**HW: Sales History Schema analysis**

Task 1. Provide description for each table within the **Sales History** Schema

In the sales history database, fact tables include the sales table with details such as quantity\_sold, amount\_sold and the cost table that provides cost-related metrics.  
Dimension table include the customers, products, times, channels, counties and promotions tables.

Sales and cost tables include transactions where each record represents a sales of a single product or the cost per unit sold. Dimension tables on the other hand provide descriptive attributes that add context to the transactions.  
  
In terms of design, the database could support both OLTP and OLAP.  
As OLTP systems are designed to allow transactions to be processed in real time and also to process day-to-day business activities, tables like costs and sales could be used to record each transaction.  
OLAP system, on the other hand that focuses on analyzing and aggregating data can leverage both fact tables (sales and costs) and dimension tables (customer, products times, countries, promotions) to perform aggregations and generate reports.

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| Table / view name | Used for | Additional notes | Type |
| COUNTRIES | Stores geographic information about countries and regions. | Enables geographic-based analysis. | Dim table |
| CUSTOMERS | Stores information about the customer demographic details, income levels and credit limit. | As the table includes a wide variety of different properties like name, gender, income level it is useful for customer detailed customer analysis and also to support future decision making. | Dim table |
| CHANNELS | Defines the different sales channels used for transactions. | Includes attributes such as channel descriptions and classifications. | Dim table |
| TIMES | Provides a time hierarchy related information which makes it a great candidate for analyzing of the transactions. | Includes day, week, month, quarter, and year levels. | Dim table |
| PRODUCTS | Stores product information such as descriptions, categories, subcategories and pricing details. | Enables different product-level analysis and also identifying sales trends. | Dim table |
| PROMOTIONS | Table includes promotional campaigns details, their durations, and categories. | Enables analysis of campaign effectiveness. | Dim table |
| COSTS | Tracks cost details for products, including unit prices, channels and campaign ids. | Enables to calculate profitability. | Fact table |
| SALES | Records individual sales transactions. | A transactional table where each record corresponds to 1 unit sold. | Fact table |
| PROFITS | Combines data from SALES and COSTS to calculate profit metrics for transactions | A view used for profitability analysis by joining costs and sales. | View |