**Employee Attrition Analysis Dashboard Report**

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**Introduction:** This dashboard provides a comprehensive analysis of employee tenure, role stability, promotion frequency, and the impact of education levels on career progression within the company. The insights are derived from various metrics, including average years at the company, average years in the current role, and average years since the last promotion. Additionally, the distribution of education levels among employees is analyzed to understand its correlation with career advancement.

**Data Loading and Preparation**

**Steps:**

1. Import Dataset: Load the employee attrition dataset into Power BI.
2. Data Cleaning: Handle any missing values and correct data types.
3. Data Transformation: Ensure relevant columns are correctly formatted.

**Data Modeling**

**Measures:**

1. **AttritionCountYes**:

AttritionCountYes = CALCULATE(COUNT('WA\_Fn-UseC\_-HR-Employee-Attrition'[Attrition]), 'WA\_Fn-UseC\_-HR-Employee-Attrition'[Attrition] = "Yes")

1. **AttritionPercentage**:

AttritionPercentage =

DIVIDE(

CALCULATE(COUNT('WA\_Fn-UseC\_-HR-Employee-Attrition'[Attrition]), 'WA\_Fn-UseC\_-HR-Employee-Attrition'[Attrition] = "Yes"),

COUNTROWS('WA\_Fn-UseC\_-HR-Employee-Attrition')

) \* 100

1. **AverageYearsAtCompany**:

AverageYearsAtCompany = AVERAGE('WA\_Fn-UseC\_-HR-Employee-Attrition'[YearsAtCompany])

1. **AverageYearsInRole**:

AverageYearsInRole = AVERAGE('WA\_Fn-UseC\_-HR-Employee-Attrition'[YearsInCurrentRole])

1. **AverageYearsSincePromotion**:

AverageYearsSincePromotion = AVERAGE('WA\_Fn-UseC\_-HR-Employee-Attrition'[YearsSinceLastPromotion])

**Columns:**

1. **AgeGroup**:

AgeGroup = SWITCH(

TRUE(),

'WA\_Fn-UseC\_-HR-Employee-Attrition'[Age] <= 25, "Under 25",

'WA\_Fn-UseC\_-HR-Employee-Attrition'[Age] <= 35, "26-35",

'WA\_Fn-UseC\_-HR-Employee-Attrition'[Age] <= 45, "36-45",

'WA\_Fn-UseC\_-HR-Employee-Attrition'[Age] <= 55, "46-55",

"Over 55"

)

1. **AgeGroupSortOrder**:

AgeGroupSortOrder = SWITCH(

'WA\_Fn-UseC\_-HR-Employee-Attrition'[AgeGroup],

"Under 25", 1,

"26-35", 2,

"36-45", 3,

"46-55", 4,

"Over 55", 5,

BLANK()

)

1. **EducationSortOrder**:

EducationSortOrder = SWITCH(

'WA\_Fn-UseC\_-HR-Employee-Attrition'[Education],

1, 1, // Below College

2, 2, // College

3, 3, // Bachelor

4, 4, // Master

5, 5, // Doctor

BLANK() )

**Visualizations and KPIs**

**KPIs:**

* Attrition Percentage
* Average Years at Company
* Average Years in Role
* Average Years Since Promotion

**Visualizations:**

* **Average Years at Company by Department**: Insights: Sales and Human Resources have the longest average tenure, while Research & Development has the shortest.
* **Average Years in Current Role by Department**: Insights: Sales has the highest average duration in current roles, indicating stability, while Human Resources has the shortest.
* **Average Years Since Last Promotion by Department**: Insights: Sales has the longest time since the last promotion, followed by Research & Development, and then Human Resources.
* **Distribution of Education Levels**: Insights: Majority of employees have a Bachelor's degree, with a significant number holding a Master's degree.
* **Correlation Between Education Levels and Career Advancement Metrics**: Insights: Higher education levels correlate with longer tenure and role stability. Employees with Doctorate and Master's degrees tend to stay longer and have more stability in their roles.

**Key Findings and Insights**

* **Average Years at Company by Department**: Sales and Human Resources departments show higher retention with average tenures exceeding 7 years.
* **Average Years in Current Role by Department**: Sales department shows the highest role stability with employees averaging 4.5 years in their current roles.
* **Average Years Since Last Promotion by Department**: Sales department has longer promotion cycles with an average of 2.4 years since last promotion.
* **Distribution of Education Levels**: The workforce is highly educated, with 38.91% holding a Bachelor's degree and 27.07% holding a Master's degree.
* **Correlation Between Education Levels and Career Advancement Metrics**: Higher education levels are associated with longer tenure and more stability in roles.

**Final Touches**

**Formatting:** Apply consistent colors, fonts, and styles across all visuals. Add titles, axis labels, and legends to enhance readability.

**Tooltips and Interactivity:** Add tooltips to provide additional information on hover. Ensure slicers and filters interact with all related visuals for a dynamic dashboard.

**Testing:** Test the dashboard with different filter selections to ensure accurate data representation.

**Proposed Actionable Strategies**

**Improving Promotion Processes:**

* Implement a transparent promotion policy that sets clear expectations and timelines for career advancement.
* Regularly review and update the promotion criteria to ensure they align with industry standards and employee expectations.
* Conduct annual performance reviews to identify potential candidates for promotion and provide them with a clear development path.

**Providing Training and Development Opportunities:**

* Establish a continuous learning and development program to enhance employees' skills and competencies.
* Offer targeted training programs based on the specific needs of different departments and roles.
* Encourage employees to pursue further education by providing tuition reimbursement and support for professional certifications.

**Fostering a Culture of Continuous Learning:**

* Promote a culture that values continuous improvement and learning by recognizing and rewarding employees who engage in development activities.
* Facilitate knowledge-sharing sessions where employees can share insights and learnings from their training experiences.
* Create mentorship programs that pair experienced employees with those seeking to develop their skills and advance their careers.
* By implementing these strategies, the organization can improve its promotion processes, provide valuable training and development opportunities, and foster a culture of continuous learning, ultimately enhancing employee satisfaction and retention.

--- M.Banu Prakash Sai