

## Page 1: HR Attrition Analysis Dashboard

### Goal:

Understand *why employees are leaving*, *which groups are most at risk*, and *what factors influence attrition* (employee turnover).

#### ◆ Visuals and Details:

1. **Card KPIs** – *Total Employees, Total Attrition, Attrition Rate (%)*
  - Shows headline metrics at a glance.
  - **Example:** If Attrition Rate > 15%, highlight the KPI in red for visibility.
2. **Bar Chart:** *Attrition Count by Department*
  - Displays how many employees left from each department.
  - Helps identify which departments (e.g., Sales or R&D) have the highest turnover.
3. **Stacked Column Chart:** *Attrition by Age Group and Gender*
  - Breaks attrition down by age brackets (e.g., 20–30, 31–40, etc.) and gender.
  - Reveals which demographic segments are most affected.
4. **Treemap:** *Attrition by Job Role*
  - Each box represents a job title, sized by the number of employees who left.
  - Useful for spotting high-risk job roles like “Sales Executive” or “Laboratory Technician.”
5. **Heatmap:** *Attrition vs Monthly Income*
  - Cross-tabulates monthly income with attrition count or rate.
  - Shows if lower-income groups have higher turnover.
6. **Line Chart:** *Attrition Rate by Years at Company*
  - Plots the trend of attrition based on how long employees have been with the company.
  - Typically, attrition is highest during early tenure (first 2–3 years).
7. **Pie Chart:** *Impact of OverTime on Attrition*
  - Compares attrition between employees with “OverTime = Yes” vs “No.”
  - Helps confirm if overworking correlates with leaving.
8. **Slicer Filters:**
  - Department | Job Role | Gender | Age Group | Education Level
  - Allow interactive filtering across visuals to explore attrition patterns dynamically.

---

## Page 2: Compensation & Performance Insights

### Goal:

Analyze *how salary, performance, and promotions* influence employee retention and satisfaction.

#### ◆ Visuals and Details:

1. **Box Plot:** *Monthly Income by Job Level*
  - Shows salary distribution per level (e.g., Level 1–5).
  - Detects salary gaps and outliers that could lead to dissatisfaction.
2. **Bar Chart:** *Average Monthly Income by Department*
  - Compares departments to find pay inequalities.
  - Highlight with conditional formatting (e.g., darker color for higher salaries).
3. **Scatter Plot:** *Performance Rating vs Monthly Income*

- Tests if higher-performing employees are compensated fairly.
  - Each point = one employee; color points by attrition to see trends.
  - 4. **Line Chart:** *Percent Salary Hike vs Performance Rating*
    - Displays how performance is rewarded across the company.
    - Identify if pay raises correlate with higher ratings.
  - 5. **KPI Cards:**
    - *Highest Monthly Income, Lowest Monthly Income, Average Performance Rating*
    - Quick snapshot of company-wide metrics.
  - 6. **Donut Chart:** *Promotion in Last 5 Years*
    - Shows % of employees promoted vs not.
    - Cross-filter to attrition data — employees not promoted may have higher attrition.
- 

### **Page 3: Workforce Demographics & Satisfaction**

#### **Goal:**

Understand the structure and sentiments of your workforce — *who your employees are and how satisfied they feel.*

#### ◆ **Visuals and Details:**

1. **Histogram:** *Age Distribution of Employees*
    - Displays the workforce's age structure.
    - Identify if your company skews younger or older, and how that links to attrition.
  2. **Stacked Bar Chart:** *Education Field by Education Level*
    - Combines two education variables to understand the talent pool's diversity.
  3. **Pie Chart:** *Gender Distribution*
    - Represents male vs female ratio; can be used to explore equity metrics.
  4. **Bar Chart:** *Job Satisfaction by Department*
    - Average satisfaction per department (scale 1–4).
    - Use color to represent satisfaction level: green = high, red = low.
  5. **Heatmap:** *Environment Satisfaction vs Job Involvement*
    - Correlates engagement and environmental conditions.
    - Helps HR focus on improving workplace experience.
  6. **Line Chart:** *Average Satisfaction over Years at Company*
    - Shows how employee satisfaction changes with tenure.
    - Early dips could indicate onboarding or management issues.
  7. **Cards:**
    - *Average Job Satisfaction, Average Environment Satisfaction, Average Relationship Satisfaction*
- 

### **Page 4: Departmental & Career Growth Overview**

#### **Goal:**

Provide a holistic view of *departmental performance, experience levels, and career development opportunities.*

## ◆ Visuals and Details:

1. **Clustered Column Chart:** *Average Salary, Satisfaction, and Attrition Rate by Department*
    - Multi-metric comparison across departments.
    - Combine three measures for a 360° view.
  2. **Line Chart:** *Years at Company vs Years Since Last Promotion*
    - Tracks career progression speed.
    - Identify stagnation risks (long tenure + few promotions).
  3. **Scatter Plot:** *Training Times Last Year vs Performance Rating*
    - Measures the effectiveness of training programs.
    - Ideally, more training correlates with higher performance.
  4. **Table:** *Department KPIs (Employees, Avg Salary, Avg Satisfaction, Attrition %)*
    - Summarized performance of each department.
    - Use conditional formatting to highlight best/worst performers.
  5. **Treemap:** *Employee Count by Job Role (within Department)*
    - Visualizes team sizes and composition quickly.
  6. **Cards:**
    - *Average Years at Company, Average Promotion Rate, Top Performing Department*
- 

## 🔗 Navigation & Design Recommendations

- **Theme Colors:**
  - Blue (Trust) → Primary
  - Light Gray → Background
  - Red → Attrition Highlights
  - Green → Satisfaction/Performance Highlights
- **Page Navigation:**
  - Add a top ribbon or buttons linking pages:  
**1** Attrition | **2** Compensation | **3** Demographics | **4** Department & Career
- **Interactivity:**
  - Enable cross-filtering between visuals.
  - Use “Drill Through” from Department to detailed employee view.