

HR Attrition Analysis Report

1. Business Problem

The organization is experiencing an employee attrition rate of 16.12%, which represents a moderate retention challenge that may negatively affect productivity, workforce stability, and long-term talent development. Employee turnover leads to increased recruitment and onboarding costs, loss of institutional knowledge, and operational disruption, particularly in technical and early-career roles.

Without identifying the key drivers of attrition, HR initiatives may remain generic and ineffective. Therefore, a data-driven analysis across executive metrics, compensation, demographics, and engagement factors is required to support targeted and strategic retention planning.

2. Key Business Questions

- What is the overall attrition rate and is it within an acceptable HR benchmark?
- Which departments and job roles experience the highest turnover?
- Does overtime significantly influence employee attrition?
- Are compensation, income, and promotions linked to employee resignation?
- Which demographic and experience segments are most vulnerable to attrition?
- Do satisfaction and engagement factors significantly impact retention?
- Where should HR focus retention strategies to achieve the highest impact?

3. Insights by Dashboard

A. Executive Overview Dashboard

Overall Attrition Level

The organization has 1,470 employees, with 237 employees leaving, resulting in an attrition rate of 16.12%. This rate is above the commonly accepted HR benchmark of 8–12%, indicating a retention risk that requires continuous monitoring and strategic intervention, although it is not critically high.

Departmental Attrition

Attrition is most concentrated in the Research and Development department compared to Sales and Human Resources. This suggests that technical and innovation-driven roles may face higher job pressure, skill demand stress, and external market opportunities. The loss

of employees in R&D is strategically significant due to the high cost of replacing specialized talent.

Attrition by Job Role

Higher attrition is observed in roles such as Laboratory Technicians, Sales Executives, and Research Scientists. These operational and performance-driven roles may involve higher workload intensity, repetitive tasks, or limited perceived career progression, increasing resignation risk.

Overtime Impact

The analysis shows no major difference in attrition between employees who work overtime and those who do not. This indicates that overtime is not a primary driver of attrition in this dataset, and other structural and engagement-related factors are likely more influential.

Gender Distribution

Although male attrition count appears higher, the difference is proportional to workforce distribution. There is no clear evidence of a significant gender-based attrition imbalance.

B. Compensation and Promotion Analysis Dashboard

Income and Attrition

Employees with lower monthly income demonstrate higher attrition levels, while higher-income employees show stronger retention. This indicates that absolute compensation level has a more meaningful impact on retention than incremental salary changes.

Job Level and Retention

Attrition is highest at Job Level 1 and decreases progressively as job level increases. Senior employees (levels 4–5) exhibit very strong retention. This pattern suggests that junior and entry-level employees are significantly more vulnerable to turnover.

Years Since Last Promotion

Higher attrition is concentrated among employees in early promotion stages (0–5 years since last promotion). This implies that employees may leave before achieving internal career growth due to unclear advancement pathways or better external opportunities.

Percent Salary Hike

The percentage of salary hike shows minimal variation between employees who left and those who stayed. This suggests that annual salary increments alone are not a dominant factor influencing attrition.

Overall Interpretation

Career progression, job level, and base income appear to be stronger drivers of attrition than salary hike percentages.

C. Demographics and Experience Dashboard

Age and Career Stage

Attrition is highest among younger and early-career employees, while mid-career and senior employees demonstrate lower turnover. This reflects higher career mobility, exploration behavior, and lower organizational attachment among early-career workforce segments.

Total Working Years

Employees with fewer total working years show higher attrition, whereas experienced and long-tenure employees display significantly stronger retention and organizational commitment.

Education Field

Attrition varies by education background, with the highest attrition observed among employees from Human Resources, followed by Technical Degree and Marketing fields. This may be due to higher market mobility, transferable skills, and broader external job opportunities in these disciplines.

Distance from Home

Attrition increases as commuting distance grows, suggesting that long travel times may contribute to fatigue, reduced work-life balance, and lower job satisfaction.

Marital Status

Single employees show relatively higher attrition compared to married and divorced employees, potentially due to greater career flexibility and mobility.

D. Satisfaction and Engagement Dashboard

Job Satisfaction

Employees with low job satisfaction levels exhibit the highest attrition rates. Attrition decreases consistently as satisfaction levels improve, indicating a strong inverse relationship between job satisfaction and employee turnover.

Relationship Satisfaction

Lower relationship satisfaction is associated with higher attrition, highlighting the importance of managerial support, team dynamics, and workplace relationships in employee retention.

Environment Satisfaction

Employees reporting poor work environment satisfaction show significantly higher attrition. This confirms that workplace culture, support systems, and organizational environment are key retention factors.

Work-Life Balance

Poor work-life balance is one of the strongest drivers of attrition, with the highest turnover observed among employees reporting the lowest balance levels. This suggests that employee well-being and workload experience are critical to retention.

Overtime and Engagement Context

While overtime shows slightly higher attrition in some cases, the difference is not substantial compared to satisfaction and engagement variables, which demonstrate a stronger and more consistent relationship with employee turnover.

4. Strategic Recommendations

Strengthen Early-Career Retention Strategies

Since attrition is concentrated among early-career and lower job-level employees, the organization should implement structured onboarding, mentorship programs, and clearly defined career progression frameworks. Regular engagement check-ins during the first years of employment can significantly improve retention.

Target High-Risk Departments and Roles

Retention initiatives should prioritize Research and Development and high-turnover roles such as Laboratory Technicians, Sales Executives, and Research Scientists. Role-specific incentives, workload optimization, and career development plans should be introduced to reduce turnover risk.

Enhance Career Growth and Promotion Transparency

The organization should establish clear promotion timelines, improve internal mobility opportunities, and increase visibility of career paths. Transparent growth frameworks can reduce early resignations driven by perceived career stagnation.

Review Compensation Structure for Junior Employees

Rather than focusing solely on salary hike percentages, HR should assess base salary competitiveness, especially for entry-level and junior roles, and consider retention bonuses or structured compensation adjustments for critical positions.

Improve Employee Engagement and Work Experience

HR should invest in improving job satisfaction, workplace relationships, and organizational culture through leadership training, feedback systems, engagement surveys, and employee recognition programs. Enhancing work-life balance through flexible policies and workload monitoring is also essential.

Adopt Data-Driven HR Monitoring

The organization should continuously track attrition KPIs, maintain interactive dashboards

in Tableau, and develop predictive attrition models to proactively identify high-risk employee segments and implement timely interventions.

5. Executive Conclusion

The analysis indicates that employee attrition is primarily driven by early-career stage, lower job levels, income levels, and engagement-related factors such as job satisfaction, work-life balance, and work environment rather than overtime alone. Attrition is also concentrated in specific departments and education fields, particularly Research and Development and employees with HR, Technical, and Marketing backgrounds.

These findings suggest that targeted, data-driven retention strategies focused on career development, employee engagement, and junior workforce support will be more effective than generalized HR policies. By prioritizing high-risk segments and improving employee experience, the organization can reduce turnover, control hiring costs, and enhance long-term workforce stability.