At Norgine pharmaceutical where I work as a Business intelligence analyst, there was a time we faced challenges in having a unified and consistent report across various department because the data used in generating reports are fragmented. There were multiple sources of data and so we had duplicated reports, inconsistent KPIs, and the reporting system was highly manual leading to delays in submitting regulatory reports.

I was given the task to overhaul the data system and create a single source of truth for every report that provide reliable, timely, and auditable insights to support decision-making and regulatory compliance.

To unify the data sources,

I conducted a detailed audit into various data sources, mapped overlaps, gaps and quality issues.

I engaged with chief data officer, finance director, HR, head of clinical teams to understand reporting needs, KPIs and pain points.

I then designed a centralised data warehouse that consolidates data from several sources such as SQL servers, excel files, ERP, and third party platforms.  
  
Standardized data schemas, applied surrogate keys, and consistent naming conventions to enable accurate cross-departmental joins.

Automated ETL pipelines using **SSIS**, reducing manual effort and ensuring timely data updates.

**Data Quality & Governance:**

* Developed validation scripts, audit logs, and exception handling to maintain data integrity.
* Established **data governance procedures** including data dictionaries, lineage documentation, and role-based access controls.

**BI Layer & Reporting:**

* Built **Power BI semantic models** mapping business processes across departments.
* Delivered interactive dashboards for Finance, HR, Operations, and Regulatory teams with standardized KPIs, enabling **real-time insights**.
* Conducted training workshops for stakeholders to encourage self-service reporting and dashboard adoption.

**Handling an Unexpected Challenge:**

* Conflicting KPI definitions between Finance and Operations caused discrepancies in the initial dashboards.
* I facilitated a rapid cross-functional workshop with department leads and the CDO to align definitions, updated the transformation logic, and implemented a KPI governance framework.
* The issue was resolved within one week, ensuring dashboards were accurate and trustworthy.  
    
  **Result:**
* Delivered a **single source of truth**, eliminating conflicting reports and improving confidence in decision-making.
* Reduced report preparation time by **over 40%** through ETL automation and standardized dashboards.
* Strengthened **cross-functional collaboration**, with aligned KPIs and consistent reporting frameworks.
* Recognized by senior leadership as a **critical enabler of digital transformation**, providing a scalable foundation for future analytics initiatives.