

# FINAL PROJECT

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**Tableau Project Link:** [Final Project | Tableau Public](#)

## Highlighting Three Specific Design Choices

- 1. Color Palette:** I chose a vibrant and visually appealing color palette in Tableau to cater to my audience's preference for engaging visuals. By using bold and contrasting colors, I aimed to capture their attention and make the data more visually appealing and easy to interpret.
- 2. Simplified Charts:** To cater to my audience's need for simplicity and clarity, I opted for simple and intuitive chart types in Tableau. I avoided complex visualizations and focused on using bar charts and line graphs to present the data in a straightforward manner, ensuring that the audience can easily understand and interpret the information.
- 3. Interactive Filters:** Understanding that my audience may have diverse interests and preferences, I incorporated interactive filters in Tableau to allow them to explore the data according to their specific needs. This empowers the audience to personalize their viewing experience and delve deeper into the data, making the visualizations more relevant and engaging to their individual interests.

## Final Project Compares to Your Original Project Proposal

- 1. Original Project Proposal:** My original project proposal was to analyze the sales data of a retail store and identify the top-selling products, customer demographics, and sales trends. I planned to use Tableau to create interactive visualizations and dashboards to present the findings.
- 2. Reflection:** During the process, I realized that the data available was limited, and I needed to pivot my project to focus more on the customer demographics and their buying patterns. I also learned that creating effective and engaging visualizations requires a lot of experimentation and iteration. As a result, my final project focused on analyzing the purchasing behavior of different customer segments and creating interactive dashboards to showcase the findings. While my plan changed, I was able to create a more focused and impactful project by adapting to the available data and refining my visualization techniques.

# **PROJECT PROPOSAL**

1. **Executive Summary:** In this project, we investigate a dataset collected about the sales data of different products in the entire US. The goal is to increase the profit by looking at trends over the period of four years, investigating potential correlation that can be utilized and identifying under-resourced and non-profitable areas.
2. **Why:** For any private business, perhaps the most important goal for any CEO and stakeholders is to have a growth and increase the profit.
3. **Who:** The target audience of this project is stakeholders and CEO. We want to show where/when/why some products/states/manufacturers are not profitable. This will help stakeholders and CEO to decide which section they want to cut and which section they want to invest on.
4. **What:** We are using the same dataset that has been used in this course. The dataset has a large sales record spanning across four years which gives us a good timescale for analysis.
5. **How:** Our first step is to analyse the time domain to see if there is any trend. For example, we may see certain category of products become more popular and certain categories are out-of-fashion. Second, we need to see if there is any state or location dependent correlation. If some products are more popular in some state, we need to invest based on geography.
6. **Challenges:** Because data only covers four years, we may not be able to see the long-term effect and trends. Moreover, data is collected during the time that there was no recession or bad economical event.

**Persona:** CEO: Bob Ross

**Age:** 62

**Gender:** Male

**Education:** MBA

## **Goals**

1. Concrete and data-oriented analysis
2. A few proposals for growth that he can choose from Analysis of the effects and side-effects of each proposal. Challenges:
3. He is generally very conservative, and he is not eager to accept any proposal that change the processes too much.
4. The stakeholders are mad at him. So, he needs to show them an effective plan.

## **Context**

Monthly meetings with board members and stakeholders. There are 23 people and one of them have hearing problem, two of them cannot walk, 3 of them have only one arm, and 2 of them has limited understanding of English language.