

Comprehensive HR Attrition Analysis & Strategic Recommendations

1. Executive Summary

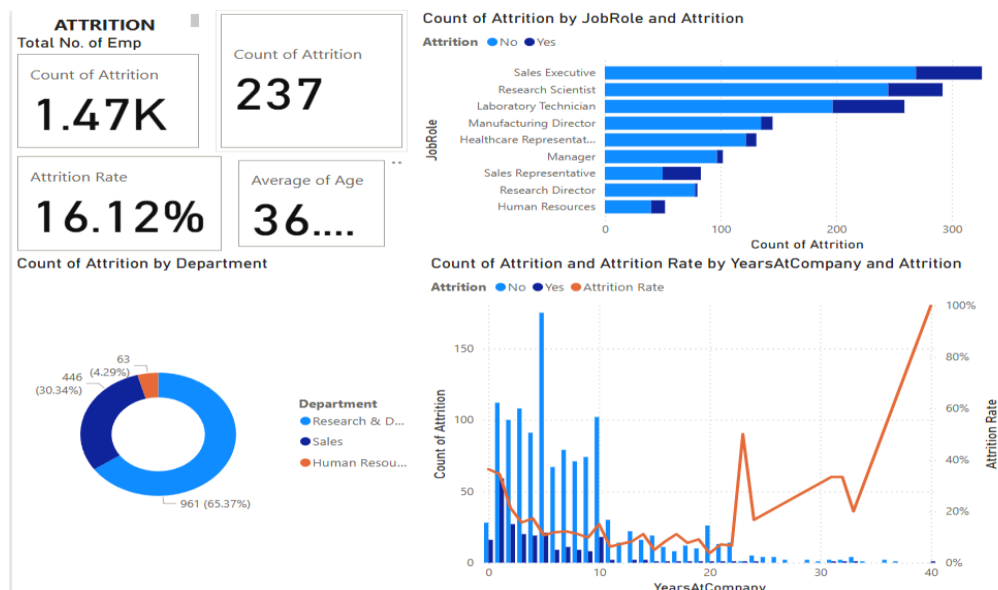
This report presents an in-depth analysis of employee attrition based on a dataset of **1,470 employees**. The primary objective is to identify the key drivers behind employee turnover and provide actionable, data-driven recommendations to enhance retention.

Our analysis reveals a significant overall attrition rate of **16.12%**, representing the departure of **237 employees**. Attrition is not a uniform issue across the organization; rather, it is highly concentrated within specific departments, job roles, and demographic groups. The **Sales department** exhibits the highest turnover rate, and employees in roles such as **Laboratory Technician** and **Sales Executive** are most likely to leave. Key contributing factors include low monthly income, persistent overtime, and a lack of career progression, particularly among early-to-mid-career professionals. This report deconstructs these trends and outlines a strategic framework for intervention.

2. Overall Attrition Metrics

A top-level view of the workforce provides the context for our deeper analysis.

- **Total Employees:** 1,470
- **Attrition Count:** 237
- **Attrition Rate:** 16.12%
- **Average Employee Age:** 37
- **Average Monthly Salary:** \$6,500
- **Average Total Working Years:** 7



3. Departmental & Role-Based Attrition Hotspots

The data clearly shows that attrition is most severe in specific pockets of the company.

3.1 Attrition by Department

While the Research & Development department has the highest absolute number of departures, the **Sales department has the most critical attrition rate**, indicating a systemic issue.

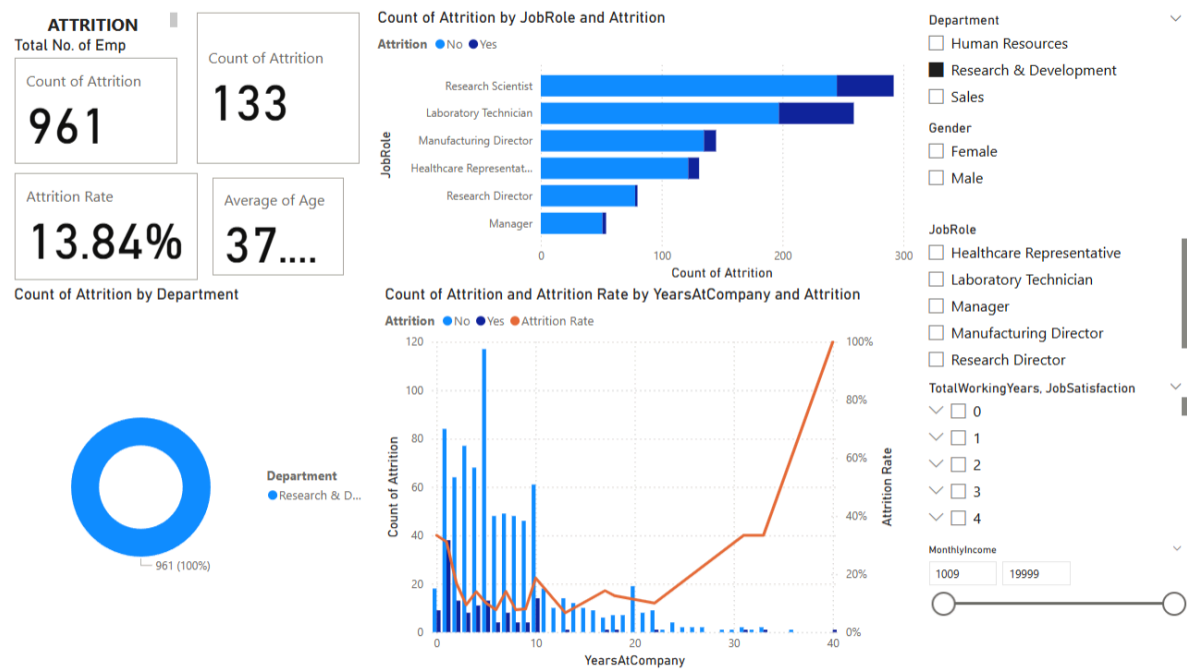
Department	Attrition Count	Total Employees	Attrition Rate
Sales	92	446	20.6%
Human Resources	12	63	19.0%
Research & Development	133	961	13.8%

3.2 Attrition by Job Role

Attrition is heavily concentrated in a few key roles, which are critical to operations and revenue.

- **Laboratory Technician:** 62 departures
- **Sales Executive:** 57 departures
- **Research Scientist:** 47 departures

These three roles alone account for **over 70%** of all employee attrition.



4. Demographic and Career Stage Deep Dive

4.1 Attrition by Age Group

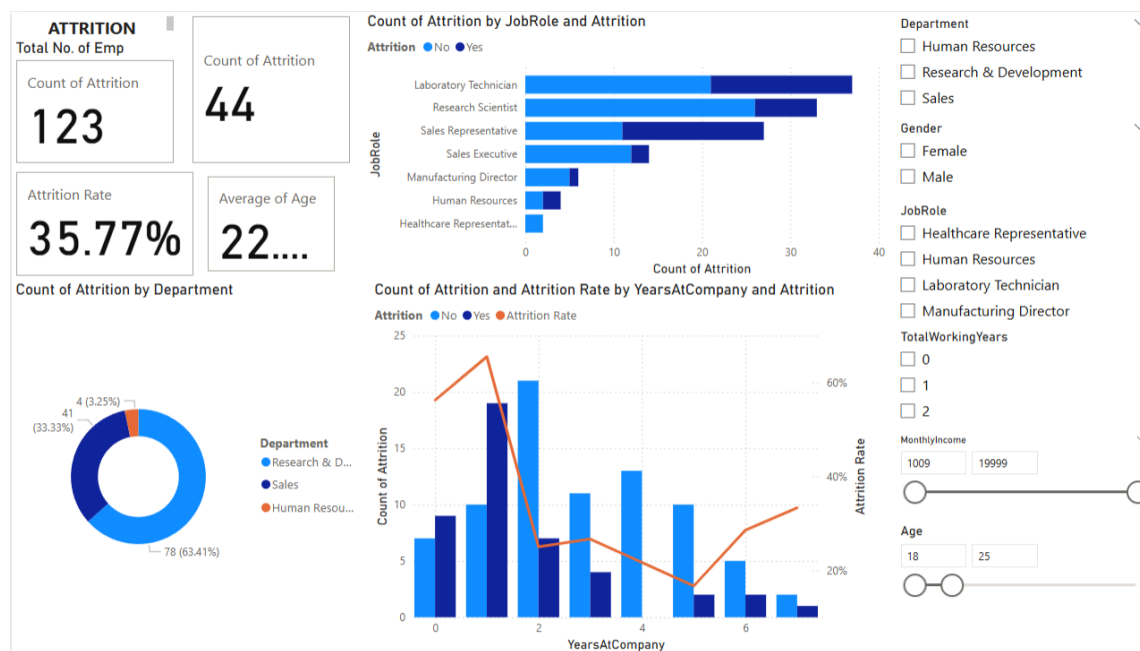
Attrition is most pronounced among employees in the early-to-mid stages of their careers.

- **26-35 Age Group:** This group shows the highest number of attritions (**116 employees**), signaling a critical retention gap for employees in their prime working years.
- **18-25 Age Group:** The second-highest group, indicating challenges in retaining entry-level talent.

4.2 Attrition by Career Tenure & Progression

An employee's tenure and perceived growth trajectory are powerful predictors of attrition.

- **Total Working Years:** The attrition rate is highest among employees with **1-7** years of experience. This group is experienced enough to be valuable but may not feel sufficiently invested in the company to stay long-term.
- **Years Since Last Promotion:** A lack of career movement is a significant flight risk. The attrition rate **more than doubles** for employees who have gone **2-4 years** without a promotion.



5. Root Cause Analysis: The Core Drivers of Attrition

5.1 The Financial Factor: Monthly Income

There is an undeniable correlation between low pay and high turnover.

- **Employees earning under \$3,000/month** have an attrition rate **exceeding 25%**.
- The attrition rate drops to less than 5% for employees earning over \$10,000/month.

5.2 The Workload Factor: Overtime

Burnout is a major catalyst for attrition. Employees working overtime are **three** times more likely to **leave** than their colleagues.

- **Attrition Rate with Overtime:** 31.5%
- **Attrition Rate without Overtime:** 10.4%

6. High-Risk Employee Profiles

From the data, two primary "at-risk" employee personas emerge:

1. **The Undercompensated Early-Career Technician:**
 - **Role:** Laboratory Technician or Research Scientist
 - **Demographics:** Aged 26-35, 3-7 years of total experience.
 - **Pain Points:** Possesses valuable technical skills but is in a low salary bracket (under \$4,000/month). Feels their career has stalled with no promotion in 2+ years and sees better financial opportunities elsewhere.
2. **The Overworked Sales Executive:**
 - **Role:** Sales Executive
 - **Demographics:** Male, aged 28-40.
 - **Pain Points:** Consistently works overtime to meet high-pressure targets. The compensation and commission structure may not adequately reward the intense workload, leading to burnout and a search for a role with better work-life balance.

7. Strategic Recommendations

1. **Target the Sales Department:**
 - **Action:** Conduct a comprehensive review of the commission, bonus, and incentive structure to ensure it is competitive and rewarding.
 - **Action:** Implement workload management policies and monitor overtime hours to prevent burnout.
2. **Create Career Paths for Technical Roles (R&D):**
 - **Action:** Develop a formal, tiered career ladder for roles like Laboratory Technician and Research Scientist.
 - **Action:** Introduce a skills-based compensation system where pay increases are tied to the acquisition of new certifications and skills, not just tenure.
3. **Re-engage Early-to-Mid Career Talent:**
 - **Action:** Launch a mentorship program pairing employees in the 26-35 age bracket with senior leaders.
 - **Action:** Mandate that managers conduct formal career development conversations for any employee who has gone **two years without a promotion**.