

# HR Data Cleaning & Workforce Analysis Report

## 1. Executive Summary

This report summarizes the cleaning and validation of HR employee data to ensure data accuracy and reliability for workforce reporting.

## 2. Data Quality Issues Identified

- Duplicate employee records
- Missing salary entries
- Negative salary values
- Inconsistent department names
- Mixed date formats

## 3. Data Cleaning Actions

- Removed duplicates
- Standardized department naming
- Converted salary to numeric format
- Treated negative salaries as invalid
- Imputed missing salaries using department-level median
- Added audit tracking column

## 4. Workforce Metrics

- Total Employees: 62
- Total Payroll: 3,771,350
- Department Distribution
- Hiring Trend (2019–2023)

## 5. Key Observations

- Finance has highest employee count
- Sales has highest average salary
- Hiring trend shows steady recruitment

## 6. Recommendations

- Implement validation at data entry
- Enforce numeric salary type
- Introduce automated data quality checks