**Conclusions and Recommendations**

Over the years, Pune has emerged as an info tech hub. It is hometown to well known IT giants like Wipro, Cognizent and Infosys. Close proximity to financial capital, rapidly developing infrastructure, best academic culture, good climate and co-operative attitude of local community and agencies made Pune one of the most sought after destination. So the researcher has selected this city for the research.

The research was undertaken to study the changing role of HR departments in a specific period (1995 to 2005) with reference to IT industries involved exclusively in the development of software.

In view of the objectives of this study, the questionnaire was prepared covering all areas of organisation like recruitment, selection, training, development and retention. The feedback from the HR managers or executives of various companies was obtained through this questionnaire. To cross check the views of HR managers on various above issues, a separate questionnaire was prepared for employees of the same companies. It helped the researcher in making comparison between views expressed by the employers and the employees on the same issues and arrive at conclusions.
On the basis of analysis and interpretation of the data, researcher has drawn certain conclusions and also has made certain suggestions. Conclusions have been divided into areas like

1. Recruitment and selection.
2. Training and development.

Recruitment and Selection

Human resource is an asset of IT industry. Success of this industry depends on quality of people it recruits. Thus, the recruitment assumes great importance in this industry. With this in mind the researcher asked variety of questions covering all areas of recruitment and has drawn the conclusions on that basis. The questions covered aspects like age group of employees, estimation of manpower requirement in terms of qualification and the number and whether opinion of project manager matters while estimating requirement of technical staff. They were also asked about whether any models were developed for recruitment in terms of strategy or a policy and outsourcing of the recruitment and if not so, what are the sources of recruitment that they have developed. They were also asked if they were focusing on small towns for recruitment to save on costs. Pertaining to fair sex, the companies were asked to answer
about the status of women employees. The conclusions derived from
the analysis are appended.

- IT industry has young HR force, as 72% of the
  respondents expressed that age group of their staff
  varies between 25 to 30 years. This is an indication of
  'young India' operating in new field as compared to its
  traditional or industrial field.

- IT industry has highly qualified, professional staff to
  shoulder any responsibility assigned to them. 43%
  employees are professionally or technically qualified
  and have specific skills, 15% are postgraduates and
  12% graduates with domain knowledge. This is due to
  unique nature of their operations and specific
  requirement of their customers.

- As far as estimation of requirement of HR by the
  industry is concerned, it is seen that recruitments are
  project based, as 95% of the companies base their
  estimation for HR on the basis of ongoing projects.
  Almost 78% give weightage to prospective projects.
  Depending on this estimate the requirement for
  managerial and administrative manpower is
  ascertained.
• Process of recruitment begins with the opinion of the project managers. 94% of the HR managers agree that weightage is given to their request. This is because of certain specific requirements of their customers spread over the globe.

• Due to the keen competition amongst rival companies and paucity of required skills, the companies are forced to develop the model in terms of strategy, policy and special efforts to attract the ‘best from available. 33% of the respondents developed strategies, while 42% of them went for specific policies and 25% resorted to special efforts for the recruitment of ‘right’ candidates to suit their needs.

• It is observed that IT companies do not favour outsourcing of recruitment as 94% companies do not resort to outsourcing due to nature of its operations.

• It is observed that normal sources of recruitment like placement agencies and newspaper advertisements are not enough to meet the huge and qualified manpower requirement. So the industry has devised its own sources like internal referrals, campus interviews and preparing own portals. 100% of the companies go for internal referrals, 56% of them go for campus
interviews and equal percentage of companies have own portals. This ensures them about proper selection.

- 50% of the companies, mainly small and medium sized, have special drives for recruitment from the rural areas as salary expectations of the candidates from urban areas are high. Job hopping in case of candidates from rural areas was also found to be less.

- It is found that as far as recruitment in this industry is concerned, gender bias is minimum which has resulted in dominance of the women employees based on qualification and excellent performance. 37% companies have 35% women employees, and in case of 12% companies' percentage of women staff is more than 50% of their total HR strength.

- The strength of administrative staff is around 10% in 58% of cases and in almost 36% cases it is around 20 to 25%. From these figures it is clear that the strength of core staff is very high due to following reasons:
  1. Professional and technically skilled staff is the backbone of IT sector.
  2. Administrative staff is less as all operations are on line and some work is out sourced.
3. It sector requires certain percentage staff ‘on bench’ as their strategy.

4. Due to Unique nature of IT business and as their customers are scattered across cultures, regions etc., they have specific requirement of staff for doing technical jobs of their customers where in the administrative work is less.

**Training and Development**

Technology changes are very swift in this industry. No company, big or small, can survive without adopting latest technologies. So the training becomes an on going activity for every company. Such training not only benefits the organisations but also leads to the development of employees and prepares them for future opportunities. Companies were requested to answer questions regarding estimation of training requirement, method and nature of training, selection of trainees, duration and cost of training, feed back after the training and the role of HR departments in this entire exercise.

In case of IT industry, companies have to develop the software as per customer needs. Projects may relate to:

- Banking.
Whenever new projects are received from the clients, the first stage is to know and analyse the customer requirements in consultation with the top brass and the departmental heads of the client's company. Extensive discussions take place among the representatives of the client and the IT Company involved. Depending on the nature of the project, and after the detailed discussions with the client, the IT companies decide the type of domain knowledge that will be required and accordingly a team including the project leader is selected for the concerned project.

Project leader in turn then assesses the total man power and the skill set required for the project to complete it in the stipulated time frame and forwards the resource requirement to HR department. He also decides whether fresh training is required for all or some members of his team.

Conclusions drawn on the basis of data analysis are as follows:
Training needs not only differ from company to company but in the same company also may differ from time to time depending upon the client's requirement. Each project may need different skills and technology. Depending on this the training needs are identified.

In addition to this, training needs may differ according to the number of expected new projects, nature of the projects, resource requirement given by the project leaders and requirements of on going projects.

- 88% of companies decide the training requirement on the basis of expected new projects. This helps in identifying the number of trainees.

- 56% of the companies along with above factor give consideration to the nature of the project. The nature of the project helps in defining the requirement of the skill sets and the type of technology for which training is to be given.

- Project managers are in continuous touch with the clients and ascertain exact requirement in terms of skills and technology and accordingly requisition HR requirement. 56% of the companies use this method too.
• 61% of the companies also consider changing requirements of the ongoing projects and accordingly identify the training requirement.

Method of Training

Once the type of training is decided and the number of trainees is fixed, the next critical step for the company is to decide as to whether the training should be imparted in house or outsourced.

To provide in house training, the companies need to make huge investments for creating facilities and in appointing resource persons. Big corporate like Wipro or Infosys Systems can afford it but the small and medium companies can not and so most of these companies resort to outsourcing the training.

• 67% of the respondents resort to outsourcing.

Popular methods of training used are

• Class room, a traditional method. 78% of the respondents make use of this method.

• On the job training which gives hands on experience to employees is used by 72% of the companies.

• 72% of the companies resort to E-Learning which is a very popular method in IT.
Contents of Training

Nature of training provided may be technical, development of soft skills, managerial, entry level, communication, ascent neutralization, behavioral and cultural adaptation.

- It is observed that technical training is of utmost importance to this industry as technology shift has to be very swift to be competitive and so 100 % of the companies go for technical training.
- Next important training is in communication skills as it is a must to develop rapport with the customers to know their exact requirements about the project. This also helps in winning the confidence of the client. 83 % of the respondents go for training in communication skills and 78 % for soft skills.
- Working of IT industry is project based. Every project leader needs to have managerial skills to execute project effectively with the team members. 61 % of the respondents provide managerial training to employees who are responsible for the projects.
Selection Criteria

Deciding the number of trainees depends upon the requirement of the project. Since reputation and advancement of the business depends upon the completion of the projects in time, right type and number of HR must be provided to the project leaders at the right time.

- 89% of companies select the trainees on the basis of requirement of the project.
- Next important aspect while making selection is qualification and selection. 72% of the respondents consider qualification and experience of the trainees.
- On going training programs are also taken in to consideration while selecting trainees.
- Companies use combination of various methods.

Training Period

The period of training depends upon the nature of technology involved and the level of training received by a candidate.

- 94% of the respondents' state that time for training depends upon the technology involved.
• Experience of the candidate influences the time taken for acquiring the new skills. 78% of the respondents consider the level of experience of the trainees while deciding the period for training.

• It is generally observed that training period varies between 3 to 5 weeks.

Cost of Training

Due to the technology, infrastructure and the faculty requirement, the cost of training is very high. According to a CEO of a very reputed company, it ranges between Rs. 5000/- to 20,000/- per employee per year. It may be noted here that companies were reluctant to divulge the cost of training.

All the respondents agreed that whatever may be the total cost of training, 80% of it is spent on technical training.

Evaluation of Training Programs

As huge costs and time is involved in training, it becomes necessary for companies to ascertain the effectiveness of the training programs. To achieve this regular feedback is obtained from the
candidates. 100 % of the companies obtain it by using various methods as:

- On line feedback.
- By giving feedback forms.
- Through personal discussions.
- Through surveys.

Depending upon the results of evaluation, some companies give online credit or grades to the trainees and their opinions about the training imparted to them are considered for modifying training programs, if required.

**Role of HR in Training**

It is observed that almost all of the companies provide technical training and 80 % of the total cost incurred on training is for this purpose. This shows importance of technical training for this industry. And thus project leaders are the ones who are given responsibility of identifying training need, deciding the training needs and selecting the personnel for the same.

Obviously, HR department has a limited role to play in training. It is mainly responsible for arranging trainings at entry level and in trainings like soft skill development, behavioral and cultural adaptation etc.
Retention

Getting right people in right numbers was a challenge for this industry during the period of this study. Retaining them was even more challenging as there was a keen competition amongst rival companies for the trained qualified staff. This resulted in to a very high rate of attrition. Due to fear of losing the talent, companies in his sector started offering various attractive incentives and facilities to hold on to their talent.

These retention measures could be broadly categorized into general, work-related, and measures to retain women employees. Various conclusions derived from the data analysis as follows:

Work Related Measures

Precautions at all levels

There is a very stiff competition for HR amongst the rival IT companies. Hence retention of employees once they have been located and absorbed is of paramount importance. Thus precaution for retaining an employee is taken right from the stage of recruitment.
• 88 % of the companies state that they reveal the career path at the time of entry itself.

**Salary packages**

Another most important factor in influencing retention is the monitory aspect. Besides offering the hefty packages at the entry level itself, the companies resort to following methods of payments.

• 17 % of the companies offer fixed pay.
• 50 % of the companies offer salary packages which are combinations of fixed plus performance based pay.
• 11% of the companies also use the mode of paying on performance basis.

Normally for the first two levels in the organization the fixed pay system is used and from 3rd level onwards the criteria of performance based pay is applied in most cases.

**Participative decision making**

Monitory measures alone fail to motivate employees after they reach a certain level. They start looking for job satisfaction. One of the ways is to involve them in the process of decision making itself which would give them a sense of involvement, commitment and
belonging. Participation is encouraged at all levels from goal setting to review of performance.

- 44% of companies involve project managers and team leaders in jointly setting the goals which give them a sense of being part of the management and so motivates them to achieve higher goals.

- 83% of the companies have a well developed system of peer review and self assessment.

- 78% of the responding companies involve subordinates in setting up of parameters of evaluation.

**Division of work & responsibility**

IT companies have to function in the global environment and so they need to develop internal systems in a very scientific manner. Thus it is common in this sector to develop standard procedures for every function envisaged.

- Almost 94% companies have standard procedures of fixing responsibilities by the project managers.
Grievances handling

Operations in this sector are basically team based. There always is a possibility of discord amongst the team members as the composition of a team could be heterogeneous as far as the cultural, geographical and economic strata of an individual members is concerned. To overcome this companies resort to following measures.

- 100% of the companies try and settle the grievances of their employees at the level of group leaders or project managers itself.
- 39% of the respondents have a separate cell to deal with the professional grievances of women employees.
- 44% of the companies also have a separate cell to deal with mental or physical abuse.

Feedback on HR policies

To gauge the effectiveness of the HR policies, the companies are taking following measures.

- 83% of studied companies have a system of conducting experience interviews to know about the technical difficulties faced during a project.
• 100 % of them also conduct open house sessions to get the feedback of HR policies adopted and rectify the policies if required. It also can be concluded here that IT industry overall is following good HR practices.

**Researcher's observation in this regard is:**

• In many companies HR departments arrange coffee meets to get employee opinions informally.

• Some companies are also employing third party surveys to get the right picture about effectiveness of their HR policies.

• In some companies policy changes are first placed for discussions in front of employees for their opinion before adopting the same.

**Accommodative policies**

With an aim to retain talent, companies give a lot of freedom to their employees like:

• 5% of the companies allow transfers at preferred destinations,

• 8% give freedom to refuse a particular project.
• 9% permit to refuse foreign assignment for personal reasons.
• 12% of companies give choice in use of technology
• 3% companies offer consultancy sharing.
• 3% companies resort to outsourcing to existing employees.

Retention measures

Various general measures are resorted to by this industry with an aim of retaining talent. They are:

• Salary rise.
• Promotions to higher posts
• Reimbursement of medical and educational expenses.
• Training.

Besides these with a view to maintain the high morale and health of their employees facilities like,

• Yoga classes, sports facilities, club memberships, family get togethers and tie ups with hotels & resorts for vacations are also provided.
• More than 55% of the companies also provide family counseling if required.
The employees in this industry, due to the large numbers required, are drawn from various cultures and geographical locations. This naturally leads to lack of homogeneity in the groups leading to groupism. To overcome this problem every effort is made by the companies to maintain homogeneity by resorting to measures like:

- Get togethers.
- Celebration of festivals.
- Outings.
- Family socials.

This helps in bringing people closer which leads to development of bonds at personal levels.

Most of the companies affirm that they get positive feedback from employees after counseling which the company provides to its employees to overcome the effects of stresses due to professional hazards like irregular timings and long working hours, keen competition amongst colleagues, inability to spend quality time with spouse and children etc.

**Retention Measures for Women Employees**

It has already been brought out that there is no gender bias in this industry at the time of recruitment. In fact it is one sector which helps women attain equal status with men. It ensures continuous
development of women by taking measures for motivating and retaining them. IT companies understand the fact that a woman employee has to balance her professional commitments with personal and family responsibilities including that of child care and upbringing of children.

With this in mind companies offer various special facilities / options to their women employees. These are:

- Flexi working hours.
- Part time work.
- Permission for attending family emergencies.
- Regular fixed working hours.
- Work from home.
- Family visits to work place.
- An exclusive grievances redressing cell to deal with abuse.
- In spite of taking all possible measures as mentioned above till the year 2005, the attrition rate was still around 5% to 10% in case of 30% of companies studied and as per 72 % of companies percentage of software engineers leaving was maximum.

- 27% of the companies said that the main reason for job hopping amongst the software engineers was higher salaries and promotions offered by competing companies. Negligible percentage of employees also
left for opportunities abroad, health reasons, higher studies, relocating within the country and dissatisfaction with their appraisals, brand name of other companies and marriage in case of female employees.

It may be stated at this point that all seven objectives have been analysed and conclusions for all have been drawn.

**Hypothesis:**

1. H R Practices in IT industry are Proactive, Positive and fair enough in compensation package.

2. H R Functions are changing to suit the working of the software industry.

3. Retaining high talent has emerged as a limiting factor.

The hypothesis is tested from the conclusions derived from the analysis of the data.
H 1. **HR Practices in IT industry are Proactive, Positive and fair enough in compensation package.**

1. While estimating requirement of man power 24% of the companies give weightage to prospective projects and accordingly people are hired.

2. Considering changing economical situation, to meet the dead lines of emergency prospective contracts, 28% of companies deliberately keep the excess manpower. This is to show the capacity to clients that at any time the company has enough man power to execute contracts.

3. The staff when put on bench is provided training on the proposed ventures.

4. 94 % of the companies do not resort to outsourcing the recruitment. 33% of the companies have their own strategies and 42% of companies have their own policies to cater for the future need of HR. Still all companies execute other option of recruitment to ensure that qualified and skilled staff is recruited.

5. To cater to the huge and qualified man power requirement, this industry has come out with innovative ways.100% of the companies use internal referrals and 56 % of them have their own portals and conduct campus interviews.
6. IT companies set the trend of visiting tier 2 and tier 3 cities for the recruitment.

7. Hi tech field such as IT industry started special drives for recruitment from small towns. 50 % of the companies resorted to this method.

8. This industry is ahead in offering equal opportunities to women. In 37.5 % of the companies women employee strength is around 35 % and in 12.5 % of the cases, it has reached even 50 %.

9. Long term measures have been taken by apex body NASSCOM which has signed MOU with UGC and AICTE to engage academia on sustained basis for curriculum up dates to make their products suitable to industry.

10. Big corporate have developed tie ups with colleges to ensure source of qualified man power.

11. 89 % of the companies decide training requirement on the basis of expected projects.

12. Considering the importance of the use of latest technology, 100 % of the companies provide technical training to their core staff.

13. In 89 % of the cases, trainees are selected on the basis of requirement of new projects.

14. In 94% of the cases, the duration of training is decided on the basis of nature of technology.
100% of the companies obtain feedback on training completed to make suitable changes in future programs. Various general and work related motivational measures in this sector. They are:

- Transfers at preferred destinations.
- Freedom to refuse a project.
- Freedom to refuse foreign assignment.
- Choice in technology shift.
- Promotions and selection for special training.
- Participation in decision making.
- Out sourcing to existing employees.

Various work related and general retention measures and measures to retain female employees have been devised by mens. Measures devised for female employees are:

- Flexi working hours.
- Part time work.
- Concession to attend to family problems.
- Fixed working hours.
- Work from home.
- Special cell to deal with cases of abuse.
- Special motivational measures.
In addition measures like providing various facilities like Yoga centre, Sports facilities, club memberships, Tie up with hotels and resorts have also been devised by HR departments.

17. As far as compensation is concerned, 50% of the companies offer fixed plus performance based pays.

18. Salary rise is offered on successful completion of difficult assignments.

19. 3% companies offer consultancy sharing and also outsource assignments to own employees.

20. 1% companies offer Employee Stock Options (ESOPs).

All the above measures related to recruitment, Training, development and retention are proactive positive and fair enough in compensation package and thus the hypothesis is proved.

H2. HR functions are changing to suit the working of the software industry.

During the initial stages of the development of the industry, focus of HR department was only on meeting the targets of recruitment. With the tremendous growth and intense competition for business the focus is now not only on locating the talent but also on
creating and retaining the talent and accordingly it has changed its mode of operations.

1. 94 % of the companies say that HR department, for estimating the man power requirement have to co ordinate with the project managers as maximum man power required is that of technocrats.

2. To cater to the huge and qualified HR requirement, Hr departments have come out with innovative ways. 100 % companies use internal referrals and 56 % of them have their own portals and conduct campus interviews.

3. HR departments have taken initiative of visiting tier 2 and tier 3 cities for the recruitment and started special drives for recruitment from small towns. 50 % of the companies resorted to this method.

4. To attract the talent, in 88% of the companies, HR departments started explaining the career paths to prospective employees to attract career oriented ambitious candidate.

5. In addition to offering attractive salary packages with many grades and performance based pay, HR departments took initiative in offering new measures like:-
   - Employee Stock Options by 1%.
   - Consultancy offers by 3 %.
   - Out sourcing assignments to existing employees by 3 %.
• Choice in technology shift by 12%.
• Option to refuse foreign assignment for personal reasons by 9%.
• Freedom to refuse particular project by 8%.
• Participation in decision making by 10%.

To have proper assessment of performance to be able to offer correct monetary rewards, HR departments developed innovative systems of appraisals like,

• On line system of appraisal
• Self assessment by employees prior to peer review
• Structured approach to appraisals with objectives set in advance.
• Periodical reviews.
• Factorisation of appraisals at different levels of appraisals.
• Performance review during and after the completion of a project.

6. IT companies require large number of educated technically qualified man power. Obviously it is drawn from different geographical locations and is heterogeneous in nature as far as cultural mix is concerned. Cultural clashes affect the work atmosphere which in turn affects the over all performance of the
companies. To avoid this and bring in homogeneity, HR departments have devised various steps like:–

- Arranging Get together.
- Celebration of various festivals.
- Social Outings.
- Families get togethers.

7. Nature of working in this industry is project oriented with tight dead lines. Peer pressure to deliver is high. Due to this the employees work for long hours with indefinite schedule and are always under tremendous stress to meet the dead lines of the clients. Also the competition amongst the group for better appraisal grades is very keen. The employees could be away from their families for long hours or periods. This may lead to stress related behavioral problems, strained professional relations, low levels of adjustments amongst team members, and strained family relations too.

In this industry, employees are sent on overseas assignments quite often. In such cases there could always be a problem of:

- Cultural adjustment.
- Language barrier.
- Eating habits.
- Time difference.
- Social acceptance.
- Worries about the spouse & children back home.
The HR departments of the IT companies have started identifying such problems and have made arrangements for

- Counseling by experts. Big corporate in this sector have their own counseling centers.
- Yoga & meditation centers.
- HR departments make sure that they get the feed back after the counseling.

8. As far as training is concerned, HR departments have devised entry level training programs with the view to improve communication skills, personality development and cultural adaptation.

9. Various work related and general retention measures and special measures to retain female employees devised by HR departments have already been discussed while proving Hypothesis no.1. It may be mentioned here that it also contributes in proving the present hypothesis.

10. Measures like providing various facilities like Yoga centre, Sports facilities, club memberships, Tie up with hotels and resorts have also been devised by HR departments.

11. To monitor and get the feed back regarding the policies devised by HR departments for maintaining good HR climate, methods like experience interviews, perception surveys, personal discussions, and coffee meets with HR personnel are employed.
Some companies also conduct third party surveys with the view to assess the effectiveness of their own HR policies and departments.

12. Since the down trend started the HR departments have moulded themselves with the view to maintain a balance between retaining crucial talent on one hand and controlling the HR cost on the other. With the fear in mind that when the business picks up it could be difficult to get back the required man power, the companies have not resorted to sacking on large scale. Instead they have resorted to measures like:-

- Reduction in recruitment.
- Freeze on fresh recruitment.
- Discontinuation of appraisals and promotions.
- Reduction or freezing of salaries.
- Reduction in working days.
- Termination of non performance
- Forced leave.
- Reduction in bench strength.
- Reduction in salaries for those on bench.

IT industry has gone through phases of development, tremendous growth till the year 2007 and since then the current decline. All through this HR departments have performed not only the functions like recruitment, selection and training but have also taken
care of retaining the talent, have devised special measures for women employees, and has also catered to the overall well-being of the employees and their families.

All above activities undertaken by HR departments show how HR functions are changing to suit the working of the software industry and thus proves the hypothesis.

H3. Retaining high talent has emerged as a limiting factor.

In spite of the best practices undertaken by the companies, the problem of retaining high talent always remained. To retain the talent IT companies resorted to many measures like:

- 88% of the companies revealed the career path at entry level.
- 50% of the companies resorted to fixed plus performance-based pay.
- 94% of the companies used standard procedures while allotting the work to give sense of fairness.
- All of the 83% of the responding companies have well-developed system of peer review and self-assessment which is linked to promotions, higher pays and giving independent responsibilities.
• 94 % of the companies pay allowances plus salary to the employees working on sites.

• In addition to these measures various steps are taken to strengthen HR climate and besides offering many special measures to women employees, general work related and motivational measures are undertaken for entire staff with an obvious aim of retain the talent by keeping them monetarily happy. All these measures have already been discussed in details while proving hypothesis no 1 and 2.

In spite of taking all possible measures as mentioned above till the year 2005, the attrition rate was still around 5 to 10 % in many companies. Amongst the staff leaving, the percentage of software engineers was maximum as per 72 % of companies.

Most of the companies said that the main reason for job hopping amongst the software engineers was higher salaries and promotions offered by the rival companies. A few percentage of employees left for opportunities abroad, health reasons, higher studies, relocating within the country and dissatisfaction with their appraisals, brand name of other companies and marriage in case of female employees.
The following chart shows number of companies and respective rate of attrition.

![Rate of Attrition Chart]

**Diagram No 19**

All above indicates that even though companies were taking all possible and proactive steps to keep the employees satisfied and win their loyalty, still, about 10 to 15% of the employees were leaving for various reasons. This proves that retaining high talent has emerged as limiting factor during the period covered under the study and thus proves the hypothesis no. 3.
IT sector, till the down trend started in the year 2007, was making strong contribution to the Indian economy by creating direct and indirect employment and was generating wealth and income for the nation. It was also creating highly skilled technocrats in large numbers. This also automatically led to the development of infrastructure in and around few selected locations like Bangalore, Hyderabad, Chennai, Noida and Pune. Software exports brought in huge foreign exchange and also attracted multi nationals to set up offices in India and due to increased confidence, huge Foreign Direct Investments started coming to India.

Considering the importance of this sector, recommendations have been made to the important stake holders of the industry, namely employers, employees, and the government.

**Recommendations to the employers**

1. Industry should improve over all linkage with academic institutes in tier ii and tier iii cities to harness the talent in these areas. At present, majority of the companies focus only on tier i cities.

2. Rapport with the educational institutions by the individual companies should be established particularly to develop soft skills
among the students as a part of curriculum to make them suitable for the industry. This will lead to saving of time and money being spent by the companies on developing these skills.

3. At present, according to the survey, only 50% of the companies have a drive for recruitment from small towns. It is recommended that all the companies should resort to this practice so that opportunities of employment for the educated youth in these areas would improve.

4. Our study shows that average participation of women in this industry is up to 35%. All out efforts are made by the companies to bring the percentage of female employees on par with that of male employees. It is also recommended that towards this end companies should take additional measure like:
   - Safety measures at work place.
   - Secured transport arrangements.
   - Special programs for health awareness, release of tension and nurturing lifestyle to suit needs of the job.

5. It came out during the interviews that the support staff is kept on contractual basis. It is recommended that they must be made permanent which will give them sense of security and belonging.

6. As only 44% of the companies involve team leaders and project managers in jointly setting the goals, this percentage could be
increased with a view to give this cadre a sense of participation, involvement and fulfillment.

7. Presently average age of employees in this industry is 25 to 30 years. It is recommended that the companies should also consider absorbing people in the higher age groups to make use of their experience and domain knowledge.

8. In spite of taking steps to bring in homogeneity amongst the employees, still 34% of companies report that they face problems due to groupism. It is so recommended that more emphasis needs to be given by them on cultural adaptation programs.

9. Only 9% of the companies are analyzing the facilitating and inhibiting factors identified by appraisal system. It is so recommended that all of them should resort to this practice to do justice to the appraisal system.

10. Companies should analyse reasons for job hopping specific to their organizations and take corrective steps.

11. In addition to monetary benefits to the employees, companies should give to them to win their loyalties which may bring down the present average rate of attrition of 10 to 15% to minimum.

- Continuous exposure to latest technologies.
- Develop good work culture.
- Direct exposure to customers.
- Transparency in dealings.
12. It is strongly recommended that companies in this sector should focus on E-governance sector of the central and state governments.

13. Companies should make all possible efforts to develop domestic market to counter the global recession.

14. The reverse outsourcing development is too new for Indian companies to go for cost saving as yet, but moving front office processes closer to the client location is fast attracting buyer's interest. Though Major suppliers are responding to the demand for enhanced local delivery customer services, it has not as yet become a common practice. So it is recommended that companies should think on this seriously.

Recommendations to the employees

The working of this industry is project based having the deadlines to meet. Quality is of utmost concern to keep the clients satisfied. So employees are always over worked to meet the deadlines. They do not get sufficient time to attend to family. This affects their personal and professional life and put them under tremendous stress. To overcome this following recommendations are made.

1. Employees must insist on taking periodical breaks, may be short, from time to time to break the monotony and relieve the stresses.
2. Spend quality time with the families.

3. At least on week ends pursue your hobbies and spend time with relatives and friends.

4. According to the survey 58% of the women respondents say that they have developed a self centered attitude. 83% of them also say that they can not relate with rest of the family members. Ironically 80% of them also say that without the family support, couples can not work in this sector as it will affect the up bringing their children. So it is recommended that people in this sector must change their self centric attitude and try and mix with general society and think of staying in joint families.

5. From the employees opinion survey it is observed that only 18% of the respondents are involved in charity in spite of hefty pay packages they get. It is recommended that every one of them contribute a little for the under privileged and bear some social responsibility.

Every business has a life cycle, similarly after introduction of IT sector in India, it grew with tremendous pace and now it is going through the downtrend. Employees, till the downtrend started were stressed out due to high work load are now under stress due to uncertainty of jobs as many had developed lavish lifestyles particularly due to the high income offered by this industry. In view of the above certain recommendations are made. They are:
1. Take counselors advice about management of personal finances.

2. Save substantial amounts to cater for the down trend which may come unannounced.

3. Invest only after catering for the savings.

4. Try and develop other skills which may help you in surviving through the down trend period.

**Recommendations to the Government**

1. The full income tax holiday allowed to IT companies in STPI comes to an end in year 2009. The government seems keen to ensure that the industry has other options available. It is looking at including IT companies in the Industrial Parks Schemes (IPS), which offers a ten years tax holiday under section 80IA(4)(III) of the Income Tax Act to new units setup between April 2006 and March 2009.

2. Industrial Parks Units would get 10 years tax relief but attract MAT in such a region If STPI is phased out; IT would be treated like any other industry. Tax incentives are needed to provide support to new industry in initial years and cannot last for ever. However, the nature of IT industry calls for a more sympathetic approach.

3. In the event of STPI scheme not getting extended; smaller IT companies would be at a disadvantage vis-à-vis their bigger rivals.
The large IT firms have more resources and rapid growth on their side. They typically grow at 30% and therefore can shift even half of their business to a new location in 3 years taking full advantage of SEZs or Industrial Parks Scheme. But smaller IT companies would find it difficult to shift to SEZs or IPS because of resource constraints, which are magnified by minimum areas norms. Slow down in the U.S. makes the things more tricky for them; there is an added issue of rupee appreciation. So there is a case of extending STPI for small IT companies for few more years.

4. Government should encourage and provide every required support to IT sector companies to protect intellectual property developed by them in the area of software and semiconductor by patenting it.

5. In the area of hardware, India has not progressed much. To achieve this, huge capital infusion in to infrastructure and industry is necessary. China and Taiwan are leading players in this important sector and are far ahead as far as Indian scene is concerned. India’s hardware export are negligible considering this India also should enter in to this field at the earliest as our engineers are going abroad and doing the prestigious jobs of designing and development for the foreign companies. It is strongly recommended that government should make available the infrastructure and huge funds required for the same.

6. It is also recommended that instead of concentrating on already industrially developed areas; the government should develop Special exclusive IT zones in areas like south and central Konkan,
Kerala, and Himachal Pradesh by providing necessary facilities. Instead of allowing any polluting industry in these areas, the government should encourage green industry like IT to shift there. This will not affect the already prospering tourism industry in these areas but will also provide many direct and indirect job opportunities to the locals besides preserving the ecology of the area and will bring prosperity to these regions. This will also lead to prevent migration of locals to the cities for want of jobs and thus help reduce tremendous pressure that exists on the infra structure in the already developed urban centers.