

ZENVY – AI Powered Payroll (documentation)

HR Intelligence Dashboard for ZENVY.

Introduction

This HR Analytics Dashboard provides a comprehensive view of payroll performance, workforce distribution, and compliance risks. It Analyzes employee payroll data to identify salary leakage, overtime abuse, and ghost employee cases. The dashboard enables HR and finance teams to monitor key payroll KPIs and department-wise cost trends. By transforming raw payroll data into actionable insights, it supports informed decision-making and improved payroll control.

DATA CLEANING & TRANSFORMATION :

- Removed duplicate payroll records to avoid double counting of salary payments.
- Cleaned and standardized employee_id, department, designation values for consistency.
- Handled missing attendance records by flagging them instead of deleting data.
- Trimmed and validated salary, overtime hours, and attendance fields to ensure accuracy.
- Created risk indicator flags (salary leakage, overtime abuse, ghost employee) for analysis.

DATA ANALYSIS :

- Analyzed **total payroll cost and average salary** across employees and departments.
- Identified **salary leakage cases** where payroll was paid without proper attendance.
- Evaluated **overtime patterns** to detect overtime abuse risks.
- Detected **ghost employees** receiving salary without valid attendance.
- Compared **department-wise payroll cost** to identify cost-heavy areas.
- Assessed **attendance compliance** (Present, Absent, Missing) to highlight control gaps.

KPI DEFINITIONS

KPI	Definition
Total Employees	Total number of employees in the payroll dataset
Active Employees	Employees currently marked as active
Total Payroll Cost	Sum of total salary paid to employees
Salary Leakage Amount	Salary paid where leakage conditions are met
Ghost Employees	Employees paid salary without valid attendance
High Risk Employees	Employees flagged for any payroll risk

Recommendations

Implement automated attendance and payroll validation checks to minimize salary leakage. Introduce stricter overtime approval limits for high-risk employees and departments. Conduct periodic payroll audits using analytics to identify anomalies early. These measures will improve payroll accuracy, compliance, and cost efficiency.

Conclusion

This HR Analytics Dashboard effectively highlights payroll risks, cost drivers, and compliance gaps. By leveraging data-driven insights, organizations can strengthen payroll controls, reduce financial leakage, and improve overall payroll efficiency.