# Final Summary

## Project Title:

**HR Attrition Analysis: Identifying Key Factors Behind Employee Turnover**

## Business Problem:

The organization was experiencing high employee attrition, especially in technical and sales roles. The HR team lacked visibility into the drivers of resignation and couldn't segment employees by risk factors such as income, job role, overtime, or satisfaction. This led to delays in responding to resignation patterns, increased hiring costs, and operational disruptions.

## Project Objectives:

| **Goal** | **Outcome** |
| --- | --- |
| Understand key drivers of attrition | Explored age, income, tenure, overtime, job role |
| Identify high-risk groups | Segmented by age group, income bucket, department |
| Provide actionable HR insights | Dashboard built in Power BI with slicers and KPIs |
| Reduce turnover costs | Offered data-backed recommendations |

## Tools Used:

| **Tool** | **Purpose** |
| --- | --- |
| **Excel** | Data cleaning, feature creation (AgeGroup, IncomeBucket) |
| **SQL Server** | Queries to find attrition trends and correlations |
| **Power BI** | Dashboard with attrition rate, filters, and role drill-down |
| **Lucidchart** | AS-IS / TO-BE process mapping |
| **Word** | BRD, stakeholder analysis |

## Key Insights:

| **Insight** | **Why it Matters** |
| --- | --- |
| 💼 Sales & R&D had highest attrition | Targeted training & leadership needed |
| ⏰ Overtime employees left at 2× higher rate | Work-life balance issue needs attention |
| 💵 Low-income group (< ₹3000) more likely to leave | Salary benchmarking & progression gaps exist |
| 👩‍🦰 Younger employees (<30) left more often | Retention plans should focus on career paths early |

## Power BI Dashboard Features:

| **Visual Type** | **Shows** |
| --- | --- |
| KPI Cards | Total Employees, Attrition Count & % |
| Bar Charts | Attrition by Department, Age Group |
| Donut Chart | Attrition by Income Bucket |
| Filters/Slicers | Department, Overtime, Gender, Role |
| Line Chart | Attrition vs. Tenure |

## Recommendations:

Offer flexible schedules to reduce overtime-driven exits

Increase early-career engagement and mentorship

Review compensation for low-income, high-turnover roles

Monitor real-time attrition by department with dashboards

## Deliverables:

| **File** | **Description** |
| --- | --- |
| HR\_Attrition\_BRD.docx | Business requirements document |
| HR\_Stakeholder\_Analysis.xlsx | Roles, power, interests |
| Attrition\_ASIS\_TOBE\_Process.png | Manual vs automated HR insights process |
| HR\_Attrition\_Cleaned.xlsx | Excel file with new features (AgeGroup, etc.) |
| HR\_SQL\_Queries.sql | SQL queries used to analyze patterns |
| HR\_Attrition\_Dashboard.pbix | Power BI dashboard file |
| HR\_Attrition\_Summary.pdf | This summary document |