Visualization Canvas

Story

1. What's the problem?
2. What question do you want to answer?
3. Why did you choose it?
4. What is the context?

1. *Analyzing customer purchase behavior and sales performance for an e-commerce platform.*

2. *How do product ratings and rankings vary over time and across different regions?*

   What are the purchasing behaviors and preferences of our customers based on demographics, traffic sources?

3. *We chose to focus on understanding trends because recognizing and analyzing patterns within our data is crucial for making informed business decisions.*

4. *By highlighting the importance of understanding sales trends, customer satisfaction, and marketing effectiveness, we underscore the value of leveraging data-driven insights to drive business success in the dynamic e-commerce landscape.*

Audience

Who is going to use the visualization?

1. Marketing team
2. Sales team
3. Product management
4. Customer service team

# Data *What type of data do you have?* *Where is it stored?* *Is it static or changing?*	1. ***Customer Demographics****: CustomerID, Gender, Country* ***Sales Transactions:*** *InvoiceDate, InvoiceNumber, ProductID, Quantity, Price, Total, OrderStatus, Sales* ***Customer Interactions:*** *TrafficSource, SessionDuration, DeviceCategory, Device, OS* ***Feedback****: DeliveryRating, ProductRating* 2. *Stored in .xlsx format. (computer generated comprehensive dataset)* *Source:* *https://www.kaggle.com/datasets/virtualschool/e-commerce-dataset/data* 3. *Static data.*
# Tools *What tool(s) are you going to use?* *Why did you choose it?*	1. *Power BI* 2. *Allows for quick updates and exploration of data.*
# Charts *What types of charts are chosen?* *Why are they the best to answer the question posed?* *Any real alternatives?*	1. ***Bar Charts****- Effective for comparing categorical data* *Alternative: Stacked or grouped bar charts* 3. ***Line Charts*** *- Ideal for showing trends over time* *Alternative: Area charts for emphasizing cumulative trends over time.* 4. ***Ribbon Charts*** *- Unique visualization for ranking data* *Alternative: Treemap charts for hierarchical data visualization.* 5. ***Sankey Charts*** *- Excellent for illustrating flows or relationships between different categories* *Alternative: Chord diagrams for showing relationships between categories.* 6. ***Slicers:*** *Allows users to filter data dynamically* 7. ***Cards:*** *Displays single values or measures.* *Alternative: KPI tiles for highlighting key metrics* 8. ***Funnel Chart:*** *Useful for visualizing a sequential process.* *Alternative: Pyramid chart for hierarchical data visualization*

Guide to creating charts/dashboards

Ref to this doc for the guidelines to create a chart: Data Visualization Checklist`

Some other key points:

- Always provide the source of the data (the readers should be able to double check it)

Remember: your visualizations should be
- Truthful
- Functional
- Beautiful
- Insightful
- Enlightening

For the full reference check out ***A.Cairo' book: The Truthful Art: data, charts and maps for communication***

Remember: charts can lie by
- being poorly designed
- displaying dubious data
- displaying insufficient data
- concealing or confusing uncertainty
- Suggesting misleading patterns

For the full reference check out ***A.Cairo' book: How charts lie: getting smarter about visual information***

All books are added to the folder Literature