Business Intelligence Execution Strategy

This document succinctly describes the strategy to be executed for a professional BI project. You are to follow this strategy for your BI course project.

Step 1: For your selected project, fill up the Excel file *Background.Data.Knowledge* in the following order:

- "Business Knowledge":
  - Enter knowledge about business domains related to your BI task. Insert professional knowledge, knowledge gathered from online sources, and knowledge about any tools, APIs or software you have already experienced.
- "Competitor Analysis":
  - Enter knowledge gained about your competitors, both from online sources, and APRs (as applicable)
- "Interviews":
  - Enter knowledge gained from any interviews you have conducted
- "Analysis":
  - From the previous 3 sheets, summarize the pain areas, and potential dimensions and KPIs related to your BI task
- "Data.Info":
  - Based on "Analysis" data, create now at least 2 problems statements for your BI task
  - Enter information about each attribute in the table. The table is designed to assist you in creating the exact BI queries that need to be answered. These queries will metamorphose as you fill up the table (same BI query can obviously be shared across different attributes). When you have finished filling up the table, it is expected that the queries will have converged.
  - Write down the final list of BI queries at the bottom of the table.

Note that a sample file (not on the same format as the one provided) has been also uploaded for your guidance.

Step 2: BI is all about analyzing KPIs across dimensions. Based on the tool you have selected, identify all the charts that are required to answer each of your queries. In PowerBI, the important charts are stacked bar, ribbon, funnel, waterfall etc. In Tableau, they are stacked bar, heatmaps etc.

You are supposed to draw a rough diagram on paper in which one or more chart is answering each of your queries. Show images of these papers. Remember this is the first step and the bottom-up approach.

Step 3: Think about how you will present your story based on the charts in Step 2. Story can be presented across time typically (if you are able to find temporal patterns through analysis in Step 4). Right now, make a rough plan and show it. If you come up with any dashboards along the way, i.e., a dashboard for each story point as in Tableau, then pen down the contents of those dashboards as well.

Step 4: Replicate Step 2 in the tool. Now, apply top-down approach to extract more information from these basic charts, e.g., by adding more dimensions in the chart attributes in PowerBI, Qlik etc., or using the central pane in Tableau (which presents the dimensional analysis framework).

From the above exercise, the bottom-up charts of Step 2 should metamorphose into multi-dimensional charts which provide opportunity to juice out more important information which you could have not figured out in Step 2. So, the bottom-up provides the foundation and top-down builds the structure. Each chart in Step 4 should become lethal wrt information. It is your job to "play" in Step 4 to make the charts informative.

Step 5: Now develop the dashboards by combining different charts if needed, along with scorecards etc. (don't forget the bullet charts are better)

Step 6: Finally create the stories

Step 7: Provide answer to each of your BI queries. Remember that multiple answers will be available for each query.

Outputs required from the project:

- O1: Filled-up *Background.Data.Knowledge* Excel file (Step 1)
- O2: Images of paper charts and paper stories (Step 2 and Step 3)
- O3: Images of each chart in Step 4 with analysis
- O4: Images of all dashboards in Step 5 with analysis
- O5: Images of all stories in Step 6 with analysis
- O6: Overall analysis in which you will answer each of your BI queries with the help of O3, O4, and O5 (Merge O2, O3, O4, O5 and O6 in a single PDF file – Submit BOTH PDF and Word versions of this file)
- O7: Source files (preferably online links which can be shared on social networks)

Weightage:

The project will carry at least 40% marks. In addition to all the above, marks will be given for interactivity and eye-catching dashboards. Keep in mind that you should focus on solving problems rather than increasing the number of charts.