

## LITERATURE SURVEY FOR CORPORATE EMPLOYEE ATTRITION ANALYSIS

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### I.

**Paper:** Assessing Employee Attrition Using Classifications Algorithms

**Authors:** Fatma Ozdemir, Mustafa Coskun, Cengiz Gezer, V. Cagri Gungor

**Year:** 2020

**Abstract:** Employees leave an organization when other organizations offer better opportunities than their current organizations. Continuity and sustenance and even completion of jobs are crucial issues for the companies not to suffer financial losses. Especially if the talented employees, who are at critical positions in the companies, leave the job, it becomes difficult for the organizations to maintain their businesses. Today, organizations would like to predict attrition of their employees and plan and prepare for it. However, the HR departments of organizations are not advanced enough to make such predictions in a handcrafted manner. For this reason, organizations are looking for new systems or methods that automatize the prediction of employee attrition utilizing data mining methods. In this study, we use IBM HR data set and apply different classification methods, such as Support Vector Machine (SVM), Random Forest, J48, LogitBoost, Multilayer Perceptron (MLP), K-Nearest Neighbors (KNN), Linear Discriminant Analysis (LDA), Naive Bayes, Bagging, AdaBoost, Logistic Regression, to predict the employee attrition. Different from existing studies, we systematically evaluate our findings with various classification metrics, such as F-measure, Area Under Curve, accuracy, sensitivity, and specificity. We observe that data mining methods can be useful for predicting employee attrition.

### II.

**Paper :** A Study on Employee Attrition:Effects and Causes

**Authors:** Kishori Singh,Reetu Singh

**Year:** 2019

**Abstract:** Employees are the most valuable assets of an organization. It is they who add value to the organization in terms of quantity and quality as well. Therefore, it is indispensable to maintain a permanent and promising workforce; which over the years has become a tough task for employers and thereby increased attrition in the organizations. This research paper is an attempt to find out the causes of attrition from different dimensions. It undertakes the effect of

the same on employer and employee. Following this, some strange reasons for attrition have been discussed in this regard. The positive side of attrition has also been discussed. Role of leadership styles in controlling attrition has been undertaken in the paper. Further, the remedial measures have been discussed herein.

### III.

**Paper:**Detection and Identification of Employee Attrition Using a Machine Learning Algorithm

**Authors:** Rama Krishna Garigipati (Koneru Lakshmaiah Education Foundation, India), Kasula Raghu (Mahatma Gandhi Institute of Technology, India) and K. Saikumar (Koneru Lakshmaiah Education Foundation, India)

**Year:** 2022

**Abstract:** This chapter proposes that employee attrition is the major circumstance faced in many organizations. Usually, organizations face this attrition when there is a pressing need of employees due to mass retirements or while expanding the organization. Generally, any organization faces a higher attrition rate for employment when they have more employment opportunities in market or recession time. Due to the demand for software goods across all industries, the software industry once suffered a significant attrition rate from employers due to large openings globally in the software business. The purpose of this research is to look at how objective elements influence employee attrition in order to figure out what factors influence a worker's decision to leave a company and to be able to predict whether a particular employee will leave the company using machine learning algorithms.

### IV.

**Paper:**Cause of Attrition in an Information Technology-Enabled Services Company: A Triangulation Approach

**Authors:**Saswat Barpanda and Athira S

**Year:** 2022

**Abstract:** The purpose of this study is to identify the human resource and the contextual factors that catalyze employee attrition in an ITES organization. A triangulation approach used to understand the reasons for employee attrition including: conducting structured interviews with the employees upon the intimation of their intention to leave the organization as well as a follow up semi-structured interview six months post their official resignation. The study was analyzed using the word cloud qualitative data analysis technique, radar chart, correlation, paired sample t-test, chi-square, and ANOVA. This exploration affirms that human resource factors impact attrition while contextual factor generation influences the human resource factors. The study also indicates that employees feel comfortable to reveal their actual reason for leaving the organization only after a certain period post resignation. Managers should prioritize maintaining

relationships with employees; ensure to provide employees with enriching job content and learning opportunities for career growth.

## **V.**

**Paper:** Study on the Most Determining Factor of Employee Attrition I.E. Age Factor

**Authors:** Sabha Yousuf Khan

**Year:** 2019

**Abstract:** The employees of an organization are the fuel for its machine running successfully over the years. However, the management has failed to give due consideration and recognition for their contribution. Reducing employee engagement and steadily climbing employee attrition are those factors that have raised the red flag on the image and brand value of the company in the market. This study focuses on the reasons for the lack of employee engagement in the organization and the resulting employee attrition. The study gives special weightage to the age factor in determining the statistics of employee attrition worldwide. It also comes up with the suggestions and the corrective measure to bring down the shooting meter.

## **VI.**

**Paper:** A REVIEW OF LITERATURE ON EMPLOYEE RETENTION

**Authors:** M.S.Kamalaveni, S.Ramesh, T.Vetrivel

**Year:** 2019

**Abstract:** This paper attempts to contribute to a holistic view concerning the practices and strategies adopted by organizations to retain committed and talented workforce globally. Engaging and retaining employees of the 21st century workforce in this competitive era is the toughest job for HR people. Now-a-days, almost every organization is driven by technology, but human resources are needed to carry out the works through technology. Hence human resources are the life energy for the organization for its survival, growth and development. It is the challenge of a HR manager to retain employees in an organization for a long run in a dynamic environment. This is a secondary research, which reviews various research articles in journals and books and attempts to explore the reviews on employee retention in various sectors, industries etc., to understand the concept of retention, factors influencing retention and the strategies to retain the employees in a better way

## **VII.**

**Paper:** Employee retention prediction in corporate organizations using machine learning methods

**Authors:** Khaled Alshehhi, Safeya Bin Zawbaa, Abdullah A Abonamah, Muhammad Usman Tariq

**Year:** 2021

**Abstract:** Employee Retention is the capability of an organization to maintain its employees. The concept is emerging as a key setback to organizations. Payments, organization culture, job satisfaction, remuneration, and flexibility impact the rate of retention for any organization or company. Employee Retention is also an essential function of Human Resource Management. Unless there is a thoughtful and serious effort from the management towards this direction, the competitors within the industry are likely to snatch and attract the talent which another company has nurtured over a period of time. Appropriate approaches for the formulation and implementation of employee retention approaches are a skill and needs to be prioritized by the management. The paper focuses on providing the prospective reasons why employees leave their jobs. The paper also examines the talents which companies want to develop and maintain to predict employee training. Similarly, the paper identifies the immediate productive scrutiny methods and implementations in a practical scenario, and who is eligible to be retained in the company and have a productive career path. Lastly, the paper identifies the essential factors for developing the predictive model. To achieve these, the research employed a survey in collecting primary data. The study surveyed the employees to identify the attributes and factors that are essential in predicting retention rates and improving retention of employees. The research conducted experiments with a machine-learning algorithm on the dataset, which increased the accuracy of the research outcomes. These assisted the research in identifying the employee retention rate. Training count emerged as the top predictor of employee retention. Thus, this research suggests that the company should strive to train more employees since those who have attended more training are retained.

## **VIII.**

**Paper:**STUDY OF EMPLOYEES ATTRITION ISSUES AND RETENTION.

**Author:**Prof. Yuvraj R.Patil

**Year:**2017

**Abstract:**In today's competitive business landscape, success hinges much on the retention of employees. In a knowledge driven economy, it is the people who are emerging as key competitive differentiators and retaining the talent has become a matter of paramount importance. But swelling attrition levels across the industries are straitjacketing the distraught HR practitioner's ability to come out with good retention strategies. Employees need to be retained because good, faithful, trained and hard working employees are required to run a business. They have acquired good product knowledge over the long run and a trained employee can handle customers better and also solve problems of peers who are new to the organization. Companies also play a vital role in curbing the attrition and retaining the talented pool. Increasing attrition is a serious concern for every company today and they are fighting with this problem by redefining their HR policies and practices. At a certain point we cannot stop attrition, but we can definitely reduce the rates by devising suitable retention strategies. The purpose of this study was to determine the factors that most significantly influence employees' decisions to remain employed at a particular organization and possible reasons for choosing to leave. In addition, the study sought to describe the importance of retaining critical employees and developing strategies to enhance employee retention practices.