Factoral Influences on Employee Engagement Practices in IT Industry

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Abstract

Purpose: *To identify the factors which influence employee engagement practices in Information technology industry. To investigate and analyze the prominent factors causing employee engagement in IT industry.*

Approach: *Data were collected from 67 employees based on convenience and snowball sampling from Information Technology Companies located in Hyderabad and listed in NASSCOM. The hypotheses have been formulated and tested using SPSS software and the results have been arrived at.*

Findings: *The results from statistical analysis of the data indicate that in the IT organizations at all levels, employees do exercise autonomy which enables self expression and learning. Transparency in corporate communication, a good compensation plan and participative decision making are the factors that have been identified from the study believed to instil employee engagement at all levels irrespective of the designation.*

Practical implications: *It enables one to understand factoral influences on employee engagement practices. IT Organizations which intend to introduce or improve employee engagement in the organization can inculcate these practices into their organizational culture.*

Originality/value: *Although there does exist literature for identifying the factors of employee engagement, limited literature could be found focusing on factors which influence employee engagement in IT industry. This study may serve as a point of reference for future studies in this area of concern.*

Keywords: *Employee engagement, Organization, Information technology, Human resource practice and Employee.*

Introduction

Today information technology is one of the most important industries in the Indian economy. It has brought about a tremendous success for the emerging economy in India. IT and ITES sectors lead the economic growth in terms of employment, export promotion, revenue generation and standards of living. As per NASSCOM estimates, IT/ITES sector (excluding hardware) revenues are estimated at USD 87.6 billion in FY 2011-12; and the industry is expected to grow by 19 per cent during FY 2012-13. The market size of the industry is expected to rise to USD 225 billion by 2020 considering India's competitive position, growing demand for exports, Government policy support, and increasing global footprint. (*Source: NASSCOM*)

Hyderabad is fast becoming the IT/ITes hub of India with new players hankering to get a foothold here and existing players continuing to hire aggressively. Large companies such as Infosys, TCS, Genpact, Deloitte, Facebook, Bank of America, Thomson Reuters, Amazon, Google,

Cognizant, Franklin Templeton among others, are growing their presence in Andhra Pradesh. According to Andhra Pradesh Government's estimates, the total IT/ITeS sector hiring for 2012-13 could be at about 50,000 professionals.

The IT industry is service industry. The quality of service offered to clients determiners the success of the organization. This leads us to the fact that the skill, knowledge and creativity of the employees are important. As employees play a key role in success of any business especially in IT industry, the IT organizations always focus on human resource practices which contribute towards employee development. Employee engagement is one of the best practices which makes employees involved and more committed towards the organization. Employee Engagement is central to long-term business success.

Objectives of the Study

- To study the employee engagement practices in Information technology industry.
- To identify and analyze the factors which influence employee engagement practices in IT industry.
- To know the impact of employee engagement on IT employees.
- To suggest certain strategies for improvement of employee engagement in IT industry.

Research Methodology

Sources of the Data: As this is an investigative study, the data comprise of both primary and secondary sources. The Primary data were collected through a structured questionnaire distributed to Software employees having three and more years' experience of working in IT organizations in and around Hyderabad. The secondary data have been collected from journals, magazines, books and websites.

Sampling Method used: Data were collected from 67 employees based on convenience and snow ball sampling from Information Technology Companies located in Hyderabad listed in NASSCOM.

Statistical Tools used: The hypotheses have been formulated and tested using SPSS software and the results have been arrived at.

Limitations of the Study:

- The study is limited to IT organizations located in and around Hyderabad only.
- The study is mainly focused on the factors which influence employee engagement in IT organizations.
- Only the employees having more than 3 and more years of experience in IT industry are considered for relevant data collection.

Statistical Analysis

To test the reliability of data, the data collected were subjected to Cronbach's alpha test. The results were

Reliability

Reliability Statistics

Cronbach's Alpha	N of Items
.462	24

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
40.22	16.873	4.108	24

Inference: Cronbach's alpha has been run to check their reliability. The above table displays some of the results obtained. The overall alpha for all the items is 0.462, which is very high and indicates strong internal consistency among the given items.

Factor Analysis: Factor analysis was done in order to obtain factors with the greatest factor loading value. The results obtained were:

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
Leadership effectiveness	1.40	.579	67
Encouragement	2.00	.718	67
Organizational policy	1.18	.386	67
Organizational direction	1.52	.533	67
Working condition	1.30	.461	67
Job security	1.25	.438	67
Performance deadlines	2.31	.763	67
Co-operation at work	1.46	.636	67
Impact of training	1.97	.984	67
Quality of training	1.97	.984	67
Team work	1.97	.834	67
Internal communication	2.30	.835	67
Transparency	1.52	.682	67
Feedback	1.30	.461	67
Salary 2.07	.502	67	
Compensation system	2.03	.521	67
Reward system	1.31	.467	67
Duties 1.25	.438	67	
Workload	1.91	.753	67
Individuality	2.07	.502	67
Decision making	2.03	.521	67
Learning opportunity	1.52	.533	67
Top management support	1.30	.461	67

Total Variance Explained

Comp-onent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	Variance % of	Cumulative %	Total	Variance % of	Cumulative %
1	4.106	17.852	17.852	4.106	17.852	17.852	2.539	11.039	11.039
2	2.928	12.731	30.583	2.928	12.731	30.583	2.378	10.340	21.378
3	2.318	10.079	40.661	2.318	10.079	40.661	2.197	9.553	30.931
4	1.801	7.830	48.491	1.801	7.830	48.491	2.143	9.320	40.251
5	1.699	7.386	55.877	1.699	7.386	55.877	2.135	9.284	49.535
6	1.503	6.533	62.410	1.503	6.533	62.410	2.121	9.224	58.759
7	1.373	5.970	68.381	1.373	5.970	68.381	1.812	7.876	66.636
8	1.220	5.305	73.686	1.220	5.305	73.686	1.440	6.262	72.898
9	1.094	4.758	78.444	1.094	4.758	78.444	1.276	5.546	78.444
10	.992	4.313	82.757						
11	.823	3.579	86.336						
12	.740	3.215	89.552						
13	.654	2.842	92.394						
14	.596	2.592	94.986						
15	.449	1.953	96.939						
16	.379	1.646	98.585						
17	.325	1.415	100.000						
18	4.799E-016	2.086E-015	100.000						
19	3.130E-016	1.361E-015	100.000						
20	1.145E-016	4.976E-016	100.000						
21	-1.466E-016	-6.372E-016	100.000						
22	-4.710E-016	-2.048E-015	100.000						
23	-2.914E-015	-1.267E-014	100.000						

Extraction Method: Principal Component Analysis.

Factor: The initial number of factors is the same as the number of variables used in the factors analysis. However, not all the 23 factors will be retained. In this example only the first 09 factors will be retained since their Eigen value is greater than1.

Initial Eigen Values: Eigen values represent the variances of the factors.

TOTAL: This column contains the Eigen values. The first factor will always account for the maximum variance and the next factor will account for lesser variance compared to the first factor as observed and so on. Hence each successive factor will account for lesser and lesser variance.
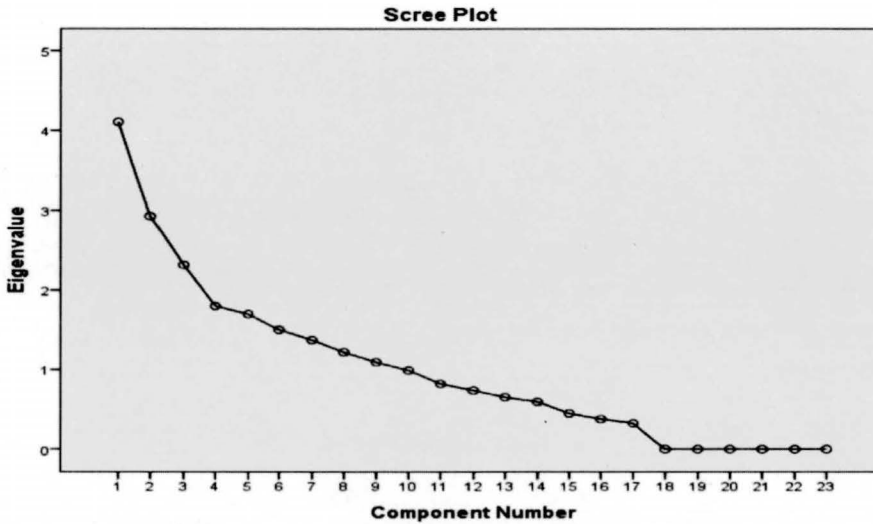
Scree Plot

The scree plot, plots the Eigen values against the corresponding factor .One can see these values in the first two columns of the table immediately above. From the third factor on, you can see that the line is almost flat, meaning that the each successive factor is accounting for smaller and smaller variation in the data.

Component Matrix[a]

	Component								
	1	2	3	4	5	6	7	8	9
Leadership effectiveness								.537	
Encouragement				.606					
Organizational policy									
Organizational direction		.722							
Working condition	.612								
Job security		-.619	.544						
Performance deadlines								.507	
Co-operation at work									
Impact of training	.652								
Quality of training	.652								
Team work	.606								
Internal communication									
Transparency									.548
Feedback				.677					
Salary	-.577				.557				
Compensation system	-.622		.521						
Reward system									
Duties		-.619	.544						

	Component								
	1	2	3	4	5	6	7	8	9
Workload									
Individuality	-.577				.557				
Decisionmaking	-.622		.521						
Learning opportunity		.722							
Top management support	.612								

Extraction Method: Principal Component Analysis.

a. 9 components extracted.

Rotated Component Matrix[a]

	Component								
	1	2	3	4	5	6	7	8	9
Leadership effectiveness									.594
Encouragement							.604		
Organizational policy							-.508		
Organizational direction			.952						
Working condition						.948			
Job security		.952							
Performance deadlines							-.522		
Co-operation at work									-.738
Impact of training	.949								
Quality of training	.949								
Team work	.601								
Internal communication									
Transparency								.813	
Feedback							.716		
Salary					.923				
Compensation system				.897					
Reward system							.506		
Duties		.952							
Workload								.666	
Individuality					.923				
Decisionmaking				.897					
Learning opportunity			.952						
Top management support						.948			

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 12 iterations.

The PRINCIPAL COMPONENT MATRIX gives the component matrix which is rotated using the VARIMAX rotation technique which gives the ROTATED COMPONENT MATRIX. Rotation of factors helps in their better interpretation since the first factor in the ROTATED COMPONENT MATRIX is heavily loaded with training and ongoing.

The highest factor loading Value of 0.949 for the first factor represents training and ongoing.The second factor is heavily loaded with Job security duties (0.982) hence it represents job security and duties and similarly the subsequent factors can be interpreted based on their Eigen value. The final list of 09 factors which collectively account for 78 % of the variance in the data is shown below.

S.NO	Name of the Factor	Factor loading
1	Impact of Training and Quality	0.949
2	Job Security and Duties	0.952
3	Organizational Direction and Learning Opportunity	0.952
4	Participative Decision-making and Compensation System	0.897
5	Salary and Individuality	0.923
6	Top Management Support and Working Condition	0.948
7	Feedback	0.716
8	Transparency	0.813
9	Leadership Effectiveness	0.594

Data were collected from 67 employees based on convenience and snow ball sampling from Hyderabad Campuses of Information Technology Companies listed in NASSCOM. The hypotheses which have been formulated are tested using SPSS software and the results have been arrived at.

Hypotheses:

1. Organizational direction and learning opportunities: Successful organizations often set goals such as improving quality, reducing errors, becoming more customer and employee focused. Defining organizational goals helps to conceptualize and articulate the future direction of the organization. Providing learning opportunities for employees to grow in organization increases their commitment and loyalty. Organizations have to allow employees to learn new skills, explore new opportunities and exercise their creativity in ways that ultimately benefit the organization.

HO: There is no significant association between designation and employee's opinion that organization is moving towards its goals.

Crosstab

Crosstab			Strongly disagree	4 Direction Disagree	Agree	Total
Designation	Analyst programmer	Count	11	9	0	20
		% within Designation	55.0%	45.0%	0.0%	100.0%
	Assoc Consultant	Count	10	10	1	21
		% within Designation	47.6%	47.6%	4.8%	100.0%
	Manager	Count	8	7	0	15
		% within Designation	53.3%	46.7%	0.0%	100.0%
	Systems Engineer	Count	4	7	0	11
		% within Designation	36.4%	63.6%	0.0%	100.0%
Total		Count	33	33	1	67
		% within Designation	49.3%	49.3%	1.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.325[a]	6	.767
Likelihood Ratio	3.449	6	.751
N of Valid Cases	67		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .16.

From the above Table chi square is not significant (sig. value is greater than 0.05), no evidence to reject null hypothesis. It means that there is no significant association between designation and their opinions on organization's right direction towards goals.

2. Impact of Training and its Quality: Training is crucial for organizational development and success. Quality training enhances employee's knowledge, skills and abilities for doing a particular job effectively. Training and development of the employees at all levels are of vital importance in every organization as they update the knowledge and skills of the employees needed in changing environment.

HO: There is no significant association between designation and employee's opinion on effectiveness of training being imparted.

Crosstab

Crosstab			9 training				Total
			Strongly Disagree	Disagree	Agree	Strongly Agree	
Designation	Analyst Programmer	Count	11	5	4	0	20
		% within Designation	55.0%	25.0%	20.0%	0.0%	100.0%
	Assoc Consultant	Count	10	4	7	0	21
		% within Designation	47.6%	19.0%	33.3%	0.0%	100.0%
	Manager	Count	6	2	6	1	15
		% within Designation	40.0%	13.3%	40.0%	6.7%	100.0%
	Systems Engineer	Count	3	1	5	2	11
		% within Designation	27.3%	9.1%	45.5%	18.2%	100.0%
Total	Count	30	12	22	3	67
	% within Designation	44.8%	17.9%	32.8%	4.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.947[a]	9	.279
Likelihood Ratio	10.984	9	.277
N of Valid Cases	67		

a. 11 cells (68.8%) have expected count less than 5. The minimum expected count is .49.

From the above Table chi square is not significant (sig. value is greater than 0.05), no evidence to reject null hypothesis. It means that there is no significant association between designation and their opinions on training being useful to improve job performance.

3.1. Salary: The salary in an organization serves a major role in recruiting, retaining and motivating staff. Most of the employees move from an organization with an attractive salary. Handsome and regular salary is one of the important motivators for employees and it retains productive employees for a long term in the organization. When an organization wants to engage employees, it has to focus on their salary package first and it should be appropriate as per market demand.

HO: There is no significant association between designation and their opinions on existing compensation system.

Crosstab

Crosstab				15 Salary		Total
			Strongly disagree	Disagree	Agree	
Designation	Analyst Programmer	Count	1	15	4	20
		% within Designation	5.0%	75.0%	20.0%	100.0%
	Assoc Consultant	Count	2	16	3	21
		% within Designation	9.5%	76.2%	14.3%	100.0%
	Manager	Count	3	11	1	15
		% within Designation	20.0%	73.3%	6.7%	100.0%
	Systems Engineer	Count	0	8	3	11
		% within Designation	0.0%	72.7%	27.3%	100.0%
Total		Count	6	50	11	67
		% within Designation	9.0%	74.6%	16.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.274[a]	6	.509
Likelihood Ratio	5.904	6	.434
N of Valid Cases	67		

a. 8 cells (66.7%) have expected count less than 5. The minimumexpected count is .99.

From the above Table chi square is not significant (sig. value is greater than 0.05), no evidence to reject null hypothesis. It means that there is no significant association between designation and their opinions on salary is commensurate with the job responsibility.

3.2. Individuality: Individuality is the capacity to express one's true and unique nature in deed and thought. Most of talented and skilled employees seek individuality in their jobs. Successful employees and teams are never quite satisfied with current ways of doing things. They are always in search of more efficient ways to work.The organizations have to give freedom to employees to explore new ways of completing tasks.

HO: There is no significant association between designations and their belief that their work style can be exhibited in job.

Crosstab

Crosstab				21 Individuality		Total
			Strongly disagree	Disagree	Agree	
Designation	Analyst Programmer	Count	1	15	4	20
		% within Designation	5.0%	75.0%	20.0%	100.0%
	Assoc Consultant	Count	2	16	3	21
		% within Designation	9.5%	76.2%	14.3%	100.0%
	Manager	Count	3	11	1	15
		% within Designation	20.0%	73.3%	6.7%	100.0%
	Systems Engineer	Count	0	8	3	11
		% within Designation	0.0%	72.7%	27.3%	100.0%

Crosstab			21 Individuality			Total
			Strongly disagree	Disagree	Agree	
Total	Count	6	50	11	67	
	% within Designation	9.0%	74.6%	16.4%	100.0%	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.274[a]	6	.509
Likelihood Ratio	5.904	6	.434
N of Valid Cases	67		

a. 8 cells (66.7%) have expected count less than 5. The minimum expected count is .99.

From the above Table chi square is not significant (sig. value is greater than 0.05), no evidence to reject null hypothesis. It means that there is no significant association between designation and their opinions on individuality in work style in job.

4. Job Security & Duties: Employees can show better performance in secured envirnoment. Job insecurity reduces organizational performance because of its detrimental effect on employees' health: reduced psychological well-being, psychosomatic complaints and physical strains. When organizations provide job security to the employees, loyalty of the employee towards the organization also increases.

Ho: There is no significant association between designation and their opinions on job security

Designation * 6.Job Security Cross Tabulation

Crosstab			6. Job Security			Total
			Strongly disagree	Disagree	Agree	
Designation	Analyst Programmer	Count	11	6	3	20
		% within Designation	55.0%	30.0%	15.0%	100.0%
	Assoc Consultant	Count	13	4	4	21
		% within Designation	61.9%	19.0%	19.0%	100.0%
	Manager	Count	10	2	3	15
		% within Designation	66.7%	13.3%	20.0%	100.0%
	Systems Engineer	Count	5	5	1	11
		% within Designation	45.5%	45.5%	9.1%	100.0%
Total		Count	39	17	11	67
		% within Designation	58.2%	25.4%	16.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.271[a]	6	.640
Likelihood Ratio	4.214	6	.648
N of Valid Cases	67		

a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is 1.81.

From the above Table chi square is not significant (sig. value is greater than 0.05), no evidence to reject null hypothesis. It means that there is no significant association between designation and their opinions on job security.

Conclusion

From the above study, it can be concluded that in IT Organizations, there exists a set of practices which foster employee engagement. The employees at all levels tend to express themselves physically, cognitively and emotionally thereby enabling them to accomplish their roles efficiently and effectively.

This promotes employees to make better contributions towards attainment of organizational goals.The employees of IT organizations irrespective of their designations opine that their organizational leadership is effective and this promotes employee engagement. Leadership of organizations enables and empowers employees to discharge their duties effectively thereby engaging the employees.

IT organizations treat their employees in a manner in which they feel empowered. At all levels, organizational direction and learning opportunities, impact of training and its quality, salary, individuality and job security are the factors that have been identified from the study that are believed to instil employee engagement at all levels irrespective of their designation.

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