# Assignment – Data Visualization using Tableau

## Coffee Supply Chain analysis

You are provided with historical data on Coffee supply chain from Jan 2010 to Dec 2011. There are 3

Tables – Fact Table, Location and Product.

Attribute description is as below:

Fact Table

1. Profit – Profit made

2. Margin – Margin between the selling price and cost of production

3. Sales – sales amount of a product

4. COGS - Cost of goods sold (COGS) is the direct costs attributable to the production of the

goods sold in a company. This amount includes the cost of the materials used in creating the

good along with the direct labor costs used to produce the good. It excludes indirect

expenses such as distribution costs and sales force costs.

5. Total Expenses

6. Marketing Expenses

7. Inventory – Quantity in store

8. Budget Profit – Predicted Profit

9. Budget COGS – Predicted COGS

10. Budget Margin – Predicted Margin

11. Budget Sales – Predicted sale amount of a product

12. Area Code – Location code

13. ProductId

14. Date – Date of sale

Location

1. Area Code – Location code

2. State – Name of the state in USA

3. Market – Regions

4. Market Size – small, medium, large etc.

Product

1. Product Type – Type of the coffee / Tea

2. Product – Product Name

3. Product ID

4. Type - Product Classification.

## The Task

**Your task is to create a story card/dashboard with the following solutions:**

1) Which State has the highest profit and indicate the profit.

2) Identify the highest selling product for each state.

3) Identify the total expenses to sales ratio of the state with the lowest profit.

4) Create a heat map for Product Type, State, and Profit. Which state in the East market has the lowest profit for Espresso?

5) What is the average profit for all the products starting with C?

6) Which product type does not have any of its product within the top 5 products by sales?

7) Draw the trend line between sales and profit and find how much variance in profit can be captured through the variance in sales.

8) Plot any 2 relevant charts for the given dataset.

9) Your client would probably want to know the number of profitable days achieved each month in a year.

Consider if profit per day is > 2000 as High Profit Day

Profit per day < 0 as No Profit day

Profit per day is 1 to 2000 as Profitable day

## Note:

- These tasks must be done in Tableau.
- Save the Tableau Workbook in twbx format and upload to LMS for evaluation.
- Create different worksheet for different questions and name the worksheet according to question numbers.
- Write the answer's or the inference in Tableau by using story cards or other options along with question and upload the respective Tableau file.