



“EMPLOYEE ATTRITION AND RETENTION”: EXPLORING THE DIMENSIONS IN INFORMATION TECHNOLOGY INDUSTRY IN COIMBATORE

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Abstract

Employee attrition and retention has been one of the major issues of the IT industry in Coimbatore. The issue of employee Attrition and retention remains a significant concern within the IT industry in Coimbatore. This research primarily aims to identify and examine the factors to employee turnover and retention within IT companies in Coimbatore. Data was gathered through a questionnaire to analyze factors such as personal attributes of employees, opinions on factors influencing turnover, and retention strategies implemented in terms of service and working conditions, as well as welfare measures. Currently, the Information Technology sector is grappling with the challenge of recruiting and retaining skilled individuals while also addressing talent loss due to turnover. One of the most pressing challenges faced by employers, particularly in the Information Technology field in the 21st century, is the high rate of employee turnover leading to a manpower shortage amidst a growing demand for skilled professionals. This dynamic often poses numerous challenges for employers in the industry while also presenting opportunities and benefits to employees through effective retention strategies. (Source: Vibha Gupta, 2013, Nargundkar and Rajendra, 2003).

Key words: Retention, HR practices, employee attrition

I. INTRODUCTION

"In Coimbatore, the attrition rate is determined by calculating the number of employees have left their jobs within a specific time frame. The average number of employees in the organization is derived by adding the headcount at the beginning and end of the financial year and dividing by two (Aruna, 2015). It is evident in the IT industry that attrition is a significant issue, with the retention of high-performing employees being more crucial than the attrition rate itself. The negative impacts of attrition on organizations are profound, leading to increased recruitment costs, training expenses, resource allocation, and decreased productivity (Singh, 2013). Employee turnover has become a prevalent challenge in the Indian IT industry, influenced by various factors such as marital status, night shifts, family concerns, salary, education level, performance, leave policies, external opportunities, motivation, duration in role, workload, training, health issues, job security, workplace environment, and recognition of achievements (Huang Lin and Chuang, 2006, Nausheen Shakeel and Sahar But, 2015). The research encompasses organizations of varying sizes, from a hundred to two lakh employees, across different IT sectors owned by Indian entrepreneurs and multinational corporations."

II. REVIEW OF LITERATURE

Since 1991, Indian Information Technology industry has been in a considerable growth rate. Indian Information Technology industry has also considerably grown in the domestic and international business as well but these industries currently face the formidable challenges of employee attrition and practicing effective retention strategies that can maintain best talent in the organization for a long-tenure (Bidisha Lahkar Das and Mukulesh Baruah, 2013). The impact of Information Technology industry in India are generating higher revenues to the organization as well as increasing the country's economic position, increasing the employment opportunities, develop the living standards of employee and dependents, number of inventory of opportunities. The attrition involves the various personal, social and mechanical factors in the organization. Some factors the industrial sectors got to increase employee's attrition rates year on year globally and the Indian industry, too (Kadam and Vidya Sunil, 2012).

Various researchers have focused that the IT industry has various perceived attitudes of employees about attrition in the organization such as employee satisfaction, employee motivation, employee job category, employee age, employee gender, employee experience and tenure. This chapter has focused on analyzing scholarly articles, developing conceptual framework, defining key discussion for attribution and its types (Sneha Mankikar, 2013).

The researchers reviewed several sources to define the attrition and range of economic terms that can apply for employee attrition, for instance too quits, turnover, exits, mobility, migration or succession.

III. OBJECTIVES OF THE STUDY

The objectives of the research is

To analyse the factors influencing employee attrition and retention: exploring the dimensions in IT industry in Coimbatore city

IV. METHODOLOGY

This study has encountered numerous challenges in gathering data, particularly in the need for a large sample size to ensure a comprehensive understanding of employees' views on attrition and retention within the Information Technology Industry in Coimbatore. The research process encompasses data collection, measurement, and analysis, adopting a descriptive design. The study utilized perceptual analysis (self-assessment) to address concerns related to subjective opinions.

In selecting companies for data collection, only those registered under the software technology park of India were considered. Companies with fewer than fifty employees were excluded due to potential lack of established organizational policies or insufficient resources to implement effective retention strategies. The opinion poll has been included of five sections including the employee background information, Employee's attitude about job (Influencing factors) for attrition, service conditions for retention, working conditions for retention and welfare measure for retention.

The opinion poll has been mailed to the professional from HR departments of the respective Information Technology Industry in Coimbatore. Altogether, five hundred industries (employees) were selected at random within the population of six hundred Information Technology industries in Coimbatore. The research was constructed on the questionnaire survey method; for this study was used five hundred surveys were conducted.

4.1 Research Gaps

The review of literature reveals a prevalent focus on attrition and retention in the Information .This study primarily aims to present evidence from economies like India, highlighting the influence of personal factors on attrition and retention within the Information Technology Industry. Given the current business landscape in India, human resource departments are increasingly required to strategically tackle employee attrition and retention issues.

In summary, existing studies have exhibited varying degrees of correlation between employees' perceptions of attrition and the retention strategies implemented in the Information Technology Industry. As industries expand globally and markets become more interconnected, comparative studies are gaining relevance. This underscores the necessity for more cross-national Human Resource Management research, particularly in emerging markets. As a result, the current study was conducted to understand the socio-economic aspects influencing employees' perceptions of attrition and retention strategies in the Information Technology Industry, with a focus on employees' personal factors and conditions like service, work environment, and welfare.

4.2 Data collection

The study has used only primary data. The data are collected from various IT companies in Coimbatore city and very few data would be collected from secondary sources like newspapers, magazines, journals, books and websites etc

4.3 Sample size and techniques

The sample size is restricted to five hundred respondents in various IT companies in Coimbatore city. A convenient random sampling technique is used in this study.

4.4 Statistical tools used.:

*Factor Analysis

4.5 Limitation of Study

- Studies related to A questionnaire method was employed in the research, conducting a survey of five hundred respondents specifically within the Information Technology Industry and among human resource professionals.
- The study did not seek the opinions of policy makers and legal experts.
- The current study focuses on the perceptual analysis of subjective opinions provided by individuals through self-rating.

4.6 The Factors Influencing Employee Attrition in Information Technology Industry in Coimbatore:

The main aim of our research was to determine the key factors influencing employee attrition through factor analysis. We identified four main factors contributing to attrition. Factor I included aspects like employee performance, family issues, salary, education level, night shifts, and marital status. Factor II focused on medical concerns, career growth, and external interviews. Factor III encompassed skills, leaves, motivation, and rewards. Factor IV involved the duration in the current role and training performance.

4.7 Bartlett's sphericity test:

In alignment with statistical tools, the Bartlett's sphericity test was used to assess the correlation among variables. With a significance level of 0.05, a p-value less than the alpha value indicated a valid factor analysis, rejecting the null hypothesis H_0 in favor of the alternate hypothesis (H_1) of statistically significant relationships between the variables.

4.8 Kaiser-Meyer-Olkin measure of sampling adequacy:

Furthermore, the Kaiser-Meyer-Olkin measure indicated the suitability of factor analysis based on the correlation coefficients.

Eigen value: Eigen value represented the variances suggested by each factor,

Factor loading: while factor loading reflected the correlations between variables and factors.

Factor matrix: Lastly, the factor matrix summarized the factor loadings across all variables and factors.

Table: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.683
Bartlett's Test of Sphericity: Approx. Chi-Square	437.034
Df	105
Sig	.000**

*P<0.01

Bartlett's test of sphericity is applied to test whether the data are statistically significant or not with the value of the test statistics and the associated significance level. It represents where a high relationship among variables exists.

Eigen values and Proportion of Total Variance of Underlying Factors associated with influencing employee attrition and retention in Information Technology Industry in Coimbatore.

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared loadings		
1	3.364	22.430	22.430	3.364	22.430	22.430	3.053	20.355	20.355
2	2.832	18.877	41.307	2.832	18.877	41.307	2.216	14.774	35.128
3	1.474	9.826	51.133	1.474	9.826	51.133	2.206	14.709	49.838
4	1.163	7.750	58.883	1.163	7.750	58.883	1.357	9.046	58.883
5	.979	6.528	65.412						
6	.884	5.896	71.308						
7	.720	4.798	76.106						
8	.687	4.583	80.689						
9	.614	4.096	84.784						
10	.576	3.840	88.624						
11	.487	3.244	91.868						
12	.410	2.732	94.600						
13	.336	2.240	96.840						
14	.266	1.771	98.611						
15	.208	1.389	100.000						

Extraction Method: Principal Component Analysis

The principal component analysis is used in the above table. It is a multivariate technique for identifying the linear components of a set of variances. The principal component analysis has extracted eight factors, there are eight factors that have Eigen values more than 1; i.e., 22.43, 18.88, 9.826 and 7.750.

Communality: Factor Loadings of Scale Items measuring the factors influencing employee attrition and retention in Information Technology Industry in Coimbatore.

S.NO	FACTORS	INITIAL	EXTRACTION
1	Marriage in pipe line	1.000	.467
2	Night shift	1.000	.520
3	Family problem	1.000	.659
4	Salary	1.000	.573
5	Higher education	1.000	.541
6	Skill Set	1.000	.676
7	Other facilities of work in your organization	1.000	.610
8	Leave	1.000	.605
9	External Interviews	1.000	.455
10	Behavior/ Motivation/Rewards	1.000	.594
11	Equipment's provided by the organization	1.000	.493
12	Duration in current role	1.000	.565
13	Training performance	1.000	.693
14	Growth/ Career Path	1.000	.714
15	Medical problems	1.000	.752

Extraction Method: Principal Component Analysis.

The above table represents the Factor Extraction method. This was performed by Principal Component Analysis to identify the quantity of factors to be extracted from the collected data. In the principal component analysis, total variance in the data is considered as a common value. So that the before extraction the commonalities are all 1.000. Then the most common approach used to determine the number of factors to maintain i.e., examining Eigen values was done.

Table: Rotated Component Matrix

S.NO	FACTORS	COMPONENT			
		1	2	3	4
x6	Skill Set	.783	-.171	.161	-.093
x3	Family problem	.733	.137	-.270	.173
x4	Salary	.716	.058	-.012	.237
x5	Higher education	.677	-.047	-.008	-.282
x2	Night shift	.676	.249	-.017	-.024
x1	Marriage in pipe line	.542	.187	-.054	-.223
x15	Medical problems	.168	.848	.019	.068
x14	Growth/ Career Path	.175	.815	.135	-.027
x9	External Interviews	-.166	.516	.248	.317
x7	Other facilities of work in your organization	.062	-.021	.778	-.007
x8	Leave	-.161	.054	.696	.304
x10	Behavior/ Motivation/Rewards	.025	.206	.647	-.365
x11	Equipments provided by the organization	-.104	.324	.579	.205
x12	Duration in current role	.035	.209	.174	.700
x13	Training performance	.228	.470	.389	-.519

Extraction Method: with Principal Component Analysis.

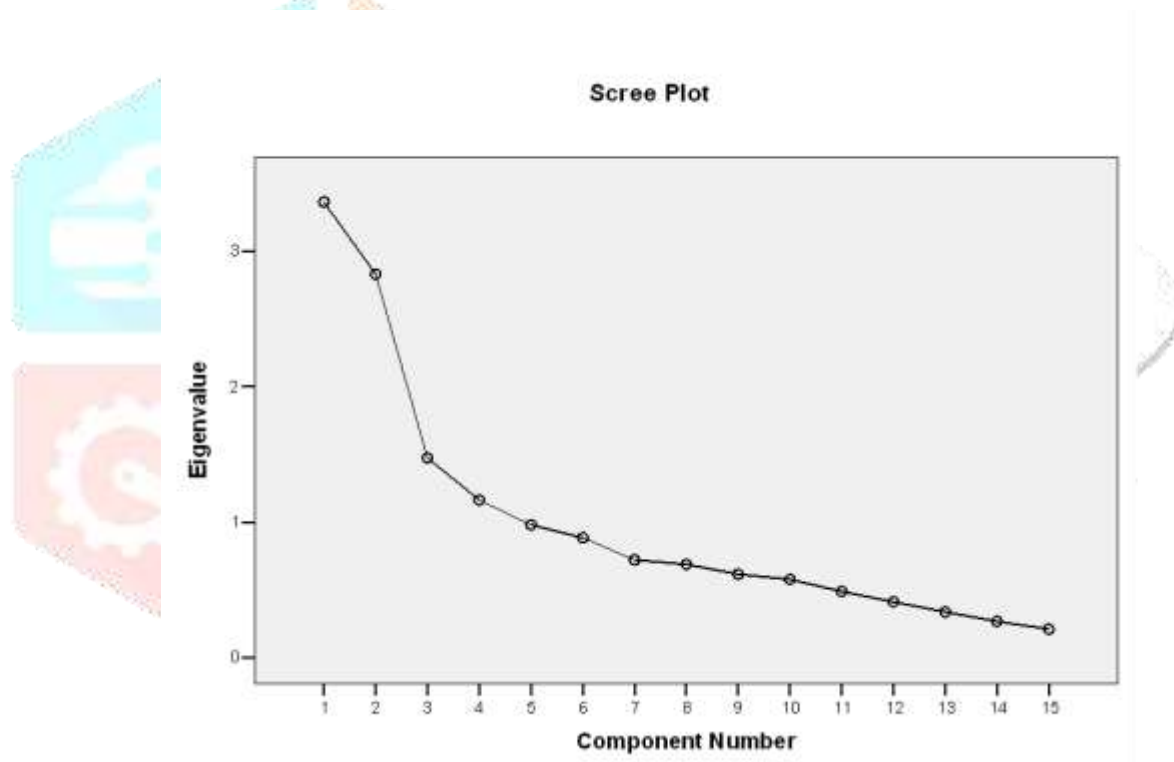
Rotation Method: Varimax with Kaiser Normalization

Rotation converged in 8 iterations

It indicates the Rotated Component Matrix wherein rotation converged in 8 iterations. Using the Rotated Component Matrix this is a better matrix for interpretation of factors (Nargundkar and Rajendra, 2003). The factors are interpreted as explained below. Herewith the different variables are associated based on their loadings and that factors are named as follows: Factor 1: Performance, Family problem, Salary, Higher education, Night shift and Marriage in pipe line have high loading on factor 1 due to high correlation values of 0.783, 0.733, 0.716, 0.677, 0.676 and 0.542. Factor 2, the variables like Medical problems, Growth/ Career Path and External Interviews have high loading on factor 2 due to high correlation values of 0.848, 0.815 and 0.516. Factor 3, The variables like Skill set, Leave, Behavior/ Motivation and Rewards have high loading on factor 3 due to high correlation values of 0.778, 0.696, 0.647 and 0.579. Factor 4, the variables like Duration in current role and Training performance high with values of 0.700 and -0.519 respectively.

The scree plot is the diagrammatic representation of the total variance. Which is explained based on the variance in the Eigen values were the 15 components used by Principal Component Analysis. This chart represents the high influence of the factor based on their Eigen value is greater than 1.

Chart – Screen Plot



4.9 Scree Plot:

Showing the distribution of eigen values and factors associated with influencing employee attrition and retention in Information Technology Industry in Coimbatore.

Table: Component Transformation Matrix

COMPONENT	1	2	3	4
1	.837	.498	.202	-.099
2	-.454	.505	.716	.161
3	.091	-.510	.562	-.645
4	.290	-.487	.361	.741

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization

The above table represents the factor correlation matrix. If the factors are uncorrelated between themselves, where in that factor correlation matrix with the diagonal elements will be 1's and off diagonal elements will be 0's. While matrix was rotated with Varimax, accepting some variables and all other variables are found to have the values even if not zero correlations but fairly low correlation.

Table: Showing the Factors Identified the Factors Influencing Employee Attrition

x6	Skill Set	61.31%	Factor I
x3	Family problem	53.73%	
x4	Salary	51.27%	
x5	Higher education	45.83%	
x2	Night shift	45.70%	
x1	Marriage in pipe line	29.38%	
x15	Medical problems	71.91%	Factor II
x14	Growth/ Career Path	66.42%	
x9	External Interviews	26.63%	
x7	Other facilities of work in your organization	60.53%	Factor III
x8	Leave	48.44%	
x10	Behavior/ Motivation/Rewards	41.86%	
x11	Equipment's provided by the organization	33.52%	
x12	Duration in current role	49.00%	Factor IV
x13	Training performance	26.94%	

V. Outcome of the Study

The primary aim of this study is to uncover key factors influencing attrition and retention among employees. It focuses on examining the employee's socio-economic background and their perceptions of attrition, the link between Employee's Personal Factors and the retention strategies practiced in various service, and working conditions, as well as welfare settings.

The variables considered in this research include various aspects of an employee's personal factors such as their category, age, gender, marital status, experience, education level, and tenure. The statistical analysis findings highlight the significance of working conditions in retention strategies. Factors like flexible working hours and creating a positive work environment contribute positively to retention. On the other hand, variables such as the number of working hours, rest breaks, safety measures, and workplace atmosphere are found to have a negative impact on service conditions related to retention.

Moreover, the study indicates that safety measures implemented by management. Additionally, the research underscores the importance of effective retention practices within the Information Technology sector in Coimbatore. It emphasizes the need for organizations to develop robust strategies that enhance retention and overall performance. Finally, organizations should prioritize factors such as recruitment policies, employee empowerment, training and development, promotion policies, and various welfare measures to strengthen their employee retention strategies. It is crucial for human resource managers to consider these factors to cultivate a supportive and engaging work environment that fosters long-term employee commitment and loyalty.

5.1 Conclusion

This research indicates a strong, positive correlation between attrition and the use of retention strategies in business environments. It is evident that organizations must prioritize the implementation of effective retention strategies to enhance employee productivity and contributions. Utilizing retention strategies in service and working conditions can enhance the discretionary contributions employees make. The managerial responsibility lies in making informed decisions that support retention efforts and align them with the organization's strategic goals.

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