

HR Attrition Analysis – IBM Dataset

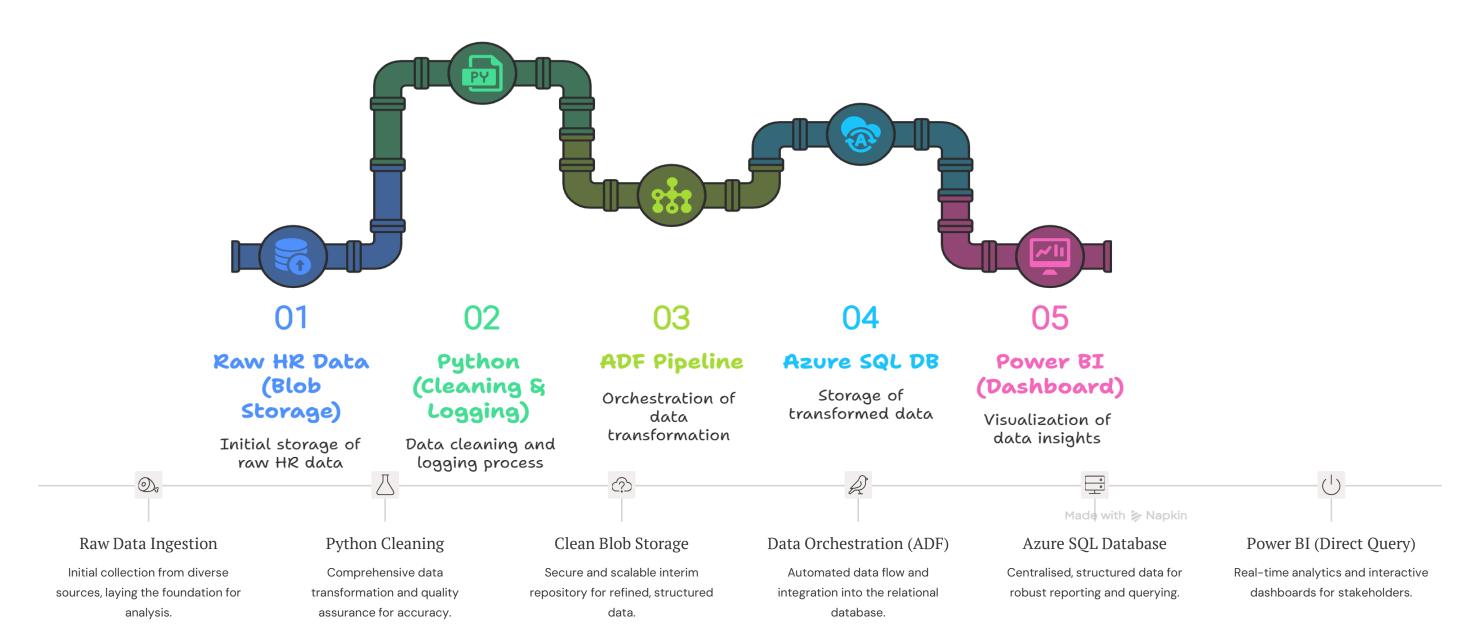
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Powered by: Python, Azure Blob Storage, Azure SQL Database, & Microsoft Power Bl

Project Workflow: From Raw Data to Actionable Insights

Robust data pipeline ensures efficient processing and delivery of timely HR insights.

HR Data Pipeline Process



Understanding the Business Challenge: Employee Attrition

Employee attrition poses significant financial and operational burdens, affecting productivity and organizational morale.

Business problem and End Goal

High Attrition Rate

Costly employee turnover

Identify Drivers

Analyze KPIs and demographics

Provide Insights

Offer actionable recommendations

Low Attrition Rate

Reduced employee turnover



Key Performance Indicators (KPIs) Tracked:

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Attrition Rate

Percentage of employees leaving the organization within a given period.

Average Income

Compensation trends across different groups, linked to satisfaction.

Average Tenure

The average length of service for employees, indicating retention success.

Demographic Breakdown

Detailed analysis of attrition across various employee segments.

Executive Summary: Dashboard Insights

Our high-level dashboard provides a comprehensive overview of current attrition trends and key demographic impacts.



Overall Attrition Rate: 16.12%

This indicates a moderate level of employee turnover requiring attention.

Average Employee Tenure: 7 Years

Reflecting a solid foundation, but opportunities for enhanced longevity exist.

High Attrition in Research & Development

A critical department for focused retention efforts due to significant departures.

Bachelor's Degree Holders at Risk

Higher turnover observed specifically among this educational qualification group.

Attrition Peaks at Ages 30-35

A crucial age bracket for targeted interventions and career support.

Deep Dive Analysis: Uncovering Attrition Drivers

Detailed analysis reveals specific factors influencing employee decisions to leave, guiding precise intervention strategies.

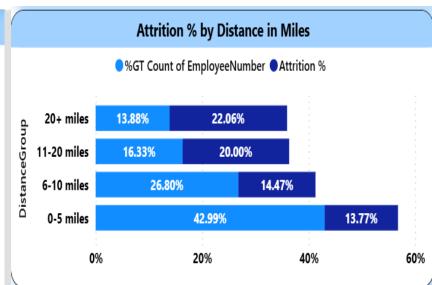
Satisfaction Levels

Significantly low job and environment satisfaction correlate with higher rates of attrition.

Commute Distance

Employees residing within 0-5 miles from the office show an unexpectedly higher attrition rate.

Attrition % by Job Satisfaction ● %GT Count of EmployeeNumber ● Attrition % Low 19.66% 22.84% 16.52% 30.07% 19.05% 16.43% Medium Very High 11.33% 31.22% 0% 20% 40%

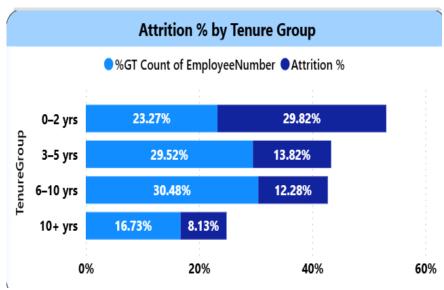


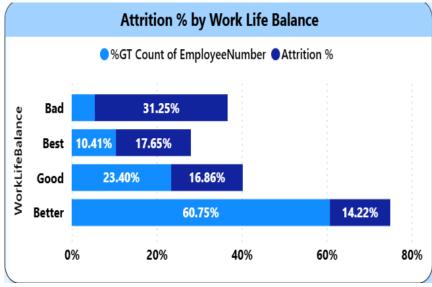
Tenure Sweet Spot

Employees within the 2-5 years of tenure bracket are most prone to voluntary departures.

Work-Life Balance

A strong negative correlation exists between perceived poor work-life balance and employee turnover.





Strategic Recommendations for Employee Retention

Based on our analysis, we propose actionable strategies to address attrition and enhance employee satisfaction.



Enhance Work-Life Balance Policies

Implement flexible working hours, remote options, and robust wellness programs to support employee well-being and reduce stress-related turnover.





Introduce structured mentorship programmes, clear career development paths, and regular performance check-ins for employees in this critical tenure bracket to foster loyalty.

Engage Bachelor's Degree Hires



Design tailored engagement and accelerated career progression programmes specifically to increase retention among this demographic, addressing their unique aspirations.

Improve Job & Environment Satisfaction



Conduct regular, anonymous surveys to gather feedback, address concerns promptly, and actively foster a positive, inclusive workplace culture to boost overall satisfaction scores.

Enhancing Employee Retention

Job Satisfaction
Improve environment and satisfaction scores.

Bachelor Degree Engagement

Engage bachelor degree hires through targeted programs.

Early Tenure Retention

Focus on retaining employees in their early years.



mplement policies to support employee well-being.







Thank You for Your Attention

I trust these insights will support collective efforts in building a more resilient and engaged workforce.

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