines that individuals are required to possess knowledge of .NET technologies, ASP technologies, SAP and ERP. In all likelihood there would be a huge demand for these professionals.

The BPO sub sector requires completely different set of skills, which is the reason why the companies train new recruits in voice modulation, English grammar, speaking skills, listening skills, phraseology, rate of speech, etc. Companies are providing this basic training so as to achieve global competency standards in client servicing.

#### **9.9.1 Assumed percentage point for employment skills**

The employment skills that individuals are expected to possess to find gainful employment in the IT Sector are given below along with their respective weightages (percentage points). These percentage points are purely based on our assumptions derived from interactions with individual interviewee during the course of the research activities. The percentage points should be ready in the following manner – number of individuals expected to possess the said skill per 100 individuals entering the sector.

*Table: 9.9.1*

*Weightage assigned to employable skills for individuals entering IT Sector over the next five years*

<b>Employment skills</b>	<b>Percentage Points (per 100 individuals)</b>
Proficiency in IT	100
Interpersonal skills	80
Analytical skills	100
Management soft skills	40
Strong communication skills	65
Sales & marketing skills	45
Technical skills	80

Customer relations	60
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## 9.10 DIRECT & INDIRECT EMPLOYMENT PROJECTIONS (Next five years)

### 9.10.1 Direct Employment Projection in IT Sector for 2010

NASSCOM pegs the total number of people employed in the IT sector in Maharashtra at 1.6 lakh in 2003, which is approximately 25 per cent of the total people employed in the sector in India.

As per the data provided by NASSCOM (refer table 9.3), the growth of employment in the IT sector in India has been 29.7 per in the year 2004, while the growth in the year 2005, has been slightly less at 24.1 per cent. The state of Maharashtra is amongst the top three states in the country along with Andhra Pradesh and Karnataka, where the industry and employment growth is much higher as compared to that of the country. Taking a conservative approach, we assumed that employment growth in IT sector in Maharashtra for the year 2004 and 2005 have been the same as that of the country. Based on this premise, we have arrived at employment figures for Maharashtra, which has been estimated at 2.1 lakh individuals for 2004 and 2.6 lakh individuals for 2005.

*Table: 9.10.1-A*

*Total employment in the IT sector in Maharashtra for 2004-2005*

<i>Employment (in lakh nos)</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>% growth 2004</i>	<i>% growth 2005</i>
IT Sector (India)	6.7	8.4	10.5	29.7	24.1
IT Sector (Maharashtra)	1.6	2.1*	2.6*	29.7*	24.1*

(\* estimated and interpreted based on NASSCOM data)

According to NASSCOM, IT companies in the Mumbai-Navi Mumbai-Thane region contribute to as much as 70 per cent of the IT business in the state, while the balance is chipped in by Pune and Nagpur region. Considering the fact that practically all major IT companies have a base in Mumbai and that the city has been extensively involved in IT exports and services, it has been assumed that 70 per cent of Maharashtra's employment is engaged in Mumbai. Based on this premise, we have projected the present employment in Mumbai. (Refer table 9.10-B).

*Table: 9.10.1-B*

*Total direct employment in the IT sector in Mumbai for 2004-2005*

<i>Employment (in 'lakh nos)</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>
IT Sector (Maharashtra)	1.6	2.1	2.6
IT Sector	1.1*	1.5*	1.8*

(Mumbai)			
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(\* estimated and interpreted based on NASSCOM data)

From the above projection, we can conclude that the present total direct employment in the IT sector in Mumbai is 1.8 lakh individuals and that it has grown at an approximately 24-29 per cent over the last two years.

Between 2000-05 employment in the IT sector in India grew at a CAGR of 29.8 per cent, according to NASSCOM. Due to factors like increased IT literacy and penetration levels, high growth in IT exports, growth-friendly policies, rise in new value-added service, and emergence of India as the IT back-office to the world, the future growth in IT employment is expected to be much higher as compared to the previous five years. In the absence of any concrete employment growth projections in the IT sector for the next five years, we have pegged the employment growth rate in India and Mumbai at approximately the same as that experienced between 2000-05, i.e. CAGR 29.8 per cent. Based on the projected growth rate, we have estimated the employment growth over the next five years.

**Table: 9.10.1-C**

*Estimated direct employment in the IT sector in Mumbai for 2010*

<i>Employment (in lakh nos)</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
IT Sector (Mumbai)	1.8	2.3	3.0	3.9	5.1	6.6

*(based on NASSCOM data)*

Projected direct employment in the IT Sector in Mumbai for the year 2010 is 6.6 lakh individuals.

### **9.10.2 Indirect Employment Projection in IT Sector for 2010**

NASSCOM has projected the indirect employment in the IT sector in India at 25 lakh for 2004-05, and it has also projected that indirect employment would see the creation of approximately 2.5 lakh jobs every year, until March 2008. For projections of indirect employment for 2010, we have assumed that the growth of employment for the year 2009 & 2010 would be the same as that estimated by NASSCOM for the year 2005-08, i.e. creation of 2.5 lakh jobs every year.

**Table: 9.10.2**

*Projected indirect employment for India 2005-10*

*(fig. in lakh)*

	<i>2004-05</i>	<i>2005-06</i>	<i>2006-07</i>	<i>2007-08</i>	<i>2008-09</i>	<i>2009-10</i>
India	25	27.5	30	32.5	35	37.5

*(based on NASSCOM data)*

Projected indirect employment in the IT sector in India for the year 2010 is 37.5 million individuals.

In 2005, the estimated direct employment in Mumbai was 1.8 lakh, vis-à-vis 10.5 lakh in the country, thus the percentage share of direct employment in Mumbai is 17.14 per cent of India. Similarly, if we assume the percentage share of indirect employment in Mumbai vis-à-vis India to be the same (i.e. 17.14 per cent), the total indirect employment in Mumbai works out 6.42 lakh jobs in 2010.

### 9.10.3 PROJECTED EMPLOYMENT FOR IT SECTOR

Based on the above calculations the projected direct employment in Mumbai for 2010 will be 6.6 lakh employees and indirect employment will be 6.42 lakh. This implies that the total employment generated by the IT sector in 2010 will be 13.02 lakh employees.

*Table 9.10.3*

*Projected direct and indirect employment for 2010 in the IT sector for Mumbai (in lakhs)*

<i>Year</i>	<i>Direct Employment</i>	<i>Indirect Employment</i>	<i>Total Employment</i>
2010	6.6	6.42	13.02

### 9.11 RESEARCH FINDINGS

- The IT-hardware sub sector being highly capital intensive, companies prefer setting up operation in places where special incentives are offered. The hardware sub sector has not flourished in Mumbai, due to lack of incentives from the state government.
- From offering mere voice operations related call centres, BPOs have got into areas such as financial research and analysis, actuarial modelling, corporate and business research. The broadening of service portfolio would create newer opportunities in segments, thereby creating a huge demand for trained and skilled personnel.
- The BPO segment is providing huge job opportunities for fresh graduates and is offering high pay packets, which has resulted into a rise in the standard of living of several families.
- Several institutes have ventured into providing training and other skills required by the BPO segment, however the sheer range of services offered by the Indian BPO companies are posing several challenges to these institutions.
- Need to enhance the industry-academia linkages through interactive platforms such as workshops/summits/programs/focused research, etc., so as to ensure that relevant IT skills are provided to the new breed of job seekers.

- A strong consensus stating that students of IT be exposed to projects as early as possible - preferably from the first and second year of college education, so as to ensure sound application knowledge.
- Need for strengthening India's professional education system in line with the requirements of the IT industry. Standardisation of curricula for IT services and ITES/BPO at the undergraduate and post-graduate level.
- Scope for 'Centres of Excellence' that combine research and consultancy with academics, on the lines of IITs. Strengthen IT infrastructure in the city and develop support services such as logistics, transportation and basic infrastructure.
- Augment training infrastructure, thereby including area like identification of manpower and creation additional capacity in appropriate disciplines at college level.
- Benchmarking computer education with world-class standards, i.e. ensuring a globally relevant curriculum in all technical/computer institutes.
- Improve telecom and other basic infrastructure at par with global standards, so as to enable companies in the city to offer 24x7 services to countries across the world.
- Over the next five years, the sector is likely to foresee a shortfall for networking multi-media, content development and E-learning professionals.

In the ITES segment, the following sub sector holds great potential for manpower requirements:

- High-value customer care services, HR outsourcing, transcription services, high-end research and analytic based services...
- Financial Process Outsourcing (FPO) in high-end areas such as insurance underwriting, risk assessment and equity research, financial data mining and modelling, corporate and market research.
- KPOs in areas like healthcare - pharmaceuticals and biotechnology; legal support - intellectual property research; design and development - automotive and aerospace industries; animation and graphics - entertainment sector...

#### **9.12 RESEARCH RECOMMENDATIONS**

- It is estimated that Indian would need nearly 1,00,000 engineers per years by 2010 in the core discipline of electronics alone. The government should therefore identify the manpower profile and create additional capacities in appropriate disciplines.

- Continuation of the IT-friendly policies, which have resulted into a scenario where one in five ITES/BPO companies registered in India have a presence either in Mumbai or Pune.
- The IT-hardware sub sector being highly capital intensive, companies have recommended special incentives from the state government to enable them set-up manufacturing units. The hardware sub sector has not flourished in Mumbai, except for few pockets in SEEPZ, due to lack of incentives from the government.
- India's cost advantage, quality assurance and huge pool of skilled manpower provided the sector with unparalleled advantage vis-à-vis other countries. the company foresees a huge demand for IT skilled people, and training institutes should be encourage to provide quality manpower.
- There is a need to address the issues like: shortage of skilled faculty, industry-oriented training, enhancement skills, synchronisation between technical education and industry requirements, rigidity of the curriculum system, etc. else the country may face a shortage of skilled manpower in the near future.
- ITES sub sector has created several employment avenues for English-speaking graduates and foreign language specialist, there is a need to encourage training institutes to offering special orientation to discerning candidates so as to fit the requirement of the sub sector.
- BPOs are expanding their specialisation beyond financial research and analysis, actuarial modelling, corporate and business research, there is a need to for training institutes to cater to these emerging opportunities. The sheer range of services offered by the BPOs is likely posing several challenges to the institutes.
- In order to address the future human resource needs of the sector there is a need to address issues like shortage of skilled faculty, industry-oriented training, synchronisation between technical education and industry requirements...

\* \* \* \* \*

## EMPLOYMENT GENERATION IN THE TELECOM SECTOR

**10.1 TELECOM SECTOR IN INDIA (Over last decade)****Macro Scenario**

For the first time in the history of India's telecom sector, subscriber base crossed the 10,000-lakh mark in the month of April 2005. Tele-density in April 2005 improved to 9.26 per cent from 9.08 per cent in March 2005. During April 2005, 203 lakh subscribers were added as against 105 lakh subscribers in March 2005. In the fixed segment, a total of 59 lakh subscribers were added during April 2005, taking the subscriber base of fixed line services to 4650 lakh. In the mobile segment, total additions during the months summed up to 144 lakh out of which 109 lakh subscribers were added in the GSM segment and the remaining 35 lakh were added in the CDMA segment.

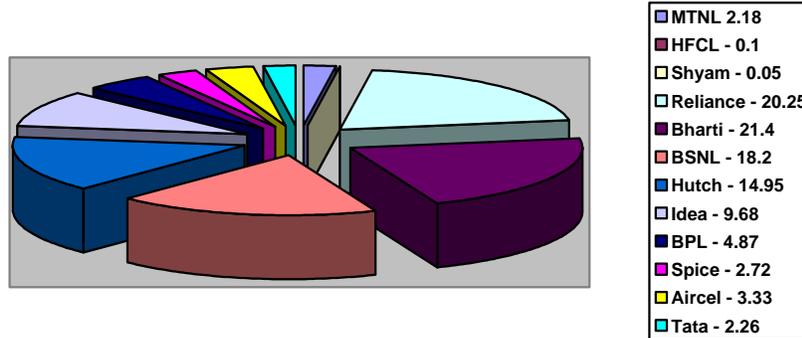
*Table: 10.1- A  
Telecom statistics for India  
(in lakhs)*

	<i>Feb '05</i>	<i>Mar '05</i>	<i>Apr '05</i>
Total Subscribers	970.3	980.8	1101.5
Tele-density (per cent)	9.0	9.08	9.26
Fixed Line	4554	4590	4650
Mobile	5149	5217	5365

*(Source: TRAI)*

Recently, cellular operators including Airtel, Hutch and Idea Cellular, dropped roaming charges from Rs. 3 per minute to Rs. 1.99 a minute. The reduction in roaming rates is likely to expand the roaming community in the country, and also help the country realise its vision of 20,000 lakh mobile subscribers by 2007. Mobile telephone subscriber base has witnessed a healthy growth of 144 lakh in April 2005. The segment subscriber base grew 2.88 per cent mom to 536.5 lakh.

Figure: 10.1  
Market share of mobile subscribers April 2005



(Source: COAI, AUTSPI)

Table: 10.1 - B  
GSM subscribers in India (March '05)

Group Company	GSM subscribers as of March '05	CDMA subscribers as of March 2005	FWT subscribers as of March 2005	Fixed Wire Line subscribers as of March 2005
Bharti	10,984,280	-	25,794	830,766
BSNL	9,407,025	-	-	-
Hutch	7,797,720	-	-	-
IDEA	5,069,693	-	-	-
BPL	2,575,387	-	-	-
Spice	1,438,824	-	-	-
Aircel	1,755,350	-	-	-
Reliance	1,115,965	9,330,088	1,236,912	73,887
MTNL	881,696	196,447	-	-
Tata	-	1,089,500	2,199,317	379,411
HFCL	-	53,163	53,8456	139,687
Shyam	-	27,663	106,306	50,767
Total	41,025,940	10,696,861	41,86,785	1,474,518

(Source: COAI)

### Outlook

April 2005 was a historic month for the Indian telecom industry as the total subscriber base crossed the 10,000-lakh mark. This was a great achievement for the industry and country. However, India has a long way to go in order to achieve its target of 25,000-lakh subscriber base by 2007.

As the future growth is likely to come from the rural sector, small towns and cities, major players are expected to focus on the rural areas. They are likely to

provide more value added service at affordable rates to retain customers, and focus on increasing their post-paid subscriber base.

### **Industry Perspective**

**BSNL** agrees that the telecom sector has witnessed an unprecedented growth over the last five years, during which period rapid growth was seen in areas like: mobile telephony, radio-paging, value-added services, Internet and global mobile communication via satellite services. It credits the government's proactive regulatory and policy initiatives for world-class telecommunications infrastructure in the country.

BSNL has plans to increase its mobile subscriber base to 2.5 crore by October 2005. It is planning to introduce new technologies on the wireless front to enable broadband services through the wireless medium. The company has also sought additional spectrum for introduction of 3G services and plans to bring about convergence of services using 3G platform. In Maharashtra, it plans to cover the balance 20-25 per cent of rural villages that are not presently networked. BSNL has made plans to spend Rs 75,000 crore in the next three years to expand its mobile, basic and broadband operations across the country.

**MTNL** also agrees that the Telecom sector in India is passing through an extraordinary growth phase. Further, elaborating on the strategic role played by the two public sector operators, who continue to hold 57 per cent of the market share, MTNL stressed that they will pose a strong challenge to private players. Looking back at growth over the last decade, it stressed that while private sector concentrated on the cellular mobile phone segment, the public sector units pushed growth in fixed line segment. Resultant, both cellular and fixed line phones have shown an equally impressive growth rate during the said period.

Over the decade, MTNL has managed to achieve an appreciable rise in customer base i.e. from 10-lakh lines in 1995 to 25-lakh lines in 2005. It claimed to have an edge over other private telecom companies in the country because of its technical expertise and infrastructure.

Quoting a study undertaken by Gartner, MTNL estimates the cellular connections to touch 13,000 lakh by 2008. It claims that the growth would be mainly driven by removal of regulatory hurdles, and adoption of a unified telecom license scheme offering full mobility and reduction in price of cellular services and handsets.

According to **Tata Teleservices (Maharashtra) Ltd.**, telecommunications is one of the prime support services needed for rapid growth and modernisation of various sectors. It credits the sector for achieving 1200 lakh mobile connection,

clocking highest CAGR of over 100 per cent during the period 1995-2001. It opined that, today, mobile services cover nearly 2000 towns, and numerous highways and railway routes, thereby enhancing country's low teledensity.

In the year 2003-04, Tata launched CDMA mobile and fixed wireless services first in rest of Maharashtra, immediately followed by launch in Mumbai. In the first year, the company acquired 1,50,000 mobile subscribers and 60,000 subscribers for its fixed wireless service, reaching a total of 2,32,100 subscribers in 2003, which later grew by more than 100 per cent to touch total of 4,85,000 subscribers in 2004.

The company opines that mobile phones would equal fixed lines by 2010, and the present growth would result into numbers touching 10,000-lakh mark in another 4-5 years. It opines that teledensity would increase to 20 per 100 by 2010, and claims that additional 4700-lakh new landlines would be added in the coming years.

## 10.2 TELECOM SECTOR IN MUMBAI

### Macro Scenario

Direct exchange lines have grown at the compound rate of 15 per cent in Delhi and 13 per cent in Mumbai over the period 1989-90 to 1997-98. Mumbai's direct exchange lines account for almost 40 per cent of the direct exchange lines for all four metros.

*Table: 10.2 - A*  
*Direct exchange lines of the four metros*  
(Figures in '000)

<i>Year</i>	<i>Kolkata</i>	<i>Chennai</i>	<i>Delhi</i>	<i>Mumbai</i>
1989-90	249	161	459	652
1990-91	259	174	521	699
1991-92	274	186	605	791
1992-93	301	208	689	898
1993-94	335	239	814	1036
1994-95	380	282	967	1241
1995-96	446	342	1167	1441
1996-97	521	422	1370	1642
1997-98	672	503	1551	1856
1998-99	853	625	1642	2012

(Source: Bombay First)

MTNL, the lifeline of Mumbai, has recently expanded the capacity of its fixed line services by another 4 lakh lines. MTNL Mumbai has a total of 183 exchanges that

cover a population of 1400 lakh people, by way of its 32,37,520 working lines covering an area of 956 square km.

**Table - 10.2 - B**  
**Cellular subscribers (GSM) in Mumbai as on 31<sup>st</sup> July 2005**

<i>Service provider</i>	<i>No. of subscribers</i>
BPL Mobile	1265817
Hutchinson	1555392
MTNL	621992
Airtel	813381
Total	4256582

(Source: India-Cellular.com)

There are a total of six cellular providers in the city of Mumbai. While the above four are GSM service providers, Reliance Infocomm and Tata Indicom are CDMA linked cellular service providers.

### **10.3 EMPLOYMENT TRENDS IN INDIA (Over the last decade)**

#### **Industry Perspective**

As per information provided by BSNL on the World Bank estimates for India, the employment in telecom sector grew at 33 per cent since 1994. It is the highest growth registered in the country as compared to other sectors in the service industry. From a career point of view, BSNL opines that the sector would continue to offer in numerous direct and indirect employment opportunities, now that the sector maturing. It feels that with new networks and businesses being rolled out in regions that are not presently catered to, the employment opportunities would see exponential growth in the coming months/years. BSNL has stopped recruitment of Group D staff since 1988. Presently, most of the recruitments were for telecom officers (Group B) and technical officers.

**Table: 10.3**  
**Employment status in BSNL**

<i>Category</i>	<i>2000</i>	<i>2005</i>
Group A	343	376
Group B	2987	4496
Group C	24,966	23,449
Group D	5,570	2,743
Total	33,866	31,063

(Source: BSNL)

MTNL agrees that the sector has seen a rise in demand for telecom engineers and technically qualified people over the past few years. Speaking of the high growth of the telecom sector in recent years on account of aggressive liberalisation policies of the government, it agreed that with private telecom companies are expanding business operations and the employment opportunities have seen a sharp rise. Further, it said that educational institution take a cue of existing and

future demand for telecom professionals, and initiated tailor-made courses in tele-communications management.

As per instructions from DoT, since 1985, all recruitment at MTNL in the Group C and D category have been stopped. Since 1996, the recruitments were mainly limited to technical categories, i.e. telecommunications, electrical and electronic engineers. Last year, the company recruited only 25 people in the JTO category; the present strength of Group C and D were 25,000, while Group A and B have around 3,000 officers. Presently, MTNL is only recruiting JTOs in telecommunication, electrical and electronic categories.

According to **Tata**, the sector is witnessing a paradigm shift as service providers are offering customers with user-friendly hi-tech services (broadband, digital and wireless connectivity), which in turn has created several opportunities on the customer service, marketing and technical side. It agrees that there has been a surge in demand for qualified telecom engineers, as companies are heavily investing in their infrastructure. It claims that the demand for telecom professionals over the next five years will increase by 10 per cent in case of direct employment and 15 per cent for indirect employment. In addition, it claimed that there are several opportunities in networking, telecom protocols, wireless protocols, hardware and equipment.

**Tata Teleservices** has a strong workforce of 6,000. The company has been recruiting skilled people at the level technical officer, sales/marketing executives, network operations, etc. The company highlights that more than direct employment, the sector offers a large amount of indirect employment opportunities.

#### **10.4 SHIFT IN EMPLOYMENT DUE TO DOWN SIZING (Over the last decade)**

In keeping with the planned restructuring programme, last year, **MTNL** offered 1,487 people VRS benefits. Presently, except for strategic and specialised technical staff, the company has stopped all recruitments. Internally, it is witnessing redeployment and retraining as the company moved from 'crossbar exchanges' to 'digital and wireless systems', which require highly specialised technical professionals.

#### **10.5 EMPLOYMENT REQUIREMENT IN MUMBAI (Next five years)**

Quoting TRAI estimates, **BSNL** elaborated that India has seen an increase in the number of operational telephone line at a CAGR of 23.44 per cent between 2004 and 2020. Some interesting facts highlighted by **BSNL** is that cellular network would cover 3,50,000 villages by 2006. Further, the emergence of broadband segment due to entry of private players is likely to create innumerable job

opportunities in urban and rural India. It claimed that in future, bulk of employment opportunities in the sector would be in the interiors of country. As the telecom sector is growing at a rapid pace, it is likely to create openings in practically all business areas – sales, marketing, customer care, technical, etc.

Presently, **MTNL** is giving greater focus on providing value added services to existing customers, ensuring higher customer satisfaction. The company is going through a process of restructuring to keep pace with changes in the field of technology and competition. It aims at becoming a global player in the field of telecommunication by providing state-of-the-art services like E-commerce, Global Roaming, High Speed Mobile Internet Services, Internet Exchange Connectivity Services, Video-on-Demand, Wireless ATM Service, etc. with emphasis on 'Communication, Anytime, Anywhere'.

**Tata Indicom** has estimated a revenue growth of 500 per cent by 2010. As per the revenue projections the company opines that bulk of those employed would be specialist in the field of customer-oriented services and systems processes by 2010.

#### **10.6 AVAILABILITY OF TRAINED PERSONNEL IN MUMBAI (Over next five years)**

**BSNL** has continued with its tried and test tradition of recruitment through a written test. After the selection of candidates via written test, they are made to undergo an 18-week rigorous training programme whereby they are provided training in the domain of individual specialisation. During the course of the training, the company lays emphasis not so much on technical skills but on inculcating required soft skills.

Recruitment process though similar to that of **BSNL**, **MTNL** puts the new recruits through a rigorous 34-week classroom training, which is immediately followed by a 4-week on-the-job training. In addition, to the orientation training, the company also undertakes refresher courses regularly for its existing staff. In an effort to bring about technology orientation across the board, the company has given training in computers to approximately 90 per cent of the clerical staff.

**Tata Indicom** does most of the recruitment for fresh candidates from colleges. The company has always given considerable importance to employee development, technical orientation, behavioural and customer sensitivity training. Last year, the company spent 4-5 crore on training programmes.

#### **10.7 TRENDS IN INDIRECT EMPLOYMENT (Over next five years)**

**BSNL** claims that the indirect employment generated by telecom sector is huge and complex as it extends in several spheres like: marketing, services,

hardware, maintenance, etc. For decades now, the company has played a major role in provide indirect employment via local and STD PCOs. As of March 2005, the company had over 1,89,634 local PCOs and 89,596 PCOs across the country. In addition, it has approximately 54 authorised franchisees who in turn have an average of 10 sub-franchisees each.

In addition to creating several direct employment opportunities, **TTSL** claims to have created more than 20,000 indirect jobs through outsourcing. It provides indirect employment opportunities to retailers, vendors, call centres, DSAs and collection centres. Tata Teleservices has estimated indirect employment to touch approximately 6,000 employees by 2010 at its customer service centres across the country. It also claims that a large number of indirect employments would be generated with service providers like couriers, banks, collection agents, etc.

### **10.8 CHANGING TRENDS IN EMPLOYMENT SKILLS (Over next five years)**

According to **BSNL**, in the changing scenario, the employees in addition to having requisite technical and vocational skills they work in a demanding and fast-paced environment. Further, they are expected to deliver on multiple responsibilities, because companies are being pressured to cut down on overheads. Functionally, professionals in the sector are required to have a strong customer focus and be bottom line driven.

According to **Tata Indicom**, over the next few years, most of the recruitment will be on the technical side and customer service. Here, the emphasis would be on software development skills, soft skills, communication skills, knowledge of interactive technology, etc.

#### **10.8.1 Assumed percentage point for employment skills**

The employment skills that individuals are expected to possess to find gainful employment in the Telecom Sector are given below along with their respective weightages (percentage points). These percentage points are purely based on our assumptions derived from interactions with individual interviewee during the course of the research activities. The percentage points should be ready in the following manner – number of individuals expected to possess the said skill per 100 individuals entering the sector.

*Table: 10.8.1*

*Weightage assigned to employable skills for individuals entering Telecom Sector over the next five years*

<b>Employment skills</b>	<b>Percentage Points (per 100 individuals)</b>
Technical background	30
Proficiency in IT	60

Interpersonal skills	100
Analytical skills	20
Management soft skills	15
Strong communication skills	100
Sales & marketing skills	40
Technology skills	30
Customer relations	35

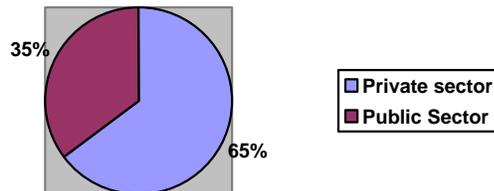
## 10.9 DIRECT & INDIRECT EMPLOYMENT PROJECTIONS (Over next five years)

### 10.9.1 Direct & Indirect Employment Projection in Telecom Sector in Mumbai for 2004

According to figures provided by Mahanagar Telephone Nigam Ltd. (MTNL), the total subscriber base (fixed and cellular connections) in the city of Greater Mumbai was 85 lakh subscribers in 2004, with MTNL having 30 lakh subscribers resulting into a market share of 35 per cent. Further, according to figures provided by MTNL, the employee base of the company in Mumbai alone stood at 28,025 employees for the same year.

Incidentally, MTNL is the only public sector player in the Mumbai's Telecom Marketplace, while the five other players sharing the market are private sector operators. Since MNTL holds 35 per cent out of the total subscriber market share, we can very well reason that the balance 65 per cent market share, i.e. 55 lakh subscribers was catered to by the private sector players.

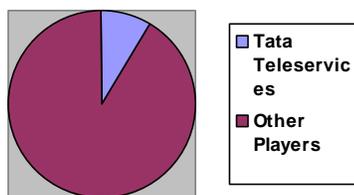
Figure 10.9.1- A  
Mumbai telecom sector subscriber market share (2004)



According to Tata Teleservices, the total subscriber base of 2,32,100 in 2003 grew by more than 100 per cent to touch a total of 4,85,000 subscriber in 2004. Moreover, the company had a 6000 strong workforce during the same period.

Figure 10.9.1 - B

*Tata Teleservices Share in the Private Sector Telecom Market (2004)*



As the total number of telecom players in Mumbai is restricted to just six players (one public sector operator; five private sector operators), we have taken Tata Teleservices as the representative unit of the private sector companies.

*Table: 10.9.1- A*

***Employee subscriber ratio for Mumbai - 2004***

<i>Companies</i>	<i>Subscriber base</i>	<i>Total employees</i>	<i>Employee-subscriber ratio</i>
MTNL	30,00,000	28,025	1:107
Tata Teleservices	4,85,000	6000	1:80

*(Source: MTNL & Tata Teleservices)*

***Note: As is evident, the employee-subscriber ratio of Tata Teleservices is lower than that of MTNL, the reason being: the private companies have just entered the business and are yet to achieve economies of scale.***

Assuming that the employee-subscriber ratio for all private sector players is more or less the same, and having worked out the employee-subscriber ratio for Tata Teleservices we have estimated the total number of employees in the Telecom Sector in Mumbai for 2004.

***Table: 10.9.1 - B***

***Estimated total employee in the Mumbai telecom sector in 2004***

<i>Industry segments</i>	<i>Subscriber base</i>	<i>Total employees</i>
Public Sector Units	30,00,000	28,025
Private Sector Units	55,00,000	68,750*
Total	85,00,000	96,775*

(\* estimated)

From the above calculations, we have arrived at the conclusion that the total direct employment in the Telecom Sector in Mumbai in 2004 was 96,775 employees.

On an employee base of 6000 employees in 2004, Tata Teleservices has claimed that it had created more than 20,000 indirect employment opportunities through outsourcing its manpower needs in 2004. Thus, in case of Tata Teleservices the ratio of direct-indirect employment is 1:3.

As most of the private telecom operators are using aggressive marketing strategies involving dealers, sub dealers, franchisee, promoters... it can be assumed that the ratio of direct-indirect employment would roughly be the same.

Based on the above ratio (Tata Teleservices) we have arrived at the conclusion that the total indirect employment in the Telecom Sector in Mumbai in 2004 was approximately 2,90,325 individuals.

### **10.9.2 Direct & Indirect Employment Projection in Telecom Sector in Mumbai for 2010**

*According to employment projections made by Tata Teleservices for the year 2010, it has stated that the growth in direct employment over the next five years would be at approximately 10 per cent p.a., while indirect employment would grow at 15 per cent p.a. for the same period.*

**Table: 10.9.2**

**Estimated direct and indirect employment in telecom sector in Mumbai for 2010**

	2004	2005	2006	2007	2008	2009	2010
Direct employment	96,775	1,06,452	1,17,097	1,28,806	1,41,687	1,55,856	1,71,441
Indirect employment	2,90,325	3,33,873	3,83,954	4,41,548	5,07,780	5,83,947	6,71,539

Therefore the estimate total Direct Employment in the Telecom sector in Mumbai in 2010 would be approximately 1,71,441 individuals, while the estimated total indirect employment would be approximately 6,71,539 individuals.

### **10.9.3 PROJECTED EMPLOYMENT FOR TELECOM SECTOR**

Based on the above calculations based we have projected direct employment in the city for 2010 at 1.71 lakh employees and indirect employment at 6.71 lakh employees. This implies that the total employment generated by the telecom sector in 2010 would be 8.42 lakh employees.

Table: 10.9.3

Projected direct and indirect employment for 2010 in the telecom sector for Mumbai (in lakhs)

Year	Direct Employment	Indirect Employment	Total Employment
2010	1.71	6.71	8.42

### 10.10 RESEARCH FINDINGS

- The telecom sector is witnessing an unprecedented growth in areas like mobile telephony radio paging, value added services, broadband internet, communication via satellite, etc.
- Over the last few years, the private sector is concentrating on mobile phone segment, while the public sector units and pushing for growth in fixed line sector. Of late, there has been a reversal in the trend private companies are eyeing fixed line, while public sector units are show aggression in the cellular mobile phone segment. Resultant, both cellular and fixed line phone segments are likely to show an equally impressive growth in employment rate over the next five years.
- Telecom companies are adopting new technologies on the wireless front so as to provide a boutique of service through the wireless medium. Companies are also asking for additional spectrum to introduce 3G services to bring about convergence of services. This is likely to create a huge demand for not only high skilled personnel, but also create several new jobs on account of higher degree of convergence.
- As telecom companies are expanding business operations, the employment opportunities are likely to witness a sharp rise. Here, it is required that educational institution taking a cue from existing and future demands for telecom professionals and initiate tailor-made courses in tele-communications management.
- As per instructions from DoT to public sector companies, since 1985, all recruitment in the Group C and D category has been stopped. During the last decade, recruitments have been mainly in high skill and technical categories.
- Service providers are offering customers user-friendly hi-tech services (broadband, digital and wireless connectivity), which in turn is creating employment opportunities in the area like customer service, marketing and technology. There has been a surge in demand for qualified telecom engineers, as companies are heavily investing in the creation of basic infrastructure.
- The future of Telecom Sector is in providing state-of-the-art services like E-commerce, Global Roaming, High Speed Mobile Internet Services, Internet Exchange Connectivity Services, Video-on-Demand, Wireless ATM Service,

etc., with an emphasis on 'Communication, Anytime, Anywhere'. As these segments are sunrise areas, skilled personnel would be in great demand over the next few years.

- The sector has seen a rise in demand for telecom engineers and technically qualified people over the past few years. Educational institution is required to take a cue of the future demands of telecom professionals and initiate tailor-made and specialized courses in tele-communications management.

#### **10.11 RESEARCH RECOMMENDATIONS**

- As the telecom companies are expanding their business operations and expanding on service offers by up the technology curve, there is a huge requirement for highly specialised technology personnel. The government should ensure that educational institutions have appropriate technology infrastructure to conduct specialised orientation.
- Educational institutions should be provided proper support to launch specialised courses that would cater to the needs of the existing and future demands of telecom professionals, and also initiate tailor-made basic courses in telecommunication management.
- By creating an environment conducive for companies to launch high-end services like E-commerce, High-speed Mobile Internet, Internet Exchange Connectivity Services, Video-on-Demand, Wireless ATM services, etc., the government could ensure several new employment opportunities across the sector.
- In the changing scenario, individuals in addition to having requisite technical and vocational skills are expected to deliver on multiple responsibilities, because companies are cutting down on overheads. Likewise, training institutes and engineering colleges are expected to broaden the horizon beyond pure technical orientation.
- Due to increased competition, professionals in the sector are required to now have a strong customer focus and be bottom line driven. Educational institutions and training institutes are expected to make appropriate amendments in the curriculum.
- By laying business guidelines and organising training programs in customer relations for outsourcing agencies like courier companies, collection agents, marketing agencies, etc. the government can bring about higher degree of standardisation in the indirect employment sector.

\* \* \* \* \*

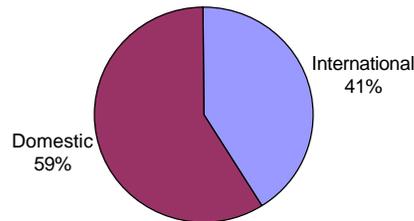
**EMPLOYMENT GENERATION IN THE COURIER (EXPRESS SERVICE) SECTOR**

**11.1 COURIER (EXPRESS SERVICE) SECTOR IN INDIA (Over the last decade)**

***Macro Scenario***

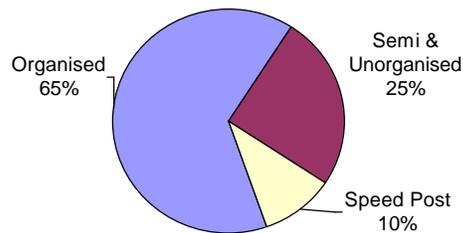
The Express Service Sector in India can be characterised by the existence of organised, semi-organised and unorganised players. As per the Express Industry Council of India's (EICI) research study, which was undertaken by AC Nielsen-ORG Marg in 2003, there are over 2,000 Express Service Companies operating in India, i.e. about 20 companies in organised segment, 25 in semi-organised segment and others in unorganised segment. As of 2003, the market is estimated at Rs 2,493 crore. The domestic market constitutes to about 59 per cent, valued at Rs 1,468 crore. The international market constitutes 41 per cent of the total industry, valued at Rs 1,025 crore.

*Figure 11.1 - A  
Classification of business earnings*



Organised segment constitutes to about 65 per cent of total market, valued at Rs 1,628 crore. Semi organised and un-organised segment constitutes to about 25 per cent, valued at Rs 618 crore. The share of EMS speed post is pegged at 10 per cent, valued at Rs 247 crore. The EMS speed post accounts for about 14 per cent share in domestic market and about 5 per cent in international market.

*Figure 11.1 - B  
Market segmentation*



Sustained efforts to liberalise the economy by consecutive governments over the last decade saw removal of several trade barriers, which has led to entry of MNCs into virtually every industry. Increasing competition in the local markets has forced Indian companies to explore overseas markets. As the number of Indian companies going global swelled, and the number of MNCs setting shop in India increased, the courier sector witnessed an apparent rise in business. The high growth pace of courier companies and the magnitude of Indian market resulted into entry of several foreign courier companies into the sector. The last decade saw several mergers and acquisitions in the courier sector as Indian and MNC companies consolidated on their business. The business consolidation activities were largely in the area of achieving economies of scales, introduction of state-of-the-art technology and providing value-added services to the customers. The competition in the organised segment was intense, as companies both Indian and MNCs were all out to grab a larger share of the booming business in sunrise industries, i.e. service sector.

**Table: 11.1**

**Composition of the express service sector in 2002-03**

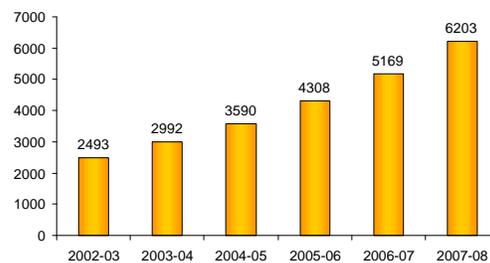
	<i>Number of Companies</i>	<i>Turnover</i>	<i>Market Share</i>
Organised	20	1,628 crore	65
Semi-organised & unorganised	1980	618 crore	25
Speed Post	-	247 crore	10

Source: *EICI-AC Nielsen and ORG Marg*

As per the EICI research study, the growth in express business over the last decade was largely due to the emergence of new economy services businesses in industries like IT, banking, hospitality, retailing, etc. Considering the recent upturn in the economy and improving cross border trade and business activities, it is expected that express business in the country would also witness high growth rate in the near future. The EICI study pegs growth of organised players in the sector at a healthy rate of 20 per cent, while the sector on the whole would grow at a CAGR of 11 per cent during the same period. Based on current estimates, express industry is expected to touch Rs 6,203 crore mark by FY' 08.

**Figure 11.1-C**

**Projected future market for express industry in India (in Rs. crore)**



### Industry Perspective

According to **TNT**, the last ten-years have been every eventful for the sector. During this period, the organised sector flourished as they grabbed a larger portion of the market share. The company pegs growth of the sector at 20-25 per cent for the last decade. Reason being: economic boom, liberalisation policy, signing of WTO agreement and growth in import/export business.

Another industry leader, **DHL Express India Pvt. Ltd.**, projects similar growth rate during the last decade. The company feels that the growth has been more in qualitative term rather than quantitative term. In other words, the sector saw major changes in customer service standards due to introduction of IT.

**Vichare Courier Service Pvt. Ltd.**, a local courier company operating within the city limits, was highly bullish about growth witnessed by the sector in the last decade. It pegged the business growth at 40 per cent for the last five years. Although the company was very appreciative of the role of organised players in the growth of the sector, it was critical about the unorganised sector. It hinted that the unorganised players lacked 'commitment' and 'quality standards', which in-turn was creating a wrong image for the sector. According to Vichare Courier, about 50-60 courier companies come up every month, and as much as 50 per cent of these close shop within a short period of time as they are unable to meet 'customer expectation' since they work on wafer-thin margins.

According to **Skypak Service Specialists Ltd.**, the highlight of the last decade was that big players streamlined and consolidated their business operations. Most of the companies invested heavily into technology, so as to ensure that they meet customer expectations. The company however was conservative on growth figures and has it at 10-15 per cent. Skypak feels that although the established players saw a more sustained and stable business growth, it was the semi-organised and unorganised companies which had their share of ups and downs.

On the other hand, **Jeena & Co.** has credited the pro-business policies of the government during the last decade. According to the company, except for few instances like 9/11 attacks, Gulf War and Indo-Pak tension, the sector had witnessed an overall growth of 10 per cent. It felt that the accelerated rate of global integration can actually set the pace for courier companies in India.

**Air Cargo Agents Association of India (ACAAI)** believes that in spite of the industry hitting a low after the 9/11 attack and other incidents such as Gulf War, Afghan and Iraq invasion, and Indo-Pak tension, India was able to recover much faster than other countries, thus clocking growth of around 15-20 per cent per annum over the last decade - which is much higher than global standards. ACAAI credits the industry growth to economic boom, liberalisation policy of the

government and India signing the WTO agreement and growth in import/export.

## **11.2 EMPLOYMENT TRENDS IN MUMBAI (Over the last decade)**

### **Industry Perspective**

At the entry level, **DHL** ensures that it employs only qualified and skilled people. It invests heavily into training its employees, and has a well-structured training programme for existing staff and new recruits. In addition to introducing new dress code and air-conditioned delivery and pick-up vehicles, the company has undertaken several growth initiatives for the employees.

Earlier individuals with HSC certificate got an entry into the delivery and pick-up team, but now graduation has become a must for the same, opined **TNT**. As the entire business process is getting technology driven, it is necessary that individuals down the line possess certain basic skills. In addition to a graduation degree, the company is giving thrust to ensure that new recruits have good command over language, good personality and are customer oriented.

**Skypak** is concerned about the high turnover of employees at the lower level of hierarchy, especially delivery and pick-up departments. Issues like low payment, lack of incentives, long working hours, etc. have continued to be the reasons for high employee turnover.

**Vichare Courier**, which employs more than 3200 people to manage its 68 service centres in Mumbai, airs a similar concern. Every month the company has to make up for approximately 70 people leaving the organisation. Although the company has achieved some level of technology upgradation, it's of the opinion that there hasn't been any dramatic change in job profiles.

**Jeena & Co.** has a policy of recruiting people who have knowledge of the industry along with IATA and Custom qualification. The company also recruits freshers who are later given on the job training.

**ACAAI** thinks otherwise. It feels that there is a real dearth of skilled manpower. Although it's easy to find leg workers, but when it comes to DGR and IATA qualified people, it's almost impossible at times to source these breed. Most of the reputed agents' source people straight from the campus in the areas like legal, HR, finance department... While for customer service, billing, cargo booking, break-bulk operations department, where the qualification requirement is mostly MBAs, the agents normally source manpower through advertisement and recruitment agencies.

In addition to collecting revenue and employee figures from these interviews we have also collected the revenue and employment figures for some companies in the semi-organised and unorganised sector so as to arrive at a more accurate revenue per employee average in the country (refer table 2.1 - A & table 2.1 - B).

**Table: 11.2 - A**

*Turnover and employment figures for organised and semi-organised players in India & Mumbai for 2004-05*

<i>Companies</i>	<i>India turnover (Rs. crore)</i>	<i>Employment in India</i>	<i>Employment in Mumbai</i>	<i>Mumbai share of employment</i>
TNT	180-200	600	179	30%
Skypak	216.23	1650	400	24%
Blue Dart*	462.11	4000	800	20%

(\* only revenue and employment figures collected from the company)

**Table: 11.2 - B**

*Turnover and employment figures for unorganised sector in Mumbai for 2004-05*

<i>Companies</i>	<i>Annual Sales (Rs.lakhs)</i>	<i>Total Employment</i>
Vichare Courier	2400	3200
Madura* Courier	75	10
E-Air* Courier	12	11
Leap* Express	96	240
Goodluck* Courier	1	3
Airpark* Courier	0.7	6

(\* only revenue and employment figures collected from the company)

### **11.3. INFLUENCE OF IT ON JOB PROFILES IN MUMBAI (Over the last decade)**

#### **Macro Scenario**

Increasing competition and high service standards in the sector has resulted into consumer demanding quality services at a reasonable cost, thus pushing companies to make the supply chain more efficient and cost effective. To deliver the same, express companies have invested heavily into technology to manage information on consignment movement, auditing and payment efficiently. Not long ago, most courier companies in India had only limited package-tracking system in place, but today the companies are moving towards implementing complete workflow automation systems.

There has been a distinct change in perception on need to invest into technology, as many companies now feel that use of technology would help them optimise consignment movement and eliminate wasteful practices. They have realised that use of IT would provide them with better control over various business operations. Apart from cutting costs, IT has also enabled companies to plan for possible off-schedule deliveries.

IT has played a major role in the growth of the sector as it has enabled companies to not only provide end-to-end solutions to customers, but also extend value-added services and tailor-made products. Presently, mobile computing and laser scanning is being used to capture data for tracking, while wireless communication is providing real-time decision-making information. Another paradigm shift that the sector is witnessing over the last 10 years is the gradual shift to paperless business transaction. The introduction of scanners, computer generated bill, online acceptance, etc. have certainly brought about faster and reliable service whereby tonnes of loads can be moved from one location to another within no time.

#### *Industry Perspective*

**DHL** states that introduction of Information Technology (IT) has brought about sweeping changes in the sector, because it has enabled companies to dramatically improve its operational efficiency without additional investment in manpower. Although the sector has registered a considerably high growth rate over the last decade, the introduction of IT has ensured that employment figures remain static. For instance, introduction of scanners have made the use of data entry operators redundant. DHL has invested heavily in IT, and the company boasts of centralised tracking system and technology-driven customer service system. Of late, it has integrated all its business operations from pick-up to delivery.

Catching up with leading industry players, **Jeena & Co.** is also planning to invest heavily into IT over the next few years. As far as the sector is concerned, the company feels that despite the fact that IT replaced a large number of jobs in the sector; the growth in employment has been high over the last few years - thanks to economic boom, government policies and growth in import/export. As far as job profiles are concerned, it feels that they have remained same except that people are now required to be more computer-literate.

**Skypak**, on the other hand, has invested approximately Rs 1 crore in the last five years and installed scanners, satellite communication system, tracking system, LAN connections throughout its business network. The company has taken a lot of efforts towards orientation of its staff and claimed that all new recruits were provided necessary technology orientation.

In the last five years, **Vichare** has invested almost Rs. 50 lakh on technology, thereby installing IT set-up at each of the branch offices and integrating it via LAN. The company is now planning an additional investment of Rs. 1.5 crore on setting up a business hub for tracking business centrally. Although the company is investing heavily into IT, it claims that it would require both skilled and unskilled professionals. In the case of unskilled employees, it plans to train them through regular induction programmes.

**ACAAI** agents have now started using AV mainframe and computers for faster turnaround of goods. On an average, around Rs 50 lakh have been invested by the agents while some have invested around Rs 2 lakh. New software for cargo handling, tracking movement of cargo online, preparing airway bills, etc. have been introduced.

**TNT** has state-of-the-art centre in place that offers fastest and most efficient handling of all cargo/consignments movement in India and other parts of the world. TNT has an extensive air and road network in India, Asia and Europe, which is used in conjunction with commercial flights to ensure optimal transit time.

#### **11.4. IMPACT ON EMPLOYMENT DUE TO SET BACKS (Over the last decade)**

##### ***Industry Perspective***

The 9/11 disaster and Iraq war were termed as the major setbacks by **DHL**, as it slowed down the international business, it however assured that these developments didn't have any great impact on either business or employment. Although the company had undergone VRS scheme during this period, but that was only to bring about equilibrium in workforce. Since one region had grown at a faster pace compared to another region.

Increasing competition due to entry of MNCs had led to consolidation of business processes on the part of **Skypak**, which resorted to restructuring its business by downsizing extra manpower across the management and operational level. It was largely aimed at enhancing efficiency levels and it was compensated by introducing new technology.

**Jeena & Co.** and **Vichare** claim that they have not encountered any setbacks. However, Vichare claims that the very fact they fulfil customer expectations and offer quality and timely service speak volume of our business commitment.

**ACAAI**, however, feels that the worst setback of the decade was the 9/11 attacks. Subsequently, the Indian Parliament attack in the year 2001 had a severe effect on air cargo sector business. Then, there was the Kargil War, Afghan War and

Iraq War, all these worked against the air cargo industry, by making fuel dearer and pushing security surcharge. The slowdown in business activity affected employment which saw 5-10 per cent dip in workforce in areas like customer relations, cargo bookings, etc.

### **11.5 EMPLOYMENT REQUIREMENT IN MUMBAI (Next five years)**

#### **Industry Perspective**

According to **DHL**, during the next five years the courier sector would witness a steady pace of growth. The fact that Indian economy is gradually integrating with the global economy (i.e. open-sky policy and free trade policy) is likely to see a sustained rise in exports, which in turn is likely to see the sector grow at approximately 20 per cent over the next few years. However, as business consolidation continues to be the buzzword, it doesn't foresee a corresponding rise in employment figures.

According to **Jeena & Co.**, considering the level playfield government has created for courier sector, the present growth rate figures is likely continue in the coming years. The company projects business growth rate at 10 per cent over the next five years.

According to **TNT**, logistics is likely to grow at an annual rate of 7-8 per cent over the next five years as sectors like retailing, MNCs and pharma are opening up. The company paints bright future for the courier and logistics business.

A similar view is aired by **Skypak**, who feel that with corporate house, MNCs, BPOs, Call Centres, etc. expanding their network across the country, growth prospects for courier industry is huge. It estimates the industry to grow at an awesome pace of 50 per cent per year over the next few years.

**ACAAI** believes that with liberalisation, removal of exim controls and a buoyant economy, air cargo business is set to grow at 10 per cent over the next five years. Also increase in the number of airlines, the exim volumes are likely to rise by another 12-15 per cent, which is significant.

The study conducted by **EICI-AC Nielsen** and **ORG Marg** states that if the economy continues to grow @ of 6.5 per cent over the next few years, and if the banking sector, service sector and ITES sector continue their present growth pace, the Indian Express (courier) industry is expected to grow at a healthy rate of about 20 per cent in the coming years, and is expected to reach Rs. 6,203 crore by the years 2007-08.

**Table: 11.5**  
**Projected future market for express industry in India**

Year	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Total Market (in Rs. crore)	2493	2992	3590	4308	5169	6203
% Change	-	20.01	19.98	20	19.98	20

Source: *EICI-AC Nielsen and ORG Marg*

## **11.6 AVAILABILITY OF TRAINED PERSONNEL IN MUMBAI (Next five years)**

### **Industry Perspective**

**DHL** supports the concept of continuous development of its staff and has been regularly investing in training and social programmes to improve work environment. The company undertakes 'Personal Development Planning' reviews twice a year to ensure development of individual's potentials and plan career progression. It ensures that continuous job opportunities are provided so as to allow mobility of staff within the company. The company agrees that due to lack of dedicated institutions offering training to personnel in the express industry, the company is forced to take on the responsibility of providing necessary technology, customer service, marketing and sales training to new recruits.

Though the company largely depends on unskilled staff to further its business, **Jeena & Co.** has been recruiting trained and skilled personnel in the area of the IT and marketing. In the area of delivery and pick-up services, it recruits individual who have good communications skills and sound knowledge of geographical area.

Whether it is recruiting staff, appointing suppliers, sub contracting job or any other key services, **TNT** believes in the use of impartial selection process. The company believes in open management policy and involves its staff in decision-making processes. Although the company largely recruits skilled people from market, it also resorts to training semi-skilled people on-the-job.

In the area of consignment delivery, **Skypak** recruits unskilled people as there is no dearth of it. However, in technology intensive areas like in-scan and out-scan, etc., which the company has recently introduced, the company trains unskilled employees in-house. While in departments like IT, HR, accounts and marketing, the company procures manpower through market.

## **11.7 TRENDS IN INDIRECT EMPLOYMENT (Over the next five years)**

### ***Industry Perspective***

The very nature of business transactions being simple, i.e. pick-up and delivery of documents and parcels, most of the companies agreed that there was limited scope for indirect employment. In the process of providing customer quality services, majority of the companies have ensured that their personnel are involved at every stage during the movement of documents or parcels.

However, the companies believe that whatever little indirect employment generated through this sector is in businesses like stationary, printing, transport, etc.

## **11.8 CHANGING TRENDS IN EMPLOYMENT SKILLS (Next five years)**

As the sector consolidates further there would be several new jobs created at every level. For instance:

At the *Operations level*, the sector foresees employment opportunities in areas like Operation Assistants, Operation Supervisors, Operation Executives, Assistant Operation Managers, Operation Managers, etc. While, Operation Assistants and Operation Executives may require individuals to be 12th (HSC) passed. However, at higher levels of the hierarchy, one is required to be a graduate with experience and trade skills in the same or similar industry. Candidates are required to have good communication and interpersonal skills, while ownership of a two-wheeler would be seen as a value addition.

In the area of *Sales and Marketing*, candidates are required to be graduates with minimum 2/3 years experience in Direct Sales to corporate customers. The categories in the sales hierarchy are: Sales Executives, Sr. Sales Executives, Sales Managers, Area Managers, Assistant Regional Sales Managers and Regional Sales Managers.

For higher positions the requirement is of post-graduate or diploma /degree in Marketing with some years experience in direct selling at corporate levels. Good communication and customer interaction skill, leadership, team management skills are a must for positions in sales and marketing.

In the area of *Customer Service*, individuals are required to be graduates with strong communication skills in English and Hindi with 2/3 years experience in customer service or tele-marketing in service industry. For a higher position in customer service, an individual requires to have more experience with managerial skills for leading team of customer service executives.

In the area of *EDP Department*, the positions available are that of Data Entry Operators (DEO) for which qualification is minimum of 12th (HSC) with good speed with alphanumeric entries. For higher levels, i.e. EDP executives or managers, individuals should have qualification in programming, hardware and networking management with relevant experience.

In the area of *Accounts*, the position requires individuals to be a finance graduate. In addition to checking for payments and claims, the job profile involves preparing bills and maintaining books of accounts. At the managerial level, individuals would be responsible for accounting activity, including books of accounts, receivables, payables, finalisation of quarterly/half yearly closing etc.

In the area of *HR*, individuals are required to have in-depth understanding of various HR processes like competency mapping, performance management, organisation structuring, job profiling, finalisation of KRA/KPI, some idea of assessment centre including various personality tests.

### 11.8.1 Assumed percentage point for employment skills

The employment skills that individuals are expected to possess to find gainful employment in the Courier Sector are given below along with their respective weightages (percentage points). These percentage points are purely based on our assumptions derived from interactions with individual interviewee during the course of the research activities. The percentage points should be ready in the following manner – number of individuals expected to possess the said skill per 100 individuals entering the sector.

*Table: 11.8.1*

*Weightage assigned to employable skills for individuals entering Courier Sector over the next five years*

<b>Employment skills</b>	<b>Percentage Points (per 100 individuals)</b>
Technical background	15
Proficiency in IT	60
Interpersonal skills	100
Analytical skills	35
Management soft skills	35
Strong communication skills	100
Sales & marketing skills	40
Technology skills	30
Customer relations	65
Database management	15
Fluency in English/Hindi	100
Awareness of the local area	75

Pleasing personality	100
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## 11.9 DIRECT & INDIRECT EMPLOYMENT PROJECTIONS (Next five years)

### 11.9.1 Direct Employment projections for Mumbai

There exists a huge disparity between the organised and unorganised segment with regards to number of companies and the market share. For instance, in 2002-03, 20 companies in the organised segment achieved a turnover of Rs. 1,628 crore enjoying a market share of 65 per cent, while the semi-organised segment consisting of 20 players and the unorganised segment with 1955 players together achieved business to the tune of Rs. 618 crore and made-up for only 25 per cent of the market.

Now as per the EICI figures, the organised segment grew at 20 per cent in 2002-03, while the sector on the whole has grown at a CAGR of 11 per cent. Based on these facts, we have pegged the growth of the semi-organised and unorganised segment at approximately 4 per cent (refer table 11.9.1-A).

*Table: 11.9.1 - A  
Employment projections for the Indian express service sector in 2004-05*

	<i>Turnover 2002-03</i>	<i>Proj. growth rate per annum for 2003-08</i>
Organised	1,628 crore	20%
Semi-organised & unorganised	618 crore	4%

The Council had projected growth of the express industry (organised segment) for the period 2003-08 at an average rate of 20 per cent per annum, which is the same as that achieved during 2002-03.

Based on the above conclusion we have estimated the revenue growth for the organised segment and semi-organised & unorganised segment independently. Further, we have assumed that the growth pattern would continue to remain same for the next two years (i.e. 2009 & 2010). The revenue growth for the organised and semi-organised and unorganised segment during 2003-10 is as follows:

*Table: 11.9.1 - B  
Projected revenue for the courier sector (2003-10)  
(Rs. in crore)*

<i>Year</i>	<i>2002-03</i>	<i>2003-4</i>	<i>2004-5</i>	<i>2005-6</i>	<i>2006-7</i>	<i>2007-8</i>	<i>2008-9</i>	<i>2009-10</i>
Organised	1628	1953.6*	2344.3*	2813.2*	3375.8*	4050.9*	4861.2*	5833.4*
Semi-organised	618*	642.7*	668.4*	695.2*	723*	751.9*	782*	813.2*

& unorganised								
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(\* estimated)

In order to estimate the total employees in the express industry in Mumbai, we have divided the companies interviewed into two groups: organised and semi-organised & unorganised segment. We have calculated the average revenue per employee in both these cases (at 2004-05 prices).

Further, in order to arrive at a more accurate revenue-employee ratio we have collected revenue and employment figures for some more courier companies in the two categories.

**Table: 11.9.1-C**  
**Revenue per employee for organised sector**

<b>Companies</b>	<b>India turnover (Rs. crore)</b>	<b>Employment In India</b>	<b>Revenue per employee (in Rs. Lakh)</b>
TNT	180-200	600	30
Skypak	216.23	1650	13.10
Blue Dart	462.11	4000	11.55

*(Average revenue per employee in organised segment: Rs. 18.21 lakh)*

**Table: 11.9.1 - D**  
**Revenue per employee for the semi-organised and unorganised sector**

<b>Companies</b>	<b>Annual Sales (Rs. lakhs)</b>	<b>Total Employment</b>	<b>Revenue per employee</b>
Vichare Courier	24	3200	0.75
E-Air Courier	12	11	1.09
Leap Express	96	240	0.4
Goodluck Courier	1	3	0.33
Airpark Courier	0.7	6	0.11

*(Average revenue per employee in semi-organised and unorganised segment Rs. 0.54 lakh)*

From the above average revenue-per-employee figures we have calculated the employment figure in India in the organised and semi-organised & unorganised sector independently for the year 2004-05 & 2009-10.

**Table: 11.9.1-E**  
**Projected direct employment for express industry (at 2004-05 prices)**

Year	2004-5	2009-10
Turnover Organised (Rs. crore)	2344.3	5833.4
Direct Employment Organised sector	12,874*	32,034*
Turnover Semi-organised & Unorganised (Rs. Crore)	668.4	813.2
Direct Employment Semi-org. & Unorganised	1,23,778*	1,50,592*

(\* projected)

For the year 2004-05, the direct employment projections for Express Industry in India are as follows: organised segment - 12,874 employees, and semi-organised and unorganised segment - 1,23,778 employees. And the direct employment projections for the year 2009-10 are: organised segment - 32,034 employees and semi-organised and unorganised segment - 1,50,592 employees.

From the employment figures available from the individual companies for India and Mumbai, we have arrived at average Mumbai's share of employment in India for these companies in the organised segment.

**Table: 11.9.1 - F**  
**Percentage share of Mumbai employment in the organised sector for 2004-05**

Companies	Employment in India	Employment in Mumbai	Mumbai share of employment
TNT	600	179	30%
Skypak	1650	400	24%
Blue Dart*	4000	800	20%

Source: TNT, Skypak & Blue Dart

From the above table, we conclude that in the organised segment average employment share for Mumbai vis-à-vis that of the country is 24.67 per cent.

Mumbai being the business capital of the country, the city is home to several small and medium sized courier companies. Taking a conservative approach we assume that the Mumbai's share of the semi-organised and unorganised segment to be the same as that of organised business i.e. 24.67 per cent, we project direct employment in the city as follows:

**Table: 11.9.1 - G**  
**Direct employment projections for Mumbai in 2004-05**

	Employment	Employment	Employment	Employment

	<i>For India 2004-05</i>	<i>For Mumbai 2004-05</i>	<i>For India 2009-10</i>	<i>For Mumbai 2009-10</i>
Organised	12,874	3176*	32,034	7902
Semi-organised & unorganised	1,23,778	30,536	1,50,592	37,151
Total direct employment	1,36,652	33,712	1,82,626	45,053

The direct employment for Mumbai in the year 2004-05 in the organised segment is 3,176 employees, and in the case of semi-organised and unorganised segment it is at 30,536 employees. While the estimated direct employment for Mumbai in the year 2009-10 in the organised segment is 7902 employees, and in the case of semi-organised and unorganised segment is at 37,151 employees. Thus, we conclude that the total direct employment in the courier sector in Mumbai is approximately 45,053

### 11.9.2 PROJECTED EMPLOYMENT FOR COURIER SECTOR

Based on the above calculations we have projected direct employment in the city for 2010 at 0.45 lakh employees, as for projections for indirect employment for 2010 the numbers have been found to be insignificant and they are largely in the area of stationary, printing, transportation, etc., and they have little impact on the total employment numbers.

*Table: 11.9.2*

*Projected direct and indirect employment for 2010 in the courier sector for Mumbai (in lakhs)*

<i>Year</i>	<i>Direct Employment</i>	<i>Indirect Employment</i>	<i>Total Employment</i>
2010	0.45	*	-

### 11.10 RESEARCH FINDINGS

- Over the last decade several big players have streamlined and consolidated their business operations. Most of these companies have invested heavily into technology to manage information on consignment movement, auditing and payment efficiency, thus ensuring customer satisfaction.
- Earlier, individuals with HSC certificate got an entry into the delivery and pick-up team, but now graduation has become a requirement for the same. As the entire business process is technology driven, it has necessitated that individuals down the line, possess certain basic IT & technology skills.
- Companies are giving additional thrust to ensure that new recruits have good command over language, pleasant personality and are customer-friendly. As far as job profiles are concerned, it has remained the same except that people

are now required to be more computer-savvy, and more conversant with spoken English with clarity and western diction.

- The introduction of scanners, computer generated bill, online acceptance, etc. have certainly brought about faster and reliable service whereby tonnes of loads can be moved from one location to another within no time.
- Installation of scanners, satellite communication system, tracking system, LAN connections throughout the delivery network has brought about significant changes in service standards. Companies are investing heavily into technology orientation of their staff.
- The sector has concern of high turnover of employees at the lower end of the hierarchy, especially delivery and pick-up departments. Companies are offering better salaries and incentives to stall the attrition rate.
- Though the sector has registered a considerably high growth rate over the last decade, introduction of IT has ensured that employment figures remain static. For instance: introduction of scanners have made the use of data entry operators redundant.
- There is a real dearth of skilled manpower in the express sector. Though it is easy to find leg workers, but when it came to DGR and IATA qualified people, it was almost difficult to source them.
- Most companies are sourcing personnel in legal, HR, finance department... straight from the campus. While for customer service, billing, cargo booking, etc. the qualification requirement is mostly MBAs. Presently, the companies sourcing manpower through advertisement or recruitment agencies.
- The unorganised players are seen to lack 'commitment' and 'quality standards', and they are unable to meet 'customer expectation' as they work on wafer-thin margins.
- There has been a distinct change in perception on the need to invest into technology, as many companies now feel that use of technology would help them optimise consignment movement and eliminate wasteful practices.

#### **11.11 RESEARCH RECOMMENDATIONS**

- As business processes are getting technology driven, it is has become necessary that individuals down the line possess certain basic skills like good command over language, good personality, customer orientation. The

government could support training institution to provide these services at a subsidised rate, thereby encouraging employment within the sector.

- Proper regulations and employment guidelines should be incorporated to protect interest of the employees, especially at the lower-end of the hierarchy as it would reduce the high attrition rate.
- Companies are investing heavily into technology to manage information and consignment movement; it has created a need for technology training across the hierarchy. Government should encourage training institutes to provide technology orientation at a subsidised rate.
- By creating an environment conducive for growth of business in the city, especially services, retailing and exports, the government would boost employment opportunities in the courier sector.
- Liberalisation, removal of EXIM controls and encouraging airlines companies, the government could encourage growth of courier sector in the city thereby boosting employment opportunities.
- The unorganised sector comprises a considerable large number of players who lack 'commitment towards customers' and 'quality standards', efforts should be made to provide this segment training on 'how to manage business profitably and efficiently'.
- The sector foresees employment opportunities in areas like: Operation Assistants, Operation Supervisors, Operation Executives, Assistant Operation Managers, Operation Managers, etc. While, Operation Assistants and Operation Executives may require individuals to be 12th (HSC) passed. However, at higher levels of the hierarchy, individuals are required to be a graduate with experience and trade skills. There is scope for dedicated training centres, which provide exclusive training in various area specific specialisations.

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## EMPLOYMENT GENERATION IN THE ENTERTAINMENT SECTOR

## 12.1 ENTERTAINMENT SECTOR IN INDIA (Over the last decade)

**Macro Scenario**

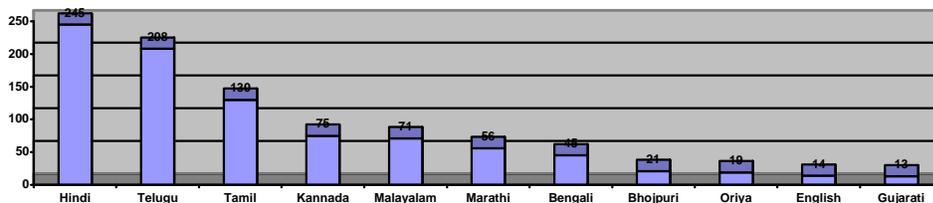
Over the years, spending power has been steadily increasing in India. Between 1995 and 2002, nearly 100-million people became part of the consuming and rich classes. And it is estimated that over the next five years, 180 million people would move into this segment, as on an average 30-40 million people join the middle class every year, representing huge spending on mobile phones, television, music systems and other similar goods due to rising income.

The consumption spending is rising due to increasing disposable incomes on account of sustained growth in income levels and reduction in personal income tax over the last decade. Higher consumption spending and consequent changes in lifestyle are also spurring the growth of the India entertainment sector. The Indian rural market with its vast size of 128 million households, nearly three times of urban India, also offers a huge opportunity that has, so far, remained largely untapped, due to reasons of accessibility and affordability.

**Film sub-sector**

The Indian Film sub sector is the largest in the world in terms of the number of films produced and the number of tickets sold annually. The number of films certified for release in 2004 touched a record high of 934 films, more by over 50 films from the previous year. Hindi films continued to dominate at 245 films followed closely by the South-Indian languages of Telgu and Tamil at 208 and 130 respectively.

*Figure: 12.1 - A*  
*Indian feature films certified in 2004*

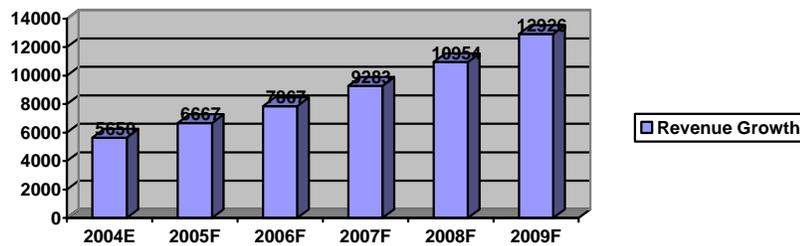


*(Source: Film Federation of India)*

The number of admissions in 2004 crossed the 3bn mark, though no official statistics are available for the same. Due to the low average admission price of around Rs. 15 per show, the domestic Box Office collections are estimated to be

Rs. 4,650 crore. In addition to this revenue are the collections from overseas theatres, which is conservatively taken at Rs. 500 crore. Added to this are revenues earned in other areas: music rights, satellite and cable television rights, home video rights, merchandising, in-cinema advertising and other promotional activities in and around films. Together with all these, the revenues of the sub sector are estimated at Rs. 5,650 crore. Based on the various growth drivers, especially with increase in number of multiplexes, and plans of Film Producers for the ensuing year, the Film sub sector is expected to grow at 18 per cent p.a. of the next five years.

*Figure - 12.1 - B  
Revenue growth of the Indian film sub sector (in Rs crore)*



*(Source: Film Federation of India)*

### **Television sub-sector**

India is the third largest television market in the world today. There are over 119 million television households in India, which comprise only about 65 per cent of the total households in the country. Of these about 50 million households receive cable television services, leading to a penetration of just over 42 per cent to total TV households and about 25 per cent of total households in India. There exists a huge untapped potential for growth in this sub sector.

The Television sub sector in India is estimated to be about Rs. 12,900 crore today. Subscription continues to have the largest share, estimated at about 58 per cent of the total revenue. Television advertising market is picking up its share and is currently estimated at 37 per cent. The balance belongs to the Television software segment.

It is estimated the Television sub sector will grow at the rate of 18 per cent compounded annually on an overall basis for the next five years. Subscription revenues will drive growth in the television segment in the next five years. In the short-term, growth is projected at 14 per cent primarily from growth in number of cable and satellite households and improved realisations. The growth of television subscription segment will also be driven by the increase in penetration

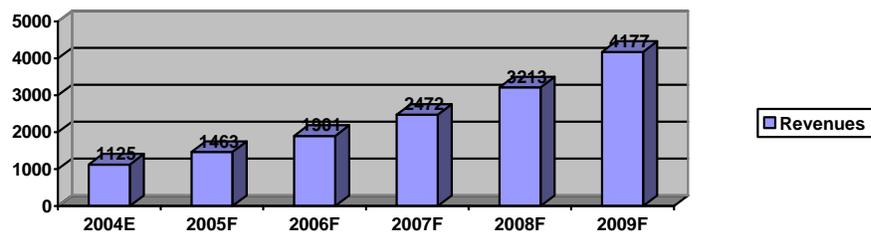
of DTH, use of digital systems of delivery and better enforcement of subscription revenue collection.

In terms of number of channels, today there is an estimated 350 TV channels available today over the Indian skies. An urban cable home in the four metros currently receives approximately 90 TV channels in the analogue mode. 50 of these channels are free-to-air and the balance is pay, which are bundled together into bouquets.

### Animation & Gaming

Total revenue of the animation production services sector in India, as estimated by NASSCOM, at around Rs. 1,125 crore in 2004. The industry is said to have grown over 20 per cent in the past year. Based on the contracts in hand with most studios, the industry is expected to grow over 30 per cent in the next five years.

Figure 12.1 - C  
Revenues of the Indian Animation sub sector (in Rs crore)



(Source: FICCI)

### Indian Gaming sub sector

Gaming in India is still in its nascent stage. The market consists of consumers spending on console games, PC games, online games and wireless games. The category excludes spending on the hardware and accessories used to play the games.

Industry estimates the size of the India gaming industry to be around Rs. 225 crore (USD 50 million). This is a relatively small size of the global gaming industry, estimate at USD 25,000 million.

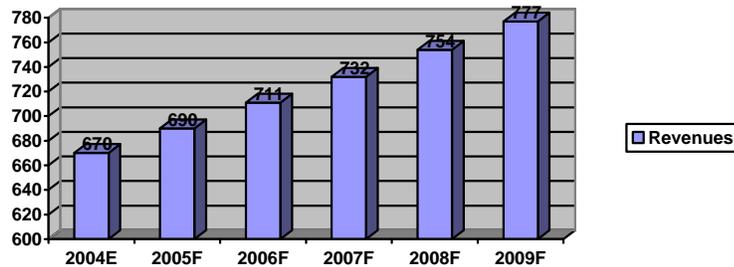
### Music sub sector

The estimation of music sub sector size is a challenge, as the unit sales and the average realisation prices continue to be a closely guarded secret of the music companies. The industry estimates approximately 15 crore of legitimate unit

sales of music cassettes and CDs in the past year, with an average realisation of Rs. 40-45. This brings the size of sub sector at about Rs. 650 crores.

Digital distribution along with the other growth drivers as detailed above will drive the sub sector in the next five years. Piracy will continue to hamper growth of the sub sector, though measures by the Indian music sub sector will help curb some of this. On a conservative basis, the music sub sector has been pegged to grow at 3 per cent over the next five years and is expected to touch Rs. 777 crore by 2009.

Figure 12.1 - D  
Revenues of the Indian Music sub sector (in Rs crore)

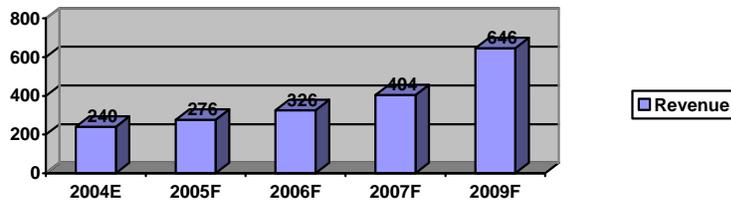


(Source: Industry Estimates & PWC Analysis)

### Radio sub sector

The size of the market in India is currently estimated at Rs. 240 crore. The State Broadcaster - All India Radio (AIR), contributed 55 per cent of the industry revenues. Rationalisation of rate card and aggressive marketing by AIR have increased its revenues in 2003-04 to Rs. 117 crore as compared to Rs. 102 crore in the previous financial year.

Figure - 12.1 - E  
Radio sub sector revenues (in Rs crore)



(Source: Industry Estimates and PwC Analysis)

Availability of larger number of frequencies is expected to drive the segment by 22 per cent over the next five years. The present market is still untapped to a

large extent and with rationalisation in the license framework is expected to treble its size to about Rs. 650 crore by 2009.

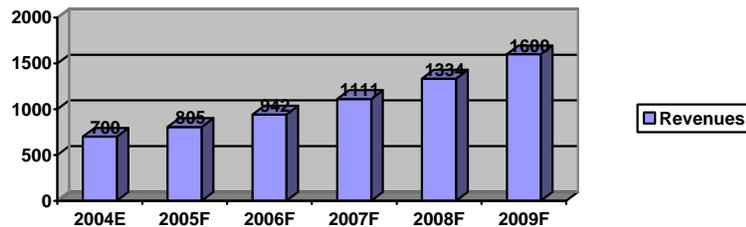
### Live Entertainment sub sector

The Live Entertainment sub sector comprises of about 10-15 larger players with average revenues of approximately Rs. 15-20 crore each; balance numbers of players comprise approximately 70 per cent of the industry size, which are largely unorganised.

The Live Entertainment segment as a whole can be divided into several key sub-segments. These include corporate events, sports, arts and theatre, felicitations and contest, festivals and personal events.

The revenues of the organised sector not captured by any agency and are a closely guarded secret of these companies. Players from the organised sector estimate the revenues at Rs. 700 crore. Based on the growth factors as enumerated above, players believe that the sub sector is likely to grow on a conservative basis by at least 15 per cent in the immediate next year and about 18 per cent over the next five years. The upsurge of the sub sector, riding on the back of increased marketing spends of corporate is one of the key factors for estimating such a buoyant growth in this segment.

Figure 12.1 - F  
Revenues of the Live Entertainment sub sector (in Rs crore)



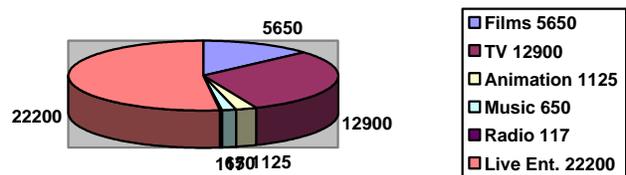
(Source: Industry Estimates and PwC)

The CII-KPMG report titled the 'Indian Entertainment industry - Focus 2010: Dreams to Reality' has estimated the sector presently at Rs. 22,200 crore, and is expected to grow at 18 percent per annum to reach Rs. 58800 crore by 2010. It evaluates the effect and interplay of various forces that shape the landscape of the television, films, radio and music sectors - which cumulatively account for over 96 per cent of the Indian entertainment industry.

According to the report, the bulk of the industry's growth will continue to come from television, which is expected to cross Rs. 37000 crores by 2010 by leveraging

the opportunities presented by delivery platforms like DTH, IP-TV and digital cable, which will drive pay revenues. The film industry is also expected to grow significantly, crossing Rs. 14000 crore by 2010, powered by increasing discipline and rising efficiency levels and penetration into hitherto uncharted overseas markets.

*Figure:12.1 - G*  
*Estimated Entertainment Sector in India 2004*  
*(in Rs. Crore)*



### Industry Perspective

**Balaji Telefilms Ltd.** claimed that the Indian entertainment sector has historically outperformed the economic growth and that it was largely due to the rise in disposable income and changing demographic profile. It claimed that television accounted for largest share in the sector due to its extraordinary reach across all socio-economic classes. It stressed on the fact that television penetration in the country is higher than print, radio and cinema, especially in the low-income households.

According to **Essel World**, except for the last 3-4 years, the going had been smooth for amusement parks in the country. During the last few years, the city has witnessed introduction of several malls and large format shopping complexes that offered both shopping and entertainment experience under one-roof. This in turn to an extent has eroded the premium value of the amusement parks. Since shopping malls are located in the vicinity, it is the amusement parks, which are located in far-off places, as it requires huge space; Similarly, amusement parks are weekend affairs as public visit them mostly on holidays, while shopping is a necessity. Nonetheless, Essel World claimed that the amusement park business was growing at a steady rate of 5-6 per cent year-on-year basis.

**ZEE Television (India) Ltd.** maintains that India has the third largest TV market in the world and that the sub sector is estimated at Rs. 12,900 crore. It stressed that with the rush of several new channels, especially in areas like news, kids, lifestyle, entertainment, spiritual, travel, etc. the sub sector had registered a phenomenal growth over the last few years. It asserted that subscribers receive

as many as 140 channels (90 channels in analogue mode and 50 channels in free-to-air format) with another 50 channels slated to launch by end 2005. It has put the total number of television channels operational across the country at approximately 350 channels. The availability of cheaper technology has led to reduction in costs and higher profits, which in turn is resulting into increase in number of channels.

**The Film & Television Producers Guild of India Ltd.** however is bullish on the growth of the entertainment sector as it felt that technology development and liberalisation has fuelled the growth. With the removal of FDI and government awarding industry status to films sub sector and also Indian production houses tapping foreign markets, the Indian entertainment sector has a promising future, it claimed. The entertainment sector comprising of films, television, broadcasting, cable television, television software, music, radio, live entertainment and event management, etc. was approximately Rs. 315 billion, it claimed.

**93.5 Red FM** feels that with the influx of satellite channels and airing of variety of programs, the entertainment business in the country has been revolutionised. It stressed that a decade ago established brands had very few opportunities for publicity, but today several entertainment programmes are driving sales of products. Defending radio as the future cost effective mass communication medium, it claimed that in a period of three years FM Radio has already made its mark as an effective medium of entertainment.

Reiterating the fact that Indian entertainment sector comprising of music, television, radio and live events, **All India Radio (AIR)** boasted that it is one of the fastest growing sector and the largest revenue earner. It stressed that Mumbai - the hub of entertainment sector in the country - which has almost all the major television and satellite network companies, large production houses and studios.

## **12.2 EMPLOYMENT TRENDS IN MUMBAI (Over the last decade)**

### ***Industry Perspective***

According to **Balaji**, during the last ten year, the entertainment sector has witnessed a surge in employment due to encouraging growth in practically all sub sector, i.e. films, music, radio, television, events... Entertainment being a glamorous field, it highlighted that companies, in addition to considering talents, nowadays gives a lot of importance to individual's personality prior to inducting him into the organisation. Aspects like person's attitude, aptitude, language, and personality are now being considered at the time of appointment. Another interesting change the sector is witnessing is that companies are asking for a minimum graduation certificate, which was not the case a decade ago. Further, with job segmentation (scheduling, HR, programming, etc.) taking place faster

than ever, the sector is moving to job specialisation, which was never heard about a decade ago.

At Balaji employment has certainly increased many folds in the last couple of years due to an extraordinary rise in production of soap operas. In 1995, it had only one serial to its credit, but today the company boasts of airing more than 20 serials on different channels. Moreover, the company has also diversified into production of films. The total number of employees in the company (direct & indirect) has increased from 15 individuals in 1995 to 1000 people in 2004. Earlier the trend was to recruit experienced individuals, but now the company is ensuring that in addition to possessing requisite talents and experience they ought to have a graduation degree.

**Essel World** claims that due to increase in competition there has been a significant change in the customer service standards. The sub sector has witnessed a paradigm shift in service standards from 'normal assistance' to 'recreational assistance', whereby companies are making efforts to provide personalised service so as to ensure that the guest have a memorable experience and they revisit the place again and again. Another change that the sector has witnessed over the last decade is that amusement parks are employing individuals, who are fluent in English and have pleasant personality, so as to interact with the guest.

The sub sector has witnessed some distinct changes on employment front over the last decade on account of considerable growth, agrees **ZEE Television**. There is a significant rise in demand for professionals and skilled personnel, admits ZEE Television, but appreciates the role played by a number of training institutes and mass-communication colleges which are coming up in the country who are extending the requisite skills to personnel. It has pegged the growth of the television sub sector at an average of 15 per cent over the next five years, and feels that the growth in employment would also grow at the same rate. As for change in job profiles, it feels that they haven't changed significantly, however job specialisations is fast catching up.

The company, which is based in Mumbai, on an average, has been launching two channels every year. Considering this, it foresees a proportionate increase in the number of new recruitments. Nevertheless, it agrees that riding the boom in sub sector, the number of people willing to make a career in the television industry is on the rise.

**The Film & Television Producers Guild of India** claimed that the craft of filmmaking was essentially teamwork and close coordination of various skilled personnel was required to offer consumers the end product. It stressed that on an

average a film unit comprised of 200 people or more, while in case of documentaries and corporate films the team could be as small as five members. In addition, the filmmaking business involves diverse activities ranging from raising capital for the film, marketing, distribution, screening, etc. and at every level the sub sector offers several employment opportunities.

Traditionally, uneducated, experienced and semi-skilled individuals have always dominated the sector. But in recent times professionals like MBAs, Chartered Accountants, Doctors, etc. are also opting for a career in the sub sector. Earlier a career in cinema was considered a 'taboo', but today with corporate houses and financial institutions investing heavily in the sub sector, filmmaking is attracting the best of talents. It opines that there hasn't been any significant change in job profiles.

Elaborating on the strategic position of Mumbai, **93.5 Red FM** claimed that the city was one of the most dynamic FM market in the country with five players. In a short duration, the sub sector has (directly and indirectly) created few hundred jobs in the city and several young individuals are pursuing radio as a serious career. Due to the ongoing media war, glamour and scope to flourish, increasingly people are moving to radio and related areas for viable careers. The company feels that over the last decade, there has been a perceptible rise in professionalism within the sector, and it credits training institutions and colleges for the marked change.

93.5 Red FM is of the opinion that the job profiles haven't changed significantly, however it agreed that with the sudden boom in the business there is a dearth of professionals. When the company had launched its operations it faced uphill task sourcing people, which is the reason why it has to recruit individuals from allied industries and give them on-the-job training. But now, it feels the scenario has changed drastically as several institutions are offering specialised courses aimed at sub sector.

**AIR** also feels that with television and radio channels multiplying briskly career opportunities have not only improved significantly, but there has also been a perceptible rise in job satisfaction, glamour and money. It claimed that television and radio sub sector have touched new heights with the introduction of several channels and that talented individuals have several opportunities to capitalise on their creativity. AIR claimed that with private FM channels coming into existence there is an improvement in the quality of programming and transmission, which in turn has made career in the sub sector lucrative.

### 12.3 INFLUENCE OF IT ON JOB PROFILES IN MUMBAI (Over the last decade)

#### Industry Perspective

**Balaji Telefilms** has always believed in marriage of technology, equipment and skilled people to drive quality programming and strengthen the company's competitive edge in business. Over the years, the company's strong belief in a systems-led approach has translated into increased investment in technology and training human capital. The company has spent much of the last year in tightening systems and creating a modular organisation.

In addition to providing company specific information through its dedicated website, **Essel World** offers companies and individuals the added advantage of bookings tickets online. The company has invested heavily into technology and boasts of an extensive CCTV network across the park. Further, the company claims to have compiled exhaustive data of its visitors and is capitalising from data mining.

**Zee Television** boasts that its services were available in over 80 countries via a highly advanced networking facility and technology tie-up with satellite and cable system operators. It claimed that ZEE was ahead of any other South Asian broadcasting network in terms of availability and local content and that it is at the forefront in use of satellite networking, secure encryption, subscriber management services and call centre technologies. ZEE introduced encryption to India three years ago with Mediaguard Encryption System. Presently, ZEE operates its own subscriber management services and call centres for its European operations and has plans to establish a similar set up for its worldwide operations in India. Currently, the network uses Iredato Access in Europe and other channels are encrypted depending on the DTH platform they are provided through.

**The Film & Television Producers Guild** claimed that IT technology has played a prime role in growth of the television and film sub sectors. The multimedia technology has enabled simultaneous exchange of voice and data, thus boosting the business growth. For instance, movies are been released through networked multiplexes to avoid video piracy and increase profitability. New technological breakthroughs have increased content variety, process of content development, value additions, content delivery and content packaging. In fact, the Guild is optimistic that in the day to come the technological advancement would bring about greater cost optimisation, i.e. it doesn't rule out a stage where producers would not require making prints to release the movie, thereby ensuring total integration of film production process.

**93.5 Red FM** elaborates that Internet and radio go hand-in-hand and felt that Internet was the best medium to exchange content with stations across the country. Further, it indicated at increasing use of Internet by radio channels at the backend, for instance: live online interviews and audio chats are conducted via Internet, thus making the medium a virtual recording studio for radio station. It stressed that the role of IT in the sub sector is on the rise, as channels are resorting to high-end technology for quality, efficiency, economy and networking.

**AIR** is revamping all the old radio stations and upgrading the technological infrastructure. The studios have already been digitalised and the old radio stations are being converted into FM transmission centres. This would result into a huge requirement of technicians with engineering background in electronic, electrical and sound over the next five years.

#### **12.4 IMPACT ON EMPLOYMENT DUE TO SET BACKS (Over the last decade)**

##### ***Industry Perspective***

Since its inception, **Balaji** claims that it hasn't suffered any major business setback. However, it agreed that competition was turning intense with each passing day and the company had little option but to be on its toes all the time. Elaborating on the change in fortunes, it said that in 1999-2000, the company had difficulties in procuring premium slot for its programme, but now it has managed to secure almost all the premium slots on different channels due to its hit soap operas. During this transformation phase, the company has managed to sustain the growth pace due to its systematic manpower planning, which has ensured 'minimum staff and maximum output'.

**Essel World** assured that it hasn't suffered any business setbacks, but agreed that the company has faced several ups and downs over the last decade. For instance, in 1998, it witnessed a drop in the number of visitors mainly due to closure of the park for expansion. Later, it had another bout of business setback in 2001, when the number of visitors dropped by 9.6 per cent on account of an earthquake in Gujarat in January 2001. Over the last few years, the number of visitors to Essel World has declined significantly because of emergence of several malls and large format super stores within the city limit which provide a mix of shopping and entertainment. The company claims that despite so many setbacks there was no impact on employment as most of the manpower inducted by the company for several low-end activities is outsourced.

**Zee Television** claimed that its performance has been very consistent during the last decade and that it had not encountered any major setbacks. The company has constantly grown in double digit over the past few years. In 1992, the

company had only two channels, whereas today it airs as many as 19 different channels and is one of the oldest channels in the country. However, it agreed that it did lose some of the employees to STAR TV in 2000-2001, but alleged that it was a temporary phase and that employment opportunities have constantly been on a rise.

Considering the present growth rate of the television sub sector, ZEE Television feels that over the next five years, the entertainment sector will witness a boom. It claimed that the sub sector has an immense potential to emerge as the biggest employment generating sub sector in the country.

According to the **Film & Television Producers Guild of India Ltd.**, piracy and multiple taxations have been a major setback for the sub sector. Last year alone, the Guild has estimated a revenue loss to the tune of \$66 million on account of unlawful copying and distribution of pirated copies. Apart from the above-mentioned problems, the Guild admits that the sub sector has not witnessed any major business setbacks over the last decade.

**93.5 Red FM** agreed that the private investors in the sub sector suffered a major setback because of the government's licensing regime. Due to short-sighted planning on the part of the government private players had to pay more than what it had earned, thus incurring heavy losses. Now, that the license regime has ended the company is confident that the years ahead would see high paced growth.

**AIR** also claimed that the institution hasn't witnessed any setbacks during the last decade and has expressed satisfaction at its progress vis-à-vis the private players. Contrary to the market believe that AIR has suffered on account of intense competition from private FM channels, the company claims that the competition has worked in its favour as the customer base has increased. It boasted that the craze of listening to a radio is back in fashion.

## **12.5 EMPLOYMENT REQUIREMENT IN MUMBAI (Next five years)**

### ***Industry Perspective***

Certainly, employment has increased by many folds in the last couple of years, especially after **Balaji** started producing soap opera for various television channels. For instance, in 1995, the company was running only one serial, but today there are more than 20 serials on air. Also, the company has diversified into production of films, which generates tremendous employment opportunities at every level. The number of employees at Balaji Telefilms has increased from 15 individuals in 1995 to 1000 employees in 2004. In terms of revenue earned, the company has grown from Rs. 40 lakh in 1995 to Rs 4000 lakh in 2005. During this period, the company agrees that there has been a significant change in job

profiles. Earlier, the sub sector only employed individuals with experience, but now television production companies were looking for graduates with diverse industry specialisation. Needless to say, qualified individual with experience have a greater demand in the sector.

According to Balaji, the television sub sector would grow at CAGR of 17 per cent over the next three years to touch Rs. 28,850 crore by 2008, thus making it one of the fastest growing sub sectors in the country. It claimed that the television sub sector would continue to retain its lead position in the Indian entertainment sector over the next decade.

According to **Essel World**, companies in the amusement sub sector would require a sharper focus on customer satisfaction and requirement. It claims that there exists a tremendous scope for family entertainment centers in suburban areas where the land component in project cost is lower. The company feels that encouraging support from the government would make it feasible for company to take the concept of amusement parks to rural areas. It plans to tap the market, which is currently tapped by those organizing frequent *melas* and circuses.

In order to check direct competition from malls and large format retail stores, it plans to regularly change the customer service patterns, entertainment rides and organise more events. Essel World has pegged the growth for amusement parks at around 20-22 per cent over the next five years. The company feels that the amusement sub sector would offer is tremendous job opportunities in the near future, both in the technical and non-technical areas. According to Essel World, the personnel presently in demand in amusement park sub sector are IT and mechanical engineers, F&B personnel, guest relations, canteen staff, etc. It has projected the total number of employee requirements over the next five years at approximately 500 personnel.

**ZEE Television** accepted the fact that entertainment sector experiences a high level of churning vis-à-vis any other sector, which is the reason why it feels that the job functions and profiles will continue to evolve. Considering the constant churning of employees, it stressed that most television companies and production houses are seen recruiting throughout the year. It agreed that the sub sector continues to operate in an unorganized manner due lack of professionals and skilled personnel. Thus, it acknowledged that future job opportunities would be technically oriented, and that constant introduction of newer technology would require future employees to be skilled and technically sound. ZEE Television would recruit several technical personnel over the next five years, and has pegged its employment requirement over the next five years at approximately 15-20 per cent.

**The Film & Television Producers Guild of India** has pegged the growth of the sub sector at approximately 10-15 per cent over the next five years, and it feels that the quality of the cinema and technology would play a key role in sustaining the growth rate. Though the operational department in television and film are more or less the same, it foresees growth opportunities in virtually every segment of the sub sector and more so in areas like: production, direction, scripting, casting, camera, light, art direction, music, dance, special effects, stunts, wardrobe, make-up and hair styling, editing, sound recording, etc.

**AIR** claimed that with changing government policies there would be more than 300 radio channels within the next two years, and this in turn would need more staff including radio jockey, radio managers, station masters, radio station technicians, etc. However, it cautioned that subsequently major players would retain their position while the smaller ones would either fade away or merge with the big ones. It pegged the rise in employment opportunities at approximately 10 per cent over the next five years.

**93.5 Red FM** feels that with the introduction of revenue sharing regime increasingly corporate houses are willing to venture into this business. Understandably, with several corporate entering into the fray radio sub sector is booming, and the employment opportunities with radio channels are increasing. It agrees that severe competition has resulted into better pay packages, and that the opportunities for specialized skilled employees are tremendous.

Presently, the company has approximately 40 employees on its payrolls and it has projected the employment requirement over the next five years to increase at an annual rate of 10-15 per cent. It maintained that it would require specialised people in virtually all departments of production, creative and marketing.

## **12.6 AVAILABILITY OF TRAINED PERSONNEL IN MUMBAI (Next five years)**

### ***Industry Perspective***

**Balaji Telefilms** claimed that the sector required personnel with diverse background, and had to take different approaches to source manpower. For instance, in case of new recruits with diverse industry specializations it approaches leading institutes like MICA, Symbiosis, etc, and in case of management related personnel with specializations in administration, finance, marketing, etc it resorted to Management College, recruitment agencies and newspaper ads. After a brief induction program, new recruits are immediately introduced on the production floor under the supervision of senior members. Later, based on the weekly performance appraisals of individual members their job profiles and remuneration packages are finalized. One of the reasons why the company has managed to attract the best talent is because it offers higher-than average pay packets to its employees.

Balaji Telefilms is of the opinion that apart from regular jobs like accountants, HR, computer operators, etc. the sub sector would require specialised personnel in the following areas:

- Pre-production: Individuals strong in concepts/ideas, with the ability to develop storyline and script.
- Commercial: Individuals capable of budgeting, and capable of negotiating contracts with corporate sponsors and channels.
- Production: Individuals specialising in logistics, casting, creating technical team, equipment and location management, etc.
- Post-production: Individuals specialising in dubbing, editing, special effects, composing music, creating title track, etc.
- Marketing: Individuals capable of pricing software, monitoring TRPs, production and creative feedback.

Though the company believed that there would be tremendous opportunities in the television sub sector due an increase in the number of channels, the above-mentioned areas are the need of the hour.

Raising concerns for lack of right people in the sector, **Essel World** highlighted on the fact that with retail and ITES sectors offering lucrative opportunities to youngster, amusement parks are not getting young and energetic people as they not only have to work long hours and also on holidays. In order to over the manpower sourcing problems, the company has decided to recruit personnel directly from agencies, which is immediately followed by a rigorous three-day induction program. In addition to the induction program, the company also organizes several internal and external training programs with the help of in-house trainers. Going a step further towards retaining and acknowledging good talents it has floated 'Service Champion' award for employees who have given outstanding performance in the field of guest relations.

**Zee Television** claimed that it has had no problems sourcing personnel with required skills at every level. It boasts of the work environment at Zee being stimulating and that development of core competencies through formal training, job rotation and hands on training is an ongoing activity. It highlighted the fact that it has invested in creating a resource base of cross-functional managers to take care of the multi-dimensional business requirements of the company. It opines that the sub sector offered excellent opportunities for high calibre professionals to take up challenging assignment both in India and overseas.

The company invests a considerably amount on employee training and skills upgradation. It claimed that in-house training had become trend and necessity in every company and sector, and that companies cannot escape this investment.

**The Film & Television Producers Guild of India** indicated at a change in perception towards the career in the film industry. And that several training schools have sprung up across the city, which provide individuals training in specialized areas. It also brought to notice the rise in number of people going abroad to for advanced training in technical and creative areas. The Guild doesn't foresee any demand-supply gap in human resources over the next few years, however it feels that with the sub sector get increasingly organized the pressure on skilled and trained personnel would reduce.

It claims that the concept of investing in employee training and skills upgradation has changed with times. Earlier, companies used to invest the maximum in training its personnel, but with the number of courses offered by private institutions on the rise, training at the company level has reduced significantly. It indicated that private institutions were offering course in virtually every creative and technical area of production process.

**93.5 Red FM** reiterated that three years ago when it had launched its activities, there was dearth of professionals. But today, with the emergence of several training institutions, management colleges and specialised courses in radio on the offer, it claimed that there were no serious problems sourcing people. Expressing satisfaction that it doesn't have problems getting skilled personnel, it stressed that it continued to believe in providing individuals on-the-job training.

**AIR** claimed that there are a number of institutes offering specialised courses for the new generation, and that these courses are not only helping individuals acquire basic skills but also grooming personality. However, it cautioned that it was important that training institutions have requisite infrastructure and human capital to offer quality training, and expressed dissatisfaction towards mushrooming ill-equipped training shops. It claimed that AIR has its own training institution in Hyderabad, nonetheless the staff regularly are provided orientation on a monthly basis.

AIR feels that people who are technically up-to-date and are multi-skilled (for instant: an individual knowing recording, mixing, editing, dubbing, etc.) will have immense scope to not only survive but also prosper. The company claimed that it gets required professionals, and stressed that it provides in-house training to all new recruits.

## **12.7 TRENDS IN INDIRECT EMPLOYMENT (Over the next five years)**

### ***Industry Perspective***

**Balaji Telefilms** has struck mutually beneficial deals with travel agencies and the Tourism Development Corporations of various countries so as to ensure low cost outdoor shootings abroad and in return facilitating growth of tourism. Moreover, it has entered into business partnerships with vendors for long-term material and equipment supply at competitive rates. The company has estimated the creation of indirect employment to the tune of 70-80 individual through these tie-ups.

As most Mumbaites visit **Essel World** over the weekends and vacation, the requirement for manpower on these days is significantly higher as compared to other days. In order to tide over the huge requirement of manpower during vacations, the company recruits temporary staff for a period ranging 2-3 months, and also engages additional hands on weekends and public holidays. These appointments are normally in the area of registration department, F&B, canteen, guest service, house keeping, gardening, security, etc., and presently the total strength of the temporary staff is as high as 200 individuals. The company is pegged the indirect employment to touch a high of 550 employees over the next five years.

**ZEE Television** highlighted the fact that television channels require a huge amount of software on a daily basis to air programs on their channels, and that it was impossible to generate all programs in-house. Thus, it has little alternative, but to depend on external production houses for their programming needs. It agreed on the issue that it generates a huge amount of indirect employment with programming houses. At the distribution and customer level, it claims of creating several indirect employment opportunities with cable operators and television manufacturing companies.

Moreover, the company out sources certain processes like editing, etc. to external production houses, and claimed that it presently works with approximately 10-15 production houses. Keeping the economic factors in mind, it claimed that scope for outsourcing opportunities within the sub sector is tremendous. Considering the complex nature of entertainment sector, it agreed that it was impossible to estimate the amount of indirect employment and outsourcing opportunities within the sector.

*The Film & Television Producers Guild of India stressed that film and television sub sector is predominantly unorganised when it comes to human capital management. And it is evident from the fact that the sub sector employed 50 lakh employees out of whom 10 lakh is direct employment, while the balance 40 lakh are engaged as indirect employment.*

**93.5 Red FM** claimed that it didn't create any indirect employment as it had the requisite infrastructure in-house. However, it claimed that the sub sector has created innumerable indirect employment opportunities as it revived the dying radio manufacturing business.

### **12.8 CHANGING TRENDS IN EMPLOYMENT SKILLS (Next five years)**

The array of career opportunities as per one's talents, temperament and aspirations run from Producer to Director, Announcer, Cameraman, Correspondent, Costume Designer, Dressmaker, Floor Manager, Graphics Designer, Lighting Director, Make-up Artist, Music Composer, News Reader, Presenter, Production Assistant, Programme Coordinator, Researcher, Script Editor, Scriptwriter, Set Designer, Sound Operator, Studio Manager, Recording Operator, Transmission Controller, Videotape Editor, Vision Mixer (online editor)...

In addition to being a good team player, each of these careers needs individuals to have special and distinct skills/talents. We take you through some of the skills required in some the above mentioned areas:

**Actor** - He is required to have the ability to imagine, relate to people and situations, project emotions, pick-up mannerisms and styles of different people...

**Announcer/Presenter** - In addition to good university education or journalist background, he is has to be comfortable during screen presence, open and well-informed, reasonable interest in topic being featured...

**Correspondent** - In addition to a journalist background and nose of news, he is required to have knowledge of pre and post production activities.

**Director** - In addition to have a complete say in on the course of production activities, rehearse actors, select sound effects, etc., he should be able to supervise post-production work like editing and sound dubbing.

**Floor/Location Manager** - He is responsible for studio floor management. Undertaken safety checks on the sets, ensure everything and everyone is in the right place at the right time, organize for make-up and essential costumes, props, cameras and microphones, etc.

**Music Composer** - Should be able to churn out compositions with versatility and organize orchestra.

**Newscaster/Anchorperson** - He is required to be an experienced journalist, and have clear and well-modulated voice. He must be thoroughly familiar with the background to the news and must be conscientious about the pronunciation of foreign names, places or words.

**Producer** - He is responsible for producing the program. He is required to program budgets, schedules rehearsals, recording and shooting. He is also required to play an important role in selecting actors and members of the production team.

**Production Assistant** - It is an entry-level job in the television industry. A Production Assistant is required to support the program from commencement to conclusion. He is required to be a keen observer and be attentive to details.

**Production Manager/Project Co-ordinator** - He is required to take on the responsibility of organizing technical equipment, fixes editing schedules, sign up with studios, and arrange for logistics.

**Researcher** - He is responsible to find suitable people for interviews and write script treatments for the Program, trace pictures in newspaper archives, video sequences in old newsreels or recordings from sound archives.

**Script Editor** - He has to supervise shooting script on the floor/location and make changes if required. A literary background and experience in theatre are the cutting edges of an ideal candidate.

**Script Writer** - He is required to write scripts for a teleserial, documentary, or adapts a novel or a story for television. Scriptwriter has to have a flair for writing and should be a wordsmith using short, crisp sentences and pithy language that add meaning to the plot.

**Singer** - One is required to participate in music-based programs, opening montages for products, occasional telefilm and so on and also network with advertising jingle producers.

**Voice Over Artist** - One is required to lend his/her voice to documentaries, programs or ad films.

**Sound Recordist** - He is required to perform complicated work in sound recording studio with complex electronic gadgetry. It requires him to have formal training at a film institute or systematic training under an established professional or a studio-production house as an assistant.

**Ad Film Maker** - He is required to examine script written by the copywriter and ensures that all details are taken care of before a sequence is shot. **Audience Co-**

**Cameraman** - He must have the ability to see uncommon in commonplace situations and the extraordinary within the ordinary. An acuteness of perception and artistic ability coupled with an extensive technical knowledge of light and filters.

**Computer Graphics Designer, Graphic Artist, Animator** - He should have the ability to transform the dull and mundane into something interesting and amazing. Graphic Artist is required to send out messages in an interesting and eye-catching manner.

**Costume Designer** - He is required to furnish proper costumes and props to the Actors/Actresses.

**Dubbing Artist** - He is required to be fluent and well versed in languages, should be able to make a mark, and should be adaptable enough to match inflections and pauses to attune with the original.

**Make-up Artist** - A successful Make-up Artist needs an eye for detail, imagination and appreciation of the human form in addition to an appreciation of historic detail and knowledge of cosmetology with special emphasis on the effect of different kinds of lighting on make-up.

**Set Designer** - A professional Set Designer/Art Director should have a sense of dimension and style, imagination and ability to translate the germ of an idea into tangible reality along with the knowledge of TV production and drawing skills.

**VJ (Video Jockey)** - He is required to be witty, sharp, charming and in love with the camera.

**Still Photographer** - He is required to maintain visual records of events, locations, settings, costumes, actors, frame continuity, etc. It is a very highly skilled job.

**Media Planner/Buyer** - He is required to prepare a format to decide how advertising time and space will be used to contribute to the realization of marketing objectives.

#### **12.8.1 Assumed percentage point for employment skills**

The employment skills that individuals are expected to possess to find gainful employment in the Entertainment Sector are given below along with their

respective weightages (percentage points). These percentage points are purely based on our assumptions derived from interactions with individual interviewees during the course of the research activities. The percentage points should be ready in the following manner – number of individuals expected to possess the said skill per 100 individuals entering the sector.

**Table: 12.8.1**

*Weightage assigned to employable skills for individuals entering Financial Sector over the next five years*

<b>Employment skills</b>	<b>Percentage Points (per 100 individuals)</b>
Technical background	45
Proficiency in IT	100
Interpersonal skills	100
Analytical skills	35
Management soft skills	35
Strong communication skills	100
Sales & marketing skills	40
Technology skills	45
Customer relations	20

## **12.9 DIRECT EMPLOYMENT PROJECTIONS (next five years)**

### **12.9.1 Direct Employment Projection in Entertainment Sector in Mumbai for 2005**

According to the study undertaken by FICCI, Indian Entertainment Sector is estimated at Rs. 22200 crore (for break up refer to Figure 12.1 – G). In the absence of research data on the entertainment sector in Mumbai, industry experts have placed (guesstimate) the total entertainment sector in the city of Mumbai at approximately 25-30 per cent to that of India, i.e. Rs. 5550 crore.

*(Note: As these sub sectors are highly unorganised, most of the business units that we have interacted with were not willing to share employment related information.)*

In order to estimate the total direct and indirect employment in the Television and Film sub sector, we have selected Balaji Telefilms as the representative sample unit, as it has presence in both the sectors.

The total number of employees (direct & indirect) at Balaji Telefilms is 1000 employees in 2004. Of these, approximately 600 employees were directly employed with the company, while the rest were employed on contract basis. Balaji Telefilms' turnover for the financial year 2004-05 was Rs. 184.44 crore. From the available employment and revenue figures, we have calculated the

average revenue per employee for Balaji Telefilms, which is Rs. 18.44 lakh per employee.

A listed company, Balaji Telefilms enjoys a higher level of professionalism vis-à-vis the industry standards and revenue-per-employee is also much better than the industry averages. Realising the fact that a large portion of the Entertainment Sector, especially the production related areas, are dominated by small and medium sized entrepreneurs, we have decided to take a more practical revenue-per-employee of Rs. 9.22 lakh (50 per cent of Balaji Telefilms).

**Assumptions:**

*As per the FICCI report, television and films sub sector together constitute 88 per cent of the total Entertainment Sector, while music, radio, animation and live events contribute to the balance 12 per cent. Interestingly, all the four sub sector, i.e. music, radio, animation and live events are the sunrise sub sectors and are likely to show high growth rate in business and employment over the next few years. Taking a conservative approach, we have assumed that the revenue-per-employee in music, radio, animation and live events would also be at par with those of films and television sub sectors.*

Based on the available total estimated turnover of Mumbai’s Entertainment Sector (Rs. 22200 crore in 2004) and the average revenue-per-employee for the entertainment sector (Rs. 9.22 lakh), we have calculated the total direct employment figures for Mumbai, which has been estimated at approximately 2,40,780 individuals.

The above estimated direct employment figure for Mumbai however does not cover those in the unorganised segment, especially sectors like Film and Television which have a high unorganised component.

**12.9.2 Direct Employment Projection in Entertainment Sector in Mumbai for 2010**

In a recent research study undertaken by FICCI, it has estimated the growth rate over the next five years for individual sub sector in the Entertainment Sector.

*Table: 12.9.2 - A  
Estimated growth rate over the next five years in India*

<i>Sub Sectors</i>	<i>Estimated growth rate for next five years</i>
Television	18 per cent p.a.
Films	18 per cent p.a.
Radio	22 per cent p.a.
Music	3 per cent p.a.
Animation	30 per cent p.a.
Live Events	18 per cent p.a.

<b>Median</b>	<b>18 per cent p.a.</b>
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(Source: FICCI)

Undoubtedly, the Entertainment Sector in Mumbai has continued to show higher than average growth in business (vis-à-vis India). But by taking a conservative approach, we have pegged the growth in the Entertainment Sector in Mumbai over the next five years at 18 per cent.

*Table: 12.9.2 - B*

*Estimated direct employment in the entertainment sector*

	2004	2005	2006	2007	2008	2009	2010
Direct Employment	2,40,780	2,84,120	3,35,262	3,95,609	4,66,818	5,50,848	6,49,998

Therefore the total direct employment in the Entertainment Sector in Mumbai is estimated at 6,49,998 individuals in 2010.

### **12.9.3 Direct & Indirect Employment Projection in Entertainment Sector in Mumbai for 2010**

The Film & Television Producers Guild of India stressed that the film and television sub sectors is predominantly unorganised when it came to human capital management. It stated that out of the 50 lakh employees engaged in the sub sectors in India, 10 lakh is direct employment, while the balance 40 lakh is indirect employment. Thus, it can be derived that the ratio of the direct and indirect employment in television and film sub sectors is 1:4.

Applying the same to the estimated direct employment figures in the Entertainment Sector in Mumbai, we have arrived at the following estimates for indirect employment for 2004 & 2010.

*Table: 12.9.3*

*Estimated direct & indirect employment for the entertainment sector in Mumbai*

	2004	2010
Direct Employment	2,40,780	6,49,998
Indirect Employment	9,63,120*	25,99,992*

(\* estimated)

The projected direct and indirect employment for the entertainment sector for Mumbai for 2010 is as below:

### **12.9.4 PROJECTED EMPLOYMENT FOR ENTERTAINMENT SECTOR**

Based on the above calculations we have projected direct employment in the city for 2010 at 6.49 lakh employees and indirect employment at 25.99 lakh employees. This implies that the total employment generated by the entertainment sector in 2010 will be 32.48 lakh employees.

*Table:12.9.4*

*Projected direct and indirect employment for 2010 in the entertainment sector for Mumbai (in lakhs)*

<i>Year</i>	<i>Direct Employment</i>	<i>Indirect Employment</i>	<i>Total Employment</i>
2010	6.49	25.99	32.48

## 12.10 RESEARCH FINDINGS

- Due to rush of several new channels in areas like: news, kids, lifestyle, entertainment, spiritual, travel, etc., the sub sector had registered a phenomenal growth over the last few years. The availability of cheaper technology has lead to reduction in costs and higher profits, which in turn is resulting into increase in number of channels. This is likely to create several job opportunities for skilled and creative personnel.
- With an increase in the number of television channels there has been a significant rise in demand for professionals and skilled personnel. Realising that there is a dearth of talent in several areas, several training institutes and mass-communication colleges have ventured in to play a strategic role in providing skilled personnel.
- Earlier a career in cinema was considered a taboo, but with corporate houses and financial institutions investing in the sub sector is attracting the best of talents. In recent times, professionals like MBAs, Chartered Accountants, Doctors, etc., are also opting for a career in the sub sector.
- Gradual removal of FDI and other market restrictions by the government, Indian business houses are aggressively tapping foreign markets. Considering the sheer magnitude of the untapped Indian markets across the country, it wouldn't be wrong to conclude that entertainment sector holds great promise in the near future.
- The influx of satellite channels has revolutionised the radio segment in the country. It has emerged as the most effective mass communication medium in the country. In a short period of three years, FM Radio channels have multiplied exponentially thereby making their mark as an effective medium of entertainment.

- In a short duration, the FM Radio segment has created few hundred direct and indirect jobs in the city. Several young individuals are pursuing radio as a serious career. There has also been a perceptible rise in job satisfaction, glamour and money.
- The radio sub sector in the country is at a nascent stage, and there is a huge scope for talented individuals to make it big – the job opportunities are rising tremendously. It is estimated that there would be more than 300 radio channels within the next two years, and this in turn would need more staff - radio jockey, radio managers, station masters, radio station technicians, etc. Severe competition has resulted into better pay packages.
- Entertainment sector is experiencing a high level of churning vis-à-vis any other sector, which is the reason why the job functions and profiles will continue to evolve. Future job opportunities would be technically oriented, and that constant introduction of newer technology would require future employees to be skilled and technically sound.
- Major sub sectors like television, films, radio and live entertainment have several overlapping employment areas. Considering that entertainment sector is witnessing holistic growth, it provides employment opportunities in virtually every segment and more so in areas like: production, direction, scripting, casting, camera, light, art direction, music, dance, special effects, stunts, wardrobe, make-up and hair styling, editing, sound recording, etc.
- Companies are investing a considerably amount on employee training and skills up gradation, in-house training has become necessity, and companies cannot escape this investment.
- Several training schools have sprung up across the city, which provide individuals training in specialized areas. Also there has been a rise in number of people going abroad to for advanced training in technical and creative areas.

#### **12.11 RESEARCH RECOMENDATIONS**

- The city has been the entertainment hub and future growth of sub-sectors like films, music, radio and television sector would have far-reaching impact on the employment opportunities within the sector. The government should create an environment conducive for the growth of these high employment sub-sectors.
- As the sector is gradually getting more and more organised, jobs are getting segmented based on specialisations. There is a need for training institutes to

provide tailor-made training programs to individuals desiring unique specialisations.

- There is a need to tackle the issue of piracy and create adequate environment for practice of intellectual property rights, it would not only boost the growth of the sector but also create several more employment opportunities.
- IT technology has played a prime role in growth of the television and film sub sector, the sector would foresees a huge requirement for specialised technical people in the near future. IT training institutes should take appropriate steps to orient training programs as per the requirements of the sector.
- Presently, the entertainment sector is experiencing a high level of churning vis-à-vis other sector. This to a certain extent is hurting the health of the sector, steps should be taken to arrest high attrition rate.
- As future job opportunities in the sector would be technology oriented as companies are constantly introducing newer technologies on the production and delivery front. Institutes should training individuals to deliver on future technologies.
- In a period of three years, FM Radio has already made its mark as an effective medium of entertainment. The sunrise sub sector is still largely untapped and with rationalisation in the license framework can create host of new employment opportunities.
- During the last few years, the city has witnessed introduction of several malls and large format shopping complexes that offered both shopping and entertainment experience under one-roof. By creating investment-friendly atmosphere, the government not only encourage retailing boom but also ensure growth of the entertainment sector.
- Mumbai - the hub of entertainment sector in the country -which has almost all the major television and satellite network companies, large production houses and studios. There is a significant rise in demand for professionals and skilled personnel, the role played by training institutes and mass-communication colleges would be very crucial in providing requisite skilled personnel.
- Future job opportunities would be technically oriented, and that constant introduction of newer technology would require future employees to be skilled and technically sound.

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## EMPLOYMENT GENERATION IN THE RETAIL (SHOPS) SECTOR

### 13.1 RETAIL (SHOPS) SECTOR IN INDIA (Over the last decade)

#### Macro Scenario

India is sometimes commonly referred to as 'a nation of shopkeepers'. This epithet has its roots in the huge number of retail enterprises in India, which totalled over 12 million in 2003. About 78 per cent of these are small family businesses utilising only household labour. Even among retail enterprises that employ hired workers, the bulk of them use less than three workers.

In a developing country like India, a large chunk of consumer expenditure is on basic necessities, especially food related items. Hence, it is not surprising that food, beverages and tobacco accounted for as much as 71 per cent of retail sales in 2002. The remaining 29 per cent of retail sales are non-food items.

India's retail sector appears backward not only by the standards of industrialised countries but also in comparison with several other emerging markets in Asia and elsewhere. There are only a handful of companies that run department stores and hypermarkets. While the number of businesses operating supermarkets is higher (385 in 2003), most of these had only one outlet. The number of companies with supermarket chains was less than 10 in 2003.

As per the 2005 Global Retail Development Index released by AT Kearney, India has displaced Russia to become the world's best destination for retail stores' expansion. The index, a study of retail investment attractiveness among 30 emerging markets across the globe, has indicated that India's retail market totalling \$330 billion, though vastly underserved, has grown at an average 10 per cent, over the past five years. A recent study of the retail segment in India conducted by KSA Technopak, states that fashion and food will be the key growth areas within the retailing sector, accounting for 85 per cent of business.

The churn in the country's retail sector has ushered in diverse concepts like multi-brand shops, all-under-one-roof shops, speciality and super-speciality shops catering to niche products and consumers. Meanwhile, more and more manufacturers are setting up dedicated outlets that focus on creating a distinct store identity by using layout, display and lighting to enhance the appeal, thus offering consumers a complete shopping experience. The contest for a greater share of the retailing turf, for now, is primarily between the organised and unorganised sectors.

Amidst these changes, we find that though every shop hasn't quite become a store, certainly most of them have changed to a great extent so as to cope with the emerging realities of retailing. With new concepts supplanting the old ones, contemporary and traditional players are learning to co-exist. Although the evolution of retailing can be traced to early years of liberalisation, it is only during the last five years that the sector has seen infusion of high degree of professionalism by way of fresh formats, ideas and players.

Retail sales (in real terms) are predicted to rise more rapidly than consumer expenditure during 2003-2008. The forecast growth in real retail sales during 2003-2008 is 8.3 per cent per year (compared with 7.1 per cent for consumer expenditure).

As for the market, India's consumer class is projected to treble to 124 million households by 2013 from 46 million households in 2003, as per the research done by National Council of Applied Economic Research (NCAER). The research highlights that India's opportunity exists in more than one billion consumer base, of which, 45 per cent comprises the young population, less than 20 years of age.

Inevitably, modernisation of the Indian retail sector will be reflected in rapid growth in sales of supermarkets, department stores and hypermarkets. This is because of the growing preference of the affluent and upper middle classes for shopping at these types of retail stores, given the conveniences they offer such as shopping ambience, variety and a single-point source for purchases. Hence, sales from these large format stores are predicted to expand at growth rates ranging from 24 per cent to 49 per cent per year during 2003-2008. However, such rapid growth is from a small base. Hence, they will continue to account for only a small share of total retail sales in 2008.

### **13.2 RETAIL (SHOPS) SECTOR IN MUMBAI (Over the last decade)**

#### ***Industry Perspective***

An optimist, **Apna Bazar** is of the opinion that just as businesses like IT, marketing and trading dominated economic activities during the last decade; similarly, retail sector would spearhead growth of economy over the next five years. The rate at which malls and stores are springing-up across the country is an apt indication of the enormity of retail revolution. It feels that in the short-term, competition would be severe as individuals players would go all out to woo customers, but in the long-term the sector will accommodate only serious players considering the fact that India's per capita consumption is considerably low vis-à-vis developed countries. Another striking change the sector is witnessing is introduction of state-of-the-art technology in business processes to stay one-up in the competition.

Over the last decade, Apna Bazar has witnessed business growth in the region of 10-15 per cent per annum; however, during the last two years, the growth rate has declined largely due to increase in competition. Another factor that has resulted into drop of sales for the company has been the movement of traditional customers from the city to suburbs.

According to **Shoppers' Stop**, the sector has grown at an annual rate of 35-38 per cent over the last decade. This was largely due to influence of western culture, increasing purchasing power, general boom in the economy and customer's changing consciousness towards products, i.e. customers were now giving more importance to branded products, quality, price, etc. Prior to 1995, the retail sector was considered to be unorganised; while post-1995 the sector has received its due recognition. Big players like Pantaloon, Westside, Pyramid, etc. started consolidating their businesses in the city, which spurred the overall growth of the sector.

Since 1995, Shoppers' Stop has performed very well growing at the rate of 25 per cent year-on-year. But in 2000, the business witnessed a slowdown as the company intentionally decided to consolidate its business by writing-off bad debt, investing heavily into ERP solution, and putting other systems in place. But soon thereafter from 2000-01, the company bounced back and since then the company has been making profits.

According to **Hilton**, a branded garment shop, the retailing sector has matured significantly over the last decade. Over the last few years, the sector has witnessed evolution of several new retailing models and concepts, which in turn are posing stiff challenges to conventional players. Indicating a paradigm shift in business, it claimed that earlier retailers were at the mercy of manufacturers, but today it is vice versa. It is certain that conventional retail shops will continue to exist despite threat from malls and big stores. It pegs the growth of retailing sector at approximately 30-35 per cent during the last 10 years.

According to **Shakari Bhandar**, the retail sector in Mumbai has grown at a rate of 25 per cent over the last five years. It credits the government's initiatives like globalisation and free trade policy for having given the necessary impetus to this sector. It feels that the government's decision of allowing FDI into retailing sector has already resulted into a mall revolution in metro cities like Mumbai, and it believes a similar trend would be visible across the country over next few years.

Over the decade, Shakari Bhandar has grown from strength-to-strength. The company's total turnover for 2004-05 has touched Rs. 65 crore with employee strength of 500 across 19 shops in Mumbai. Over the last few years, the company

has witnessed a slight drop in sales to the tune of 5-10 per cent on account of invasion of malls and super stores. It agreed that if no action is taken at the earliest, the drop in sales could intensify in the coming future. However, the company is not taking competition lying down, in fact it has plans to introduce new schemes for its customers and create a mall-like ambience in its shops.

According to **K. Dinesh & Co.**, a leading wholesale and retail textile shop, the retail sector has grown by almost 500 times in the last 10 year, and it was largely due to greater awareness among customers and increasing spending power. But the main reason for the growth of this sector is easy availability of finance from banks and financial institutions. The company has performed exceptionally well over the last 10 years, and has five textile and ready-made garment stores and one furnishing shop. The company started with a turnover of Rs 2 crore and five employees and at present has 40 employees with a total turnover of Rs 7 crore. The company has invested in customer-friendly interiors and has air-conditioned all its outlets.

**Retailers Association of India (RAI)** feels that the employment has certainly grown in the retail sector in Mumbai, but cannot confirm the exact figure. The growth in employment is directly related to family owned businesses, which are now operating multiple outlets, and also the large format stores and malls that are spreading like wildfire. However, RAI is of the opinion that the transformation from unskilled to skilled worker is gradually happening - thanks to the new institutes which are offering various courses in retailing.

### **13.2 EMPLOYMENT TRENDS IN MUMBAI (Over the last decade)**

#### ***Industry Perspective***

In the last 2-3 years, **Apna Bazar** has gradually switched from manual to mechanisation of business processes, which in turn has resulted into basic computer orientation of existing staff and recruitment of IT savvy personnel. Earlier, the institution used to recruit individuals with SSC and HSC qualification, but now the basic criteria is graduation with specialisation in business areas like sales, accounts, administration, merchandising, shop floor management, etc.

Apna Bazar has 35 franchisees, each of which employs on an average five employees (i.e. 175 employees). In addition, it has approximately 30 small shops across the city employing 750 individuals, thus taking the total employee strength to approximately 900.

Elaborating on the changing employment perceptions, **Shoppers' Stop** said that earlier working in retail store was considered as down market and only those from the lower strata of the society with family income less than Rs. 50,000 p.a.

worked in a retail store. But after 2000, as the sector received its due recognition, it led to huge flow of people from middle class entering this stream. Of late, the company claimed that individuals from upper class were also entering the sector, and it was largely due to improvement in technology, enhanced supply chain management and high salary offered by several large players. In short, the sector is attracting the best talent in the city. As for change in job profiles, earlier the sector was employing undergraduates, but today several companies were recruiting graduates and post-graduates, moreover the demand for specialised personnel has increased phenomenally over the last few years. A number of institutes like KC College, RAI, Pearl Academy... were playing an important role in providing the sector with skilled and trained personnel.

Hilton feels that organised retailing has resulted into entry of business houses and corporates, who due to their strong customer focus approach, are recruiting quality manpower. Indicating at the changing trends in job profiles, **Hilton** claimed that bigger players like Pantaloon, Shoppers' Stop, etc. were recruiting graduates for shop floor jobs and MBAs for senior positions. It is of the opinion that liberalisation flooded Indian markets with foreign brands; and with international brands being image conscious brought about a marked change in employment patterns. As a result, Indian retailers were forced to invest on their human capital.

On employment front, Hilton has witnessed some significant changes in total employee strength. The number of employee reduced from 16 individuals in 2001 to 8 employees at present, and this was largely due to manufacturers placing their own people in the stores. For instance, Lakme and Zodiac counters at the store are managed directly by the company representatives. This has significantly brought down the direct employment in the store. As for those working in the store, most of them have been around since the inception of the store, i.e. 40 years ago. Although these employees are not qualified as per the market expectations, they surely have vast experience under their belt.

According to **RAI**, a decade ago, not many people were attracted to the retailing sector as it was considered low paying and largely unorganised. But of late, it claims that the sector has undergone immense transformation in terms of services standards, employee training, remunerations, job profiles, etc. Though the sector has witnessed phenomenal change, yet RAI feels that the sector in India continues to fall short on account of meeting individual's expectations, especially when it is compared to the developed countries.

Elaborating on employment patterns in retailing sector in India, RAI said that on one hand it had an enormous unorganised segment dominated by family-run shops and stores that employ uneducated and unskilled labour, on the other

hand it has comparatively small, but fast growing organised segment - the large format stores, discount stores, giant stores, speciality stores, etc., which employ highly trained and specialised personnel. It emphasised that the sector is in for a huge change whereby high-paced growth in the organised segment would trigger holistic transformation of the unorganised segment. It expressed confidence that this would result into a rise in demand for educated, qualified and skilled personnel in the smaller stores.

According to **Sahakari Bhandar** estimation, over the last five years, although employment in the sector has witnessed a growth of approximately 20 per cent, there hasn't been any drastic change in the job profile. Nonetheless, it agrees that the sector is witnessing a gradual shift from manual operations to mechanised services at the backend. The introduction of computer was literally forcing people to learn to operate it, thus playing a critical role in day-to-day operations of the business. The company agreed that increased use of computers was helping in reduction of response time, but also stressed on the fact that it had resulted into a drastic cut in manpower.

**Sahakari Bhandar** stressed on the fact that it is not only real estate builders like Hiranandani, Oberois, Rahejas, Piramals, etc. who are opening malls across the city, even the private and foreign players like Wal-Mart, Carrefour, Tesco and Casino are eyeing to set up shops here. As a result, the retail sector would witness creation of several jobs in both skilled and unskilled segment. However, it is concerned that job security will take a severe beating over the next few years, on account of rise in competition.

**K. Dinesh & Co.** claims that over the last decade employment has grown at a steady rate of 50 per cent due sustained increase in the number of family owned shops, malls and super stores in the country. As far as job profile is concerned, the company claimed that at the shop level there hasn't been much change in the job profile. It mentioned that shops like theirs require hardworking, skilled and qualified people at the front end to strike a right cord with customer, as skilled people would come at a cost.

### **13.3 INFLUENCE OF IT ON JOB PROFILES IN MUMBAI (Over the last decade)**

#### ***Industry Perspective***

**RAI** agrees that IT or automation has played a major role in the growth of retail business, due to which the sector's dependence on people has gone down drastically. Moreover, IT has helped increase accuracy, improve customer response time, streamline logistics, manage store shelf, track customer behaviour, etc. The introduction of software packages like ERP and RFID has enabled retail chains to plan and control inventory efficiently and improve business economics via integration of outlets across the country.

**Apna Bazar** kicked-off its computerisation programme 7-years ago, and during this period it has invested approximately 15-20 lakh on the basic IT infrastructure. As a next step, it is in the process of integrating its various branches on-line and is currently undertaking a pilot study at its Andheri branch. The institution is aiming at achieving total business integration so as to improve its customer service standards. In keeping with this goal, Apna Bazar has already ensured basic IT training to its staff and also undertakes regular 'Target Oriented Programmes' aimed at officers, shop-floor staff and committee members.

**Shoppers' Stop** has invested three per cent of its total turnover (Rs. 550 crore in 2004-05) in IT. It has achieved 100 per cent integration across all the stores and departments and has implemented four ERP solutions - JDA for retail operations, Oracle Finance for finance and accounting, Ramco Marshall for HR and Arthur Planning for range business planning. The company recently bagged an award for best IT practices in retail category for the year 2003-04.

**Hilton** has been very conservative on the issue of investment in IT. During the last five years, it has invested approximately Rs. 30,000 - Rs. 35,000 in IT, including bar coding system. The bar coding system was introduced to ensure inventory control, thereby enabling shop managers to get an exact update of the stock in the stores.

**Sahakari Bhandar** claimed that it has achieved 100 per cent computerisation in all its shops across the city and that all the offices have been fully integrated. It doesn't foresee any direct impact of computerisation on employment; however, it agreed to have invested in computer orientation of its staff members. The company claims to have invested over Rs 1 crore in the last five years on staff orientation.

**K. Dinesh & Co.** agreed that currently only some of its outlets were computerised and they were aimed at managing accounts, stocks and sales. However, over the next two years, the company claims it would store to become a fully computerised business operation.

#### **13.4 IMPACT ON EMPLOYMENT DUE TO SET BACKS (Over the last decade)**

##### ***Industry Perspective***

According to **RAI**, the retailing sector is still in its nascent stage and it would take the sector approximately 6-7 years to undergo a consolidation process. During this period, it doesn't forecast any job cuts or business reverses. It doesn't rule out marginal business pressure coming from the organised sector in the disorganised retail segment; however, it has ruled out any major job cuts or

change in profiles. Contrary to it, RAI feels that the ongoing boom in the retail sector would create several new jobs for skilled and qualified individuals.

In the year 2000, **Apna Bazar** had to close down two of its unviable manufacturing units, which in turn resulted into a VRS scheme. It was major setback that the organisation witnessed over the last decade. Presently, Apna Bazar is in the process of bringing about a complete change of business culture. It is working on replacing its existing uneducated and unskilled personnel with qualified and business-oriented individuals. It plans to improve the existing customer service standards so as to take competition head-on.

As a company **Shoppers' Stop** hasn't faced any set back, however it doesn't rule out a temporary drop in profit in 2002 when it decided to write-off its debts of Rs. 2 crore and invested Rs. 25 crore in ERP. This move had resulted into a deficit of Rs. 8 crore, but immediately next year the company made a profit of Rs. 10 lakh, and since then the company has never looked back. All these developments have had no direct impact on employment in anyway and being the 'numero uno' company in the retailing sector; it always attracted and retained the best talent in the city.

**Hilton** experienced a business setback between 1999-2003, during which period it experienced a drop in business to the tune of 75 per cent. The setback was largely on account of emergence of large malls and big stores in the area. In the wake of new challenge, it had undertaken a complete makeover of the store wherein it introduced systems like bar coding and off-the-shelf shopping. As far as employment is concerned, the shop has seen a major cut in the employee strength, which reduced from 30 employees before 1999 to 8 employees in 2005.

Being a co-operative society store operating on a 'No Profit, No Loss' basis, **Sahakari Bhandar** agreed that they have specific guidelines in investments and business spending, and cannot match bigger retail players like Shoppers' Stop, Crossroads, Globus, etc. Due to this limitation, it has been experiencing business setback as customers were frequenting the malls as they provide better ambience, entertainment, food court, etc. under one roof. Expressing resentment towards lack of guidelines in government policies, due to which, there is unplanned growth of mall across the city. It claimed that the unhealthy practice was adversely affecting the smaller retailers who were surviving on wafer-thin margins. These adverse developments had forced Sahakari Bhandar to resort to VRS in 2001, whereby it severed the services of 61 employees. Some of the reasons for the downsizing were fierce competition from malls, lack of proper government policy, FDI entry into the retail sector, loyal customers shifting to suburbs, etc.

### 13.5. EMPLOYMENT REQUIREMENT IN MUMBAI (Next five years)

#### *Industry Perspective*

**RAI** has projected the growth of the retailing sector at approximately 10-times over the next five years and claimed that given the size and purchasing power of the Mumbai consumers the road ahead can only get smoother. It however cautioned that the non-availability of trained manpower, especially at the management level, poses a key risk for the retail sector. Besides, as organised retail grows rapidly there will be pressure on existing players and new entrants to look for trained manpower at various levels. Opening up of the FDI in retail could also see the entry of international majors put further pressure on the manpower of exiting retailers, i.e. poaching will take place.

Although **Apna Bazar** foresees sector growth at an average rate of 10-15 per cent over the next five years, it doesn't anticipate any increase in employment opportunities. It feels that increased competition would have a direct bearing on profit margins, which in turn would force retail outlets to keep a check on their overheads. Especially, the family owned businesses and co-operative societies are likely to be at the receiving end as they lack financial muscle. However, it agrees that large private players – on account of their strong financial muscle – would create several employment opportunities as they would invest in new projects and strengthen their human resource capital.

Nevertheless, **Apna Bazar** plans to increase its existing branch and franchisee network, which in turn is likely to create new employment opportunities. Simultaneously, it is in the process of streamlining existing businesses and human capital resources. It projects the increase in human resource requirements at approximately 100 people over the next five years.

**Shoppers' Stop** is confident that the growth in employment in the retail sector over the next five years would be in the range of 35-40 per cent and justified saying that retail shops in the city were on an expansion spree. It claimed that the company had been recruiting approximately 400-700 individuals every year for the last few years. Highlighting on the fact that demand for quality and specialised personnel would continue to be high, it ruled out any major changes in job profiles as it felt that the sector would grow vertically. It agreed that the management colleges and retail training institutes would continue to be the fountainhead for qualified and trained personnel for the next few years. The company has projected a growth in employment of approximately 40 per cent p.a. on the base of 1900 employees (800 employees in Mumbai), and the projection is based on it plans to open four stores every year over the next few years.

**Hilton** lauds the government's support and encouragement to the retailing sector and claims that with the entry of more private players the sector would attain a greater degree of maturity over the next five years. It has pegged the growth of business at 20 per cent p. a., and growth in employment at approximately 15 per cent p.a. over the next five years. It cautions that infusion of technology could slow down the employment growth rate marginally as it would cut down on redundant business processes. However, it foresees a drop in direct employment with the stores and a subsequent rise in indirect employment opportunities with manufacturers, as most of them (manufacturers) would prefer to place their own sales staff at the stores counter.

As far as job profile is concerned, Hilton believes that the future belongs to specialised people like designers, merchandisers, shop-floor managers... as international brands are making inroads and that they would require people with thorough understanding of products and customers. It opines that future employee would require having graduation as the minimum qualification, while for higher post it will require an MBA degree.

**Sahakari Bhandar** is optimistic of an average growth of 10 per cent every year over the next five years, as it claims to have created goodwill amongst its customers. It is gradually changing from a traditional co-operative society store to modern co-operative store with the introduction of bar coding, self-service, free home delivery, computerisation, etc. It doesn't foresee any growth in employment over the next five years as it already has excess staff.

It opines that the retail sector in the city would explode over the next five years, due to release of mill land by the government. Further, real estate builders like Hiranandani, Oberois, Rahejas, Piramals, etc. are opening up malls and shopping complexes in their residential and commercial projects. Not to mention, the inflow of FDI into the sector and growth of townships in and around the city are fuelling the growth of malls.

Elaborating on the changing employment trends in the sector, Sahakari Bhandar claimed that the future employment opportunities in the sector would be predominantly for skilled and specialised individuals. For instance: a qualified person experienced in apparels would be required to work in the apparel department; similarly, a person possessing knowledge about jewellery would be preferred in the jewellery department as against individuals without any experience. Another change that the company foresees in the near future is that with more and more institutes offering retailing courses in various segments such as merchandising, customer service, client management, shop managers, etc. there would be a phenomenal increase in the availability of skilled personnel.

According to **K. Dinesh & Co.**, the retail sector has a huge potential for growth, as a large section of the market lies untapped. Considering the fact that major players and well-known brands eyeing India's vast retail market, the next five years will see the sector achieve 100 per cent growth rate. The rising customer spending power and readiness of banks for easy credit, the company claims that the future of retail sector is very bright. Though the company is bullish about growth of retail sector, it feels that the growth in employment may not match expectations. This is because by and large retail stores are witnessing a transition from 'traditional' mode of functioning to 'technology driven' business, which would have an adverse impact on the number of employees. The concept of 'off-the-shelf' buying has already reduced the number of sales people significantly, who traditionally were the backbone of any retail set up. The company pegs the growth in employment at approximately 10-15 per cent over the next five years. As far as job profile is concerned, it claimed that the stores would require the same kind of people who are dedicated, demand lesser pay, and have some experience, however it agreed that qualification would be an added advantage, but not compulsory.

### **13.6. AVAILABILITY OF TRAINED PERSONNEL IN MUMBAI (Next five years)**

#### ***Industry Perspective***

**RAI** agrees that of late, there has been a lot of poaching in the sector as retail stores were finding it difficult to get personnel with requisite skills. It also highlighted the fact that there were several established management colleges offering retailing course with a wide range of job specialisations, which were creating skilled and qualified talent pool. It agreed that recruitment through newspaper advertisement and agencies continued to remain favourite, and that retail companies were willing and equipped to provide intensive in-house training to qualified personnel.

According to **RAI**, the retail sector is spending a miniscule amount on employee training and that too it is visible only in large format stores and malls like Shoppers' Stop, Crossroads, etc. It warned that survival of the sector in near future would to a great extent depend on its investment in training and development of manpower. It claimed that as profit margins shrink due to rise in competition, only companies that have quality manpower would survive. At the front-end, the retail stores would require qualified and efficient sales executives and floor managers who will convert sales and rake profits, while at the back-end it would require merchandisers who would provide all the necessary assistance to the front end and at the same time save cost.

**Apna Bazar** recruits people directly from the market and trains them at its training institute - The Ashok Mehta Apna Bazar Management Institute. The

new recruits are required to undergo a compulsory training programme for a period of one month during which they are provided orientation in diverse area of their specialisation. The duration of the training programmes range from as brief as one-day to as exhaustive as one-month.

**Shoppers' Stop** claimed that there is a huge demand for skilled and specialised personnel in the sector and the gap is widening with each passing year on account of increase in the number of retail stores. Presently, the company is sourcing personnel largely from management colleges (campus recruitment), who are later trained as per the requirements of the job. As the company follows European business model, it has always recruited fresh graduates from various institutes like Pearl Academy, NIFT and other fashion schools and later engaged them in specific job orientation.

**Hilton** claims that there is no dearth of people in this field, but finding specialised personnel is a tough job. In the past, Hilton had resorted to newspaper ads for select job profiles, but it did not get the required results. It believes in the tried and tested method, i.e. 'word of mouth' for sourcing manpower. It agrees that there are several institutes that have started courses in retailing, but here again, as most individuals are graduates they are directly sourced by the malls and large format stores.

At the officer level, **Sahakari Bhandar** employs qualified personnel, i.e. graduates with retailing background and these are sourced largely through newspaper advertisements. However, it doesn't rule out the fact that a large portion of its staff are SSC pass or below, who are engaged in unskilled activities like packaging, loading/unloading, data entry, labelling, etc. Nevertheless, it claims that presently there is no dearth of both skilled and unskilled people in the market, and it agreed that it was largely due to increasing employment opportunities due to emergence of malls across the city.

Traditionally, **K. Dinesh & Co.** has been recruiting people through 'word of mouth', and it has never had problems sourcing people from the market, as they were largely unskilled and uneducated manpower. It agrees that skilled manpower was scarce, and even if they were available, they came at a huge cost. Prior to recruiting an individual, the company took three things into consideration - Pay, Experience and Dedication, while Qualification was the last thing in an employee that the company looked for. Once recruited, the employers ensured that the new recruits are given hands-on training at the shop level.

### 13.7 TRENDS IN INDIRECT EMPLOYMENT (Over the next five years)

#### Industry Perspective

As **Apna Bazar** has a fairly wide branch and franchisee network, the indirect employment generated is largely in the area of logistics, i.e. packaging and transportation. It does outsource some low-end jobs like housekeeping and security. Further, as the institution offers several value-added services to customers in the area of health and fitness, it does generate some indirect employment for medical specialists.

Elaborating on the indirect employment generated in the sector, **Shoppers' Stop** claimed it generated approximately 3000 indirect employments through transportation, loading/unloading, warehouse, housekeeping, manufacturing, etc. In addition, company is likely to generate approximately 30-40 per cent of outsourcing opportunities over the next few years. Presently, the ratio of outsourcing is 100:35, i.e. for every 100 people it employs, the company would create outsourcing opportunity for 35 people, which would be largely in the area of manufacturing, ancillary, warehousing, housekeeping...

As for **Hilton**, the indirect employment generated is mostly seasonal, i.e. during festivals and occasions, when it undertakes promotional activities in the store. During the festive season, it creates indirect employment opportunities for around 15 individuals and these are largely engaged in the area of sales promotions. In addition, it doesn't rule out marginal indirect employment opportunities in areas like housekeeping, maintenance, transportation, couriers, etc. throughout the year.

**Sahakari Bhandar** has a well-knit and fully integrated supply chain, thus the scope of indirect employment creation is marginal. However, it claims that several MNCs and private corporate houses regularly conduct sales promotion activities in its premises, which in-turn creates several indirect employment opportunities. It has placed the total number of indirect employment generated at each of its shops at approximately 10-15 individuals per month. The company opines that it is likely to generate approximately 10 per cent indirect employment annually in the next five years.

Bulk of **K. Dinesh & Co.'s** business is into retailing of readymade garments, which generated approximately 100 indirect employments at various levels - from transportation to tailoring to embroidery to packaging, etc.

**RAI** predicts that around 115 lakh indirect employment will be generated by retail sector over the next five years, including transportation, packaging, small scale industries like embroidery, zips, buttons, etc.

### **13.8 CHANGING TRENDS IN EMPLOYMENT SKILLS (Next five years)**

**RAI** claims that with more and more format stores and malls coming up in the next few years, sales pattern and employee feedback will play a crucial role. As the sector is getting matured, more depth will be required in job profile. Retail stores will require quality people to steer its profit, as competition will intensify. While the demand for unskilled and semi-skilled people will shrink, the demand for individuals with specific qualifications and skills from recognised institutes will rise.

Although traditionally, **Apna Bazar** employed individuals with diverse educational background - SSC, HSC, graduates, etc. a large portion of its employees were unskilled and untrained. Now, with increasing competition from private players the institution is sourcing only graduates with good communication skills, pleasing personality and strong customer service orientation. The company has become increasingly demanding and choosy about selection of human resources.

**Hilton** cautions that rapid computerisation, bar coding, off-the-shelf shopping, etc. would have greater influence on future employment trends. Keeping tuned to the above changes, it feels that future employees would require strong technology orientation, in-depth knowledge of job specialisation, strong customer-service focus and good communication skills.

**Sahakari Bhandar** feels that specialised people would be required in the near future. For instance: a person who knows in and out about apparels would be considered in the apparel department. Similarly, a person who has the knowledge about jewellery would be preferred in the jewellery department as against the person who has none. Another change the company is witnessing is that more and more institutes are offering retailing courses in various segments such as merchandising, customer service, client management, shop managers, etc.

**K. Dinesh & Co.** is of the opinion that small and medium sized stores will require people who are dedicated, demand lesser pay, and have some experience. Qualification will be an added advantage, but not compulsory.

**Shoppers' Stop** predicts that in the next five years retail companies will focus more and more on customer service and technical skills. With companies planning expansion, there would be more interaction between the customer and the front office staff. Similarly, the need for technical people like merchandisers, IT, back-office staff, etc. will explode.

### 13.8.1 Assumed percentage point for employment skills

The employment skills that individuals are expected to possess to find gainful employment in the Retail Sector are given below along with their respective weightages (percentage points). These percentage points are purely based on our assumptions derived from interactions with individual interviewees during the course of the research activities. The percentage points should be ready in the following manner – number of individuals expected to possess the said skill per 100 individuals entering the sector.

*Table: 13.8.1*

*Weightage assigned to employable skills for individuals entering Retail Sector over the next five years*

<b>Employment skills</b>	<b>Percentage Points (per 100 individuals)</b>
Proficiency in IT	60
Interpersonal skills	100
Analytical skills	35
Management soft skills	15
Strong communication skills	100
Sales & marketing skills	40
Technology skills	20
Customer relations	35
Database management	5

## 13.9 DIRECT & INDIRECT EMPLOYMENT PROJECTIONS (Next five years)

### 13.9.1 Employment Projection in Retail (Shop) Sector in Mumbai for 2005

The retail sector is mainly dominated by unorganised segment, and the definition of the segment would have a direct bearing on the projections. Hence, to avoid ambiguity, prior to undertaking employment projections for Retail (Shop) sector in Mumbai, we are defining the organised and unorganised sector as follows:

**Organised sector:** Trading activities undertaken by licensed retailers, that is, those registered with sales tax, income tax, etc., which also includes the corporate-backed hypermarkets, retail chains, large and medium sized shops.

**Unorganised sector:** Traditional formats of low-cost retailing, for example, the local kirana shops, owner operated general stores, paan/beedi shops, convenience stores, hand carts and pavement vendors, etc.

## FACT SHEET: RETAIL SECTOR IN INDIA

AT Kearney has projected the retail sector in the country to be approximately Rs. 8,00,000 crore in 2005, while FICCI has estimated the total retail business at Rs. 11,00,000 crore or 44 per cent of the GDP.

The size of the organised retail segment was estimated at Rs. 15,000 crore in 1999, and was slated to grow at 40 per cent per annum to touch Rs. 35,000 crore by 2005.

The Indian retail sector is highly fragmented with approximately 11-12 million outlets across the country; however only 4 per cent of these are stated to be larger than 500 sq. ft. in size.

According to AC Nielsen and KSA Technopak, India has the largest shop density in the world, and it is estimated that in 2001 there were:

- 11 outlets for every 1,000 people (in India)
- 16 outlets for every 1,000 people (urban India)

As per the Census 2001, the total population of Greater Mumbai in 2001 was 16,300,000. Going by the given ratio of 16 outlets for every 1000 people, we have arrived at the conclusion that the total number of outlets (organised & unorganised) in Mumbai in 2001 was 2,60,800.

Industry estimates have put the organised component in Mumbai's Retail Sector at 35 per cent in 2001, while the balance comprises of the unorganised segment. Thus, the number of retail outlet in the organised sector in Mumbai works out to 91,300 outlets, while the balance 1,69,500 outlets were in the unorganised sector.

- According to Shoppers' Stop, the organised sector has grown at an annual rate of 35-38 per cent over the last five years.
- Sahakari Bhandar has estimated that the retail sector in the city has grown at a rate of 25 per cent over the last five years.
- Hilton has pegged the growth of retailing sector at approximately 30-35 per cent during the last 10 years.

Backed by these research findings, and based on the views of industry experts, we have assumed that the growth in the number of retail outlets in Mumbai between 2001 and 2005 was 15 per cent for the organised sector and 10 per cent for the unorganised sector. Thus, the estimated retail outlets in Mumbai in 2005 as follow:

Table: 13.9.1 - A

*Estimated total number of outlets in Mumbai (2001-2005)*

	2001	2002	2003	2004	2005
Organised	91,300	1,04,995	1,20,744	1,38,855	1,59,684
Unorganised	1,69,500	1,86,450	2,05,095	2,25,604	2,48,164
Total	2,60,800	2,91,445	3,25,839	3,64,459	4,07,848

(\* estimated)

According to Industry experts, the average number of individuals working per outlet in Mumbai in the organised sector was 15, while the average of individuals working per outlet for unorganised is estimated at 2.

Table: 13.9.1 - B

*Estimated total employment in outlets in Mumbai (2005)*

	2005	Avg. employee per outlet	Est. total employment
Organised	1,59,684	12	19,16,208
Unorganised	2,48,164	3	7,44,492
Total	4,07,848	-	26,60,700

(\* estimated)

### 13.9.2 Employment Projection in Retail (Shop) Sector in Mumbai for 2010

- Shoppers' Stop has projected the growth in employment at approximately 40 per cent per annum over the next five years.
- Hilton has projected growth in employment at approximately 15 per cent p.a. over the next five years.
- Shakari Bhandar is optimistic of an average growth of 10 per cent every year over the next five years.
- K. Dinesh & Co. has pegged the growth in employment at approximately 10-15 per cent over the next five years.

Based on the above assumptions, we have put the growth in employment over the next five years at a conservative 10 per cent p.a. and have made the following projections:

Table: 13.9.2

*Estimated employment growth in retail sector in Mumbai (2010)*

	2005	2006	2007	2008	2009	2010
Employment	26,60,700	29,26,770	32,19,447	35,41,391	38,95,530	42,85,083

### 13.9.3 PROJECTED EMPLOYMENT FOR RETAIL SECTOR

Based on the above calculations we have projected direct employment in the city for 2010 will be 42.85 lakh employees. As for indirect employment in the sector, we find that they would be created largely in the area of housekeeping, maintenance, transportation,

courier, printing, packaging, etc. and it would be difficult to map the exact figures for 2010.

*Table: 13.9.3*

*Projected direct and indirect employment for 2010 in the retail sector for Mumbai (in lakhs)*

<i>Year</i>	<i>Direct Employment</i>	<i>Indirect Employment</i>	<i>Total Employment</i>
2010	42.85	*	-

### 13.10 RESEARCH FINDINGS

- Just as IT, marketing and trading dominated economic activities during the last decade, the retail sector would spearhead growth of economy over the next five years. The rate at which malls and stores are springing-up across the country is an apt indication of the enormity of retail revolution.
- Over the last few years, the sector has witnessed evolution of several new retailing models and concepts, which in turn are posing stiff challenges to conventional players. Despite challenges it is certain that conventional retail shops will continue to exist despite the threat from malls and big stores.
- Government’s decision of allowing FDI into retailing sector has already resulted into a mall revolution in metro cities like Mumbai.
- A decade ago, not many people were attracted to the retailing sector as it was considered low paying and largely unorganised. But of late, it claims that the sector has undergone immense transformation in terms of services standard, employee training, remuneration, job profile, etc.
- Earlier, retail stores recruited individuals with SSC and HSC qualification, but now the basic requirement is graduation with specialisation in business areas like sales, accounts, administration, merchandising, shop floor management, etc. The sector is attracting the best talent in the city.
- On the whole, the retail sector is witnessing creation of several jobs in both skilled and unskilled segment. But, increased use of computers by retail stores to improve response time is expected to drastically cut manpower requirements.
- Introduction of IT/automation has lowered the dependence on people drastically. Moreover, it has helped increase accuracy, improve customer response time, streamline logistics, manage store shelf, track customer behaviour, etc.
- Emergence of large malls and big stores is forcing family-run stores to undergo a complete makeover. Several small stores have changed to the extent of introducing systems like bar coding and off-the-shelf shopping. As

far as employment is concerned, these shops have cut their employee strength.

- Increased competition is likely to have a direct bearing on profit margins, which in turn would force retail outlets to check on their overheads. Most family owned businesses and co-operative societies are likely to be at the receiving end as they lack financial muscle.
- In the near future, more and more institutes are expected to offer retailing courses with a wide range of specialisations - merchandising, customer service, client management, shop managers, etc., thereby leading to a phenomenal increase in the availability of skilled personnel.

### **13.11 RESEARCH RECOMMENDATIONS**

- The government's decision of allowing FDI into retailing sector has resulted into a mall revolution in Mumbai, thus creating several newer job opportunities. The pace of the revolution could be further accelerated by providing requisite regulatory support and fiscal benefits to investors.
- In the unorganized sector, the growth in employment would be directly influenced by family owned businesses, and they are likely to face stiff competition from large format stores and malls in the near future. Attempts could be made towards providing requisite training to family-run-businesses on how to cope up with competition to adapt to transition.
- The sector has witnessed a gradual transformation in work force from unskilled to skilled courtesy retail training institutions mushrooming across the city. However, the quality of training provided by most of these institutions had been a matter of concern, and appropriate steps should be taken to regulate the courses.
- Retail stores are gradually switching over from manual to mechanisation of business processes, thereby creating the need for technology orientation of existing staff and recruitment of technology savvy personnel. Presently, only a handful of training institutions have access to state-of-the-art retailing technology, and are capable of meeting future manpower needs in the sector.
- The projected growth of retailing sector is estimated at approximately 10-times over the next five years in Mumbai. The existing retail training infrastructure in the city is not geared to meet future expectations of trained and skilled manpower, thus necessitating the creation of quality training institutions. In the near future, survival of the sector to a great extent would depend on investment in training and development of manpower.

- Management colleges and retail training institutes would continue to be the fountainhead for qualified and trained personnel for the next few years, and a closer interaction between training institutes and retail sector would be beneficial for the two.
- The future belongs to specialised people like designers, merchandisers, shop-floor managers... and the sector requires people with thorough understanding in these areas. Existing training institute should be encouraged to launch dedicated courses in various specializations.
- The sector has the potential of creating employment opportunities for SSC pass or below and unskilled individuals at the backend in areas like packaging, loading/unloading, data entry, labeling, etc. There is also a huge scope for indirect employment and outsourcing of backend activities. There is a need for creation of proper employment norms to avoid undue exploitation of individual engaged in low-end unskilled jobs.

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## EMPLOYMENT GENERATION IN THE AUTOMOBILE GARAGE SECTOR

### 14.1 AUTOMOBILE GARAGE IN MUMBAI (Over the last decade)

#### Macro Scenario

The growth curve of India Auto Inc. has been on an upswing for the past few years. The high growth observed since 2001-02 in automobile production continued in the first three quarters of the 2004-05. Annual growth rate was 16.0 per cent in April-December, 2004; the growth rate in 2003-04 was 15.1 percent. Consequent to liberalisation, the arrival of new and contemporary models, easy availability of finance at relatively low rate of interest and price discounts offered by the dealers and manufacturers appear to have stimulated the demand for vehicles and a strong growth of the industry.

The automobile industry grew at a compound annual growth rate (CAGR) of 22 per cent between 1992 and 1997. With investment exceeding Rs. 50,000 crore, the turnover of the automobile industry exceeded Rs. 59,518 crore in 2002-03. Including turnover of the auto-component sector, the automotive industry's turnover, which was above Rs. 84,000 crore in 2002-03, is estimated to have exceeded Rs.1,00,000 crore in 2003-04.

The progressive liberalisation of the norms for foreign investment and import of technology appear to have benefited the automobile sector with production of total vehicles increasing from 4.2 million in 1998-99 to 7.3 million in 2003-04. It is likely that the production of such vehicles will exceed 10 million in the next couple of years.

The fastest growth in volumes has come from commercial vehicles. Between 1998-99 and 2003-04, output of such vehicles has grown 2.8 times compared to the 2.2 times increase in passenger cars. Furthermore, two-wheeler output continues to dominate the volume statistics of the sector. In 2003-04, for every passenger car turned out by the sector, there were 7 two-wheelers produced.

**Table: 14.1 - A**

<b>Automobile production (Numbers)</b>			
<b>Category</b>	<b>2002-03</b>	<b>2003-04</b>	<b>2004-05*</b>
Passenger Car	608,851	842,437	699,082
Multi Utility Vehicles	114,479	146,103	178,187
Commercial Vehicles	203,697	275,224	247,797
Two Wheelers	5,076,221	5,624,950	4,758,639
Three Wheelers	276,719	340,729	271,983
Total	6,279,967	7,229,443	6,155,688
Percentage Growth	18.1	15.1	16.0

(Source: Ministry of Heavy Industry & Public Enterprises)

**Table: 14.1-B**

**Total number of motor vehicle in Greater Mumbai as on 31<sup>st</sup> March 2004**

	<b>Mumbai Central</b>	<b>Mumbai Western</b>	<b>Mumbai Eastern</b>	<b>Greater Mumbai</b>	<b>% increase over previous year (Greater Mumbai)</b>
Two Wheelers	194343	263427	126410	584180	11.25
Three Wheelers	0	58834	43390	102224	6.38
Four wheelers (light)	224520	149824	66373	440717	9.1
Others	38744	23173	10378	72295	*
Total	457607	495258	246551	1199416	10.26

(Source: RTO, Mumbai)

### **Industry Perspective**

Elaborating on developments in the automobile garage sector, the **Two Wheelers Association** expressed its satisfaction on the rate of growth of vehicles in the city, as it was generating several new employment opportunities for those engaged in vehicle maintenance business. However, at the same time it expressed its concerns on the new trends whereby manufacturers were withdrawing their dealerships, and starting their own service stations. It highlighted that some manufacturers had already stopped selling spare parts in the open markets, and that it was affecting the small and medium sized garages. It also brought to notice an important concern – space constraint in the city, which has been bothering the sector for a long time now; and to make matters even worse, the government had now stopped issuing licenses to garages in the city. The association was of the opinion that these factors had reduced employment scope in the sector. Nevertheless, it has projected the growth of automobile garages for two-wheelers at approximately 5-10 per cent for the year 2004-05.

According to **Andrade Motors**, the last decade had been good for the automobile garages sector, as many manufacturers had launched new vehicles into the market. It is of the opinion that the liberal government policies led to entry of many foreign automobile manufactures into the Indian market, which in turn not only generated employment in the area of automobile manufacturing but also brought business to garages. It estimates the company's business has grown at more than 100 per cent over the last decade.

Established in 1970, **Apsara Scooters** was doing quite well until 2000, during the last five years its business has suffered a major setback as two automobile manufacturers - Kinetic and Bajaj, had discontinued their dealership with the company. So also, the manufacturers have increased the warranty on vehicle from 1-year to 2-year; this has resulted in customers preferring to get their vehicles serviced from the manufacturer rather than the garages.

The story is the same with **Frank Auto Repairs**, established in 1970, its business prospered for 25 years in a trot, but post-1995, the business has been on the slide. Here again, one of the prime reasons for business not performing well was automobile manufacturer starting their own service centres and withdrawal of their dealership. Non-availability of spare parts and increase in warranty period had directly affected the garage business in a big way, as customers prefer to visit manufacturers' service centre. The company feels that these factors have had a negative impact on employment, as garages that repaired almost 10-15 vehicles per month and employed 10-12 mechanics are now servicing only 5-6 vehicles and have only 2-3 mechanics.

**Mahesh Turning Works** also endorsed that with the increase in number of vehicles, the garages business flourished for three decades. However, the dawn of the 21st Century saw the Japanese invasion on the Indian automobile sector, and this resulted into a gradual slowdown of the automobile garages business as Japanese technology provide little room for repair services. Another reason for business not doing so well is that banks are offering easy loans on new vehicles, and manufacturers offering sops like exchange offer, free accessories, etc.; this has distant traditional customers from conventional garages. Nonetheless, the company is optimistic on the future growth of garage business in the city, as it foresees motorcycle sports to create a greater demand for customers asking for tailor-made services. It projects the growth of the automobile sector in the last decade at approximately 70 per cent.

Another garage company that had been doing good business since 1939, **Vijay Auto Works** saw its business reversals after Maruti Udyog introduced low maintenance cars into the market in 1996-97. This affected its business to a certain extent, but the company was able to do a quick turnaround and make

profits the next year itself. However, this run was also short lived after Hyundai came with its own model Santro in 1998. This hit the company margins so badly that since then the company's business has hit rock bottom. According to the company, some of the reasons why the garage business is in doldrums today are: Low maintenance, good quality cars, low interests bank loans, increase in warranty period, exchange schemes, etc. It claimed that all these factors had worked against the interest of automobile garages and that during the last 10 years growth had been not more than 30 per cent.

#### **14.2. EMPLOYMENT TRENDS IN MUMBAI (Over the last decade)**

##### ***Industry Perspective***

Conventionally, automobile garages recruited skilled personnel on the basis of their experience, while the unskilled labour were made to learn on-the-job. These decades old recruitment practice has seen some makeover during the last few years, according to the **Two-Wheelers Association**, though experience is still a prerequisite established garages are demanding individuals along with degree or diploma in automobile engineering. The ever-changing technology used in the modern state-of-the-art automobiles requires people who can read and write technical manuals so as to do a good job. Also, earlier mechanics were dependent on spanners and other conventional tools, but now power tools are replacing the conventional tools; this has drastically reduced the role of unskilled and ill-qualified personnel, states the association. Moreover, it agrees that the overall personality of people involved in the automobile service segment has also changed dramatically, for instance – dress code, language, salaries, etc.

Supporting the association's claim of a dramatic change in the 'personnel profile' of those required in the sector, **Andrade** feels that gone are the days when people were recruited on the basis of their work experience. In an era, where automobile manufacturers were launching vehicles with MPFI technology, it was mandatory that mechanic is able to read and understand the electronic gadgets prior to working on it. Presently, the company is only recruiting people who read and understand the technical manuals, and follow the set guidelines.

**Apsara** feels that there hasn't been any major change in the basic skills requirement of those employed in garages. It continues to advocate the concept of learning on-the-job culture, and feels that this process provide practical knowledge to mechanics which in turn provide the small and medium sized garages the required edge vis-à-vis the established ones.

**Frank** opines the company, even today, hires mechanics on the basis of their work experience. It feels that semi-skilled people learn the tricks of trade on-the-job, and at times the company send them for short courses organised by manufacturers. Further, it highlights the fact that qualified people won't enter

small and medium-sized garages as it involves a lot of hard work, and the salaries offered are also low. As the qualified personnel normally join the dealers and manufacturers on high pay scale in the post of supervisors, works managers, etc., small and medium sized garages have to do with the best of skilled, semi-skilled and unskilled employee in the sector.

According to **Mahesh**, the employee today should at least be HSC pass, not to mention that individuals with diploma or degree in automobile engineering would be an added advantage. Now that things have changed, it feels that new technology and computerised machinery require qualified people to handle them. However, it doesn't rule out the role of 'work experience' in the growth of an individual's job prospects.

**Vijay** agrees that with new models and engines making their presence, the need for technical or skilled people have increased. Newer tools have also made it necessary for people in the business to learn to read technical manuals. It has indicated a gradual shift from unskilled to skilled labour in the automobile garages.

*Table: 14.2-A  
Total repairs and employees figures for four-wheeler garages in Mumbai*

<i>Four-wheeler garages</i>	<i>Repair/service</i>	<i>Employees</i>
Shamal Motors*	150	20
Balaji Automobiles*	40	4
Bombay Motor Works*	20	12
Bachoo Garage*	750	50
Andrade Motors	65	23
Frank Auto Repairers	6	3
Century Garage*	30	8
Vijay Auto Works	15	3

*Source: Garages mentioned above*

*(\*Garages where only employment and repair figures have been taken but were not part of the sample)*

**Table: 14.2-B**  
**Total repairs and employees for two-wheeler garages in Mumbai**

<i>Co. Name</i>	<i>Repair/service</i>	<i>Employees</i>
Apsara Automobiles	25	1
Sai Service Agency (Bombay) Ltd.*	1500	30
M/s Prakash Auto*	800	20
Vasant Auto Works*	50	5

*Source: Garages mentioned above*

*(\* garages where only employment and repair figures have been taken)*

### **14.3. INFLUENCE OF IT ON JOB PROFILES (Over the last decade)**

#### **Macro Scenario**

Modern technologies have today taken over the ancient system of maintenance of cars and two wheelers. Earlier, mechanics and engineers probes the defects in the automobiles and what could not be diagnosed were opened at random. At times, owners had to suffer on account of wrong diagnosis and the mechanics covered up for their goof-ups. It was a case of constant trials till the mechanic learnt by making mistakes at the vehicle owner's cost.

Today, having multiple 'CPU's or EMS (engine management systems) on board has made life much easier for the mechanics. Electronics have made possible a situation wherein the person attending to a motor vehicle simply has to plug in his central computer or analyser to the engine's EMS and all faults etc. which might have occurred during normal running are immediately intimated to the analyser and preventive steps can be taken accordingly. It also ensures that there are no 'trials' conducted on anybody's vehicles and faults can be easily pinpointed and hence rectified. Here, skilled workers are still needed because the person operating the analyser must be skilled else it might end up into replacing the entire car.

Some of the older generation garage owners still prefer to rely on experience than use these new computers, and subsequent cause heavy damage to the car owner on account of wrong diagnosis. When the fact is information technology has made automobile service simpler. Onboard computers and Engine Management Systems seldom fail under normal use but the consumer is not aware of it. The CPU is a pre-programmed unit with very wide parameters of variation that vehicles undergo and has an answer for all the problems that, that particular automobile could encounter under all conditions.

Today's cars have become more reliable as long as they are serviced and maintained well. There is hardly anything known as major engine tune ups, today one only has to change/clean air and fuel filters which is being done in a jiffy at home and add a fuel additive to the petrol to clear up and service the injectors. A visit to the 'quick oil change bay' at a gas station while getting tanked up and the servicing and an engine tune-up is done.

#### **14.4 IMPACT ON EMPLOYMENT DUE TO SET BACKS (Over the last decade)**

##### ***Industry Perspective***

The last decade has witnessed many new vehicles with Japanese technology making inroads into India. The **Two-Wheelers Association** was of the opinion that though these developments led to creation of employment in the automobile manufacturing sector, the employment opportunities at the garage level reduced as manufacturers withdrew their dealerships. Another setback that the sector is dealing with is the manufacturers' decision to stop selling their spare parts in the open market. To top it up, the government's decision to stop issuing licenses to garages in Mumbai, and space constraints have made garage business unviable to many small and medium sized garages in the city.

The discontinuation of service authorisation from two big manufacturers – Kinetic and Bajaj came as a huge setback for **Apsara**. It was followed by the introduction of new laws and regulations by the government, BMC, Fire Brigade and BEST. Making matter even worse is the increasing builders' pressure to claim prime property for real estate development. All these developments have had a negative impact on the business.

**Frank** was largely into repair of imported cars, but now that import duty of spare parts is on the rise, the impact on business has been significant. Of late, it has also faced problems from BMC and other governmental agencies, not to mention harassment from the builder's lobby. A recent setback that the company highlights is the introduction of VAT, whereby companies have to pay 12.5 per cent on all the spare parts purchased.

**Mahesh** and **Vijay** share similar views on the issue of setbacks, prominent among them being – manufacturers launching service stations, discontinue of dealership, refusal to sell spare parts in the open market and increase in the warranty period. In addition to these, Vijay is of the opinion that the introduction of low maintenance cars like Maruti and Hyundai had been a major setback of the garage owners.

#### **14.5. EMPLOYMENT REQUIREMENT IN MUMBAI (Next five years)**

##### **Industry Perspective**

**The Two-Wheelers Association** paints the future of the garage sector in Mumbai as 'red', since manufacturers are trying to extend their monopoly in this area. Although it foresees several new vehicles to hit the market in near future, but lack of space in the city, it rules out any new garages coming up in the future. Also, those garages that currently exist, it predicts some of them would face closure due to strict government regulations. It predicted growth of the garage business in Mumbai at 5 per cent for next five years.

**Andrade** and **Frank** also agree that future is quite bleak for the automobile garage sector, and one of the reasons being increasing pressure from builders lobby to claim prime space within the city. Also due to increase in various taxes several small and mid-sized garages are shutting their shops. It is of the opinion that only big garages and manufacturer's service stations will survive in the future, as new vehicles will require quality and high-tech maintenance.

There is no doubt about the future growth of automobile sector as one can see launch of several new models every month, which is the reason why **Apsara** is confident of the growth of the garage sector in the city. Though it has predicted growth, it has also cautioned on the pace at which the sector will grow. It feels that factors like increased warranty period and use of sophisticated technology has reduced maintenance requirements for cars to some extent. It however doesn't see any negative growth for the sector, as it believes that rising number of vehicles on road will sustain the growth of garage business.

**Mahesh** feels that in the near future 'automation' would be the buzzword, and believes that in future garages would have to provide 'one-stop-shop' services to clients. It has projected the business growth for the next five years at 25 per cent, but clarified those garages that have adequate space and infrastructure would enjoy the high growth in business.

Contrary to it, **Vijay** seemed to be pessimistic about the future scenario of the automobile garages in the city. It warned that garages needs to upgrade their infrastructure, else face difficult times ahead.

#### **14.6. AVAILABILITY OF TRAINED PERSONNEL IN MUMBAI (Next five years)**

##### **Industry Perspective**

**The Two-wheelers Association** is of the opinion that skilled labour will be in huge demand as new vehicles with state-of-the-art technology are being launched virtually every month. It highlights the fact that future mechanics ought to be educated, as they would require to understand the technology by

reading manuals and then work on it simultaneously. It feels that individuals with ITI qualification are presently in demand, and they can seek better positions like supervisor, works manager, sales manager, etc. Today, more and more educated and skilled manpower are finding employment with the manufacturers as they provide better working conditions and salaries. It is becoming increasingly important for mechanics to have diploma or degree in automobile engineering, as they would be preferred over those having work experience but lack qualification.

**Andrade** feels that the future employee would require knowing how to read and understand technical manuals, hence recommends that diploma in mechanics is a must, and work experience would provide individuals with additional advantage. However, it doesn't undermine the role of on-the-job skill development of individuals. Considering the fact that technology and tools are now changing faster than ever, it foresees an increase in demand for technically skilled people.

**Frank** also agrees that with manufactures churning out new engines and models almost every month; the need for people with technical background will be the 'need of the hour'. More and more people with ITI qualification along with work experience will be required. Similarly, future mechanics will have to know to read and write in order to understand technical manuals and at the same time implement them.

According to **Mahesh**, the ratio of people employed in the automobile garage sector on an average would be 1:3, i.e. one person working on 3 vehicles. Keeping this in mind, it has suggested that the sector needs multi-skilled people who can perform on different accounts. Thus, it suggests that qualified and skilled individuals with multiple specialisations (degree/diploma certificates) would gain a high premium.

**Vijay** also agrees that the future workforce will have to be qualified, and that they should be able to read technical manuals and measure electronic scanners. It feels that a degree or diploma in mechanics would be a must as new vehicles are introducing state-of-the-art technology like MPFI system.

#### **14.7. CHANGING TRENDS IN EMPLOYMENT SKILLS (Next five years)**

Automobile garages in the city are witnessing a complete business overhaul, both in terms of infrastructure set up and customer service standards. Private garages will not only have to directly compete with manufacturers 'Automobile Care' service centers, but will also gear up on the technology front as future vehicle would be sensitive and sophisticated. Automobile garages will have to dawn the retail store looks and customer service standards.

In the front office, garages most likely will have to employ graduates with good communication skills and pleasant personality. One who would be expected to handle EPABX, deal with clients, office house keeping, correspondence, etc.

On the shop floor individuals with a degree/diploma would be more technically suited, whereas in other areas graduates and post graduates with a mechanical engineering background will be desired.

#### **14.7.1 Assumed percentage point for employment skills**

The employment skills that individuals are expected to possess to find gainful employment in the Automobile Garage Sector are given below along with their respective weightages (percentage points). These percentage points are purely based on our assumptions derived from interactions with individual interviewees during the course of the research activities. The percentage points should be ready in the following manner – number of individuals expected to possess the said skill per 100 individuals entering the sector.

*Table: 14.7.1*

*Weightage assigned to employable skills for individuals entering Automobile Garage Sector over the next five years*

<b>Employment skills</b>	<b>Percentage Points (per 100 individuals)</b>
Technical background	85
Proficiency in IT	30
Interpersonal skills	100
Analytical skills	35
Management soft skills	15
Strong communication skills	100
Sales & marketing skills	20
Technology skills	90
Customer relations	85

#### **14.8. DIRECT & INDIRECT EMPLOYMENT PROJECTIONS (Next five years)**

In order to estimate direct employment in automobile garages in Mumbai we have first found the total number of vehicles on road in the city. Here, we have used the 2004 figures provided by the RTO, Mumbai.

Figures provided by CMIE show that the growth of economy has been much higher for the year 2005 vis-à-vis the last year. Conventionally, it has been observed that high market sentiments directly result into rise in business for automotive sector, which results into growth in number of vehicles on the roads.

As the market sentiments for the year 2005 have been much better than that of 2004, the growth rate in number of vehicle in Mumbai is expected to be higher in 2005 vis-à-vis 2004. However, we take a conservative approach and peg the growth rate for number of vehicles to be the same at that of 2004. On this assumption we have estimated total number of motor vehicles in Greater Mumbai in 2005, which is as follows:

**Table: 14.8-A**  
**Estimated number of motor vehicle in Greater Mumbai in 2005**

	<b>Greater Mumbai 2004</b>	<b>% increase over 2003</b>	<b>Greater Mumbai 2005</b>
Two Wheelers	5,84,180	11.25	6,49,900*
Three Wheelers	1,02,224	6.38	1,08,745*
Four wheelers (light)	4,40,717	9.1	4,80,822*
Others	72,295	*	83,009*
Total	11,99,416	10.26	13,22,476*

Source: RTO (\* estimated)

As a next step to estimating the existing direct employment in the Mumbai garages, we have calculated the average repairs-per-employee at the two-wheelers and four-wheeler garages in the city, independently, which are as follows:

**Table: 14.8-B**  
**Average ratio of repairs per employees in the four-wheeler garages for Mumbai**

<b>Four-wheeler garages</b>	<b>Number of Repair/service</b>	<b>Number of employees</b>	<b>Repairs per employee</b>
Shamal Motors*	150	20	7.5
Balaji Automobiles*	40	4	10
Bombay Motor Works*	20	12	1.6
Bachoo Garage*	750	50	15
Andrade Motors	65	23	2.8
Frank Auto Repairers	6	3	2
Century Garage*	30	8	3.7
Vijay Auto Works	15	3	5

Source: Garages mentioned above  
 (\* garages where only employment and repair figures have been taken)

**Table: 14.8-C**  
**Average ratio of repairs per employees in the two-wheeler garages for Mumbai**

Co. Name	Repair/service	Employees	Repairs per employee
Apsara Automobiles	25	1	25
Sai Service Agency (Bombay) Ltd.*	1500	30	50
M/s Prakash Auto*	800	20	40
Vasant Auto Works*	50	5	10

Source: Garages mentioned above  
 (\* garages where only employment and repair figures have been taken)

From the above data, we arrive at the conclusion that on an average one employee in the four-wheeler garages in Mumbai services 5.95 vehicles per month, while an employee in the two-wheeler garages in the city services 31.25 vehicles per month.

Further, we have assumed that the average of repairs for three-wheelers is more or less the same as that of two-wheelers, and a similar assumption is made between four-wheelers (light vehicle) and four-wheeler (heavy vehicles).

We have the estimated the figures for total number of vehicles on the city roads for the year 2005, and the average of repairs-per-employee for different vehicles, we have used the two to arrive at total direct employment figures in the Mumbai garages in 2005.

**Table: 14.8-D**  
**Estimated number of motor vehicle in Greater Mumbai in 2005**

	Number of vehicles in Mumbai (2005)	Number of repairs per person	Projected direct employee in garages (2005)
Two Wheelers	6,49,900	31.25	20,797*
Three Wheelers	1,08,745	31.25	3,480*
Four wheelers (light)	4,80,822	5.95	80,810*
Others	83,009	5.95	13,951*
Total	13,22,476		1,19,038*

Source: RTO  
 (\* estimated)

The estimated total direct employment in the garages in Mumbai for the year 2005 is 1,19,038 employees, and a large portion to these are engaged in the four-wheeler garages as seen above.

#### 14.8.1 Total Direct Employment Projections for 2010

According to the Two-wheelers Association, employment in Mumbai garages would grow by only 5 per cent between 2005-2010. This is largely because the sector is expected to go through a consolidation phase whereby manufacturers are likely to strengthen their presence in the area of after-sales-service, while those garages presently operational are likely to see an increased in use of technology in repairs and maintenance.

*Table: 14.8.1*

*Estimated number of motor vehicles in Greater Mumbai in 2010*

	<i>Estimated direct employee in garages (2005)</i>	<i>Estimated direct employee in garages (2010)</i>
Two Wheelers	20,797	21,836*
Three Wheelers	3,480	3654*
Four wheelers (light)	80,810	84850*
Others	13,951	14648*
Total	1,19,038	1,24,988*

(\* estimated)

The total employment projections for garages in Mumbai for the year 2010 is 1,24,988 individuals.

#### 14.8.2 PROJECTED EMPLOYMENT FOR AUTOMOBILE GARAGES SECTOR

Based on the above calculations we have projected direct employment in the city for 2010 at 1.24 lakh employees. As for projections of indirect employment, it has been found that the sector creates marginal/negligible employment opportunities and it contributes very little to the total employment in the sector.

*Table: 14.8.2*

*Projected direct and indirect employment for 2010 in the automobile garages sector for Mumbai (in lakhs)*

<i>Year</i>	<i>Direct Employment</i>	<i>Indirect Employment</i>	<i>Total Employment</i>
2010	1.24	*	-

### 14.9 RESEARCH FINDINGS

- The sector is concerned of manufacturers withdrawing dealerships, and starting their own service stations. In fact some of the manufacturers had already stopped selling spare parts in the open markets, which is already affecting small and medium sized garages.
- The space constraint in the city is bothering the sector for a long time now, and to make matters worse the government has stopped issuing licenses to new garages in the city.
- Due to increase in number of vehicles the garages business flourished for three decades. However, the Japanese invasion in the Indian automobile sector has resulted into a gradual slowdown of business of automobile garages as Japanese technology gives little room for repair services.
- Factors like low maintenance requirements, good quality automobiles, low interests bank loans, increase in warranty period, exchange schemes, etc. are working against the interest of automobile garages.
- Conventionally, automobile garages recruited skilled personnel on the basis of their experience, while the unskilled labour hired were made to learn on-the-job. State-of-the-art automobiles have now created a need for people who can read, write and understand technical manuals to do a good job. While power tools have replaced the conventional spanners, the role of unskilled and ill-qualified personnel has been reduced considerably.
- It is highly unlikely that qualified people will work with small and medium-sized garages as it involves a lot of hard work, and the salaries offered are also low. Qualified personnel mostly join dealers and manufacturers on high pay scale in the post of supervisors, works managers, etc.
- Ideally, individuals should possess a diploma in mechanics, while work experience would be considered as an additional advantage. The sector offers great opportunities to multi-skilled people who can perform on different accounts.
- Future looks quite bleak for small automobile garages in the city. One of the reasons being lack of space within the city, the other being rise in various taxes. It has been found out that only big garages and manufacturer's service stations that have state-of-the-art facilities stand a better chance of surviving in the future.
- Automobile garages will have to dawn the retail store looks and customer service standards.

#### 14.10 RESEARCH RECOMMENDATIONS

- Space constraint in the city has been a concern for the garages sector in the city, and to make matters even worse the government has stopped issuing licenses to new garages. Government should not only rethink on the issue of license, but also train garage owners on how to make optimal use of the available space and maintain a pleasant habitat.
- With manufacturers withdrawing spare parts from the open markets and starting their own service stations, the business of small and medium sized garages have been impacted deeply. The process of certification of garages for 'quality' and 'service standards' by authorised organisation could help the process of overcoming concerns of manufacturers pertaining to 'credible service station'.
- Though the garage business in the city is in doldrums on account of good quality cars, low maintenance, increase in warranty period, exchange schemes, etc., but then it is equally true that these have also created a huge demand for 'routine service checks' of these sophisticated machines and general 'vehicle care'. Small and medium sized garages could be trained in the art of 'vehicle care' using technology.
- The technology used in modern automobiles requires people who can read and write technical manuals to do a good job. Power tools are replacing conventional tools, which has drastically reduced the role of unskilled and ill-qualified personnel. There exists a huge demand for skilled technical personnel, and only a handful of training institutes presently are equipped to delivery quality training.
- Qualified personnel normally join the dealers and manufacturers on high pay scale in the post of supervisors, works managers, etc., small and medium sized garages have to do with semi-skilled and unskilled employee. There is a huge scope for training and technology-orientation of semi-skilled and unskilled personnel in small and medium sized garages.
- Electronics have made the process of fault finding easy and accurate, thereby ruling out the need for trials and experimentation on customer's vehicle. As the technology is not easily accessible to an average garage owner on account of its prohibitive costs, the government should consider the option of easy loans to garages thus help them invest in technology.
- Automation is the buzzword, and all future garages are likely to provide 'one-stop-shop' services to clients. In order to enable business optimisation in

the long term and diversification, garages should be encouraged to invest heavily into technology.

- Skilled labour will be in huge demand as new vehicles with state-of-the-art technology are being launched virtually every month. Individuals with ITI qualification are presently in demand, and they can seek better positions like supervisor, works manager, sales manager, etc. The government should further upgrade the courses delivered by the ITI, thereby offering diverse specialisations and in-depth orientation in technology.

\* \* \* \* \*

## EMPLOYMENT GENERATION IN THE PHOTOCOPYING SECTOR

### 15.1 EMPLOYMENT TRENDS IN MUMBAI (Over the last decade)

#### 15.1.1 Fort

Located at the southern tip of the city, Fort- Kalaghoda area is the 'business and commercial' hub of Mumbai. It is one of the most 'crowded' areas in the city, and is estimated that the region of Fort and Kalaghoda alone has approximately 400 to 450 photocopy centres, both big and small. The competition here is immense as business opportunities are huge due to presence of the stock exchange, head offices of multi-national companies, banks and government offices. It is estimated that approximately 1500-2000 people are employed in the photocopy centres in Fort - Kalaghoda region.

#### *Trade Mark Print House*

This three-decade old shop is mainly into retailing of office stationery. In addition, it has diversified into photocopying business long ago. Its photocopying set up has two Xerox machines and employees three people. Apart from catering to retail clients, it also has agreement with business houses in the area. Since the business is located in prime commercial area of the city, it has not met with any setbacks in the last 10 years. Also, the business didn't encounter any major problems sourcing trained manpower, despite the fact that the region has several competitors. Considering the business volumes and the diverse nature of assignment, the shop has always banked on educated individuals with basic computer knowledge.

#### *Vidhi Digital*

The shop is just one year old and it is presently reeling under business losses due to huge investments already made in infrastructure and technology. To make matter worse, the business is facing stiff competition. A new entrant, it hasn't had any business setbacks, though it is struggling to make its presence known in the market.

#### *Modern Copy Centre*

Even though the shop is over 10-year old, according to the proprietors, the business has gradually declined over the years. It has witnessed a decline in business of Ammonia blue prints and DTP services, as the former has become obsolete, while there is immense competition in the latter. The company however has not witnessed any major setbacks during the last two-years, though the business activities have fallen drastically. Despite slowdown the shop claims that there have been no cut in employment and it continues to maintain 10 employees even today. The shop meanwhile continues to employ educated and

uneducated, skilled and unskilled individuals. Over the last decade, it claims there hasn't been any change in job profiles. It boasts of providing individuals on-the-job training with a training period often extending over 2-3 months. The training programme imparts basic lessons on how to operate and maintain the machine.

#### *Office Automation Systems*

Despite strong competition, the business has been good for the last 12 years. It has expanded its business operations over the years and today has six machines and four employees. On the whole, it has not encountered any business setbacks during the last decade, but agrees that there has been an adverse impact on the profitability of the business. As for change in job profiles, it is of the opinion that there have been no major changes in the working of the employees. As the shop employs largely uneducated and unskilled personnel, it has to ensure that they are adequately trained to undertake business operations independently.

#### **15.1.2 Bandra**

Bandra is one of the most important suburbs in terms of commercial value. It has a large number of offices and educational institutions such as schools, colleges, etc. It is centrally located and has about 64 photocopying centres (both big and small), most of which are clustered near the station area. Approximately 300 people are employed in photocopy centres in Bandra.

#### *Jumbo Xerox Centre*

The shop, in addition to being a photocopying centre, also sells office stationery and computer related items like ink cartridges, fax rolls, etc. It claims that with MNCs and large corporate houses moving to Bandra area, the overall turnover of the business witnessed a satisfactory growth. But the business profitability would have been much higher if competition hasn't intensified. Presently, the shop has 10 hi-tech machines and the business is managed by a staff of 10 individuals. Over the last decade, the shop hasn't faced any major setbacks nor there has been a change in job profile. In fact it maintains that that shop has always employed experienced and skilled personnel.

#### *Mayur Stationery and Xerox Centre*

Over the last decade, though the shop has witnessed an average growth in business, of late, the going has been tough, as the business volumes have gradually declined since 2002 onwards. The shop employs uneducated and unskilled staff and hasn't witnessed any significant change in the nature of business nor the job profiles of those employed.

#### *Mittal Xerox Centre*

Despite the shop being in the business for some time now, its business performance for the last two years is far from exciting. It has termed the business growth as average, for the simple reason that in spite the shop's turnover has increased, the profit margins have been on a slide. Presently, the company has seven machines and employs six personnel and most of those engaged are unskilled and uneducated. The company has not faced any adversities in business over the last decade; however it agrees that the going has been tough of late.

#### ***Novelty Centre***

It boasts of being one of the few survivors to have lasted 30 years in business; and during this period it has seen several shops come and go. It claims that competition is getting severe with each passing year, and opines that only those who have deep pockets to invest would survive since the business is witnessing rapid technological transformation. It also agrees that profits margins have eroded over the last couple of years. Presently, it has four machines, which are handled by the same number of person. Of these, two persons are working on commission basis and are engaged into DTP activities. Probably, it is one the company that has reduced its staff strength to two individuals (pay roll) as salaries were unaffordable due to low business activities during 2003. It blames unwarranted competition for low profit margins for business uncertainty. The shop employs only educated and skilled personnel, but agrees that the job profiles haven't changed. The shop however provides the necessary training to new recruits with the training period extending 6-8 months.

#### **15.1.3 Kandivali**

Kandivali is slowly becoming an important suburban area due to mushrooming offices of multinationals in Malad and Borivali. There are about 45-50 photocopy shops in Kandivali itself, resulting in increasing competition and better service. It is estimated that approximately 200 people are employed in photocopy centres in Kandivali.

#### ***Jain Jumbo Xerox***

In spite the shop being only one year old, it has been doing good business. The shop was started with an initial investment of Rs. 15 lakh, and presently employs two individuals, excluding family members who are also part of the shop. The owners agree that there is immense competition in photocopying business, but express satisfaction that new technological developments is helping them to introduce new business opportunities.

#### ***King Xerox***

This decade old shop has witnessed an increase in business largely due to number of assignments and projects of students and growth in the industry. It is

concerned about the increase in number of shops that are mushrooming all over the area, and highlights that in the vicinity of the Kandivali station itself there are about 7-8 photocopying shops. Moreover, the fact that its business operates on a business margin of 10 per cent, the going is getting tougher day-by-day. Presently, the shop engages only three employees and has not encountered any major business setback over the last decade. It admits that the business is plagued by seasonal cycles, especially during the vacations when there is no business from students, during which period the turnover dips drastically. The shop however believes in employing skilled and educated people with some work experience - a shift from its earlier practice of employing uneducated and untrained individuals. It has also ensured that every member of the staff has basic computer knowledge and machine operating skills.

#### **15.1.4 Andheri**

##### ***Alwyn Xerox Centre***

In spite of shop being in the business for the last 20 years, the growth in business is being witnessed only during the last couple of years. In addition to photocopying, the company has now diversified into several other digital support services. Presently, it has 10 different state-of-the-art photocopying and printing machines as compared to five in 2000. There has also been a growth in employment over the last five years; currently it has 20 employees as compared to 12 employees in 2000 and 10 employees in 1995. Over the last decade, the company hasn't encountered any major setbacks in business and there has been no direct impact on the employment front. Also, there has been no significant change in the employee profiles as large portions of its people are uneducated and unskilled.

##### ***Xerox Point***

Easy availability of loans from the banks has resulted into several shops coming up in the area, it claims. It agrees that though the sector has witnessed significant growth during the last decade, the profitability of individual companies have taken a beating due to increased competition. The shop has been in business for over 42 years, and presently has four machines and employees three individuals. As it largely caters to students from educational institution, it has witnessed steady growth in business as projects and assignments have become part and parcel of education process of late. The shop has not encountered any major setbacks during the last decade, however its business have been affected due to business cycles, i.e. during vacation it witnesses a business slowdown. It continues with the practice of recruiting unskilled and untrained people and then providing on-the-job training on basic computer operational skills. Though it agrees that the job profiles have not changed, it agrees that in future the sector would require trained skilled and experienced personnel as the technology component is ever changing.

## **15.2. EMPLOYMENT REQUIREMENT IN MUMBAI (Next five years)**

### **15.2.1 Fort**

#### ***Trade Mark Print House***

With companies gradually moving businesses to suburbs, mushrooming of photocopying shops across the city and erosion of cost benefits, it is of the opinion that the growth in its business would be average. This is the basic reason why it hasn't drawn any expansion plans for the future and hopes to continue with the current set-up and employee strength.

#### ***Vidhi Digital***

Presently, the shop has two employees attending the business; both these individuals are unskilled and possess only basic education. As the company has recently ventured into business, it doesn't foresee any scope for expansion in the near future, thereby rules out an increase in employee strength.

#### ***Modern Copy Centre***

The shop is optimistic that it would sustain its current business status and is making efforts to recover from losses as soon as possible. As it doesn't foresee any growth in business, it is ruling out any expansion or diversification plans in the near future. So also, it doesn't foresee any growth in employment figures for the next five years.

#### ***Office Automation Systems***

The shop is not likely to expand its business in the near future, thus rules out recruitment of employees. It is content with the present business infrastructure and employee strength.

### **15.2.2 BANDRA**

#### ***Jumbo Xerox Centre***

Recently, the shop has invested heavily in renovation and restructuring business activities, thus it doesn't see any major investments over the next few years. Understandably, as it doesn't plan to invest in business expansion, it doesn't foresee any major changes on the employment front.

#### ***Mayur Stationery and Xerox Centre***

It is of the opinion that business is heading towards saturation on account of increasing competition. Moreover, the business profitability has also been witnessing a steep decline. These factors are likely to force shops differ their expansion and investment plans, which in turn would result into stagnation of employment opportunities in the business. It however doesn't see any major changes on the employment front.

### *Mittal Xerox*

The shop is making an all-out effort to survive increasing competition, thus hasn't forecasted any optimistic growth figures for the future. Already, it is feeling the heat due to rising competition and agrees that in the existing scenario it was more important to sustain present business. It doesn't see any room for business expansion and rules out an increase in employment in the near future.

### *Novelty Centre*

It claims that the business has reached saturation and that there is no scope for business expansion; however it does not rule out business diversification whereby it could provide its clients with related services. If ever it diversifies into another business, the shop would be recruiting additional personnel. But as of now, it is content with the present set-up and any plans to diversify would be considered on the basis of the market demand.

## **15.2.3 KANDIVALI**

### *Jain Jumbo Xerox*

It has plans to launch a new shop either in Andheri or Kandivali in the next five years. On account of its expansion plan, the company foresees a requirement for both skilled and unskilled personnel. Though it is unclear as to number of people the new business it would be employing, since it has not yet confirmed upon the location of its new shop and the nature of the business activities.

### *King Xerox*

It foresees a significant growth in business over the next five years. This would be largely due to growth of commerce in Mumbai and an increase in the use of state-of-the-art technology. It feels that these factors would lead to further increase in the number of shop providing similar services, which in turn would result into growth of employment opportunities in the sector. However, the shop has no plans to expand its business in the near future and looks content to sustain at the present level so as to ensure survival in a highly competitive environment.

## **15.2.4 ANDHERI**

### *Alwyn Xerox Centre*

It has not chalked out any business expansion plans for the next five years, which is the reason why it has no idea about future employee requirements. Moreover, as it hired unskilled people it hasn't witnessed any shortage of personnel.

### *Xerox Point*

It claims that the sector would witness a growth rate of approximately 50 per cent over the next five years, largely due to change in technology, resurgence of market/business and credit facilities provided by the financial institutions. It

feels that with the increase in the size of the sector, employment opportunities would also increase. It also highlights the fact that several small and medium sized businesses in the city have set-up photocopying as a side business, since it has become a necessity.

### **15.3. INFLUENCE OF INFORMATION TECHNOLOGY ON JOB PROFILES**

#### **15.3.1 Fort**

##### *Trade Mark Print House*

A major portion of the shop's business comes from establishments in the vicinity. Since most of these establishments have state-of-the-art technology with them, it becomes more than ever necessary to have access to compatible technology to execute their jobs. It does boasts of regularly investing in technology; only recently it has invested Rs. 40,000 on computers, printers and scanners. Agreeing that it would have to keep pace with ever-evolving technology, it foresees the need for regular technology orientation. However, it agrees that there may not be any significant change in the overall job profiles with the introduction of IT.

##### *Vidhi Digital*

A comparatively new set-up, it has invested approximately Rs. 12 lakh in starting the business, of this Rs. 50,000 has been investment in IT. It agrees that investment in IT has not had any major impact on the job profiles, as those involved are unskilled and uneducated.

##### *Modern Copy Centre*

With a set-up of 10 machines that cater to different needs of the customers, the shop claims to have made investments to the tune of Rs. 50 lakh over the last decade. A considerable portion of this investment has been in the area of IT infrastructure, which in turn has resulted into need for skilled and trained personnel. In order to maintain economies of scale, it believes in hiring new recruits and training them on the job, as the skilled, experienced and technology-literate demand higher salary.

##### *Office Automation Systems*

The shop has not made any major investment in the area of IT during the last decade, as it is by-and-large a photocopying center and does not undertake any other activities like DTP or computer printouts.

#### **15.3.2 BANDRA**

##### *Jumbo Xerox Centre*

The total investment in IT over the last five years has been to the tune of Rs. 1.5-2 lakh and it was largely in the area of upgrading it existing infrastructure. Though this did not had any major impact on the job profiles, as most of its employees are educated and skilled. The shop doesn't foresee any need for investment on

skill upgradation in the near future, however it agrees that there may be a need for providing employees short-term orientation.

***Mayur Stationery and Xerox Centre***

Despite the shop making investments to the tune of Rs. 1.5-2 lakh on technology during the last few years, this investment has not made any major impact on the job profiles. Even today, its entire staff is uneducated and unskilled, but over a period of time they have gained the basic operating knowledge.

***Mittal Xerox***

The company is just two years old and it has recently invested Rs. 50,000 to buy computer, printer and scanner. As all its employees have been trained on-the-job, the company feels that it would be very difficult to estimate the extent of investment made in area or training manpower.

***Novelty Center***

The shop has made investments to the tune of Rs. 1.5 lakh over the last five years so as to upgrade its IT infrastructure. It doesn't rule out moving up the technology chain and is optimistic about an increase in business and employment. As for providing training to its staff, it agrees that it is difficult to estimate the magnitude of investment as individuals are trained on-the-job.

**15.3.3 KANDIVALI**

***Jain Jumbo Xerox***

The company has invested a sum of Rs. 60,000 on IT in the last five years, which was mainly in the area of computer, printer and scanner. It agrees that of late there has been an increase in IT-related services, thus has plans to further invest in IT so as to provide high-end services to its customers.

***King Xerox***

The shop has invested approximately Rs. 60,000-80,000 in buying computers and printers during the course of the last five years. On account of this investment, it claims that there has been no major change in job profiles as all its employee possess basic computer skills.

**15.3.4 ANDHERI**

***Alwyn Xerox Centre***

It has invested Rs. 4-5 lakh in the last five years on creating basic IT infrastructure, which consist of state-of-the-art printers, scanners, computers, etc.

***Xerox Point***

It admits that it has not spent much on IT as it buys second-hand computers and printers. It has pegged the investment in IT at approximately Rs. 30,000-50,000 in

the past five-years. It's however difficult to comment on the extent of investment, but surely there would be increased training programmes for employees with influence of IT.

#### **15.4. AVAILABILITY OF TRAINED PERSONNEL IN MUMBAI (Next five years)**

##### **15.4.1 Fort**

###### ***Trade Mark Print House***

Located in the business and commercial hub of the city, the area has a sufficient high number of photocopying shops. This has resulted in excess number of trained and skilled personnel. But on many occasions it has also recruited fresher and provided them with on-the-job orientation.

###### ***Vidhi Digital***

The shop has had no problems sourcing manpower as its manpower requirements are very low - the two people employed are neither skilled nor educated. They don't foresee any problems related to manpower in the future, as the shop wouldn't be offering technology-intensive jobs.

###### ***Modern Copy Center***

As the shop employs individuals with diverse background - educated an uneducated, skilled and unskilled, etc. currently it isn't facing any difficulty employing individuals.

###### ***Office Automation Systems***

As the family members manage the shop, pressure for employing trained personnel is minimal. While those employed are largely engaged in supportive activities. Neither has the shop had problems in the past while sourcing personnel nor does it foresee any difficulties in the future.

##### **15.4.2 BANDRA**

###### ***Jumbo Xerox Centre***

It claims of employing only skilled and experienced personnel as it saves valuable time and money for the business. Justifying the same, it claimed that except for one staff, who is uneducated but efficient in hardware maintenance, all the other members have basic computer knowledge and can do their job efficiently. In case a fresher is inducted, he/she has to undergo an on-the-job training programme for a minimum period of two months. The shop has had no problems in sourcing personnel in the past as most of the recruitments were made through references and contacts.

### *Mayur Stationery and Xerox Centre*

As the shop employs uneducated and unskilled staff, it has never had problems sourcing employees. However, it agrees that once an individual is hired there is a period of on-the-job training (minimum of two months) during which it provides the necessary job orientation.

### *Mittal Xerox*

Being one of the leading photocopying center, the shop has never had problems attracting trained and experienced personnel. The shop however claims that it does not invest in training its employees as they learn on-the-job. It doesn't foresee any shortage of trained and skilled personnel in the near future, but doesn't rule out higher financial implications on account of higher salaries.

### *Novelty Centre*

Presently, the shop employs only two personnel and the others are engaged on commission basis. It hasn't had problems sourcing personnel in the past, nor does it foresee any problems in the future. The shop admits that most of the new recruits are fresh and it has to invest in them by giving on the job training for a period of 6-8 months.

## **15.4.3 KANDIVALI**

### *Jain Jumbo Zerox*

Considering the salary photocopy centres offer, only uneducated and unskilled people can be sourced; thus it is the responsibility of the shop to provide the necessary training to its staff.

### *King Xerox*

The shop has had no problems in sourcing individuals with basic computer skills. However, post-recruitment it had to provide individuals with the required business skills via on-the-job training. It has always believed in providing on-the-job training to individuals, as it not only helps individuals to specialise but also be efficient in whatever they are assigned.

## **15.4.4 ANDHERI**

### *Alwyn Xerox Centre*

As the shop cannot afford high-skilled and technology-savvy people, and the fact that it has to depend on skilled and experienced people at salaries not very high, finding replacements at times is very difficult. It agrees that it does not get personnel with the required business skills, thus it is forced to train individuals on the job.

### *Xerox Point*

It feels that an increase in size of the sector would create several new employment opportunities in the future. Highlighting the fact that several small business people have entered into the sector as a side business over the last few years, it feels that similar trends would continue over the next five years. Presently, it feels that the sector faces no dearth of personnel, as the job requirements are basic and shops don't require skilled and educated individuals. However, it doesn't rule out the fact that those shops that offer value-added services would require highly trained and skilled people in the future.

## **15.5 CHANGING TRENDS IN EMPLOYMENT SKILLS (Next five years)**

### **15.5.1 Fort**

#### ***Trade Mark Print House***

Due to the presence of several photocopying set-ups in the vicinity it operates, the shop is faced with severe competition - both in terms of business and margins. Another growing concern it is faced with is the reducing business volumes due to emerging competition from the photocopying shops mushrooming across the city. It opines that earlier, due to distinct cost advantages, individuals travelled all the way down to Fort with bulk jobs, but today these jobs have virtually vanished. Amidst these developments, the company doesn't foresee any scope for further business expansion over the next five years, hence it rules out any future growth in employment.

#### ***Vidhi Digital***

The shop doesn't foresee any major changes in employment skills levels in the photocopying business as it feels that individuals have to provide routine services. It is of the opinion that the skill component being negligible, the job profiles haven't changed and it rules out any major changes in the future.

#### ***Modern Copy Centre***

It doesn't foresee any major change in the existing job profiles of those employed in the shop in near future. However, it doesn't rule out the fact that in future, it would have easy access to educated and skilled personnel and the salaries paid to individuals would also see any increase. It feels that with change in technology taking place almost everyday the need for specialists/skilled employees will increase.

#### ***Office Automation Systems***

Presently, the shop is engaged only in photocopy activities and has not branched out into related areas. The shop is of the opinion that there hasn't been any change in the job profiles over the last decade. Although it feels that in future photocopy shops would have to offer diverse services to achieve economies of scale, thus the job profiles would change and shops would look for educated, experienced and skilled personnel.

### **15.5.2 BANDRA**

#### ***Jumbo Xerox Centre***

As majority of the existing employee are educated and skilled, it doesn't foresee any major change in job profiles. So also, the shop has no major plans to diversify in any other business, but doesn't rule out business upgradation, i.e. moving up the value chain.

#### ***Mayur Stationery and Xerox Centre***

It doesn't foresee any major changes in the employment skills over the next five years. On account of fierce competition and reducing profit margins, shops will cautiously invest in the business.

#### ***Mittal Xerox***

It feels that there is a greater availability of educated, skilled and experienced labour now, than ever before. It feels that over the last decade there hasn't been any major change in the job profiles, though it doesn't rule out a shift in job profiles in the next five years. Some of the basic changes that it envisages are people would be more educated, computer literate and customer-friendly.

#### ***Novelty Centre***

It claims that the last decade has seen some change in the job profiles as more and more educated and skilled people are finding their way into the business. It feels with the introduction of diverse technologies and services there would be a rise in number of skilled and computer literate personnel.

### **15.5.3 KANDIVALI**

#### ***Jain Jumbo Xerox***

As most of the employees are uneducated and get trained on-the-job, the company feels that it is difficult to quantify the extent of investment made in training them. It is of the opinion that there hasn't been any major change in job profiles during the last five year. Nonetheless, it admits that the services provided by the photocopy shops would not see any major changes in the next five years, thus playing down the shift in the job profiles.

#### ***King Xerox***

It agrees that individuals nowadays are far more technology literate vis-à-vis a decade ago, as they possess the basic knowledge and are highly adaptable. As the business requires basic technology handling knowledge, it doesn't foresee any major change in the employment skills over the next five years. Introduction of state-of-the-art technology (machines) would require future employees to

possess basic handling knowledge, as these machines would be highly sensitive and sophisticated.

#### **15.5.4 ANDHERI**

##### *Alwyn Xerox Centre*

In the past, though bulk of those employed in the shop have been uneducated and unskilled personnel, in the future, the company wishes to only employ skilled and educated people. It feels that by doing so, it would save on the efforts of training persons, and as the use of sophisticated technology will increase in the future, employing skilled people would be a necessity.

##### *Xerox Point*

There hasn't been any significant change in the employment scenario in the photocopy sector, except for the fact that now more and more educated people are being employed. Over the next five years, it feels that the usage of computer in the photocopying shops would increase significantly and in order to keep with the change in customer's demand, the future employees would require having in-depth knowledge of computer operations.

#### **15.5.1 Assumed percentage point for employment skills**

The employment skills that individuals are expected to possess to find gainful employment in the Photocopying Sector are given below along with their respective weightages (percentage points). These percentage points are purely based on our assumptions derived from interactions with individual interviewees during the course of the research activities. The percentage points should be ready in the following manner - number of individuals expected to possess the said skill per 100 individuals entering the sector.

*Table: 15.5.1*

*Weightage assigned to employable skills for individuals entering Photocopying Sector over the next five years*

<b>Employment skills</b>	<b>Percentage Points (per 100 individuals)</b>
Technical background	15
Proficiency in IT	60
Interpersonal skills	100
Analytical skills	35
Management soft skills	15
Strong communication skills	100
Sales & marketing skills	40
Technology skills	35
Customer relations	85

### 15.6 DIRECT EMPLOYMENT PROJECTIONS (Next five years)

During field research we enquired with the interviewee of the four areas on the approximate number of photocopying shops in the vicinity and the estimated number of employees engaged in these shops. The findings of this exercise are given as below:

*Table: 15.6 - A*

*Estimated number of photocopying shops and people engaged for 2005*

No.	Area	No. of shops	people engaged in the shops
1.	Fort	400	1500
2.	Bandra	64	300
3.	Andheri	85	350
4.	Kandivali	45	200

*Source: Based on data collected from photocopying shops*

From the above table, we find that areas like Fort, Bandra and Andheri have high density of photocopying shops as these regions have a high concentration of business units, while Kandivali, which is largely residential area, has a comparatively lower number of photocopying shops. In order to estimate employment in the city, we have taken a conservative approach and picked up Kandivali as the representative sample for Mumbai.

The city of Greater Mumbai stretches across 437.71 sq. km. and the businesses though highly concentrated in some pockets are also seen to scattered across the city. The overall structure of the city is such that business and residential units coexist; one finds utility shops like PCOs, photocopying shops, stationery shops, etc., evenly scattered across the city.

During our interaction, we have found that in the 2 sq. km. area around Kandivali station there are 45 photocopying shops. As we have taken Kandivali as a representative sample area of Mumbai, we have taken this figure to arrive at total number of photocopying shops in the city.

*Table: 15.6 - B*

*Projections for number of shops and employment in 2005*

Region	Area (Sq. Km.)	Number of Shops
Kandivali	2	45
Mumbai	437.71	9,848

*Source: Based on data collected from photocopying shops*

To find the average employees per shop in the city, we have banked on employment information provided by individual shops from across the city. The employment details of the shops interviewed are as follows:

**Table: 15.6 - C**  
*Number of employees engaged in the photocopying shops in Mumbai 2005*

No.	Photocopying shops	No. of Employees
1.	Trade Mark Print House	3
2.	Vidhi Digital	2
3.	Modern Copy Centre	10
4.	Office Automation Sys.	4
5.	Jumbo Xerox Centre	10
6.	Mayur Stationery Centre	4
7.	Mittal Xerox Centre	6
8.	Novelty Centre	4
9.	Jain Jumbo Xerox	2
10.	King Xerox	3
11.	Alwin Xerox Centre	20
12.	Xerox Point	3
	Avg. empl. per shop	5.91

*Source: Based on data collected from photocopying shops*

From the above figures we arrive to the conclusion that the average number of employee per shop in Mumbai is 5.91 employees.

Assuming that Mumbai has an estimated 9,848 photocopying shops and each of these employs 5.91 individuals, we have come to the conclusion that the total direct employment in the photocopying sector is 58,201 individuals in 2005.

#### **6.11.4 PROJECTED EMPLOYMENT FOR PHOTOCOPYING SECTOR**

Based on the above calculations we have projected direct employment in the city for 2005 will be 0.58 lakh employees, and they are largely engaged in the photocopying shops. However, there exists a huge segment comprising those who offer photocopying services as an allied business activity (PCOs, Stationary Shops, Gift Shops, etc.) and also those who have entered into business contracts with corporate and business houses.

**Table: 15.6-D**  
*Projected direct employment for 2005 in the photocopying sector for Mumbai*

Year	Direct Employment
2005	58,201*

*\* figures for those working in photocopying shops only*

Considering the existing fragmented and unorganised nature of the business it has not been feasible to map the exact employment figures (direct and indirect) in the sector for 2010.

#### **15.7. RESEARCH FINDINGS**

- The sector continues to employ educated and uneducated, skilled and unskilled individuals at the same time.
- There have been no major changes in job profiles of the employees. Shops continue to employ uneducated and unskilled personnel who are adequately trained on-the-job to take on business operations independently.
- Most of the shops, in addition to offering photocopy services, also sell office stationery and computer related items like ink cartridges, fax rolls, etc.
- Although many shops have not faced any adversities in business over the last decade; however they agree that the going of late is getting tough due to increase in competition.
- Owing to competition the profits margins have eroded over the last couple of years. It has forced several shops to differ their expansion and investment plans, which in turn would result into stagnation of employment opportunities in the sector.
- The business is plagued by seasonal cycles – especially during the vacations - when there is no business from students. The turnover slides down drastically.
- Several small and medium sized businesses units in the city have set-up photocopying as side businesses, indicating the growing demand for these services.
- Some of the establishments have access to state-of-the-art technology - computers, printers and scanners, etc. as they have expanded into offering allied services.
- As the shop cannot afford high-skilled and technology-savvy people and the fact that it has to depend on skilled and experienced people at low salaries, finding replacements at times is very difficult.
- With usage of computer in the photocopying shops would increase significantly over the next few years, future employees will require to have in-depth knowledge of computer operations.

## 15.8. RESEARCH RECOMMENDATIONS

- Easy availability of bank loans at lower interest rates and subsidies would enable existing photocopying shop upgrade their infrastructure and technology, which in turn would enhance not only their business profitability but also help in the process of business diversification.
- The sector largely survives on uneducated and unskilled employees, and in most cases these individuals are trained on-the-job. Lack of basic skills and technological know-how is seen to have a direct impact on the business profitability, which is the reason why attempts should be made to provide basic operational skills to those employed in the sector.
- Shops that have see stagnation in business are the ones that have not made timely investment in infrastructure, technology and business diversification. In an age where technology is making life easier and simpler, there is a need to educate the photocopying business fraternity to 'change with changing times'. There exists room for capitalising on newer technological development so as to help photocopying shops diversify.
- Most photocopying shops are victims of shrinking profit margins resulting due to increasing competition in conventional businesses/services. Majority of the shops have not moved up the business value chain and continue to stick to photocopying business. There is a scope for training the fraternity in services like: database management, data entry, DTP, colour printouts, marketing of stationery and peripherals, etc.
- With photocopying gradually becoming a basic necessity, several small and medium sized businesses in the city have ventured into offering photocopying services as side business. It has created several unconventional direct employment opportunities in allied sectors. Though, in the short term, it has reduced profit margins for conventional photocopying shops, in the long-term the trend would be instrumental in pushing shops move up the value chain and weed-out not serious players.
- As the business is plagued by seasonal cycles, especially during the vacations when the business is low on account of educational institutions being shut, the turnover dips drastically. Identification of alternative businesses areas that would compliment the dip in business cycle could be considered to help the shops overcome financial crunch.
- Considering the salary photocopy centres offer, only uneducated and unskilled people can be sourced. However, one cannot completely rule the

possibilities of job and skill orientation of these uneducated and unskilled personnel so as to boost the overall profitability of the business.

- There is scope for providing basic training and orientation to individuals employed in photocopying shop in the area of customer service, basic computing, basic electronics, DTP, etc. so as to help individuals be more effective and businesses more profitable.

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## VOCATIONAL TRAINING IN INDIA - OVERVIEW

### 16.1 INTRODUCTION

For value creation through dynamic Vocational Training Policy and Infrastructure, 104 new (Industrial Training Institutes) ITIs have been opened in 2003 increasing it from 4647 last year to 4751 located all over the country with a total seating capacity of 6.97 lakh to impart training in 98 trades. With the view to provide need based training in the changing scenario existing trades have been revised, obsolete trades have been deleted and new trades have been introduced increasing this tally 98 trades through 4751 ITIs.

During year 2003, a total of 870 affiliation inspection reports were examined and affiliations to trades/units/institutes for those conforming to NCVT norms were granted. During the year 2003, 177 new institutes were opened and 1610 trades/units were added in existing thereby increasing the total seating capacity under the scheme by 25752.

### 16.2 REVISION OF SYLLABI

Syllabi of several trades were revised to keep pace with the rapidly changing technology in industry. Also, obsolete trades were deleted and new trades were introduced as per the need of the industry. A total of 36 new trades were introduced during the year, while the curricula of six trades were revised during the last two years. Five unpopular trades were discontinued w.e.f. August 1, 2003. Action had been initiated by DGE&T to revise 17 existing trades so as to align the courses to market needs.

A trade in emerging area of Information Technology namely "Information Technology & Electronics System Maintenance (ITESM)" had been introduced under the "Craftsmen Training Scheme". A scheme to introduce the above trade in 100 Government ITIs had been taken up jointly by DGE&T & Department of Information Technology DIT covering 33 States/UTs. The facilities in the existing trade of Electronics Mechanic or Mechanic Radio & TV had been upgraded and latest equipment was provided.

### 16.3 INDUSTRY-INSTITUTE LINKAGES

Institute Management Committees (IMCs) were set up to bring about improvement in the functioning of ITI in terms of better upkeep of machinery and equipment, training & development of faculty, organising campus interviews, placement of trainees as apprentices, arranging on-the-job training, industrial visits, revenue generation, donation of tools and equipment, vocational guidance and counselling etc. The State Directors have been requested

to set up IMCs for Government ITIs of their respective states. To strengthen industry-institute linkages, IMCs for 292 Government ITIs in 17 states have already been set up with very encouraging results.

#### **16.4 STEPS TAKEN FOR EXPANSION OF VOCATIONAL TRAINING**

Planning Commission has set up a target of 10 million jobs to be generated every year during the Tenth Plan period. Skills are extremely important for job seekers. Therefore, a special drive for expansion of vocational training facilities by opening new ITIs/ITCs in the country by utilising available infrastructure with necessary infrastructure in specific trades in second shift was launched in August, 2003. In order to meet the Planning Commission's projected job creation, 277 new ITIs were set up and courses in 2nd shift started in 996 existing ITIs thereby creating 40,000 additional seats. Under Apprenticeship Training Scheme, 32,000 smaller establishments, which were not covered so far by the respective states, have been identified for coverage under the Apprentices Act.

Efforts were made to enhance the training capacity by introducing additional short-term courses, weekend courses and courses in second shift at these institutes under DGET. As a result, the training capacity increased from 13530 to 16945 i.e. 25 per cent during the FY 2002-03. During the financial year 2003-04, the target fixed to train 21934 trainees was achieved. Training capacity of these institutes is expected to meet the target to train 27000 trainees annually from FY 2005-06.

Training capacity for women at NVTI Noida and 10 RVTIs have been enhanced by 30 per cent. Introducing 38 additional training units at these institutes i.e. an increase from existing 115 units to 153 units increased these seats. Additional courses were arranged by organising weekend/ evening courses and tailor-made courses in institutes under DGET, which resulted in increase in trained manpower by 50 per cent.

In order to facilitate engagement of persons with disability, physical standards have been relaxed in respect of 44 trades for hearing impaired (deaf and dumb), 63 trades for visually impaired and 40 trades for orthopedically handicapped. The syllabi of the three trades have been revised under the Apprentices Act, 1961. The trades are refrigeration and air-conditioning mechanic, instrument mechanic (Chemical Plant) and mechanic motor vehicle.

#### **16.5 Steps taken for quality improvement of Vocational Training**

##### **16.5.1 Craft Instructor Training**

Objective of the Craft Instructor Training was to train instructors in the techniques of imparting industrial skills, in order to train semi-skilled/skilled manpower for industry. Under the programme, instructors from State Govt.

I.T.Is and from Training Centres established by industries under the Apprentices Act were trained in 25 trades. Apart from ITIs/ITCs, Craftsmen Training is also imparted through 6 Model Training Institutes (MTIs) attached to 5 Advanced Training Institutes (ATIs) and one Central Training Institute (CTI) under the DGE&T. Besides, one National Vocational Training Institute (NVTI) and 10 Regional Vocational Training Institutes (RVTIs) have been imparting Craftsmen Training in women's occupation. A scheme of modernisation and expansion of Instructor Training Programme with an outlay of Rs. 2.25 crore had also been taken up to create facilities for training in the trades of COPA, ITESM, Radio and TV in four Advanced Training Institutes at Ludhiana, Howrah, Mumbai and Hyderabad.

### **16.5.2 Apprenticeship Training**

The Apprentices Act covers 254 group of industries and about 20700 establishments engage apprentices. Of these, 153 trades in 32 trade groups have been designated for trade apprentices. As against 2,32,745 training seats available, 1,63,221 apprentices have been undergoing training as on June 30, 2003. 102 subject fields have been designated for Graduate & Technician Apprentices and 94 for Technician (Vocational) Apprentices. As against 78461 training seats located for these categories, 43478 have been utilised as on June 30, 2003.

### **16.5.3 Women's Vocational Training Programmes**

Training facilities exclusively for women are being offered by the DGE&T at one National Vocational Training Institute (NVTI) for Women and 10 Regional Vocational Training Institutes (RVTIs) for Women. NVTI/RVTIs have trained about 36,200 trainees since inception in various training courses; this includes 22,300 trained in regular long term courses and 13,900 in short-term courses.

During 2002-03, about 3423 women have been trained in various training courses; it includes 1896 trained in regular long term courses and 1527 in short term/ad hoc courses in areas like using MS office, Word processing, Personal Grooming, Repairs/maintenance of Domestic Electronic equipment, Embroidery, Dress Making etc. During last one year, 50 new training units were introduced in NVTI/RVTIs, thereby increasing the total seating capacity from 2376 to 3232. There were about 800 Institutes (218 WITIs and 582 Women Wings in General ITIs/Private ITIs) with about 46658 training seats. To promote participation of women in Craftsmen Training, the NCVT has recommended that the State Government would reserve 25 per cent seats for women in general ITIs. A pilot programme on 'Decent Employment for Women in India' funded by US Department of Labour (US \$ 1.3 million) is being jointly implemented by the ILO and DGE&T, Ministry of Labour. 1700 women from slum areas have been trained and 70 per cent were placed in self-employment.

#### **16.5.4 Advanced Vocational Training**

It ensures that the individual's skills and competencies improve as technology and skill requirements change. It also ensures the personal and career development of workers and results in increasing in aggregate productivity and income. With this view, training of workers to over 96,652 industrial workers in the advanced vocational areas has been provided through 6 Advanced Training Institutes and 16 ITIs in the current year. To meet the growing demand, the facilities were extended to 30 more ITIs.

#### **16.5.5 Advanced Vocational Training and Training in Hi-tech Areas**

The Advanced Vocational Training Scheme (AVTS) is being implemented through six Advanced Training Institutes (ATIs) under DGE&T and 16 Industrial Training Institutes (ITIs) of 15 State Governments. Training in selected skill areas is being imparted through short-term/tailor-made modular courses of one to six weeks' duration. Over 96,652 industrial workers/technicians have made use of the training facilities at six ATIs under DGE&T. From April to December 2003, 3216 workers have been trained. To meet the growing demand of industry, advanced skill training facilities were extended to 30 ITIs of various State Govt./UTs under the Vocational Training Project.

Hi-tech Training Scheme is being implemented with the objective to produce trained personnel with technological advanced skills necessary to meet the requirements of industry. The scheme covers 10 ITIs under 10 State Government and 6 ATIs. With the infrastructure created at ITIs, short-term modular training courses in the areas of Computer Aided Drafting (CAD), Analog and Digital Electronics, Personal Computer Maintenance and Industrial Automation are being offered to the industrial workers. The ITIs are imparting training to 1000 trainees every year. The institutes are imparting short-term training to 1500 trainees every year in Advanced Programming.

#### **16.5.6 Retraining Programme for Retrenched Workers**

The Department of Industrial Development identified DGE&T as one of the 13 nodal agencies for counselling, retraining and redeployment of rationalised workers. The scheme implemented in nine States through various ITIs and some of the field Institutes under DGE&T. During FY 2002-03, DGE&T trained 981 rationalised workers of CPSEs, of which 892 were deployed up to March 2003. Rs.41.41 lakh was spent for training of these workers during the FY.

#### **16.5.7 Staff Training, Research and Development**

Up to October, 2003, the Central Staff Training and Research Institute at Calcutta has trained 14,042 personnel and completed 155 projects covering various aspects of Vocational Training. During the year, Institute has also developed 5 new and

revised/updated 10 existing curricula of the trades of various training activities under vocational training programme.

WESTERN REGION							
1	GOA	11	2492	4	420	15	2912
2	GUJARAT	135	67524	119	15266	254	82790
3	MADHAYA PRADESH	133	19218	26	2332	159	21550
4	CHATTISHGARH	77	8456	57	6200	134	14656
5	MAHARASHTRA	347	65550	266	29218	613	94768
6	D & N HAVELI	1	228	0	0	1	228
7	DAMAN & DIU	2	388	0	0	2	388
	SUB-TOTAL	706	163856	472	53436	1178	217292
	GRAND TOTAL	1826	3,82,468	2925	3,14,822	4751	6,97,290

(Source: Ministry of Labour, Govt. of India, Annual Report 2003-04)

**RESEARCH FINDINGS - VOCATIONAL TRAINING**

**17.1 SHIFT IN EMPLOYMENT SKILLS AS REQUIRED BY COMPANIES**

***Industry Perspective***

According to Advanced Training Institute, due to emergence of global markets for products and services, international competition, new business strategies, new management practices, technological changes, etc. there has been a significant transformation in the work environment. In the changing scenario, skill building and training has become a necessity to empower people, improve the quality and organisation of work, enhance citizen's productivity, raise worker's incomes, improve enterprise competitiveness, promote job security and help individuals become more employable. Companies are seeking individual with domain skills along with good soft skills, and are also ensuring that people are multi-skilled.

IIT agreed that the work scenario is changing. Skill building and training has become a necessity to empower people, improve the quality and organisation of work, enhance productivity, raise worker's incomes, improve enterprise competitiveness, promote job security and help individuals become more employable in changing labour markets. India like any other developing country continues to improve quality of productivity throughout the economy by systematic supply of trained manpower to the industry through various technical training programmes. It stressed that emphasis should shift towards soft skills development like team spirit, multiple tasking, communication skills, etc.

Reiterating the same fact, Fr. Conceicao Rodrigues College of Engineering emphasized that the emergence of global markets for products and services, international competition, new business strategies, new management practices, technological changes, changes in financial markets, etc. are among the significant developments that are transforming the world of work. In this evolving environment, the preference by industry is people with multiple skills like computer knowledge and interpersonal skills. With industries laying greater stress on 'less people-greater productivity' the need is for domain knowledge with the go-getter spirit to match it.

ITI (Agrimada) understands that the changing role of the organisations demands all employees to learn new competencies. Besides performing individual tasks, they need to respond to irregularities and breakdown in routines and do multi-tasking as well. Also, in the technical line of work companies prefer people with

hands-on experience. People with electronics, instrumentation and mechanical skills are seen to be in great demand.

Padmabhushan Vasantdada Patil College of Engineering (PVPPCOE) is of the opinion that along with engineering skills, companies prefer people who have impressionable soft skills as well. Teamwork, interpersonal sensitivity, leadership, problem-solving and decision-making skills are some of the requisites for gaining employment.

## **17.2 INDUSTRIES THAT HOLD EMPLOYMENT POTENTIAL (next five years)**

### ***Industry Perspective***

As elaborated by ATI, the IT and financial services will be the industries that will hold tremendous employment generation potential. The IT sector has become a driving force in India's economic development, accelerating job and revenue creation. As the opportunities continue to grow, IT jobs have the potential to create financial stability for greater numbers of employees. Along with IT, the financial services sector especially in insurance, mutual funds and derivatives market provide ample scope for employment.

IIT feels that globalisation has had a major impact on the nature of employment opportunities generated. Rapid growth is slated in the services sector like IT&ITES, real estate, telecommunications, banking and insurance. By the year 2020 more than 120 million jobs is expected to come from the services sector alone. On the manufacturing side, industries like automobiles and pharma hold great employment potential.

The Fr. Conceicao Rodrigues College of Engineering believed that IT, engineering and manufacturing will be the employment generating industries. With India fast developing into a global manufacturing hub for product design, reconfiguration and customisation, many countries have started leveraging the country's talented and skilled manpower to meet their production requirements. Some MNCs also enter into OEM deals to source components while others have Indian arms to supply to global markets.

Reiterating the IT sector potential, ITI-Agripada also asserted that the electronics industry, which is a major contender for FDI offers great scope for employment as well. In the city of Mumbai, where infrastructural development projects are on a major upswing, the civil construction industry also has great employment generating potential.

Summing up the IT potential for employment PVPPCOE said that the recent growth of IT- enabled service businesses in India like call centres, medical

transcription, technical support and back office processing, engineering and design, geographic information services, payroll and other human resource services is evidence enough to prove the industry's employment scope.

### **17.3 MANDATORY EMPLOYMENT SKILLS (next five years)**

#### ***Industry Perspective***

According to ATI, basic skills in IT will become mandatory for gaining employment over the next five years. Be it any industry, computer-related literacy will definitely be a preferred advantage. Also, soft skills like listening combined with the ability to build interesting conversations, is crucial for going higher up in the ladder.

IIT feels that the foremost skills required for any profession would be domain knowledge. Besides that good analytical skills and the skill to react efficiently to situations will be a requisite.

Fr. Conceicao Rodrigues College of Engineering said that the changing world has brought about a paradigm shift in the skill requirements demanded by industry. Academic excellence coupled with computer literacy and good interpersonal skills is the order of the day.

ITI-Agripada emphasised on domain knowledge being a mandatory part in the field of technical employment. Also, computer literacy along with the appropriate soft skills will be an added advantage.

PVPPCOE asserted that the engineers who pass out of institutions should have the necessary skill set required by companies in that particular field. So besides theoretical knowledge, there is a need for practical experience as well.

### **17.4 IMPACT OF LIBERALISATION ON VOCATIONAL TRAINING INSTITUTIONS (Over the last decade)**

#### ***Industry Perspective***

ATI highlighted that with liberalisation there has been a shift towards vocational training which is more practical-oriented. This is because the industry is on the lookout for skill-oriented personnel as they have more exposure to technical training than mere academics-oriented education.

Liberalisation according to IIT has laid greater emphasis on vocational training courses. Also, with the quality of faculty, practical use of knowledge, its application and employability quality increasing, the scope has widened to a large extent. To improve productivity of industry, trade and services in the globalisation era, skilled manpower is a great necessity and this can only be achieved through vocational training.

Fr. Conceicao Rodrigues College of Engineering stressed that with liberalisation and many emerging industries, vocational training will reduce unemployment by supplying skilled people required by the nation and for the rest of the world. It has helped in reducing costs and improving productivity of services. Vocational training helps in higher efficiency, lesser wastage and lower cost of operation in the production process.

ITI Agripada elaborated that liberalisation has brought about three distinct classes in an organisation-the manager, the supervisor and the worker. The worker category is generally sourced through the vocational training institutions. In the manufacturing and service sectors there are hundreds of skills and vocations for which there is a shortage. For instance, TV, electrical appliance repair and service, automobile and motorcycle repair and service, etc. So in the context of the evolving world, vocational training has gained great importance.

PVPPCOE asserted the shifting trend towards vocational training in the liberalization era. Technically qualified skilled manpower is the requirement of the day. Acquiring new practical knowledge of technical processes, regulating manual operations and understanding a trade in its entirety is what is preferred by the new world and vocational training is the best means to achieve it.

#### **17.5 EFFORTS BY INSTITUTION TO ADAPT TO CHANGING SCENARIO**

Advanced Training Institute is a field unit of Directorate General of Employment and Training, Ministry of Labour & Employment, Government of India. In keeping with the needs of the industry, the institute has developed programmes in IT, computers and programme logistics controls, CAD-CAM and many such IT-related courses. These programmes add value to the traditional fields of engineering.

IIT continuously upgrades its syllabus in keeping with the needs of the industry. Also, the institute renders training programmes in personal effectiveness and GD&PI. In a bid to make the students ready for the competitive world, students are also given exposure to all sectors of the economy. For e.g. A IT student is also given knowledge about futures and options, stock, etc.

Fr. Conceicao Rodrigues College of Engineering has an on-going revision in terms of the projects that are made by the students. With constant industry interaction, the college incorporates the latest trends and industry expertise while changing the syllabus. In the fifth semester, training in presentation skills is given to students of all disciplines so as to enhance their chances for employment. Even spiritual training is given to students.

IIT Agripada offers nearly all the vocational training courses that are requisite for employment in the state of Maharashtra. The institute continuously keeps updating the course syllabus and greater emphasis is laid on practical knowledge. Of the 7 hours that is allocated each day, 5 hours is used for practicals while only 2 hours is used to impart practical knowledge.

PPVCOE tries to give maximum exposure to the students through various projects that will keep them in tune with industry requirements. The college is a member of the Institute of Electronics and Electrical Engineers (IEEE), which is an international institution that has members and branches in engineering colleges all over the world. The IEEE-PVPP student branch has organised a variety of events for increasing technical awareness among the students. Workshops and seminars are conducted where researchers and experienced industry people are invited to deliver lectures. Industrial tours are also conducted to provide students with an exposure to a professional working environment.

## **17.6 COURSES OFFERED BY INSTITUTIONS, AND FREQUENCY OF REVISION**

### ***Industry Perspective***

ATI offers a diverse stream of long-term and short-term courses. The main courses are: Mechanical, Electrical, Instrumentation, Process Control and Draftsman, with an average of 16 students in each stream. Hi-tech Training Programme in the areas of Numerical Controlled/Computerised Numerical Controlled Machines, Programmable Logic Control and Hydraulics Pneumatics was implemented in 1998 with assistance from World Bank. Trades of Computer Operator and Programming Assistant and Information Technology & Electronics System Maintenance under Craftsmen Training Scheme were introduced in the year 2001. The ATI courses are revised once in seven years. But we do introduce new courses as per the demand from the industry.

IIT offers a whole range of courses in different fields of engineering. Along with the core curriculum the IIT Senate continuously introduces new papers as per the needs of the industry. These papers are introduced within a period of six months after approval from the Senate. If courses need to be revised, then the professor, who wants to do so, has to intimate the Senate six months in advance. Once the Senate approves, the course is sent to the IIT Management Committee and the course is introduced. This would take at the most 8-9 months. So there is a continuous revision of our courses.

Fr. Conceicao Rodrigues College of Engineering offers five graduate courses in Production Engineering, Electronics, Computers and IT. It also has three post-graduate courses in Manufacturing, mechanical and Electronics. All the courses

are revised every five years as per Bombay University changes. However, the institute is proactive in introducing new concepts through its project works.

The ITI offers 23 full-term courses and over 60 short-term courses. The short-term courses vary from 1 to 3 months and offer a range of subjects like Basic Electronics, Page Maker, Driving, PVC Plumbing, Welding, Furniture making, Call centre assistant, etc. Among the full-term courses, Electronics and Instrumentation have been merged as one course in keeping with the finance minister's demand to create a 'Centre of Excellence' in the electronics sector. On merging, this course now has a capability to admit 100 students.

PVPPCOE offers five courses in engineering approved by the Government of Maharashtra, University of Mumbai and AICTE (All India Council of Technical Education). The courses are in the field of IT, Electronics, Electronics & Telecom, Marine and Computers. The courses are revised as per Bombay University recommendations and revision.

### **17.7 ADMISSION PROCEDURE FOLLOWED BY INSTITUTIONS IN VARIOUS COURSES AND STUDENTS INTAKE**

#### ***Industry Perspective***

ATI's selection procedure is done through invitation of applications through advertisements. Once these applications come in, they are scrutinised and then based on merit, a list is put up of the selected candidates. It is an open procedure, and anyone can challenge the admission procedure. As per government rules, the batch strength for each of the trade courses is 20. There are many short-term courses of 2-3 weeks. These courses have 10-12 candidates in one batch while the entire course strength could be 50. There are also industry-sponsored candidates for specialised courses as well.

The IIT admission procedure is very stringent and based completely on merit. The JEE-GATE exam is conducted all over the country and based on the scores admission is given after a personal interview. Also, since the students at the end of every course rate the faculty at IIT, our students belong to the cream of intellectuals. After completion of a term the students fill in an assessment form on the performance and competency of the instructors. If the result is not found to be satisfactory, then the instructor may be asked to quit. So the students selected into our courses have to be very good by all standards and our entrance exam ensures that we get the best. The following numbers of students were enrolled in the BTech course as of May 2005:

<b>Courses offered</b>	<b>Number of students</b>

Aerospace	40
Civil	65
Computer Science	75
Electrical	100
Chemical	100
Mechanical	90
Metallurgy	55
Engineering Physics	25

Source: IIT

At Fr. Conceicao Rodrigues College of Engineering for the graduate courses, the PCM marks and the score at the CET is considered. While for the postgraduate courses, a first class in BE of the equivalent discipline is considered. The following numbers of students were enrolled in the BE and ME course as of 2005:

Course	First introduced in	Number of students
Production Engineering	1984	60
Electronics	1987	60
Computer	1992	60
Computer	1999	60
IT	2004	30
*M.E (Manufacturing)	1997	10
M.E (Mechanical)	2005	18
M.E (Electronics)	2005	18

Source: Fr. Conceicao Rodrigues College of Engineering \* part-time

ITI-Agripada follows the government procedure where there are different qualifications for different trades. There is a 25 per cent reservation for girls. Also, with the passing out marks being 40, the students are ideally qualified for industry. The syllabus is revised every two years as per the changes given by the Directorate General of Employment & Training (DGET).

Trade	No. of students	Qualification
Plumber	32	VIII pass
*Sheet metal	32	VIII pass
Carpenter	32	VIII pass
Welder	24	VIII pass
*Foundryman	32	VIII pass
*Building construction	32	VIII pass
Wireman	16	VIII pass
Painter	16	VIII pass
Mechanic	32	X pass

Draftsman (civil)	16	X pass
Surveyor	16	X pass
Electric	32	X pass
Electronics (incl.Instrumentation)	48	X pass
IT	16	X pass
Refrigeration & AC	16	X pass
Fitter	32	X pass
Turner	24	X pass
Machinist	24	X pass
Grinder	24	X pass
Motor mechanic	16	X pass
Computer operator and programming assistant (COPA)	64	XII pass
DTP	32	XII pass (with a typing speed of 30 wpm)
Machine maintenance and tool manufacturing (MMTM)	16	X pass
Draftsman (Mechanic)	32	X pass

Source: ITI-Agripada \*These courses did not have full capacity for this year

PVPPCOE follows the Maharashtra Common Entrance Test (CET) procedure to admit students. The competency level of the students is therefore understood through the test and admissions are thus given solely on the basis of merit.

Courses offered	First introduced in	Number of students
Information Technology	2001	120
Computers	1991	60
Electronics	1991	60
Electronics & Telecom	2001	60
Marine	2002	40

Source: PVPPCOE

### 17.8 COURSES LIKELY TO BE IN DEMAND (over next five years)

#### Industry Perspective

According to ATI, courses in IT& computers and telecom will be the courses in demand over the next five years. This is because these industries have the maximum growth potential backed by a positive growth in employment as well. Need -based training programmes suiting the training needs of the industries on request are also conducted. The Institute has Mechanical, Electrical & Electronics

workshops / Chemical laboratories and also expertise to conduct need-based training programmes.

IIT lays greater emphasis that courses in IT, biosciences, biotechnology and retailing will be more in demand. On the engineering side, the most preferred courses would be in IT. Nascent industries like biotechnology will have a global demand and so courses in this field will be an added advantage. Also, with the retailing sector growing by 8-10 per cent per annum for the next few years, courses in this field will be in great demand.

Fr. Conceicao Rodrigues College of Engineering asserted the demand for IT-related and manufacturing industry related courses. The growth potential of IT is an obvious factor while, India fast developing as a manufacturing hub will add up to the demand for courses in production, design and development of manufacturing goods. More focus will also be given to courses where e-manufacturing and TQM aspects are taken into consideration. The institute also plans to introduce a BE Mechanical and BE (Electronics & Telecommunication) as also other ME courses in manufacturing and IT.

ITI-Agripada feels that motor mechanic, fitter, turner, electronics and IT-related courses will be the first choice. However, they pointed out that though trades like masonry are not preferred by students, it offers huge employment potential.

PVPPCOE reiterates that courses in IT and telecom will be in great demand due to the overall growth potential of these industries. The adaptation of computer technology in all sectors of the global economy will continue to generate fresh demand for IT-related businesses.

## **17.9 INSTITUTION-INDUSTRY INTERACTIONS, AND ITS IMPACT ON CURRICULUM**

### **Industry Perspective**

As per the courses offered at ATI plant training is imparted to the students. For this, the institute is in touch with the industries to use their factory premises. Besides, many companies also come in to recruit students because they prefer people with industrially intensive training as given by the ITIs. Curriculum /content and duration of Tailor Made Courses are to be developed through bilateral discussions between the industry and the Institute to meet the specific training needs.

IIT is known for its pro-active culture and interaction with industry. The institute has a Continual Education Programme Cell where training is given to the students on different trends in the industry. Secondly, there is a R&D department where joint research and projects are carried out for industry. Also,

IIT has an innovative concept called SINE i.e. Society for Innovation and Entrepreneurship. Here, selected innovative business ideas of students find encouragement and seed capital is given to the students for a start-up.

Fr. Conceicao Rodrigues College of Engineering has a placement cell which is in continuous interaction with the companies. In the final semester production engineering students are sent for field training to industries like L&T, Siemens, M&M, Godrej and Crompton Greaves for six months. Also, companies like TCS and Infosys offer training to the faculty so that they get students who acquire knowledge and can be customised to meet company requirements. For the computer and IT engineering courses, students take up company-based projects and it is only on approval from the company, that these projects are cleared. All students acquiring 58 per cent and above receive industry placements in the last semester itself.

ITI-Agripada gives valuable practical experience to all its students. Between February to April, students of all trades are given in-plant training in their respective fields. A one-year apprenticeship whereby the student takes on-the-job experience is a mandatory part of the course curriculum. All the students are placed in good companies like Godrej & Boyce, BSE, Indian Airlines, Power Grid Corporation, Siemens, HT Media, etc.

PVPPCOE also has a placement cell which was set up to bring about convergence of industrial demands and teaching curriculum. The Cell has a Campus Recruitment Programme where companies like L&T Infotech, Wipro, Accenture, etc. come in. The college is also associated to the Indian Society for Technical Education (ICSTE), a premier national professional organisation of teachers and students of technical institutions in India. ISTE is the main authorised agency by the AICTE in conducting Short Term Training Programmes (STTPs) for updating the knowledge and skills of teachers of engineering colleges and polytechnics

#### **17.10 OBSOLETE COURSES ACCORDING TO INSTITUTIONS (over next five years)**

##### **Industry Perspective**

ATI says that with the CAD/CAM courses coming in, draftsman course will be rendered obsolete. Also, courses in carpentry and welding have no takers.

IIT says that going by the general trend, courses in Metallurgy, Mining and Textile engineering could be rendered obsolete in the coming years.

With limited companies in the sheet metal and foundry field of work, these courses will be rendered obsolete. Also, with the introduction of Auto CAD, the Draftsman (civil) course will be redundant. This course has therefore been cut

down to one batch while the other batch caters to interior decoration and designing.

Both Fr. Conceicao Rodrigues College of Engineering and PVPPCOE emphasised that none of their courses will be rendered obsolete as they are in synch with the market demand.

### **17.11 INVESTMENT IN INFRASTRUCTURE**

#### ***Industry Perspective***

ATI has a well setup computer laboratory with total networking and Internet facility to impart skill & knowledge / training to trainees as well as trainers. Continuous upgradation of these institutes and this will take place as per government guidelines.

IIT has state-of-the art infrastructure as compared to any engineering college in the country. Last year the institute spent Rs 33 crore annually on infrastructure maintenance and up gradation. Providing Internet training and modernisation of laboratories is an ongoing process at IIT, and infrastructure up gradation will continue to be the key to our growth.

Fr. Conceicao Rodrigues College of Engineering makes need-based investment to provide state-of-art equipment in its 20 laboratories. In the last two we have spent 2-2.5 crore in equipment upgradation.

ITI-Agripada has equipped our labs with the latest industrial instruments. We also have a garage, which is used to give practical training to our motor mechanic trade students.

PVPPCOE is spread over a total area of 3,00,000 sq. feet. The faculty is complemented by up-to-date labs, workshops and access to a vast store of information by means of a library and the World Wide Web.

### **17.12 RECOMMENDATIONS FOR IMPROVING VOCATIONAL TRAINING**

During the course of the study, the two specific problems facing the ITIs were understood to be uneven demand-supply structure and lack of infrastructure. There is a need for a major structural change in ITIs in terms of infrastructure and course revision.

Given below are a few recommendations to improve the situation:

- Re-orient the ITI skills training programmes towards modern industrial and particularly non-industrial programmes.
- There is a need for better integration of ITI-based training with formal apprenticeships in order to reduce the overall learning period and improve returns to investment in skills training.

- To provide greater autonomy to the ITIs and introduce the accountability framework. The financing and management arrangements regarding public ITIs constrain their operational flexibility and responsiveness and there is a need to remove these bottlenecks.
- Fee-funded courses should be encouraged, enabling training institutes to improve their financial position.
- The institutes need to analyse the potential demand for skills in the local labour markets. This would help to avoid the demand-supply imbalances and improve efficiency of training institutes.
- Adopt a strategy for restructuring the training provided at ITIs through introduction of refresher training programmes for faculty in industrial trades.
- Strengthen interaction between industry and ITIs. Many companies who come in to recruit students prefer people with industrially intensive training as given by the ITIs. To cater to this demand, curriculum /content and duration of courses should be periodically revised and developed through bilateral discussions between the industry and the Institute.
- The companies get maximum work done by the apprentices during the apprenticeship period, as this involves zero cost to them. However, very few of these are actually absorbed by the company on a permanent basis. There should be a system to keep a check on such practices by industry.
- There is a need to review and integrate ITI-based training with formal apprenticeship in order to reduce overall learning periods and improve returns to investment in skills training and its attractiveness to young people.
- There is a need to utilise ITI premises and equipment more efficiently to also promote the scope of self-employment.
- More focus should be placed on setting up ITIs in developing the skills of workers operating in the unorganized economy i.e. the rural areas, where the largest employment opportunities are said to exist.
- Introduce skills training for poverty alleviation programmes and encourage shorter courses for the unorganized sector.
- State governments do not hold ITIs accountable for their performance and particularly outputs. It is not a requirement for ITIs to monitor their graduates and report on their labour market success. This means ITIs are not accountable for their performance and outputs and eliminates the very basis against which their performance can be measured and improved. It is therefore required to make a accountability framework with certain points favourable towards improving the cause of vocational education.
- In the absence of proper infrastructure and facilities to improve the quality of training provided, the ITIs should be given operational freedom and incentives to decide on the training programmes to offer, on enrolments, freedom for the ITI management to hire and fire staff as per pre-determined rules.

- Also, more community polytechnic schemes as set up by the Ministry of HRD should be set up, which will implement need-based courses as per the demand of a town or village.
- As against individuals setting up private ITIs, the government should encourage industry bodies to come together and set up an ITI, thereby ensuring the best interests of both the students and the industry as a whole.
- And the last but the most important fact is the growth of the Indian economy. There is a need for rapid growth of the Indian economy failing which all manufacturing industry-related courses however improvised they become, will be rendered useless.

**List of emerging trades as per the research study**

While a majority of ITI courses are in basic industrial trades, expansion of the job market will mostly be in the services and other sectors. So ITIs need to offer a mix of training courses in *non-traditional trades* such as agriculture-related, forestry and paper, tourism, IT-enabled services, paramedical professions, etc. and other sectors that are identified as having major potential for job creation. Some of the emerging trades in the coming era would be:

- CAD/CAM and other computer-related courses.
- Electrician courses
- Auto-mechanic (diesel and petrol) courses
- Auto-CAM Pro-e courses
- Courses in IT& computers and telecom.
- Biotechnology and biosciences.
- Courses where e-manufacturing and TQM aspects are taken into consideration.
- Radio-TV repairing in synch with computer hardware courses.
- Also, motor mechanic, fitter, turner, electronics and IT-related courses will be the first choice.

*EMPLOYMENT GENERATION IN POST GLOBALISATION ERA  
IN GREATER MUMBAI*

**RESEARCH CONCLUSIONS**

- Competition has created a scenario of “Change or Perish”. A gradual shift from ‘manual’ to ‘mechanised’ business operation is visible in Financial, Tourism, Courier, Retail and Automobile Garage sectors. This in turn has reduced job opportunities for unskilled workers, and increased demand for skilled and semi-skilled personnel.
- There exists a big divide between business units within sectors like Financial, Construction, Courier, Entertainment, Retail and Automobile on lines of technology ‘haves’ and ‘have-nots’. At one end, there are few technology-driven highly efficient large business organisations, while at the other end there is a large number of small and medium sized business units with marginal or investment in IT and technology. These sectors will continue to provide employment opportunities for educated and uneducated, skilled and unskilled personnel over the next few years.
- Business units in organised segment across all sectors are at different stages of IT and technological advancement. Accordingly, these units are stressing on basic IT literacy in employees across the board, and they have already taken necessary steps to ensure IT literacy in future employees.
- Across sectors, the basic requirements in an individual seeking employment at the low and middle management level has changed to: graduation degree, pleasant personality, fluency in English, strong customer-service orientation, basic IT literacy, etc. While, at the higher management level, they have changed to: post-graduation degree or MBA, strong communication skills, managerial skills, business specialisation, strong technology orientation, soft skills,
- Experiencing a paradigm shift from ‘quantity’ to ‘quality’ manpower, sectors like Financial, Construction, Entertainment, Retailing and Automobile Garages are opting for higher manpower rationalisation. Though, individual business units in these sectors may resort to downsizing/rightsizing, these sectors on the whole would see a modest growth in employment figures.
- Business units in sectors like Financial, Tourism, Telecom, Courier and Retailing are strongly focusing on strengthening of retail business, and it has necessitated creation savvy frontline and efficient backend.

- In sectors like Financial, Construction, IT, Telecom and Entertainment, which are witnessing extraordinary growth rate and severe competition, companies are recruiting specialised and highly skilled personnel.
- Management colleges/recognised training institutes are emerging as hotspots for recruitment of qualified personnel amongst several sectors. In spite of this, there is a unanimous feeling that the candidates though qualified (bookish knowledge), lack requisite job skills and soft skills. As a result, companies are forced to spend, both time and money, on rigorous on-the-job training. Business units have stressed on the need for further strengthening of professional education system inline with the requirements of the industry.
- Business units in Financial, IT, Telecom and Retailing have highlighted on the need for benchmarking of professional education as per international standards. There is a huge scope for adoption of globally relevant curriculum and training by management colleges and professional training institutions specialising in these sectors, thereby ensuring immediate availability of 'quality employable personnel'.
- Sectors like Financial, Tourism, IT, Telecom, Entertainment and Retail have stressed on creation of strong industry-academia linkages through interactive platforms like: workshops, summits, programs, research projects, etc.
- Business units in Financial, Construction, Tourism, Telecom, Courier and Entertainment sectors are outsourcing mundane business processes to external agencies, thereby creating hoards of indirect employment opportunities.
- High customer service focus is pushing business units in Financial, Tourism, IT, Telecom, Courier and Retail sectors to integrate their business on the IT platform. This has created demand for not only skilled IT personnel, but also for niche personnel in areas like data warehousing and data mining.
- Business units in the Financial, Tourism, IT, Telecom and Retail are increasingly moving towards remote electronic transactions, which has necessitated re-skilling of employees in the area of technology, marketing and customer service.
- Majority of the business units in Construction, Tourism, Courier, Entertainment, Retail, Automobile Garages and Photo Copying sectors are indifferent to best business practices, state-of-the-art technology and better utilisation of material and resources. Increased market pressure is likely to push them to fall inline, thus resulting into reduction of unskilled manpower and creation of opportunities for semi-skilled and skilled personnel.
- Sectors like Construction, Courier and Entertainment are witnessing high cost over-runs due to high turnaround of personnel and lack of trained manpower

with managerial skills. Proper structuring of salaries in these sectors could address the issue of job security and high employee turnover.

- Sectors like Financial, Construction, Tourism, IT, Telecom and Courier have been suffering largely due to lack basic infrastructure and government policy support. An overwhelming feeling amongst business units is that enhanced support from government and availability of business infrastructure would result into a significant increase in employment opportunities in the city.
- Business units across all sectors are investing considerably on employee training and skills upgradation. Most of them have realised that in-housing training is a necessity and that they cannot escape this investment.

#### *SECTOR-SPECIFIC HIGHLIGHTS*

##### ➤ *FINANCIAL SECTOR*

- Continued downing sizing/right sizing will lead to cut in direct employment and rise in contractual employment/outsourcing.
- Future employment opportunities for specialised, skilled, technical and customer-service personnel.
- Introduction of remote electronic transaction would seen another round of re-skilling of employee in areas of technology, marketing and customer service.

##### ➤ *CONSTRUCTION SECTOR*

- Huge demand for highly skilled people like: engineers, project manager, materials manager, quality assurance managers, safety managers...
- Unskilled labour will continue to play a significant role in several business areas.
- Handful business units have opted for IT & technology adoption to seek greater economies of scale, while majority have stuck to traditional practices.
- Job security, people management, manpower training, salary structuring, etc. continue to be the grey areas.

##### ➤ *TOURISM SECTOR*

- Improvement in city's infrastructure, rise in number of airlines, promotion of leisure and medical tourism are likely to result into spurt in employment opportunities.
- Infusion of technology and increased business networking would have a strong impact on employment patterns and job profiles.

- The sector is losing trained manpower to sunrise sectors like BPO and retailing, on account of better pay packages.
  - The sector is highly vulnerable to drastic socio-economic-political developments across the world.
- **IT SECTOR**
- Business segments like BPO and ITES are likely to continue creating huge employment opportunities in the near future.
  - Networking, multi-media, content development, (online) customer service, research and E-learning professionals would see a huge demand.
  - Creation of 'Centres of Excellence' in training, and strengthen of IT and telecom infrastructure is requisite for extraordinary growth of the sector/employment.
- **TELECOM SECTOR**
- Introduction of the 3G platform and convergence of services would create several new job opportunities.
  - The demand of telecommunications, electrical and electronic engineers will further increase due to introduction of newer service and expansion capacities.
- **COURIER SECTOR**
- Increased use of IT and technology is likely to result into significant reduction in employment numbers, but enhance employment standards.
  - Command over languages, good personality, customer service orientation, technology literacy, etc. would be mandatory requirements for all future jobs in the sector.
  - Gradual drop in the proportion of uneducated and unskilled labour in favour of trained, educated, skilled and technology savvy personnel.
  - Easy availability of leg-workers, but a dearth of skilled manpower in areas like HR, finance, legal, customer service, etc.
- **ENTERTAINMENT SECTOR**
- Growth in employment opportunities largely due to increase in number of Television channels and FM radio stations.
  - With corporate houses and financial institutions investing, the Sector is likely to attract best talents.
  - The sector witnessing a high level of churning of manpower due to evolution of job profiles on account of introduction of newer technology.

- Considering the pace of growth of the sector, employment opportunities exist in virtually every business segment/specialisation.

➤ **RETAIL SECTOR**

- Retail sector would spearhead growth in economy over the next five years, malls and super stores are springing across the country.
- It is certain that conventional retail shops will continue to exist and prosper despite the threat from malls and big stores.
- The sector is attracting the best talent in the city. The remuneration, service standards, job profiles have seen a big change.
- Introduction of IT has lowered the dependence on people drastically, but it has created a new breed of techno-savvy floor managers.

➤ **AUTOMOBILE GARAGES SECTOR**

- Companies are withdrawing dealerships and authorised service centre contracts with garages. Some have already stopped selling spares in the open market.
- On one hand, the new technology cars offer very little room for repair services and regular maintenance, while on the other end they require technically educated, trained and skilled manpower.
- In the future, only garages that have state-of-the-art facilities stand a better chance of surviving.

**DIRECT & INDIRECT EMPLOYMENT PROJECTIONS FOR VARIOUS SECTORS FOR 2005 & 2010**

<i>Sectors (fig. In lakhs)</i>	<i>Direct Empl. 2005</i>	<i>Indir. Empl. 2005</i>	<i>Direct Empl. 2010</i>	<i>Indir.Empl. 2010</i>
Financial	2.58	1.61	2.86	1.78
Construction	12.89	-	19.98	-
Travel & Tourism	24.1	49.8	25.7	53.2
Information Technology	1.8	25	6.6	6.42
Telecom	1.06	3.33	1.71	6.71
Courier	0.33	-	0.45	-
Entertainment	2.49	9.63	6.49	25.99
Retail	26.60	-	42.85	-
Automobile	1.19	-	1.24	-
Photocopying	0.58*	-	-	-

*(\*total employment in organized sector)*

## LIST OF BUSINESS UNITS CONTACTED FOR THE STUDY

<i>BUSINESS UNITS</i>	<i>CONTACT PERSON</i>	<i>ADDRESS</i>
<b>FINANCIAL SECTOR</b>		
ASSOCIATION OF MUTUAL FUNDS OF INDIA	A P KURIAN, CHAIRMAN	AMFI, 106, FREE PRESS HOUSE, FREE PRESS MARG, NARIMAN POINT, M'BAI-21.
UTI MUTUAL FUND	ROHINI SODHI, MANAGER-HR	UTI MUTUAL FUND, BANDRA-KURLA COMPLEX, BANDRA (E), MUMBAI
INDIAN BANKS ASSOCIATION	SHIV SHANKARA BABU, ADVISOR, PERSONNEL, AND JAYASREE MENON, ECONOMIST	6 <sup>TH</sup> FLOOR, CENTRE I, WORLD TRADE CENTRE, CUFFE PARADE, MUMBAI – 400 002.
CICI BANK	MR SAURABH SINGH, JT. DIRECTOR, HR	BANDRA KURLA COMPLEX, BANDRA (E)
PRUDENTIAL ICICI ASSET MANAGEMENT COMPANY	PUJA BIYANI, ASSISTANT MANAGER-HR	8 <sup>TH</sup> FLOOR, 'A' WING, PENINSULA TOWERS, PENINSULA CORPORATE PARK, LOWE PAREL, M'BAI
SARASWAT CO-OPERATIVE BANK	BALGI, DGM, HR; SANDEEP PUNEKAR, SR. MGR., AND RAJE, CGM, STAFF TRAINING COLLEGE	SARASWAT BANK BLDG., SECTOR-17, VASHI, NEW MUMBAI
STATE BANK INDIA	B B DAS, GM, CENTRAL RECRUITMENT & PROMOTIONS DEPARTMENT, AND BRAGANZA, DGM, WESTERN REGION	STATE BANK BHAVAN NARIMAN POINT, MUMBAI –21.
<b>CONSTRUCTION SECTOR</b>		
BUILDERS' ASSOCIATION OF INDIA	D L DESAI, HON. GENERAL TREASURE	G-1/G-20, 7 <sup>TH</sup> FLOOR, COMMERCE CENTRE, J.DADAJEE ROAD, TARDEO, MUMBAI-34.
RNA BUILDERS (NG)	HARI NAIR, CEO	28, RAJA BAHADUR BUILDING, 1 <sup>ST</sup> FLOOR, BOMBAY SAMACHAR MARG, FORT, MUMBAI-23.
EVERSHINE BUILDERS PVT. LTD.	ALOK TRIPATHI, MANAGER-HR	215, VEENA-BEENA SHOPPING CENTRE, OPP. BANDRA STATION, BANDRA (W), MUMBAI-50.
HINDUSTAN CONSTRUCTION Co. LTD.	PAWAN KANT, EXECUTIVE-BUSINESS DEVELOPMENT	HINCON HOUSE, LAL BAHADUR SHASTRI MARG, VIKHROLI (W), MUMBAI-83.
NATIONAL INSTITUTE OF CONSTRUCTION MANAGEMENT AND RESEARCH	PROF. K N VAID	WALCHAND CENTRE, TARDEO ROAD, MUMBAI-34.
SHAPOORJI PALLONJI & Co. LTD.	SS CHOUHAN, DY. GENERAL MANAGER -HR	GRESHAM ASSURANCE HOUSE, 4 <sup>TH</sup> FLOOR, SIR P M ROAD, FORT, MUMBAI-01.
MAHARASHTRA CHAMBER OF	K RAVI NAMBIAR, SECRETARY	9, RUBY HOUSE, 113, LADY

HOUSING INDUSTRY		JAMSHEDJI ROAD, OPP. SITLADEVI TEMPLE, MAHIM (W), MUMBAI-16.
GAMMON INDIA LTD.	MILIND M NAIK, GENERAL MANAGER - HR	GAMMON HOUSE, VEER SAVARKAR MARG, PRABHADEVI, MUMBAI-25.
<b>INFORMATION TECHNOLOGY</b>		
NASSCOM	RAJIV VAISHNAV, DIRECTOR (WESTERN REGION)	GROUND FLOOR, SAMRUDHI VENTURE PARK, ANDHERI (EAST), MUMBAI - 400 092
APTECH LTD.	SHAMKANT BHAVSAR, AGM-HR	APTECH HOUSE, MIDC, ANDHERI (E), MUMBAI-92.
EFUNDS		
MAIT	VINNIE MEHTA, EXECUTIVE DIRECTOR	80, DR ANNIE BESANT ROAD, WORLI MUMBAI 400 018.
TCS	DR RITU ANAND, VP-HR	11 <sup>TH</sup> FLOOR, AIR INDIA BUILDING, NARIMAN POINT, MUMBAI-21.
ADVENTITY	AMIT VARMA, HEAD-HUMAN RESOURCES	ADVENTITY HOUSE, NR. MULUND CHECKNAKA, THANE (W), MUMBAI.
<b>TELECOM</b>		
MTNL	MR. HOSAMANI, DGM, ADMINISTRATION-II	MTNL SHIVAJI PARK, DADAR, MUMBAI
BSNL	MR. P K DHORE, DGM, ADMINISTRATION ; AND Ms. JYOTSNA EKKA, DGM, MARKETING	MUMBAI
TATA TELESERVICES	Mr. HARI SUBRAMANIAM, Sr. Mgr.-HR	MUMBAI
<b>COURIER</b>		
THE AIR CARGO AGENTS ASSOCIATION OF INDIA	P K NAIR, EXECUTIVE SECRETARY	28-B, NARIMAN BHAVAN, NARIMAN POINT, MUMBAI-21.
JEENA & COMPANY	K M KARKHANAVALA, HEAD-CORPORATE, TAXATION & LEGAL AFFAIRS	ELPHINSTONE BUILDING, 10, VEER NARIMAN ROAD, MUMBAI-01.
VICHARE COURIER SERVICE PVT. LTD.	ABHIJIT DEVDHAR, MANAGER-ACCOUNTS & FINANCE	601/602, KESAR, B-3, PLOT No.239, RDP-6, BEHIND FISH MARKET, CHARKOP, KANDIVALI (W), MUMBAI-67.
DHL EXPRESS (INDIA) PVT. LTD.	SYRUS P PALSETIA, COMPENSATION & BENEFIT MANAGER	8 <sup>TH</sup> FLOOR-DHEERAJ ARMA, A K MARG, BANDRA (E), MUMBAI-51.
SKYPAK SERVICE SPECIALISTS LTD.	NITIN DESHPANDE, GENERAL MANAGER - PERSONNEL	SKYPAK HOUSE, MAROL, ANDHERI (E), MUMBAI-59.
TNT	AKSHAY KEJRIWAL, ASSISTANT MANAGER-HR	FUTECH PARK, EL-225, TTC ELECTRONIC AREA, MIDC

		MAHAPE, NAVI MUMBAI-79.
<b>RETAILING</b>		
RETAILERS ASSOCIATION OF INDIA	LAWRENCE FERNANDES, ASSOCIATE DIRECTOR-RETAIL LEARNING	111/112, ASCOT CENTRE, NEXT TO LE ROYAL MERIDIEN, SAHAR ROAD, SAHAR-ANDHERI (E), MUMBAI-99.
HILTON DEPARTMENT STORE	ARSHAD PORBANDARWALA,	RAMDAS NAYAK MARG, BANDRA, MUMBAI-50.
APNA BAZAR CO-OP.	S B SHINDE, CHIEF OFFICER (ADMN. & PERSONNEL)	GOVINDJI KENI ROAD, NAIGOAN, MUMBAI-14.
SHOPPERS' STOP LTD.	SIDDHARTHAN M, CUSTOMER CARE ASSOCIATE & MANAGER - HR	EUREKA TOWERS, 9 <sup>TH</sup> FLOOR, B-WING, PLOT No.504, LINK ROAD, MALAD (W), MUMBAI-64.
<b>SAHAKARI BHANDAR</b>	LALIT DHAKNE, ASSISTANT GENERAL MANAGER	BHANDARI ESTATE, QUARESHI NAGAR, KURLA (E), MUMBAI.
K DINESH & Co.	MEHUL, PROPRIETOR	7/8 & 13, BELOW HOTEL SHANTIDOOT, HINDMATA CLOTH MARKET, DR. A B ROAD, DADAR, MUMBAI -14.
<b>AUTOMOBILE GARAGES</b>		
TWO WHEELERS ASSOCIATION	KISHAN RAO, PRESIDENT	293/ A, BELLASIS ROAD, NEXT TO MUMBAI CENTRAL P.O., MUMBAI -400 008.
ANDRADE MOTORS	SHAILESH ANDRADE, OWNER	155, WORLI VILLAGE, MUMBAI-400 030.
APSARA SCOOTERS	MICHEAL FERNANDES, OWNER	235, ESHAK MANZIL, DR. DADA SAHEB BHADKAMKAR MARG, MUMBAI-400 007.
FRANK AUTO REPAIRERS	FRANK D'SOUZA, OWNER	PETTIT COMPOUND GARAGE No.9, NEXT TO SHETTY VEG. PLAZA, NANA CHOWK, MUMBAI-400 007.
MAHESH TURNING WORKS	MAHESH POWLE, OWNER	SHOP No.111/ A, 198 CORNER CHAMBERS, SHIVAJI PARK, MAHIM, MUMBAI.
VIJAY AUTO WORKS	PRASHANT R JHALA, OWNER	HANSRAJ WADI, KENNEDY BRIDGE, OPERA HOUSE, MUMBAI-400 004.
<b>ENTERTAINMENT</b>		
THE FILM & TELEVISION PRODUCERS GUILD OF INDIA LTD.	SUPRAN SINGH, SECRETARY GENERAL	G-1, MORYA HOUSE, VEERA INDUSTRIAL ESTATE, OSHIWARA LINK ROAD, ANDHERI (W), MUMBAI -400 053.
BALAJI TELEFILMS LIMITED	STANLEY MARTYRES, ASSISTANT MANAGER- HR	BALAJI HOUSE, C-13, DALLA INDUSTRIAL ESTATE, OPP. LAXMI INDUSTRIES, NEW LINK ROAD, ANDHERI (W), MUMBAI-

		400053.
ESSEL WORLD	SALIL DESAI, HR & PERSONNEL	GORAI VILLAGE, BORIVALI (W), P O Box No. 19710, MUMBAI - 400 091.
ZEE TELEVISION (INDIA) LTD.	RANJAN SARKAR, HR HEAD	CONTINENTAL BLDG, 135, DR. ANNIE BESANT ROAD, WORLI, MUMBAI 400 018.
93.5 RED FM	SAUGATO BANERJEE, STATION DIRECTOR	MITTAL CHAMBERS, NARIMAN POINT, MUMBAI-21.
ALL INDIA RADIO	RAJENDRAN PATANKAR	AKASHVANI BUILDING, CHURCHGATE, MUMBAI-20.
<b>TOURISM</b>		
GOVERNMENT OF INDIA	GOUR KANJILAL, REGIONAL DIRECTOR	C.D.O. HUTMENTS, OPP. L.I.C. BUILDING, MADAME CAMA ROAD, MUMBAI-400 020.
ORBIT TOURS & TRAVELS	OMPRAKASH, DIRECTOR	MIDWAY PREMISES, A5, MARATHA MARG, PRABHADEVI, MUMBAI.
KESARI TOURS & TRAVELS	SUDHIR PATIL, DIRECTOR	SITLADEVI TEMPLE, MAHIM, MUMBAI.
KUMAR TRAVELS		
GARHA TOURS & TRAVEL	N S RATHOD, CHAIRMAN	ELVEE CHAMBERS, GREEN STREET, FORT, MUMBAI-23.
LAGU TRAVEL CONSULTANTS PVT. LTD.	KETAN JUVEKAR, DIRECTOR	17/3 LAHER CHAMBER, GOKHALE ROAD, SHIVAJI PARK, MUMBAI-28.
<b>PHOTOCOPY CENTRE</b>		
TRADEMARK PRINT HOUSE	ANAND, OWNER	SHOP No.6, 41, JANMABHUMI MARG, WADIA BUILDING, FORT, MUMBAI.
VIDHI DIGITAL	PRAVIN GADA, OWNER	SHOP No.1, WADIA BUILDING, 31, JANMABHUMI MARG, FORT, MUMBAI-01
MODERN COPY CENTRE	KAUSHAL NANDU, OWNER	2, HOMAJEE STREET, BOMEN HOUSE, FORT, MUMBAI-01
OFFICE AUTOMATION SYSTEM	RAMESH, OWNER	23 PODDAR CHAMBER, STORE LANE, FORT, MUMBAI-01
BANDRA JUMBO XEROX CENTRE	NIKUNJ GALA, OWNER	SHOP No.4&5, BANSIDHAR BHAVAN, GURUNANAK ROAD, BANDRA (W), MUMBAI-50
MAYUR STATIONARY & XEROX CENTRE	KIRTI SHAH, OWNER	DAULAT HOUSE, OPP. NUTAN NAGAR, TURNER ROAD, BANDRA (W), MUMBAI-50.

MITTAL XEROX CENTRE	NIRAV GALA, OWNER	BANDRA LIBERTY CO-OP SOCIETY, HILL ROAD, BANDRA (W), MUMBAI-50
NOVELTY CENTRE	GUDDU, OWNER	21-AA, GLASSWALA COMPOUND, BESIDE SAHAKARI BHANDAR, GURUNANAK ROAD, BANDRA (W), MUMBAI-50.
JAIN JUMBO XEROX	NAVIN GADA	SHOP NO. 10, JAMUNA NIWAS, OPP. SAROVAR HOTEL, KANDIVALI (W), MUMBAI.
KING XEROX	RAMNIK GADA	3 KESAR KUNJ, V L ROAD, OPP. OM PLAZA, KANDIVALI (W), MUMBAI.
ALWYN XEROX CENTRE		10, VERTEX VIKAS, ANDHERI (E), MUMBAI.
XEROX POINT		ANDHERI

QUESTIONNAIRE

*EMPLOYMENT GENERATION IN  
POST GLOBALISATION ERA IN GREATER MUMBAI*

UNDERSTANDING TRENDS IN EMPLOYMENT SINCE 1995

- Could you elaborate in brief the industry performance over the last decade?

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- What major changes has the industry witnessed on the employment scenario? Have there been any distinct changes in job profiles over the last decade?

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- How has been the company's performance over the last decade? Could you elaborate on growth of the business activities of various division/departments?

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- Has the company encountered any major business setback over the last decade or so? If yes, what enduring impact has it left on the business, especially on the employment front?

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- Over the last decade, what significant changes has the company undergone on the employment front in the Mumbai region? Has there been any significant change in the job profiles?

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- Could you elaborate on the growth of indirect employment due to the company's business activities (i.e. through its dealer/retailers/ vendor/service providers) in the Mumbai region?

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**2. EMPLOYMENT REQUIREMENTS OVER THE NEXT FIVE YEARS**

- How do you foresee the industry grow over the next five years?

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- Could you elaborate on the nature of employment opportunities to be generated by the industry over the next five years? Further, do you see any distinct shift in job profiles in the next five years?

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- What is the business growth the company has forecasted for the next five years?

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- In order to meet the growth of business over the next five years, what would be the projected employment requirements?

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- Could you broadly elaborate on the change of profiles of the future employees? What per cent of these employees are expected to be skilled/trained for undertaking specialised assignments?

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- What expansion/diversification plans does the company have for the next five years? What impact would these have on the employee requirements?

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- What is the magnitude of outsourcing opportunities the company is likely to generate over the next five years?

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- In-line with the business plans for the next five years, what is the projected indirect employment the company is likely to generate through its dealers, wholesalers, retailers, etc.?

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### **3. INFLUENCE OF INFORMATION TECHNOLOGY ON JOB PROFILES**

- What has been the company's investment in IT over the last five years, and what is the extent of integration with the business processes?

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- What would be the extent of investment in employee training and skill up gradation? And, what is going to be the impact of these activities on future job generation (both skilled and un-skilled)?

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- Broadly, what has been change in the job profiles in the company over the last decade? And what is the expected shift in job profiles over the next five years?

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**4. SHIFT IN EMPLOYMENT AFFECTED BY DOWN SIZING**

- Has the company undertaken any business restructuring activities over the last decade? If yes, what has been the extent of impact in the area of down sizing/ right sizing?

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- What were the prime reasons for resorting to down sizing/right sizing (if any)?

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- Due to the business restructuring efforts undertaken, what has been the change in the ratio of skilled and unskilled employee?

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- Currently, what is the magnitude of outsourcing jobs undertaken by the company? Could you elaborate on the estimated job outsourcing the company would be resorting to over the next five years, and its impact on the job generation?

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Name of the organization : \_\_\_\_\_  
Address : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Nature of business : \_\_\_\_\_  
When did the organization  
become operational : \_\_\_\_\_  
Ownership pattern : \_\_\_\_\_  
Member of industrial  
Organization : \_\_\_\_\_

**QUESTIONNAIRE**  
*EMPLOYMENT GENERATION IN*  
*POST GLOBALISATION ERA IN GREATER MUMBAI*

**(FOR ITIs AND ENGINEERING COLLEGES)**

1. Could you elaborate in brief the performance of various sectors vis-à-vis employment generation over the last decade?

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2. With regards to employment generation in various industries, over the last decade, which sectors have been the major gainers and losers? Why?

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3. Considering the performance of the various sectors over the last decade, could you sum up the major shift in the nature of employment skills that companies require across various sectors?

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4. Over the next five years, which industries according to you hold tremendous employment generation potential? Why?

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5. Could you elaborate on some of the employee skills that are likely to become mandatory for seeking gainful employment in companies across different sectors, over the next five years?

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6. Over the last decade, what major changes has Mumbai witnessed on the employment front? Do you see any distinct shift in job profiles during this period?

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7. What impact has liberalisation/globalisation had on vocational training courses provided by institutions? How have the institutions performed over the last decade?

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8. What jobs do you foresee in the next five years? And what steps have the institution taken to cater to this emerging employment needs?

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9. Could you provide details on the various courses offered by your institution in diverse streams, along with information about the dates of 'course introduction' and the 'course revision'?

Sr. No.	Courses offered by	First Introduced in:	Last revised on:

10. Speaking about employment trends in Mumbai, what courses are likely to be in great demand over the next five years? Why?

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11. Could you elaborate on the nature of institution-industry interaction currently practised? Does the institution have any structured mechanism to incorporate skills training (re-training) requirements of the industry into its course curriculum?

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12. Has there been any market pressure to revise contents of the courses currently offered by the institution, or to introduce new courses?

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13. In the changing scenario, what according to you are the different courses that could be termed as obsolete, or are likely to become obsolete in the next five years?

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14. Broadly, could you elaborate on the present admission procedures followed by the institution? Also, could you provide us details on the annual intake of students into various courses?

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15. What expansion/diversification plans does the institution have for the next five years so as to meet the employment training needs of various industries?

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16. Could you provide us details on the infrastructure investment the institution has undertaken over the last decade so as to provide state-of-the-art training to students? Further, what is the estimated investment the institution likely to make on infrastructure upgradation over the next five years?

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Name of the person : \_\_\_\_\_  
Name of the institution : \_\_\_\_\_  
Address : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

When did the institution  
become operational : \_\_\_\_\_  
Ownership pattern : \_\_\_\_\_  
Member of educational  
Institutions/organization : \_\_\_\_\_