



Human Capital Management in IT- An Evaluation

Prashant Vithal Kadam

Dnyanprassarak Mandal's College & Research Centre, Goa University

ABSTRACT

The explosive pickup of the IT industry in the late 1990s brought India on the global map in the software industry. Various software firms across India started feeling the heat of competitiveness amidst opportunities. The big giants like TCS, Infosys, Wipro, HCL etc had its way in grabbing this missed opportunities. The liberalization and the process of globalization boosted this infant software industry into a matured dynamic adult, eager to face the world. Its contribution to the GDP also increased tremendously. This IT boom attracted the attention of the advanced economies towards India. The competitiveness of the human capital of the software industry proved to be the edge factor among various firms. The employee cost was enhanced. This paper has explored the different attributes of the human capital in the IT industry, away from its traditional measurements. Using a structured online questionnaire and SPSS, it has found a very significant relation among various attributes in the effective management of the Human Capital.

Keywords: Software, Competitiveness, Human Capital, IT and ITeS.

1. INTRODUCTION

The explosive pickup of the IT industry in the late 1990s brought India on the global map in the software industry. India became one of the important competitors in the software industry. The contribution of the IT sector towards the GDP of the nation infact also was remarkable. (More than 55%). [1] This explosion or what can be termed as boom in IT sector however brought many

challenges and opportunities in this knowledge industry. The Challenge was basically in terms of managing the human capital across the firms at different levels. Amidst competing firms of the Software industry. But along with this competitiveness, also came a flow of economies with a rise in the rate of attrition. Infact as per the report of the Press Trust of India, the attrition rate was expected to be in the range of 15 – 20% in the IT and ITeS sector. [2] To counter this move of employees going to other organizations, many of the firms as seen in the previous chapter increased their employees cost to offer a host of benefits to its employees to produce an excellent performance. With customers spread worldwide, interaction with different nations demanded for better working culture by mixing the better of the two worlds. What constituted a good working environment differs amongst the people. People spend a major part of a day in offices. So the HR is continuously on the lookout for better ways for creating a pleasurable environment to work with. [3] Aiding in the maintenance of a balance in the personal life and work life of its employees is of a major worry to the HR. A dissatisfied workforce was a major threat to the very existence of an organization. Employees expected the company to give excellent opportunities for their personal growth through different incentives and schemes. A good balanced HR system provided the backbone for ensuring career growth to the employees. This however had to be backed by an excellent training system to meet the immediate requirements and futuristic needs on the basis of a good forecast of the key skills needed for meeting the future. [4]

2. THEORETICAL BACKGROUND

Human Resource Management is the art of not only managing the human resource, but also trying to achieve a competitive edge over its competitors in terms of its strategic and well balanced practices directed not only towards the employees, but also towards the achievement of the organizational goals.

In my research study of competitiveness of software industry, human capital component is one of the

3. OBJECTIVES OF STUDY

1. To find the different attributes of Human Capital Management in IT firms.

4. METHODOLOGY OF THE STUDY

The present study consists of mainly primary data gathered in terms of a structured questionnaire which was administered online in terms of the specially created URL (softwarecompetitiveness.co.in/competitiveness/it-employees) to 2000 respondents mainly consisting of IT employees working in different Information Technology and Information Technology enabled companies across India. The areas covered were

5. PROFILE OF THE RESPONDENTS AND ITS ANALYSIS

5.1 Gender Mix: The differences in labour market for men and women are highly prevalent across the service industries. This may be not only due to existing discriminations, but also due to differences in attitudes of both the genders which greatly influences their competitiveness. The existing empirical literature finds a significant gender gap in competitiveness. [5] There are several factors which account for such gender gap, but are still debatable as some emphasize on biological factors, some on social environment and so on. Further it should be noted that over the years it has been observed that women's have exhibited higher levels of

major factors which influence the competitiveness of the software industry. No doubt, various studies have reflected the importance of employee cost. But whether this cost really helped in determining the efficacy of human capital or not. A analysis has been carried in terms of different attributes influencing the human capital in the randomly selected IT and ITeS firms across India located at Hyderabad, Bangalore, Pune and Goa

2. To analyze the role of select HR variables in determining the competitiveness of software firms.

Bangalore, Hyderabad, Pune and Goa respectively. Out of 2000 respondents, 400 respondents filled the online questionnaires, but only 341 questionnaires were found valid in terms of their entries and attributes. The success rate of online questionnaires were however only 20%. Hence the calculations were restricted to 341 respondents only. SPSS has been resorted to evaluate the various variables under study.

competitiveness among themselves and not among mixed gender groups. Further in most of the Companies in Silicon Valley of US, most of the men outnumbered the women. For example At Google, women make up 17 percent of technical employees; at Facebook, it's just 15 percent. A less formal survey done in 2013 by Pinterest engineer Tracy Chou found that women represented just 12 percent of engineers at major tech Companies. [5] Infact as per the Survey conducted online by Fusion from US in 2015, 92 percent of software developers were men and only 5.8 % were women's. This survey included respondents from 157 countries. [6]

Even in case of Indian top IT companies like Tata Consultancy Services Ltd., Infosys Ltd., Wipro Ltd., HCL Tech Ltd., Tech Mahindra and Mahindra, the top level positions are hardly occupied by the females. [7] It is reported that the proportion of women into the various IT based industries in India is in the order of 19% in the software industry; 40%

in the telecom industry; 80% in the airlines; 45% in the ITES; and 50% in the BPOs. [8] The HR analysis of software industry involved respondents (employees) from the mixture of all IT companies (small, medium and large) across India. This can be seen from the following tables.

Table: 1 – Gender Mix

Gender	No. of Respondents	Percent	Mean Salary	Standard Deviation
Male	200	58.7	56875	25017.27
Female	141	41.3	48209	24080..09
Total	341	100.0		

The Table- 1 involved 58.7% of males and 41.3 of females. The mean salary between both the genders also varied as shown in table -1... Further there is statistically significant difference between the two

in terms of their mean salary (Table 1.1) with the sig. value of 0.02. Female employees are found to earn less than their male counterparts.

Table: 1.1 -- Anova Analysis of Gender and Mean Salary

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	Significance Value.
Between Groups	6210263994.613	1	6210263994.6	10.2	.002
Within Groups	205725953014.18	339	606861218.33		
Total	211936217008.8	340			

5.2. Marital Status

It is usually perceived that married people do not give their 100% towards achieving the organizational goals as they get divided in their tasks both at organization and home. Most of the empirical studies also suggested that married

employees mostly suffer from stress levels and these can greatly undermine their competitiveness which is very much important for the success of the organization. The respondents' profiles in terms of their marital status is given in Table

Table- 3 – Marital Status & Mean Salary

Gender	No. of Respondents	Percent	Mean Salary	Standard Deviation
Single	123	36.1	39508.2	24120.14
Married	218	63.9	61089.45	21973.2
Total	341	100.		

It can be seen from table 3, that most of the respondents were married (63.9%) and the remaining 36% of were single or not married. This indicates a high proportion of employees of software organizations who are married. This can

have its own repercussions on the competitiveness of the organizations, if not managed properly. However the mean salary indicates that irrespective of family obligations the married employees are earning more than the singles

Table 3.1 Anova Analysis of Marital Status & Mean Salary

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	Significance Value.
Between Groups	36432645845.129	1	36432645845.9	70.300	.000
Within Groups	175167997537.22	338	518248513.424		
Total	211600643382.4	339			

The proposition that most of the IT employees are unmarried and thus greatly contributes towards the productivity and the competitiveness of the employees does not holds true. The analysis in table 5.3. Age

The age of the employees can act as an important determinant for influencing the competitiveness of the firms. It is presumed that the young employees are mostly energetic, innovative and always prefer challenges in any given organizations. In today's modern globalised world the labour market has been facing three basic challenge; namely, 1. The workforce and the population as a whole are aging, 2.Labour shortages are growing in many sectors, especially in software in case of India and finally, many employees prefer to work beyond their

Table – 4 Age Groups of the Respondents

Age Groups	No. of Respondents	Percent	Mean Salary	Standard Deviation
20-25	65	19.1	31500	22473.07
26-31	118	34.6	46038.2	21347.1
32-37	80	23.5	57562.5	14577.2
38-43	59	17.3	73940.68	15447.4
44 & Above	19	5.6	90789.5	17099.6
Total	341	100.0		

3 clearly shows the mean salary is greatly influenced by the marital status and is having a significance value of 0.000.

retirement age. Though India has been talked of much because of her demographic advantage in terms of her growing young prospective employees, a doubt also has been raised in terms of the quality of this human resource which needs to be managed effectively not only at the firm level, but also at the national level if the competitive advantage needs to be sustained in the near future. The analysis of human capital in IT sector has been analyzed in terms of different age groups as can be seen in table 4.

The table 4 clearly shows that the respondents involved in the study belonged mostly to the age group of 20 to 43 years i.e. almost more than 94%. The aged population of 44 years and above was hardly around 5.6%. Thus this clearly shows India's demographic competitive advantage in the software

industry. But it needs to be sustained if it has to be really competitive in the years to come. There exists a significant relation between the mean salary and the age of the respondents as indicated in Table 4. It is highly significant with sig. value of 0,000 as shown in table 4.1

Table 4.1 – Anova Analysis of Mean Salary & Age

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	Significance Value
Between Groups	90406750851	4	2260168772	62.5	.000
Within Groups	121529466157	336	361694840		
Total	211936217009	340			

5.5 Talent Building and Competitiveness

Various variables relating to the recruitment, training, compensation, packages, welfare etc were taken for the purpose of the study. Though theoretically, many studies have revealed the importance of Human resource management in the success of software firms, but hardly any study has been undertaken to evaluate the component specific of HR and their correlations if any. The present study tried to analyse the link between the type of educational degrees and the salary that they are earning.

5.5.1. Education and salary

It should be noted that it is most of the time presumed that education and salary (income) usually goes hand in hand. The software industry cannot succeed without having an educated and talented workforce. It greatly contributes to the efficiency level of the organization. In fact the most important factor of the globalization process is expressed as knowledge. Knowledge becomes a

propulsive force in the process of creating technology and providing sustainable development and affects the competitiveness of countries directly. For this reason, knowledge strengthens change by being transferred to technology and provides competitive advantage to companies which can manage this process. [9] In every respect of the knowledge age, the pursue of the innovation and realization of economic development depends on the work force having received a qualified education. But to get such an educated workforce it is very much important to either retain the existing or attract the new entrants in terms of fresher's by offering a perfect salary and incentives. Infact the IT-business process management is estimated to expand at a CAGR of 9.5 to US \$ billion by 2020. [10] Further during 2008-15 the number of graduates addition to talent pool grew at CAGR of 9.4%. In other words, it added 3.7 million in 2010 to 5.8 million to talent pool in 2015. The analysis in terms of the education of the respondents is given in table 5

Table – 5 Educations – Pre and Post Mean Salary

Disciplines	No. of Respondents	Percent	Mean Salary (At Joining)	Mean salary(After Joining)
BE/B.Tech	49	14.4	46887.7	47179.5
ME/M.Tech	54	15.8	59675.9	59681.8
MCA	109	32	54839.4	53154.2
M.Sc	50	14.7	54800	58150
MBA	29	8.5	59827.6	59000
BA/B.Sc/BBA	50	14.7	44000	37105
Total	341	100	320030.6	314270.5

The table 5 indicates that there is hardly any difference in the mean salary of the software sector employees at the time of joining and after joining the organisations, except for the employees with the graduation qualifications. Further it should be noted that it is most of the time presumed that education and salary (income) usually goes hand in hand. The software industry cannot succeed without having an educated and talented workforce. It greatly contributes to the efficiency level of the organization. In fact the most important factor of the globalization process is expressed as knowledge. Knowledge becomes a propulsive force in the process of creating technology and providing sustainable development to affect the competitiveness of countries directly. [6] For this

reason, knowledge strengthens change by being transferred to technology and provides competitive advantage to companies which can manage this process [9]. But to get such an educated workforce it is very much important to either retain the existing or attract the new entrants in terms of freshers by offering a perfect salary and incentives. Further in terms of its anova analysis, it is found from Table 5.1 that education plays a significant (at 90% confidence level) role in the determination of the salary, which in turn has a crucial role to play in influencing the competitiveness of the software firms. In other words education does helps in building the knowledge workforce which is a basic requisite for sustaining the competitiveness of the human capital in the IT organizations across India.

Table 5.1 Anova of Mean Salary and Education at the Time of Joining the Organisation

	Sum of Squares	Degrees of freedom	Mean Square	F-Value	Sig.
Between Groups	10140927354.026	5	2028185470.805	3.367	.006
Within Groups	201795289654.77	335	602373998.969		
Total	211936217008.8	340			

Table 5.2 Anova Mean Salary & Education of the Respondents (After Joining the Organisation.

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	Significance Value
Between Groups	18258590632.468	7	2608370090.3	4.59	.000
Within Groups	186353834962.77	328	568151935.86		
Total	204612425595.23	335			

In fact the role of education becomes much more important after the employees join the respective organizations. It is to be noted that the education when combined with the necessary trainings and incentives results into talents, which plays a crucial role in managing the firm's edge over its competitors in the long run. This is clearly reflected in table 5.1 the significance value between education and the mean salary is high after joining the organization vis-à-vis at the time of joining the organization as shown in table 5.2

5.5.2. Work Experience

Table 6 Frequency of Work Experience

Work Experience	No. of Respondents	Percent
1 - 5 years	154	45.2
6 - 11 years	136	39.9
12 - 17 years	39	11.4
18 - 23 years	12	3.5
Total	341	100.0

Table 6.1 Anova Analysis of Information Technology Industry Experience and Mean Salary

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	Significance Value
Between Groups	72428583190.410	3	24142861063.47	58.32	.000
Within Groups	139507633818.47	337	413969239.817		
Total	211936217008.8	340			

Thus work experience greatly acts as a determining factor for the salary of the software employees. Its

Work Experience plays a significant role in determining and influencing the competitive abilities of the employees at work. In today's modern globalised world, having a degree is not sufficient, but its employability is very important. A perspective employer will always looks favorably on the effort taken by those who have done work experience, which empowers new talent and gives them an edge to push for the most sought after positions in the race for excellence. Apart from soft skills, work experience also helps in differentiating oneself from others and thereby leading to the development of the personality in a professional manner.

The work experience of the employees of the software industry has been analyzed and it was found that 85% of the employees worked for approximately eleven years as seen in Table 6

significance value is 0.000 as shown in table 6.1. The IT work experience has been attracting most of

the IT employees across different organizations, thereby giving a one of the possible factor for attrition in IT industry.

software industry, employees join the organization of their choice. The decisions are taken by taking into account various factors. Some of the factors were analyzed as follows in the following tables

6. Attributes for joining the organization: In today's modern dynamic world of attrition in the **Table 7 - Attributes for joining the organization**

Attributes	No. of Respondents	Percent
Job Security	85	24.9
Better Salary	64	18.8
Better Working Conditions	89	26.1
Challenging Job	67	19.6
Reputation of the Organisation	32	9.4
Could not get better offer in other Org	4	1.2
Total	341	100.0

It can be seen from Table 7 that factors such as Job Security, better Salary, better working environment and challenges involved in jobs plays an important role in joining the software organizations of their choice by the respondents.

Anova Analysis of the reasons for Joining the Organisations

Table 7.1 Better salary as a reason for Joining the Organisation

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	Significance Value
Between Groups	19.272	5	3.854	3.120	.010
Within Groups	181.604	147	1.235		
Total	200.876	152			

Table 7.2 Job Security as a reason for Joining the Organisation

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	Significance Value
Between Groups	78.287	5	15.657	14.931	.000
Within Groups	160.443	153	1.049		
Total	238.730	158			

Table 7.3 Better Working Environment as a Reason for Joining the Organisation

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	Significance Value
Between Groups	19.053	5	3.811	3.358	.006
Within Groups	213.318	188	1.135		
Total	232.371	193			

The anova analysis in tables 7.1, 7.2 and 7.3 clearly establishes the importance of better salary, job security and better working environment as the important variables among the respondents to

choose the organization of their choice in terms of their employment

7. Factors in Selection of an Employee in Software organisations

A founder can't grow a winning enterprise singlehandedly. [12] Some may try, but it is nearly impossible to do so. Every famous entrepreneur has built a flourishing company with great employees by his or her side. In other words, every employer is aware of the fact that her company's productivity and profitability depend on the quality of workers she employs. Thus an employer takes a number of factors such as education and merit, confidence, personality traits, set of skills in selecting the right required employee and so on. The present study had taken certain factors whose analysis has been shown in table 8

Table 8 – Factors in Selection

Factors	No. of Respondents	Percent
Qualification & Merit	182	53.1
Work Experience	74	21.1
Personality Traits	85	24.9
Total	341	100

It is found from the analysis in table 8, that 53.1% of the respondents (employees) of the different software organizations were selected on the basis of their qualification and merit alone. 25% of the respondents accounted their selection for their personality traits and very few i.e. 21% were of the view that work experience plays a significant role in the absorption to the organizations.

Table 8.1 Anova Analysis of Qualification & Merit as factor of selection

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	Significance Value
Between Groups	9.059	3	3.020	12.734	.000
Within Groups	53.832	227	.237		
Total	62.892	230			

Table 8.2 Anova Analysis of Work Experience as Factor of Selection

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	Significance Value
Between Groups	12.550	3	4.183	16.186	.000
Within Groups	36.443	141	.258		
Total	48.993	144			

Thus in terms of anova in tables 8.1 and 8.2 it was found that educational qualifications and work experience played a major role in determining the selection of the employees in different software

8. Induction Programs and Management of Human Capital

When a new employee joins a company, more often than not, there is a period of time that is required for a person to settle in to the new role before they are able to operate at full capacity. This is a common scenario when one is exposed to a new working environment and culture despite the credentials and competencies a new employee brings into the company. A comprehensive and well-prepared induction program helps new staff quickly understand the responsibilities of their new role and the employer's expectation of them. Investing in such a program ensures that the learning curve is shorter, as not only are skills and knowledge of the company quickly obtained and understood, but

companies across India with a significance value of 0.000. The role of personality traits however was minimal.

interaction, communication and collaboration with others is likely to take place much quicker than if no program was outlined. [12] Induction helps an employee to adapt to the organization easily in short period. This also helps to minimize the labor turnover.

The analysis carried out with the software firms across India tried to find the role of induction programs in which the respondents have revealed in terms of their responses. The study had set the objectives of induction program in terms of factors such as productivity, competitiveness, organizational goals, up gradation and no links at all. But whether such programs do matter or not. The importance given to such programs in terms of their relative objectives for the employees is given in table 9 as follows.

Table 9 Induction Program and its Objectives

Objectives	No. Respondents	Percent
Enhanced my Productivity	67	19.6
Enabled me to be more Competitive	68	19.9
Enabled me to contribute to Org. Goals	117	34.3
Needs Up gradation On regular basis	81	23.8
No link with job tasks & Assignments	8	2.3

It was found in terms of table 9, that Induction programs enabled 34.3% of the employees to contribute towards their organizational goals. And hardly 20% of the employees were of the view that it enabled them to be more competitive and

enhanced their productivity. A small chunk of 23.8 of the respondents were also of the opinion that such induction programs run by the organizations requires up gradations at regular intervals.

Table 9.1 Anova Analysis of Induction Programs & Productivity

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	Significance Value
Between Groups	42.759	4	10.690	11.69	.000
Within Groups	115.211	126	.914		
Total	157.969	130			

Table 9.2 Anova Analysis of Induction Program and Competitiveness

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	Significance Value
Between Groups	19.597	4	4.899	6.600	.000
Within Groups	106.153	143	.742		
Total	125.750	147			

Table 9 3 Anova Analysis of Induction Program and Organisational Goals

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	Significance Value
Between Groups	4.833	4	1.208	1.545	.191
Within Groups	147.021	188	.782		
Total	151.855	192			

Table 9.4 Anova Analysis of Induction Program and its Up gradation

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	Significance Value
Between Groups	9.997	4	2.499	2.168	.076
Within Groups	154.507	134	1.153		
Total	164.504	138			

It was found in terms of anova that induction programs greatly helps in enhancing the
5.10. Awareness of tasks and duties: It is usually presumed that whenever an employee is inducted in

productivity and the competitiveness of the firms as reflected in tables 9.1 and 9.2 respectively. any organization he is made aware of all his tasks and responsibilities towards the success of the

organization. In the analysis however, it was a mixed approach, with no doubt majority of them

Table - 10

Tasks & Duties	No. of Respondents	Percent
Not at All Informed	17	5.0
Insufficiently Informed	99	29.0
Sufficiently Informed	224	65.7
Total	341	100.0

5.11. Performance Appraisal: Performance appraisal provides important and useful information for the assessment of employee's skill, knowledge, ability and overall job performance. [14] It helps to a great extent in managing ones human capital for the betterment of the organization. Though theoretically, it plays an important role, but in reality the analysis showed a different picture.

Table 11 Performance Appraisals and Competitiveness

Performance Appraisal	No. of Respondents	Percent
Very Much Important	152	44.6
Not at All	131	38.4
No Link At All	58	17.0
Total	341	100.0

of potential for the growth of employees was found on a little higher side. Further Opportunities for growth and development help employees to expand their knowledge, skills and abilities, and apply the competencies they have gained to new situations. The opportunity to gain new skills and experiences can increase employee motivation and job satisfaction and help workers more effectively manage job stress. This can translate into positive

were made aware of their tasks and responsibilities, but some of them were not even aware of it.

In table 10, it can be seen that only 65.7% of the respondents were sufficiently informed about their tasks and responsibilities at the time of joining the organization; whereas 29% were of the opinion that they were inadequately informed about their tasks and responsibilities and a marginal 5% of the respondents were of the view that they were not at all informed about their tasks.

It can be observed from Table 11, that 44.6% of the respondents were of the view that the performance Appraisals are very much important to enhance competitiveness of the firm. However 38.4 were of the opinion that it was not at all important. Furthermore 17% of the respondents were of the view that they don't have any link at all to the competitiveness.

5.12. Potential for Growth: Any organization in order to grow requires dynamism in her approach and opportunities for growth of its employees. This greatly influences the competitiveness of the firms. In the analysis it was found that unlike in other industry, in software industry, the degree

gains for the organization by enhancing organizational effectiveness and improving work quality, as well as by helping the organization attract and retain top-quality employees. By providing opportunities for growth and development, organizations can improve the quality of their employees' work experience and realize the benefits of developing workers to their full potential.

Table 12 – Potential for Growth

Potential	No. of Respondents	Percent
Yes	210	61.6
No	131	38.4
Total	341	100.0

It was found that only 61.6% of the respondents were of the view that there existed unlimited potential for growth in their organizations. However at the same time 38.4% of the employees under study were very much negative about the existence of the opportunities for growth in the organizations. Infact an employee's perception of internal growth and development opportunities is one of the more important predictors of employee engagement.

13. Internal Transfer of Tasks and Responsibilities

One of the internal mobility of the employee is transfer. It is the lateral movement of an employee in an organization by the employee. A transfer involves the shifting of an employee from one job to another without changing the responsibilities or compensation. Transfers of employees can be possible from one department to another from one plant to another. Transfer may be initiated by the organization or by the employees with the approval of the organization. It can be also due to changes in organizational structure or change in volume of work, it is also necessary due to variety of reasons. But broadly can be done either to suit the conveniences of organization and to suit the

convenience of employees. [15] But does it really contribute to the competitiveness of the human capital?

Table 12 - Internal Transfer of Tasks and Responsibilities

Competitiveness	No. of Respondents	Percent
Yes	208	61.0
No	133	39.0
Total	341	100.0

The study found that the internal transfer of tasks and responsibilities within the organizations does contribute towards the competitiveness of the employees of the software industry. In table 12, it can be observed that 61% of the employees found the process of internal transfer of tasks and responsibilities facilitated their process of enhancing their competitiveness.

5.14 Flexibility in working Hours

Flexibility is about an employee and an employer making changes to when, where and how a person will work to better meet individual and business needs. Flexibility enables both individual and business needs to be met through making changes to the time (when), location (where) and manner (how) in which an employee works. [16] Flexibility should be mutually beneficial to both the employer and employee and result in superior outcomes.

It greatly benefits in terms of reduced levels of stress, increased employee morale, reduction in absenteeism, increase in productivity, reduction in costs and etc.

Table 13 Anova Analysis of Flexibility in working Hours & Competitiveness

	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	Significance Value
Between Groups	5.187	1	5.187	21.96	.000
Within Groups	80.062	339	.236		
Total	85.249	340			

It can be seen from the table 13 that flexibility in working hours greatly results in enhancing the competitive abilities of the employees.

5.15. Strength of Software Employees (Industry Specific)

The Software industry is basically a knowledge based service industry. It's totally different from the manufacturing industry. The attributes of the employees of both these industries also varies. But what are the qualities which distinguishes an employee of software industry from other industry. The analysis of the employees showed that most of the employees after joining the IT organizations found themselves as more confident than earlier. Further the payment package (76%) attributed greatly to the competitiveness of the firms.

Thus Various factors such as Salary, age, flexibility, Internal transfer of tasks, performance appraisal , package, potential for growth plays an important role in determining the competitiveness of the firms.

6. CONCLUSION

The Human resource management in software industry plays an important role in determining the competitive edge of all the software firms. The various HR measures such as Performance Appraisals, Induction Programs, and Training Programs have a positive influence in determining the competitiveness of the employees. But the trend of the IT sector employees in working in IT industry for a period of 11 years only needs to be taken a serious note. The saturation point of the IT employees is found to be at 11 years. Thus it is very much important to go away from its traditional approaches of measuring and implementing the human capital in an efficient manner and bring some innovative programs where the maximum can be reaped from the professionals of IT industry, which will not only help the firms to be competitive but also the nation at large.

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