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Unveiling Market Insights:Analysing Spending Behaviour and Identifying Opportunities for Growth

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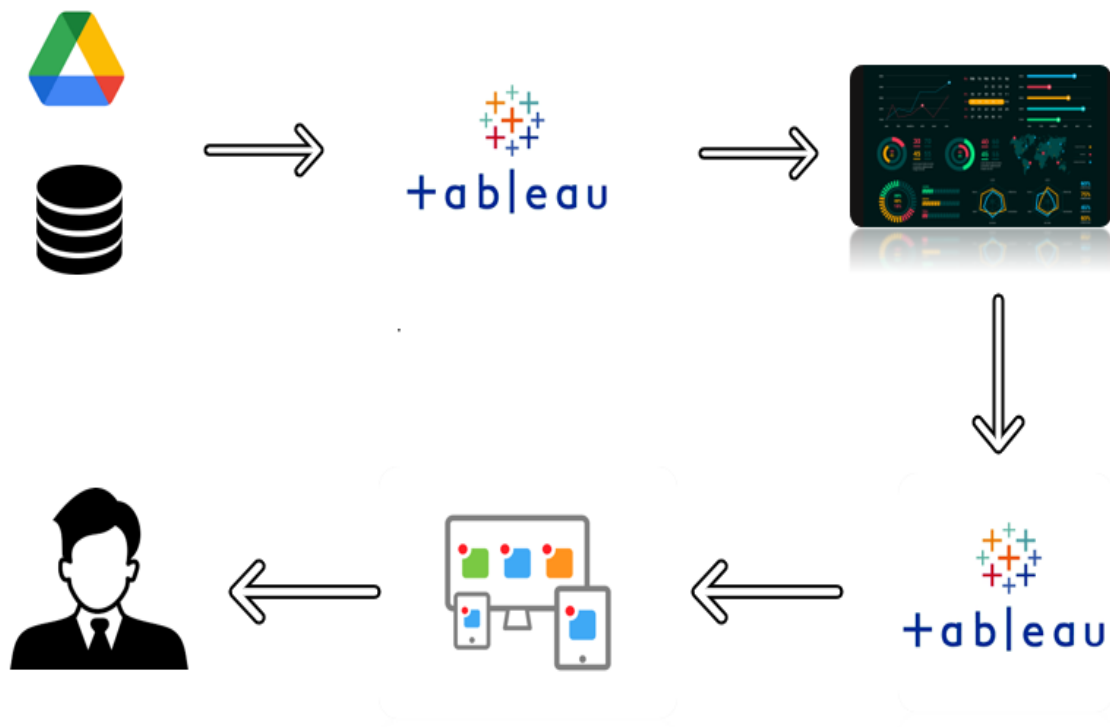
**Unveiling Market Insights: Analysing Spending
Behaviour and Identifying Opportunities for Growth
Project Based Experiential Learning Program**

Unveiling Market Insights: Analysing Spending Behaviour and Identifying Opportunities for Growth

Wholesaling or distributing is the sale of goods or merchandise to retailer to industrial, commercial, institutional or other professional businessman to other wholesalers (wholesale businesses) and related subordinated services. In general, it is the sale of goods in bulk to anyone, either a person or an organization, other than the end consumer of that merchandise. Wholesaling is buying goods in bulk quantity, usually directly from the manufacturer or source, at a discounted rate. The retailer then sells the goods to the end consumer at a higher price making a profit.

The consumption and production of marketed food are spatially separated. Production is primarily in rural areas while consumption is mainly in urban areas.

Technical Architecture:



Project Flow

To accomplish this, we have to complete all the activities listed below,

- Define Problem / Problem Understanding
 - Specify the business problem
 - Business requirements
 - Literature Survey
 - Business Impact.
- Data Collection & Extraction
 - Collect the dataset
 - Connect Dataset with Tableau
- Data Preparation
 - Prepare the Data for Visualization
- Data Visualizations
 - No of Unique Visualizations
- Dashboard
 - Responsive and Design of Dashboard
- Story
 - No of Scenes of Story
- Performance Testing
 - Amount of Data Rendered to Tableau
 - Utilization of Data Filters
 - No of calculation fields
 - No of Visualizations/ Graphs
- Publishing
 - Publishing Dashboard & Story to Tableau Public
- Project Demonstration & Documentation
 - Record explanation Video for project end to end solution

- Project Documentation-Step by step project development procedure

Milestone 1: Define Problem / Problem Understanding

Activity 1: Specify the business problem

Refer Project Description

Activity 2: Requirements

Analyzing spending behavior and identifying opportunities for growth can provide crucial market insights for businesses looking to optimize their strategies and increase market share.

Pricing Optimization: Analyze the relationship between pricing and spending behavior to identify pricing strategies that maximize revenue while maintaining customer satisfaction.

Purchase Patterns: Analyze the frequency and timing of customer purchases to identify seasonal trends or patterns that can guide inventory management and marketing campaigns.

Competitor Analysis: Compare your spending behavior data with competitors to understand your market position, pricing strategies, and areas where you can gain a competitive advantage.

For this Created KPI's and interactive Visualizations and Dashboard and story Board to bring clean and deep understanding of the data.

Activity 3: Literature Survey

A literature survey is a method of researching existing literature and studies related to a specific topic. In the context of Measuring Success in Talent Management, a literature survey would involve reviewing studies and articles that have been published on the topic of Wholesaler a customer. The literature survey would include sources such as academic journals, industry reports, and online articles. It would aim to identify key performance indicators (KPIs) and metrics that are commonly used to measure wholesaler customers. The literature survey would also explore any existing research on The Tableau HR

Scorecard: Measuring Success in Talent Management specifically, and would aim to identify any unique challenges.

Activity 4: Business Impact

It shows the information about the data and shows the weak regions and channels and helps to improve the weakness and helps where to improve. By this the wholesaler makes plans to transport the goods and where to transport more goods. And what type of goods are selling more in which region and channel.

Social Impact:

- Personalization and Targeted Marketing: With insights from spending behavior analysis, businesses can personalize marketing efforts and promotions. This targeted marketing approach reduces unnecessary advertising noise and enhances the relevance of promotional messages for consumers.
- Economic Growth and Job Creation: As businesses identify growth opportunities and optimize their strategies, they often experience increased revenue and expansion. This can lead to economic growth and job creation, benefiting local communities and contributing to the overall prosperity.

Business Impact:

- Revenue Growth: Leveraging market insights to identify growth opportunities can lead to increased sales and revenue for businesses. Understanding customer preferences and optimizing product offerings can attract more customers and improve customer retention.
- Cost Optimization: Data-driven decision-making allows businesses to allocate resources more efficiently. By identifying underperforming products or unprofitable channels, businesses can optimize costs and improve their bottom line.

Milestone 2: Data Collection & Extraction

Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes and generate insights from the data.

Activity 1: Collect the dataset

Please use the link to download the dataset: [Link](#)

Activity 1.1: Understand the data

Data contains all the meta information regarding the columns described in the CSV file. we have provided CSV file:

Wholesaler Customer Data.Csv

Column Description

Region: It is dimension Data in Wholesaler data.

Channel: It is also a Dimension data.

Fresh: It is a product in data and it measures the selling quantity of fresh.

Milk: It is measured and shows the quantity of selling Milk.

Grocery: combination of products used to Prepare food comes under measure.

Frozen: food that has been subjected to rapid freezing and it is measured.

Detergent paper: It is also a measure in the wholesaler customer data.

Delicatessen: It is also one of the products sold by the wholesaler.

Activity 2:Connecting Dataset to Tableau.

<https://drive.google.com/file/d/1MHcMUf8rMGUI6jhBKHZudNzi6dh6LK8k/view?usp=sharing>

Milestone 3: Data Preparation

Activity 1: Prepare the Data for Visualization

Data modules are containers that describe data and rules for combining and shaping data to prepare it for analysis and visualization in Tableau. Data module sources. Data modules can be based on data servers, packages, uploaded files, data sets, and other data modules.

Milestone 4: Data Visualization

Data visualization is the process of creating graphical representations of data in order to help people understand and explore the information. The goal of data visualization is to make complex data sets more accessible, intuitive, and easier to interpret. By using visual elements such as charts, graphs, and maps, data visualizations can help people quickly identify patterns, trends, and outliers in the data.

Activity 1: No of Unique Visualizations

The number of unique visualizations that can be created with a given dataset. Some common types of visualizations that can be used to analyze the performance and efficiency of a project include bar charts, line charts, heat maps, scatter plots, pie charts, Maps, etc. These visualizations can be used to compare performance, track changes over time, and show distribution, and relationships between variables.

- **Activity 1.1: KPI's**

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- **Activity 1.2: Region Wise Detergent paper and grocery**

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- **Activity 1.3: Region wise Milk**

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- **Activity 1.4: Channel wise frozen and Delicatessen**

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- **Activity 1.5: Region wise Delicatessen and Detergent paper**

https://drive.google.com/file/d/17RWqG5p5l3Y_CoccYdY8A3RABn3DhXX8/view?usp=drive_link

- **Activity 1.6: Channel wise grocery and Detergent paper**

https://drive.google.com/file/d/1VTQfetbncufnVML6qaGEd-BSr2lY1EG8/view?usp=drive_link

- **Activity 1.7: Region Wise Delicatessen**

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Milestone 5: Dashboard

A dashboard is a graphical user interface (GUI) that displays information and data in an organized, easy-to-read format. Dashboards are often used to provide real-time monitoring and analysis of data, and are typically designed for a specific purpose or use case. Dashboards can be used in a variety of settings, such as business, finance, manufacturing, healthcare, and many other industries. They can be used to track key performance indicators (KPIs), monitor performance metrics, and display data in the form of charts, graphs, and tables.

Activity :1- Responsive and Design of Dashboard.

Once you have created views on different sheets in Tableau, you can pull them into a dashboard.

Explanation Video:

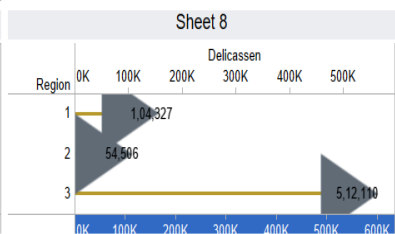
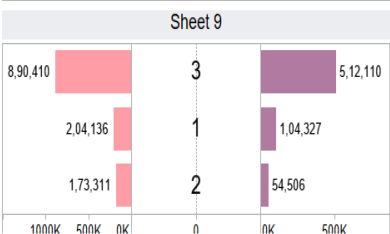
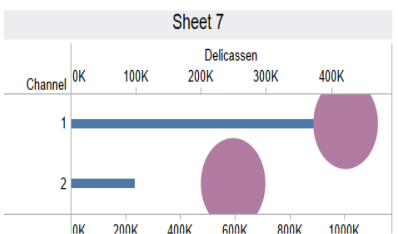
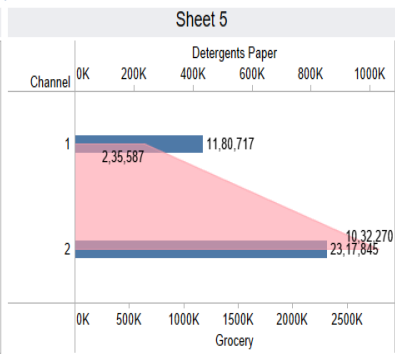
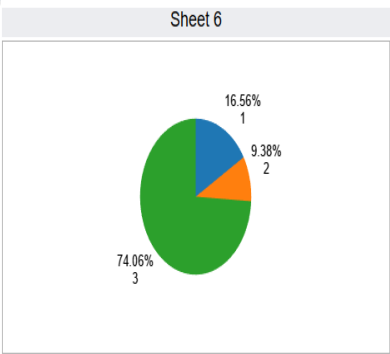
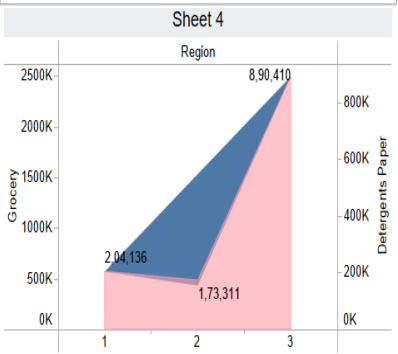
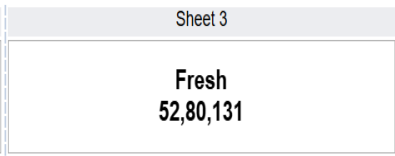
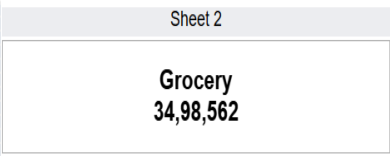
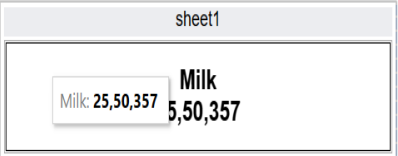
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Wholesaler Customer Analysis

Measure .. Detergents Pa.. Grocery

Region 1 2 3

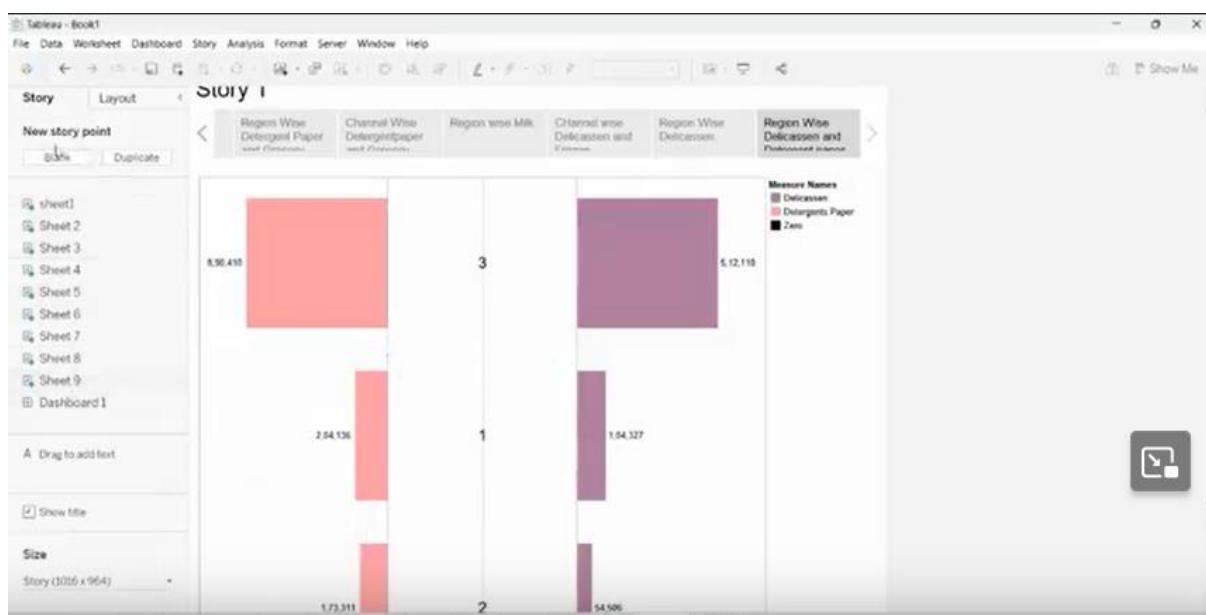
Milk 25,50,357



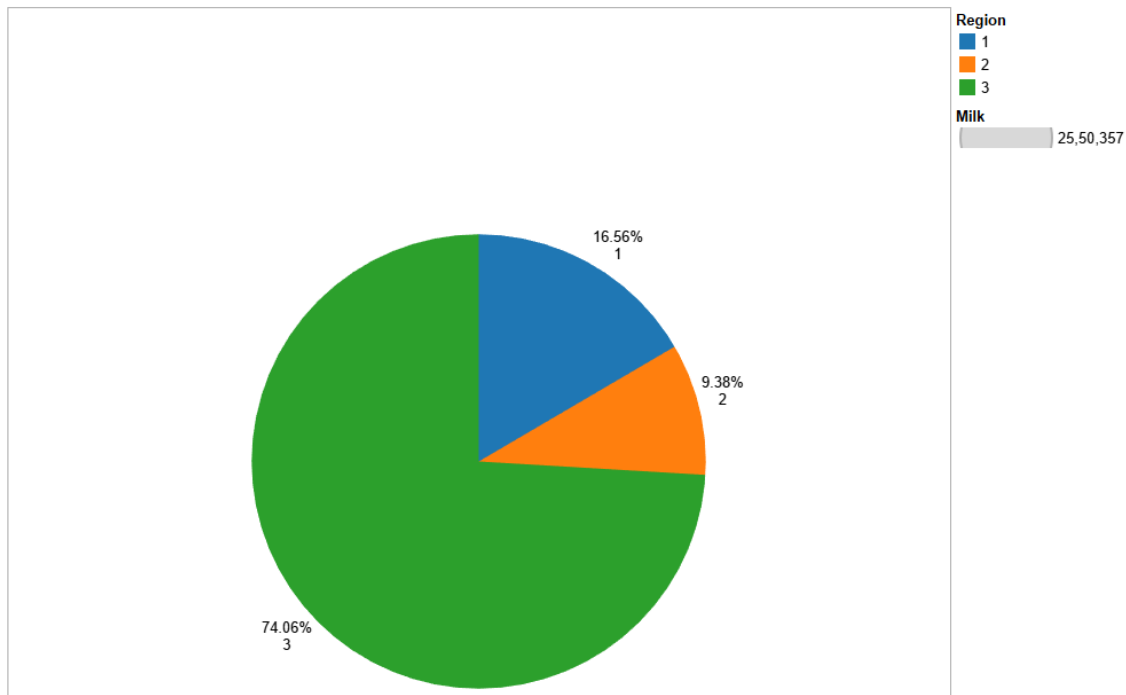
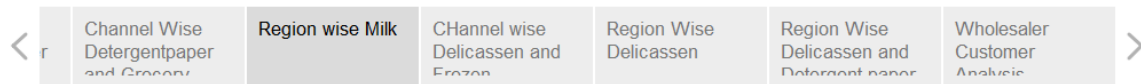
Milestone 6: Story

A data story is a way of presenting data and analysis in a narrative format, with the goal of making the information more engaging and easier to understand. A data story typically includes a clear introduction that sets the stage and explains the context for the data, a body that presents the data and analysis in a logical and systematic way, and a conclusion that summarizes the key findings and highlights their implications. Data stories can be told using a variety of mediums, such as reports, presentations, interactive visualizations, and videos

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Story 1

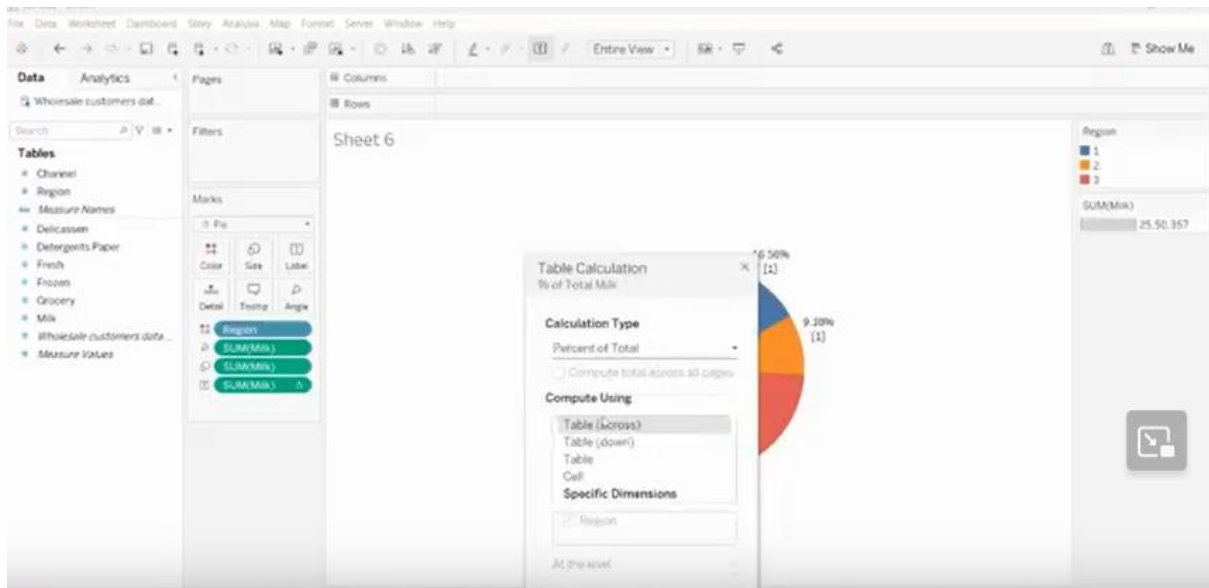


Milestone 7: Performance Testing

Activity 1: Amount of Data Rendered to Tableau

- The amount of data that is rendered to a Tableau depends on the size of the dataset

Activity 2: Utilization of Data Filters



Activity 3: No of Calculation Fields

- # Delicassen
- # Detergents Paper
- # Fresh
- # Frozen
- # Grocery
- # Milk
- # Zero
- # Wholesale customers data ...
- # Measure Values

Activity 4: No of Visualizations/ Graphs

1. KPI
2. Region Wise Detergent paper and grocery
3. Region wise Milk
4. Channel wise frozen and Delicassen
5. Region wise Delicassen and Detergent paper

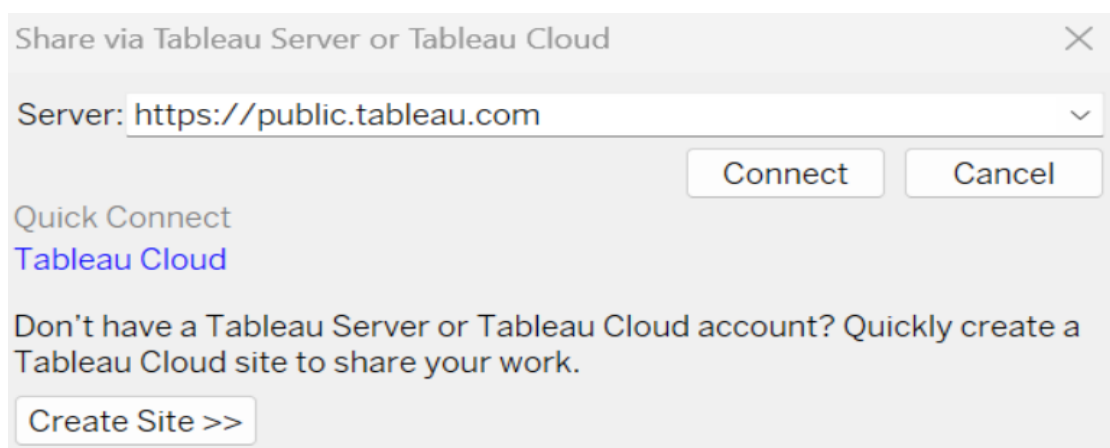
6. Channel wise grocery and Detergent paper
7. Region Wise Delicassen

Milestone 8: Publishing

Publishing helps us to track and monitor key performance metrics, to communicate results and progress. help a publisher stay informed, make better decisions, and communicate their performance to others.

Publishing dashboard and reports to tableau public

Step 1: Go to Dashboard/story, click on share button on the top ribbon



Share via Tableau Server or Tableau Cloud

Server:

Quick Connect
[Tableau Cloud](#)

Don't have a Tableau Server or Tableau Cloud account? Quickly create a Tableau Cloud site to share your work.

Give the server address of your tableau public account and click on connect.

Step 2: Once you click on connect it will ask you for tableau public user name and password



The image shows the Tableau Public login interface. At the top is the Tableau Public logo, which consists of a stylized 't' followed by 'ableau' and 'public' with three small '+' signs. Below the logo are two input fields: 'Email' and 'Password'. Under the 'Password' field is an orange 'Sign In' button. Below the button is a small lock icon and the text 'This site is SSL encrypted'. At the bottom, there are three links: 'Forgot your password?', 'Don't have a profile yet?', and 'Create one now for free'.

Once you login into your tableau public using the credentials, the particular visualization will be published into tableau public

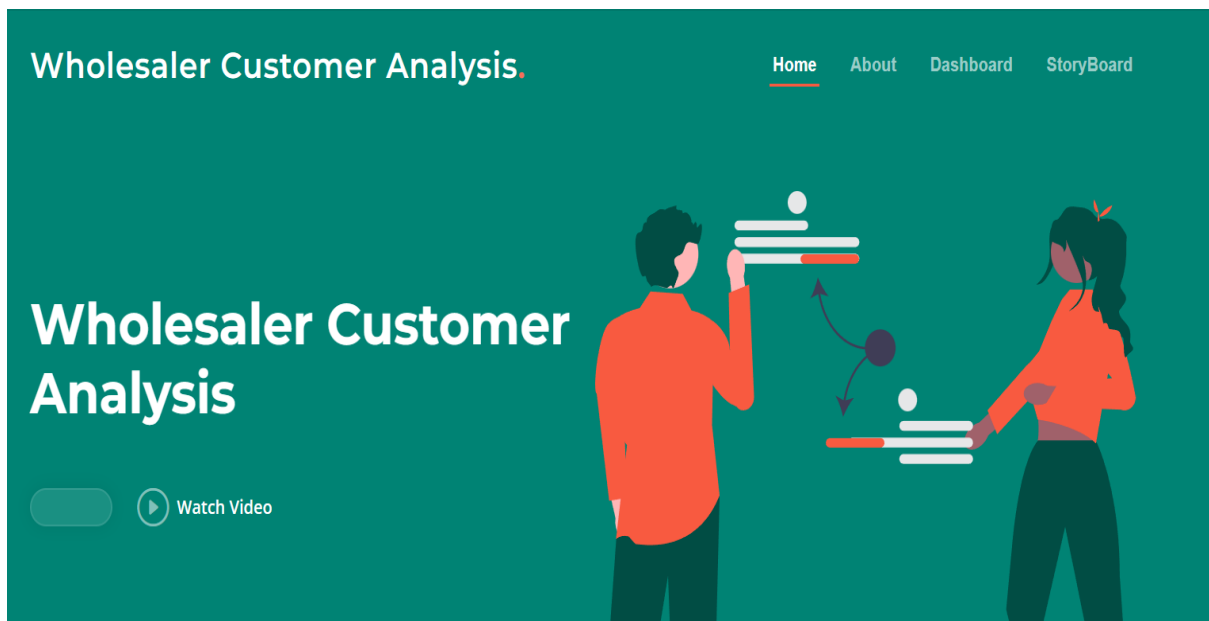
Note: While publishing the visualization to the public, the respective sheet will get published when you click on share option.

Explanation Video:

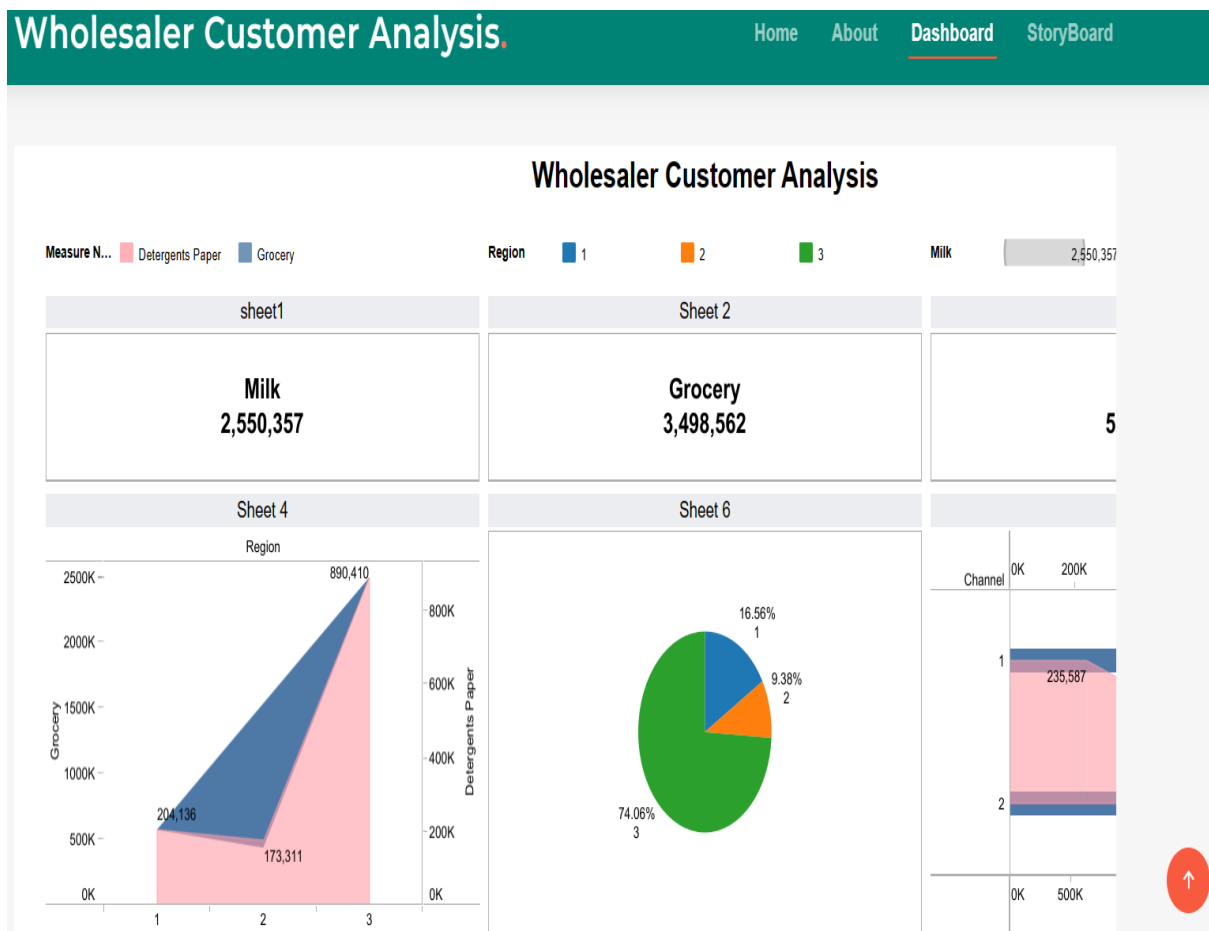
https://drive.google.com/file/d/14em_9n43qaP0wfo4DqMaeyCBkXLCy3f6/view?usp=drive_link

Activity 1: Dashboard and Story embed with UI With Flask

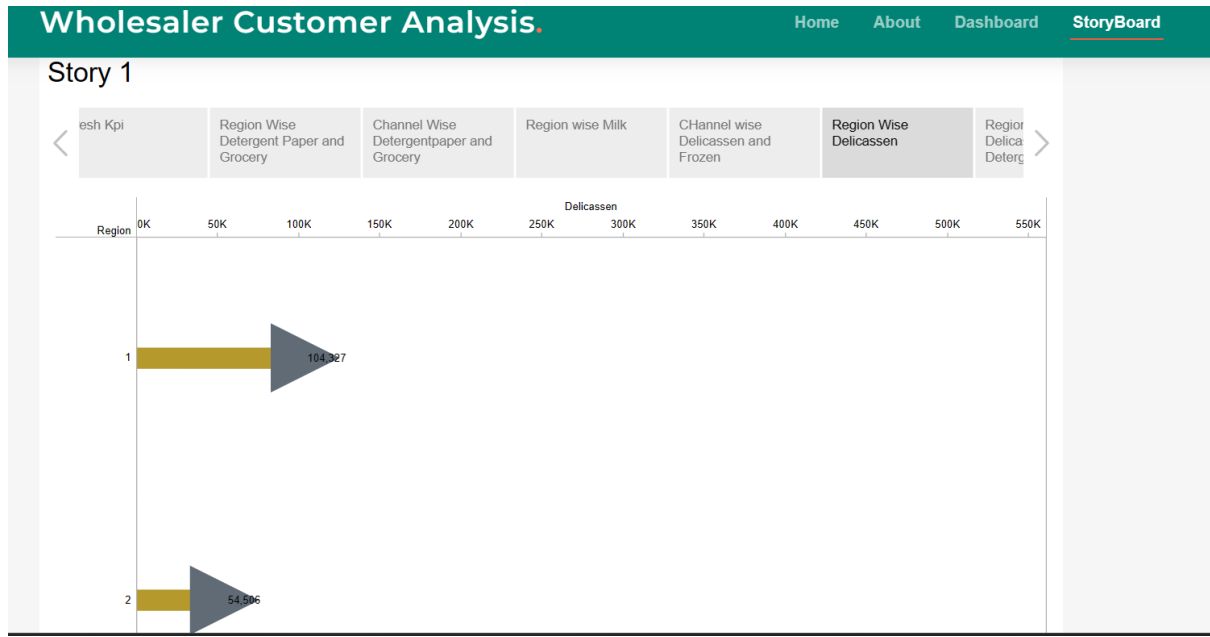
a.) Home Page:



Dashboard page :-



Storyboard page: -



Milestone 9: Project Demonstration & Documentation

Below mentioned deliverables to be submitted along with other deliverables

Activity 1:- Record explanation Video for project end to end solution

Activity 2:- Project Documentation-Step by step project development procedure