IBM NALAIYA THIRAN PROJECT

Corporate Employee Attrition Analytics

PANIMALAR ENGINEERING COLLEGE

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ABSTRACT

We analysed the IBM Employee Attrition dataset to find the top reasons employees quit. First, using the correlation matrix, we identified approximately features that were not significantly correlated with other attributes and removed them from the dataset. A random forest was then used to select's key characteristics, and found that monthly income, age, and number of companies she worked for had a significant effect on the turnover rate of her employees. Understood. Then k-means clustering was used to classify people into her two clusters. Finally, we performed binary logistic regression for quantitative analysis. Churn for a frequent traveller was 2.4 times higher than churn for infrequent travellers. We also found that employees working in HR had a high turnover rate.

PROJECT DESCRIPTION:

Employee turnover rate. Also known as employee or employee turnover. Companies in India and other countries are facing significant challenges in recruiting and retaining talent, while also coping with the loss of talent due to industry downturns or voluntary attrition. Attrition can be defined as a gradual reduction in membership or personnel, such as due to retirement, resignation, or death. In other words, turnover rate can be defined as the number of employees leaving the company and includes both voluntary and involuntary turnover. The loss of employees and talent is costly to and organization due to the enormous cost loss of:Certain factors such as layoffs and terminations are not included in the case of attrition. turnover rates tend to differ between skilled and unskilled workers. If employee is transferred, it must be replaced by a new employee. Again, recruitment and training costs increase

REVIEW OF LITERATURE:

GLOBAL FORENSIC DATA ANALYTICS SURVEY

The Global Forensic Data Analytics Survey. In this report, we look at the findings from our latest Global Forensic Data Analytics Survey. We have analysed the responses of some 745 executives globally who generously shared their perspectives. Through this analysis, we can see specific ways in which companies can measurably improve their legal, compliance and fraud risk programs, as well as the maturity level of their FDA capabilities.

It is an exciting time for companies as digital transformation creates new opportunities. Artificial intelligence, robotic process automation and advanced data analytics are just some of the new possibilities being explored. However, a growing digital footprint comes with additional risks.

Two risks come into sharp focus in this survey:

1) regulatory compliance,

2) data protection and data privacy.

We heard from companies around the world that expressed growing concern in these areas and identified real challenges to overcome. This year's Global Forensic Data Analytics Survey findings show that this is where Forensic Data Analytics (FDA) has a vital role to play.

Employee retainment remains a challenge

From 2019 to 2021, those who were at their current company for 1 year or less dropped from 58% to 47%. Those residing at current companies for 2 years have increased from 19% (2018) to 29% (2021). However, past the two-year mark, the percentage of retained employees practically halves across 3rd and 4th years of employment. This highlights that businesses are perhaps still not doing enough to retain their existing workforce effectively.

Among all employee related problems, employee attrition is one of the key problem in the today's scenario despite the changes in the external environment. Attrition is said to be gradual reduction in number of employees through resignation, death and retirement. The other name given for Attrition is attrition. When a well-trained and well adapted employee leaves the organization for any of the reason, it creates an empty space in an organization (i.e) there occurs a vacuum in the organization. It creates a great difficulty for a Human resource personnel to fill the gap that has occurred. Modern Human resource managers is taking various steps to reduce the employee attrition rate and it has been a pivotal challenge for today's Managers. Many of the employees may also tend to leave the job for various undisclosed factors such as lack of job security, lack of career advancement, desire for change in new opportunities, anticipating higher pay, problems with supervisors and few other personal reasons. This study helps in knowing why attrition occurs, reasons for employee attrition, challenges faced by managers in retaining employees and also suggest some measures in retaining employees.

In this paper, author analyzed the dataset IBM Employee Attrition to find the main reasons why employees choose to resign. Firstly, author utilized the correlation matrix to see some features that were not significantly correlated with other attributes and removed them from our dataset. Secondly, we selected important features by exploiting Random Forest, finding monthlyincome, age, and the number of companies worked significantly impacted employee attrition. Next, author also classified people into two clusters by using K-means Clustering.Finally, We performed binary logistic regression quantitative analysis: the attrition of people who traveled frequently was 2.4 times higher than that of people who rarely traveled. And author also found that employees who work in Human Resource have a higher tendency to leave
Employee attrition is one of the major factors that affect overall business performance. Organizations incur huge costs in terms of lost productivity and expertise, recruitment as well as training costs. For this reason, they are struggling hard to find and extirpate the causes for high attrition. These causes may vary with industry and location. This paper aims at finding the causes of

attrition in a reputed sales organization with its presence in all major cities in India. Using convenience sampling method, a sample size of 120 was taken for data collection. This sampling method was used to ensure that the employees from all regions, tenure range, business units and grades are included. After conducting the attrition and exit interview analysis, the major reasons for attrition across all tenure ranges, grades and regions was found. After the data analysis, it was found that workplace politics, role stress, supervisor-related issues, better working opportunities and personal problems like relocation predominantly contribute to job dissatisfaction.

RELATED SOFTWARE:

One of the most common existing software that is related to this project is emplus.io. Xoxoday Empuls launched in early 2019 as an employee recognition and rewards platform. Fast forward to today, Empuls has all the tools you need to meaningfully celebrate your people's work and craft your unique culture. Empuls is an employee engagement software that makes it easy to reward and recognize your employees to improve retention and productivity at your organization. Empuls helps you set up & run pulse surveys, measure and track feedback, and gather eNPS scores. With Empuls you can: 1. Build a culture of appreciation through peer recognition. 2. Motivate employees with rewards and digital gift cards, choose from over 20,000+ options. 3. Celebrate every birthday, work anniversary, and company milestone day. 4. Increase employee retention by acting on feedback gathered from pulse and eNPS surveys. More than 1000 organizations around the world use Empuls to reduce attrition, improve retention and satisfaction. Most HRs use Emplus as a recognition module that makes hard work and teamwork visible to everyone, making it easy for employees to show their appreciation for each other, build stronger working relationships, and feel a greater sense of belonging. Empuls helps you celebrate employee contributions and key milestones, reduce HR's time and efforts in setting up rewards, promote participation in company initiatives, gather employee feedback, and tie rewards with the company and culture goals.

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