

A company has decided to implement a performance management system. Part of this performance management system is a Business Intelligence System that integrates performance data into an analytical dashboard. This analytical dashboard will support the need for management to understand organizational health and make decisions.

Perspective	Measure	Domain Dimension	Time Dimension
Financial	[A] Total Sales from orders [B] Total Sales from services [C] Total Expenses from orders [D] Total Expenses from services	[01] Operations Region [02] Sales Representative [03] Customer Region [04] Order Status	[T1] Month [T2] Quarter [T3] Year
Customer	[E] Total Number of Customers [F] Average Satisfaction Rating	[01] Operations Region [02] Sales Representative [03] Customer Region [04] Order Status [05] Type of Sales	
Internal Processes	[G] Average Order Turnaround Days (days from order to fulfillment date)	[06] Operations Region [07] Sales Representative [08] Customer Region	
Organizational Capacity	[H] No. of Training [I] Longevity	[02] Sales Representative	

Data Sources: Online System uses a MYSQL Database (the script file of the database is provided)
In-Call System uses an Excel Worksheet

Objective: Design and Implement the Data Warehouse (including relevant statistical data) for the Company
Design and Implement an automated ETL processing and integrating the data from the data sources and populate the Data Warehouse

Discrepancies: Discrepancies were identified by the Analyst that hinders the proper integration of the data. These are:

- Status used for sales records on both data sources are not consistent. Fulfilled and Completed from the Online System is the same as Completed in the In-Call System. Processed and Shipped in the In-Call System is the same as pending in the Online System.
- In the In-Call System, the Fulfill date for processed and shipped orders is the promised delivery date.
- The rating system is also not consistent on both Online and In-Call Systems. In the Online System, 5 is the highest rating and 1 is the lowest rating. In the In-Call System, 5 is the lowest rating and 1 is the highest rating.
- From interview with company executives, the standard status (Completed and Pending) must be used in the integrated data, and the rating system to follow is what the Online System is using.
- In the Online System, a Service 0 means that the sales were for orders; a Service 1 means that the sales were for service. A sales record can only be for either an order or service, but not both.
- In the In-Call Systems, orders and service sales are recorded separately even if they are both under the same order number.
- It is possible that the same customers are recorded in the In-Call and Online Systems with different customer numbers. The customer names are recorded uniquely on both Systems.
- The amount in the Online System is inclusive of the 1% system management fee and should not be recognized as sales, but an expense. The discount in the In-Call System should not be more than 2% of the sales amount. If is beyond 2% of the sales amount, it is considered an expense for the company.

Research: There are other ETL tools that may need to be used to completely satisfy the requirement, especially in mapping values that are in conflict.