📊 Payroll KPI Definitions Document

Project: Payroll Intelligence & Risk Monitoring Dashboard
Purpose: This document defines all KPIs used in the dashboard, including their business meaning, calculation logic, and decision relevance. It ensures transparency, auditability, and executive understanding.

◆ 1. Total Payroll Cost

- **Definition:** Total salary paid to all employees for the selected period.
- **Formula:** SUM(Total_Paid)
- **Business Purpose:** Understand overall payroll expenditure.
- **Decision Use:** Cost control, budgeting, and financial planning.

◆ 2. Total Employees

- **Definition:** Count of unique employees paid in the payroll cycle.
- **Formula:** DISTINCTCOUNT(Employee_ID)
- **Business Purpose:** Measure workforce size.
- **Decision Use:** Headcount planning and HR capacity analysis.

◆ 3. Active Employees

- **Definition:** Employees currently marked as active.
- **Formula:** DISTINCTCOUNT(Employee_ID) where Employment_Status = Active
- **Business Purpose:** Identify productive workforce.
- **Decision Use:** Resource utilization and workforce effectiveness.

◆ 4. Inactive Employees Paid

- **Definition:** Inactive employees who still received salary.
- **Formula:** DISTINCTCOUNT(Employee_ID) where Employment_Status = Inactive
- **Business Purpose:** Identify payroll risk.
- **Decision Use:** Immediate HR audit and corrective action.

◆ 5. Total Overtime Hours

- **Definition:** Total overtime hours logged by employees.
- **Formula:** SUM(Overtime_Hours)
- **Business Purpose:** Track workload pressure.
- **Decision Use:** Workforce planning and OT control.

◆ 6. Overtime Cost

- **Definition:** Total cost incurred due to overtime payments.
- **Formula:** `SUM(Overtime_Pay)`
- **Business Purpose:** Measure extra labor cost.
- **Decision Use:** Cost optimization and OT approval policy.

◆ 7. Overtime Abuse Count

- **Definition:** Employees exceeding approved overtime threshold (e.g., >40 hrs).
- **Formula:** COUNTROWS where Overtime_Abuse_Flag = Yes
- **Business Purpose:** Detect misuse of overtime.
- **Decision Use:** Policy enforcement and investigation.

◆ 8. Overtime % of Payroll

- **Definition:** Proportion of payroll spent on overtime.
- **Formula:** Overtime Cost / Total Payroll
- **Business Purpose:** Measure OT dependency.
- **Decision Use:** Identify abnormal payroll patterns.

◆ 9. Ghost Employee Count

- **Definition:** Employees paid without attendance or inactive status.
- **Formula:** COUNTROWS where Ghost_Employee_Flag = Yes
- **Business Purpose:** Detect fraudulent payments.
- **Decision Use:** Immediate payroll correction and compliance action.

◆ 10. Salary Leakage Count

- **Definition:** Number of payroll records with anomalies.
- **Formula:** COUNTROWS where Salary_Leakage_Flag = Yes
- **Business Purpose:** Measure payroll risk exposure.
- **Decision Use:** Risk mitigation and audit prioritization.

◆ 11. Salary Leakage Amount

- **Definition:** Total salary paid under leakage conditions.
- **Formula:** SUM(Total_Paid) where Salary_Leakage_Flag = Yes
- **Business Purpose:** Quantify financial loss.
- **Decision Use:** Recovery planning and control implementation.

- ◆ **12. Payroll Exception Rate**

  - **Definition:** Percentage of payroll records with issues.
  - **Formula:** Salary Leakage Count / Total Payroll Records
  - **Business Purpose:** Measure payroll quality.
  - **Decision Use:** Process improvement tracking.

- ◆ **13. Attendance Rate**

  - **Definition:** Average employee attendance percentage.
  - **Formula:** AVERAGE(Days_Present / Working_Days)
  - **Business Purpose:** Measure workforce discipline.
  - **Decision Use:** Performance and policy evaluation.

- ◆ **14. Missing Attendance Count**

  - **Definition:** Employees with no attendance recorded.
  - **Formula:** COUNTROWS where Days_Present = 0
  - **Business Purpose:** Identify attendance-payroll mismatch.
  - **Decision Use:** System validation and HR intervention.

- ◆ **15. Average Salary per Employee**

  - **Definition:** Mean salary paid per employee.
  - **Formula:** Total Payroll / Total Employees
  - **Business Purpose:** Understand compensation levels.
  - **Decision Use:** Pay benchmarking and cost analysis.

- ◆ **16. Department-wise Payroll**

  - **Definition:** Payroll distribution across departments.
  - **Formula:** SUM(Total_Paid) grouped by Department
  - **Business Purpose:** Identify cost-heavy departments.
  - **Decision Use:** Budget allocation and optimization.