**EMPLOYEE PERFORMANCE & ATTRITION**

**Insights into Employee Success and Retention**

**Objective**:

The objective of this project is to analyze employee performance and attrition within the organization. This involves identifying factors that contribute to employee success and satisfaction, as well as understanding the reasons behind attrition. By exploring various metrics and conducting in-depth analysis, the goal is to provide actionable insights to improve employee engagement, retention, and overall organizational performance.

**GitHubLink:**

<https://github.com/komatineniapoorva/Project6-Employee-Performance-Attrition>

**Dataset Description:**

The dataset comprises employee-related information collected over a specified period. It includes attributes such as employee ID, age, gender, job role, department, monthly income, job satisfaction level, work-life balance, performance rating, years with current manager, and attrition status. Additionally, there is survey data providing further insights into employee perceptions and experiences. The dataset enables comprehensive analysis of factors influencing employee performance and attrition within the organization.

**Observations:**

1. *Employee Overview:*

* The dataset includes a total of 4,410 employees, with 2,646 males and 1,764 females,
* The average age of employees in the dataset is 37 years.
* Approximately 30% of employees report being satisfied with their jobs, based on survey data capturing job satisfaction levels on a scale of one to five.
* On average, employees demonstrate a high level of involvement in their jobs, with a mean score of 3.75 on a scale of one to five, indicating a significant commitment to their roles.
* Many (3,000) are employed in the Research and Development department, followed by 1,000 in Sales, and a smaller number in Human Resources.

1. *Employee Performance:*

* High job satisfaction levels are observed among employees reporting a very high level of job satisfaction, while a smaller percentage report low satisfaction levels.
* Similarly, job environment satisfaction varies across different job roles and departments, with employees in some roles reporting higher satisfaction levels compared to others.
* Monthly income varies across different educational backgrounds, with employees holding higher degrees such as Masters or PhDs earning higher salaries on average compared to those with lower educational qualifications.
* Graduates earn an average monthly income ranging from $50,000 to $67,000, while those with Masters or PhDs earn between $62,000 to $86,000 on average.
* Employees are distributed across different age groups, with the highest concentration observed in the 32-48 age group, followed by 42-50 and 22-31 age groups.
* Employees aged 50 and above constitute a smaller percentage of the workforce, suggesting potential generational dynamics and implications for workforce planning and management.

1. *Attrition Analysis:*

* attrition rate stands at 16%, indicating moderate turnover.
* Females account for 55% of churn cases, suggesting gender-related factors in attrition.
* Employees within the early tenure period (0-5 years) exhibit a higher likelihood of leaving the company, with churn rates gradually decreasing as tenure increases. This highlights the importance of enhancing employee retention initiatives, particularly for newer employees. Early tenure employees exhibit higher churn, emphasizing the need for retention efforts for newer hires.
* Attrition varies across departments, highlighting potential areas for improvement.
* Marital status appears to influence attrition, with single individuals exhibiting higher churn rates compared to those who are married or divorced.
* Graduates exhibit higher churn than those with advanced degrees, indicating potential career development needs.

**Recommendations:**

* Incentivize employees for their loyalty and exceptional contributions to encourage retention and job satisfaction.
* Establish mentorship initiatives to nurture talent and provide guidance for career advancement.
* Conduct regular performance evaluations and offer constructive feedback to facilitate professional growth.
* Cultivate a culture of appreciation and recognition to boost morale and motivation among employees.
* Promote ongoing learning opportunities to enhance skills and keep employees engaged and invested in their roles.
* Prioritize work-life balance initiatives to support the overall well-being of employees and improve job satisfaction.

**Dashboard:**

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