Key Learnings from the Deloitte Data Analytics Job Simulation

In the Data Analytics job simulation by Deloitte, I had the opportunity to gain practical knowledge and hands-on experience with a variety of tools and techniques. This simulation was a great introduction to data analytics, especially focusing on data visualization using Tableau, and performing data-related tasks in Excel. Below are the key learnings and insights gained during the simulation:

1. Learning the Interface of Tableau

Tableau is one of the most popular data visualization tools in the field of data analytics. In this simulation, I was introduced to the Tableau interface, which includes various components like:

- Data Pane: Where you load and manage data sources.
- Sheets: Where you can create individual charts and graphs.
- Dashboard: Allows you to bring together multiple sheets to create interactive visualizations.
- Story: A sequence of sheets or dashboards to tell a data-driven narrative.

Some key aspects of the Tableau interface that I explored include:

- Connecting to Data Sources: I learned how to connect Tableau to various data sources such as Excel, CSV files, or even live databases.
- Understanding Dimensions and Measures: Tableau categorizes fields into dimensions (categorical data) and measures (quantitative data). This helped me understand how to manipulate and visualize data effectively.
- Building Visualizations: I worked with multiple types of visualizations, such as bar charts, line graphs, pie charts, and maps. This enabled me to represent the data in a way that tells a story and highlights key insights.

2. Creating a Simple Dashboard in Tableau

The main task of the simulation was to create a simple dashboard using Tableau, which brought together multiple visualizations into a single view. Some key steps involved in creating the dashboard included:

- Designing Individual Sheets: Each visualization was created separately in different sheets. I explored using drag-and-drop functionality to add dimensions and measures to the visualization.
- Combining Sheets into a Dashboard: After creating several visualizations, I brought them together into a single dashboard. This required careful arrangement and resizing to ensure the layout was intuitive and visually appealing.

- Interactivity Features: I added interactive features like filters and highlight actions to allow users to explore different aspects of the data dynamically. For example, clicking on a bar in a bar chart would filter other charts to display related data.
- Exporting and Sharing the Dashboard: Once completed, I exported the dashboard as an image and a Tableau workbook, which could be shared with stakeholders for further analysis.

3. Performing Queries on Excel

In addition to Tableau, the simulation also involved performing data manipulation tasks in Excel. This helped me apply foundational data analytics skills, particularly in querying and cleaning data. Some tasks I completed include:

- Using Formulas: I applied various Excel formulas such as VLOOKUP, SUMIF, and COUNTIF to extract specific information from large datasets.
- Pivot Tables: I created pivot tables to summarize and aggregate data, making it easier to analyze key trends and relationships within the dataset.
- Data Cleaning: Excel's built-in tools such as Text-to-Columns, Find and Replace, and Remove Duplicates were used to clean the dataset by eliminating errors or irrelevant information.
- Basic Data Analysis: I used Excel to run some basic statistical analyses, such as calculating averages, percentages, and identifying trends using charts and graphs.

4. Guidance Throughout the Task

The task provided detailed guidance at each step, ensuring that I had the necessary resources to complete it successfully. This guidance included:

- Step-by-Step Instructions: Clear instructions were provided on how to complete each part of the task, such as creating a dashboard or performing specific queries.
- Helpful Tips: The guidance offered tips on how to optimize visualizations in Tableau and use the appropriate Excel functions for the given data.
- Troubleshooting Resources: I had access to resources that helped troubleshoot common problems in both Tableau and Excel, ensuring that I could overcome any issues I encountered.

Here is the look of dashboard-

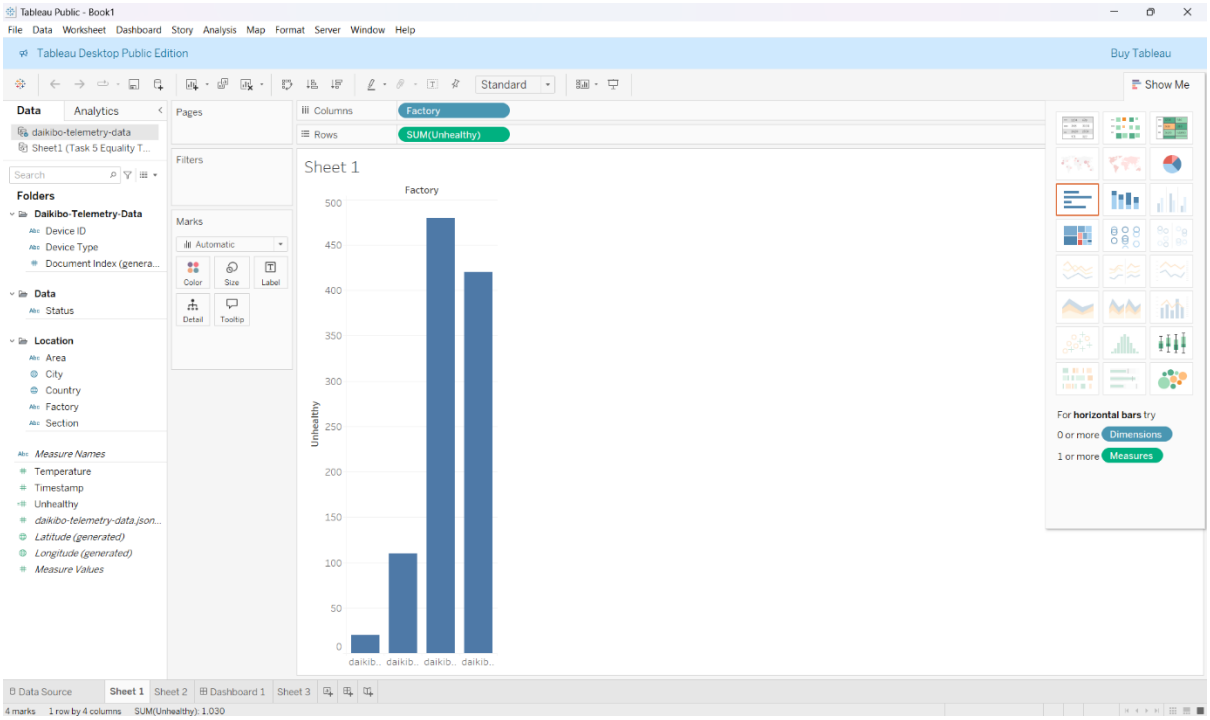

Fig.1

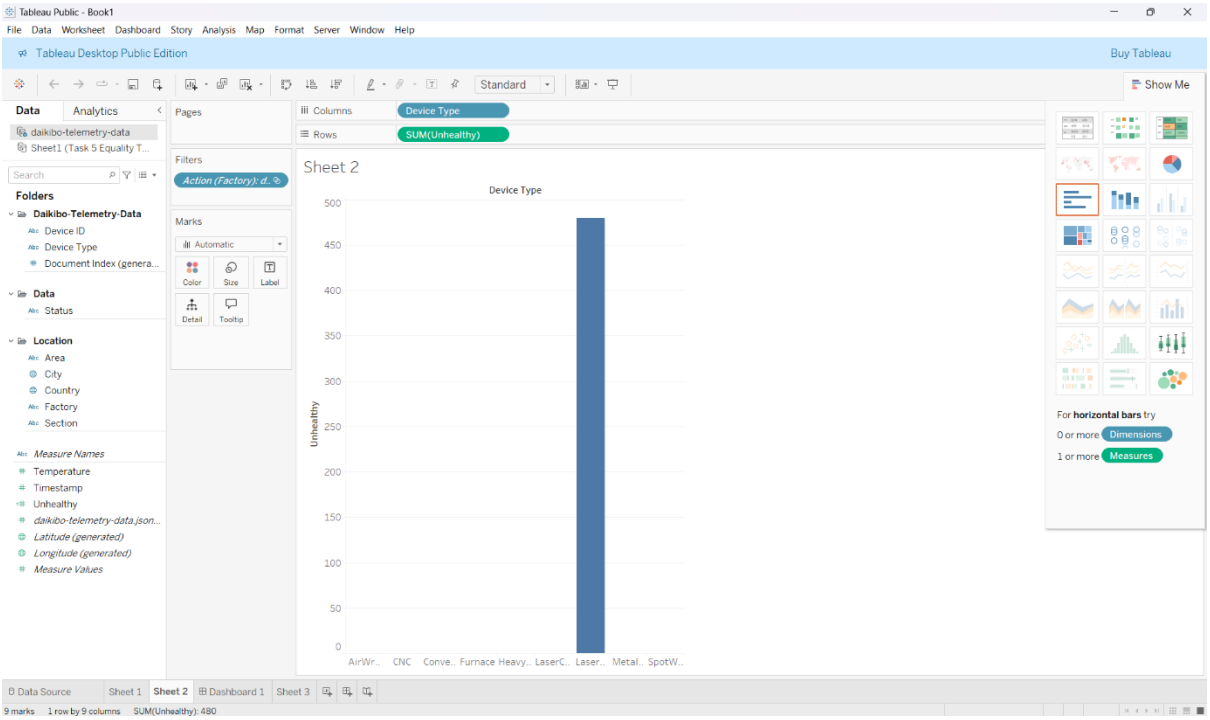

Fig.2

Final Dashboard-

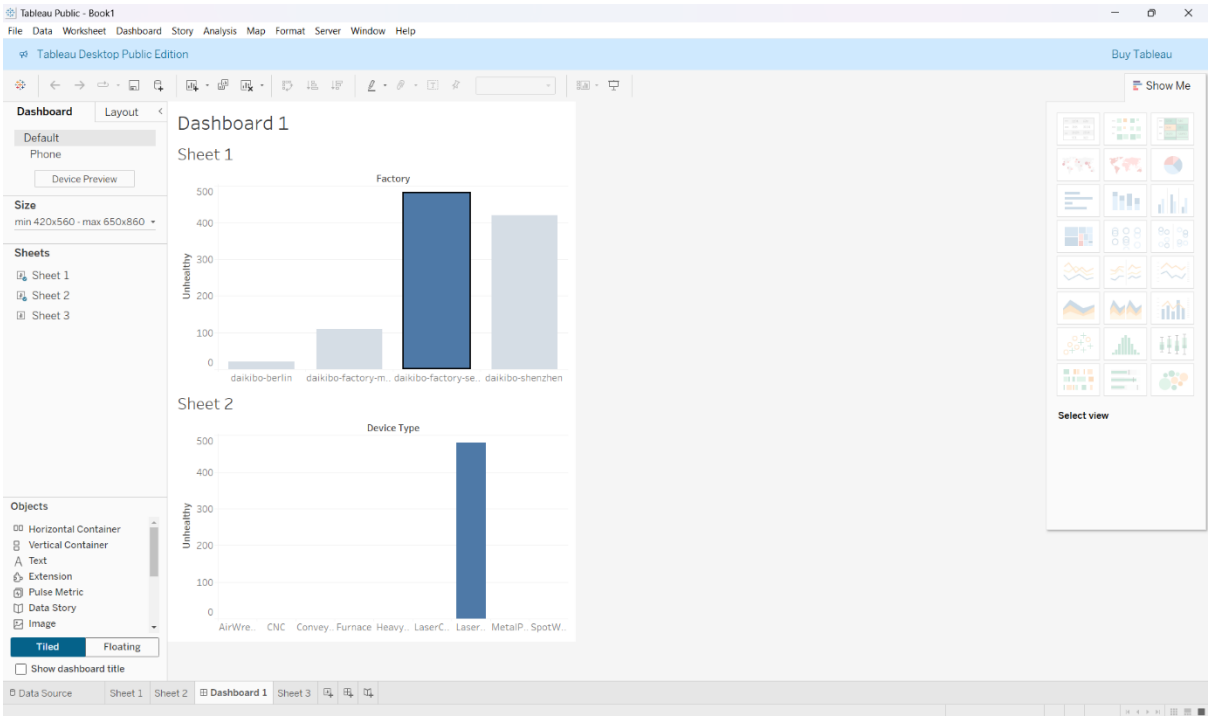

Fig.3

Completion Certificate

Deloitte.

Anjali Niranjan

Data Analytics Job Simulation

Certificate of Completion
February 24th, 2025

Over the period of February 2025, Anjali Niranjan has completed practical tasks in:

Data analysis
Forensic technology

Tina McCreery
Chief Human Resources Officer, Deloitte

Enrolment Verification Code Wmka6RgpLME6GSnkz | User Verification Code KgRjXAQTXwfRjt7ha | Issued by Forage