

Problem 2

MEASURES

Data Source	Measures	Aggregation Properties
Other Data Source: Sales Summary Table	Actual_Units Forecast_Units Actual_Amount Forecast_Amount	All are additive.
Other Data Source: Cost Summary Table	Actual_Units Budget_Units Actual_Labor_Cost Budget_Labor_Cost Actual_Material_Cost Budget_Material_Cost Actual_Machine_Cost Budget_Machine_Cost Actual_Overhead_Cost Budget_Overhead_Cost	All are additive.
Other Data Source: Leads Table	Success, Quote_Qty Quote_Price Quote_Value	Success and Quote_Price are non additive. Rest are all additive.
ERP: Job Table	Unit_Price Quantity_Ordered Quotation_Quantity Quotation_Amount	Unit_Price is non additive. Rest are all additive.
ERP: Sub Job Table	Cost_Labour Cost_Material Cost_Overhead Quantity_Produced Sub_Job_Amount	All additive
ERP: Invoice Table	Invoice_Amount Invoice_Quantity Invoice_Shipped	All additive
ERP: Shipment Table	Actual_Quantity Requested_Quantity Boxes Quantity_Per_Box Quantity_Per_Partial_Box Shipment_Amount	Quantity_Per_box non additive Quantity_Per_Partial_Box Non additive Rest all are additive

Data Cubes:

Cube	Dimensions	Measures
Sales (Financial)	Time Location SalesClass	Actual_Units Forecast_Units Actual_Amount Forecast_Amount
Cost (Financial)	Time, MachineType Location SalesClass	Actual_Units Budget_Units Actual_Labor_Cost Budget_Labor_Cost Actual_Material_Cost Budget_Material_Cost Actual_Machine_Cost Budget_Machine_Cost Actual_Overhead_Cost Budget_Overhead_Cost
Lead	Customer, Sales_Agent, Time Location SalesClass	Success, Quote_Qty Quote_Price Quote_Value
Job	Customer, Time ,Sales_Agent Location SalesClass	Unit_Price Quantity_Ordered Quotation_Quantity Quotation_Amount
SubJob	Customer MachineType, Time	Cost_Labour Cost_Material Cost_Overhead Quantity_Produced Sub_Job_Amount
Shipment	CustLocation, Time Location SalesClass	Actual_Quantity Requested_Quantity Boxes Quantity_Per_Box Quantity_Per_Partial_Box Shipment_Amount
Invoice	Customer, Time Location (from Customer)	Invoice_Amount Invoice_Quantity Invoice_Shipped