A. In Class assignment:
  1. Edit a report to perform the following OLAP operations: drill-down, roll-up, pivot, slice, dice (this was done on the sample project already available with Tableau)
  2. Create a report that includes a filter

B. Project Deliverables:

The project deliverables to ValueSmart management will include:

- Data Model (20 points)

- Data Dictionary (20 points) – please see sample table below

- Assumptions on Data Sources (which data comes from which source), sample ETL (sample mapping showing data feeds and underlying logic) (10 points)

- Logical representation of system architecture (10 points)

- Support for monthly Historical Analysis for customer status (10 points)

- **Proposal of another useful dashboard (10 points)**

- **Live demo of working reports (10 points)**

- Presentation Quality (10 points)

- **Live Demo of Dashboard in Tableau or any other tool (10 EXTRA points)**

All students opted to use Tableau for the items in bold.

The working reports consisted into 2 dashboards based on the following:

  1. Customer Analysis Scorecard: provides an overview of customer activity trends and customer profitability measures.

     Lifetime Value Score is an important customer metric that measures the expected profitability of a customer. For this project, assume that the Lifetime Value Score is an attribute of a customer (you do not need to describe how it is computed)

     The scorecard is composed of the following reports/analytics (sample visualization is shown below):

       - Quarterly trend of new customers by their lifetime value score

       - Quarterly trend of lost customers by their lifetime value score

       - Revenue contribution by location of the customer in the current quarter

- Top 10 most profitable customers (by actual profit) in the current quarter

2. <u>Customer Analysis Summary:</u> This is designed to be an interactive dashboard that lets the user select various filtering options for segmenting customers by demographic attributes (marital status, Lifetime Value and Income Range). The reports provide insights on revenue and profit performance by different customer segments. This allows organizations to better understand the profile of their most valuable customers.

   The Customer Analysis Summary dashboard is composed of the following reports (sample visualization of the dashboard is shown below):

   - Total number of customers in a particular segment (based on user selected demographic filter selections)

   - Average revenue per customer in a particular segment

   - Average number of transactions per customer in a particular segment

   - Top categories of products bought by customers in a particular segment

   - Quarterly revenue and profit trend by customers in a particular segment