

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