Sales Data Warehouse
Project Documentation

0. Document Overview

Purpose: This document describes the design and implementation of a Sales Data Warehouse to support analytical reporting and decision-making.

Scope: Sales analytics, CRM & ERP integration, historical analysis, BI readiness.

1. Executive Summary

This project delivers an end-to-end Sales Data Warehouse that transforms raw transactional data into business-ready analytical datasets using a Bronze, Silver, and Gold layered architecture.

2. Business Problem & Objectives

Problem: Sales data is fragmented across systems, leading to inconsistent reporting and slow decision-making.

Objectives: Centralized data, high data quality, scalable analytics, and reliable KPIs.

3. Source Systems & Data Description

CRM Tables	Description
crm_cust_info	Customer master data
crm_prd_info	Product master data
crm_sales_info	Sales transactions

ERP Tables	Description
erp_cust	Customer demographics
erp_loc	Customer locations
erp_cat	Product categories

4. Data Architecture

The solution follows the Medallion Architecture (Bronze, Silver, Gold) to ensure traceability, quality, and analytical readiness.

5. Data Modeling

The Gold layer uses a Star Schema with fact_sales as the central fact table and multiple dimension tables.

6. ETL Process

Data is extracted from CRM and ERP systems, transformed for quality and integration, and loaded into analytical structures.

7. Business Analytics & KPIs

Customer, product, sales, profitability, and time-based analytics are supported through curated KPIs.

8. Business Value

The data warehouse enables better decision-making, performance tracking, and strategic planning.

Conclusion

This project provides a scalable and enterprise-ready Sales Data Warehouse suitable for BI and advanced analytics.