

GOVERNMENT ARTS COLLEGE (AUTONOMOUS)

COIMBATORE -641 018

DEPARTMENT OF MATHEMATICS

**NAANMUDHALVAN COURSE: DATA ANALYTICS WITH
TABLEAU**

CLASS : III YEAR B.Sc Mathematics - SEMESTER : 5

PROJECT REPORT

(PROJECT DOCUMENTATION)

NM TEAM NUMBER : TEAM 2

NM TEAM ID :NM2023TMID24919

NM PROJECT TITLE :Estimation-of-Business-Expenses

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Submitted to

SmartBridge Educational Services Pvt. Ltd.

Estimation of Business Expenses

INTRODUCTION:

- **OVERVIEW:**

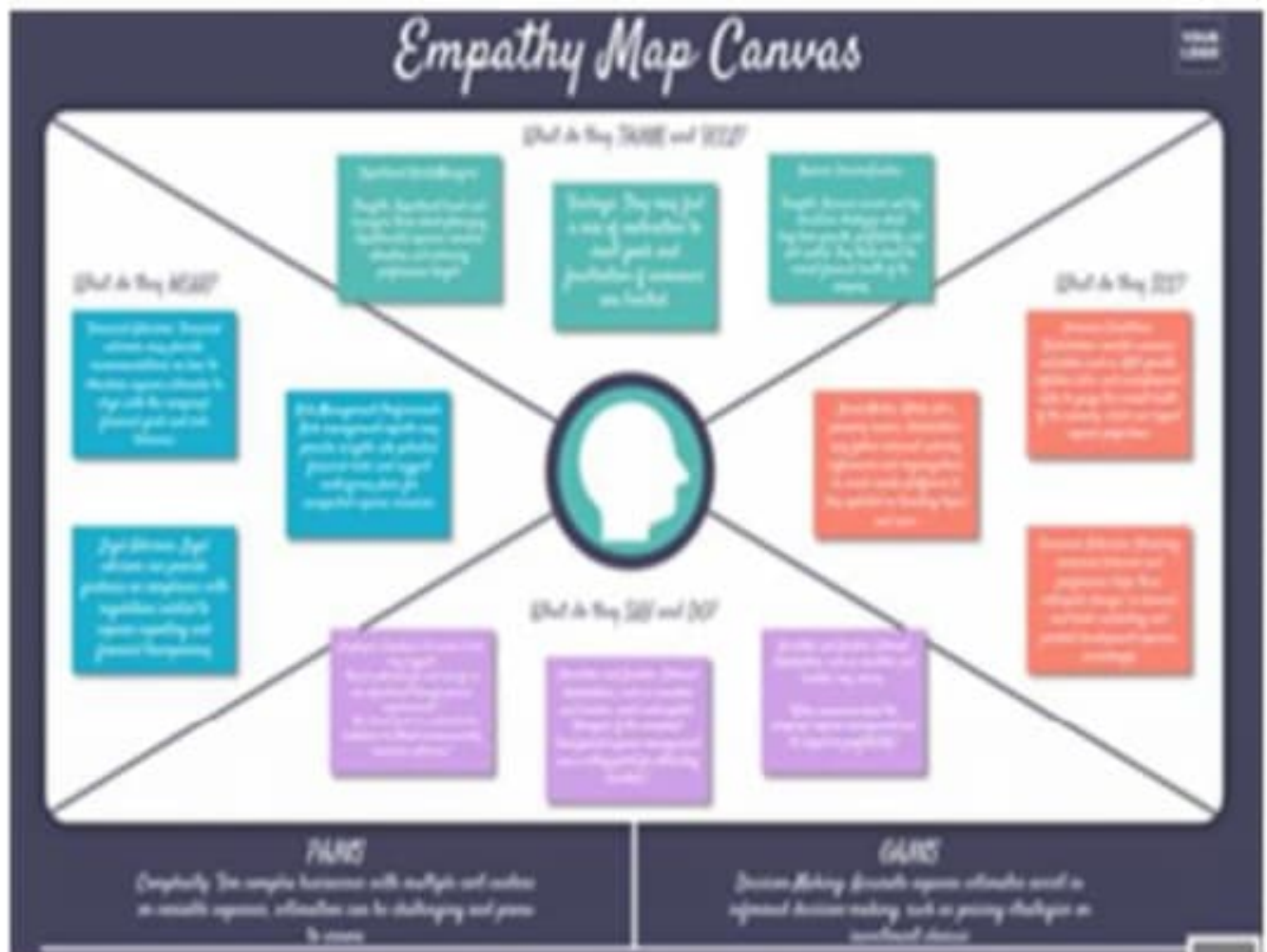
This report delves into the fascinating realm of business expenses and provides a visual exploration of the various expenditures incurred by different businesses. It showcases the distribution of expenses, identifies key optimization or concern. The visual representations allow for intuitive analysis, facilitating a deeper understanding of expenditure patterns and their implications for business performance.

- **PURPOSE:**

Decision-makers, financial analysts, and stakeholders can gain valuable insights into the financial health of businesses, identify areas of inefficiency or opportunity, and make informed decisions to optimize resources and drive growth. To Extract the Insights from the data and put the data in the form of visualizations, Dashboards and Story we employed Tableau tool.

Problem Definition & Design Thinking:

Empathy map



IDEATION & BRAINSTORMING MAP:

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CREATIVE MIND MAP



Find out what your
product is worth with our
map

Milestone 1: Define Problem / Problem Understanding:

Activity 1: Specify the business problem:

- ***Refer Project Description.***

Activity 2: Business requirements:

- ***The primary business requirements for this report are to visualize and analyze business expenses, provide industry-specific insights, identify cost drivers, highlight outliers, and offer interactive functionality.***
- ***Stakeholders need a visual representation of expenses to compare and analyze spending patterns across different businesses and industries.***
- ***Additionally, it should flag any outliers or anomalies for further investigation.***

Activity 3: Literature Survey:

- *Cost drivers were a significant focus in the literature survey, with researchers extensively investigating the factors influencing business expenses.*
- *The role of technology in expense analysis emerged as a significant theme.*
- *These technologies enable businesses to gain deeper insights into their spending patterns, identify trends, and make data-driven decisions for cost optimization.*

Activity 4: Social or Business Impact.

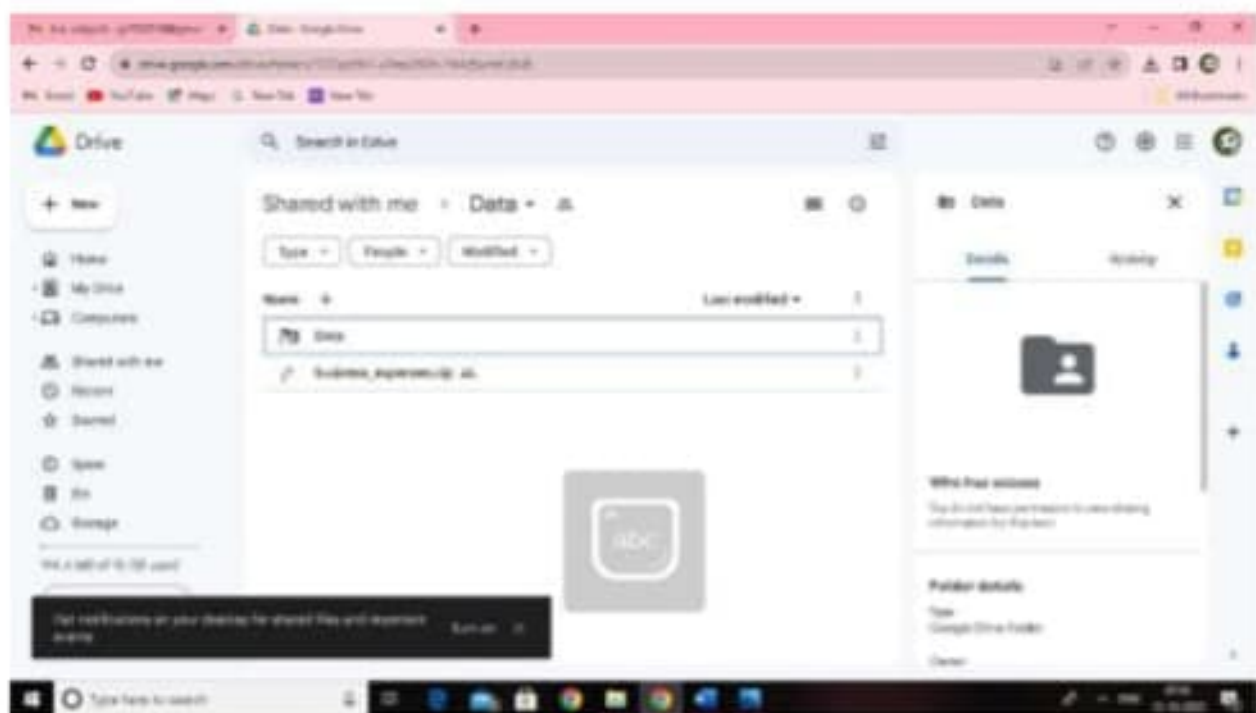
- *Social Impact: The analysis of business expenses and financial management has a significant social impact.*
- *Overall, analysing and managing expenses positively influences economic growth, employment, stakeholder well-being, and social responsibility.*
- *Business Impact: Analysing business expenses has a profound impact on various aspects of business operations. It helps optimize costs, improve profitability, and ensure financial stability.*

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, evaluate outcomes and generate insights from the data.

Activity 1: Downloading the dataset:

RESULT:



Milestone 3: Data Preparation:

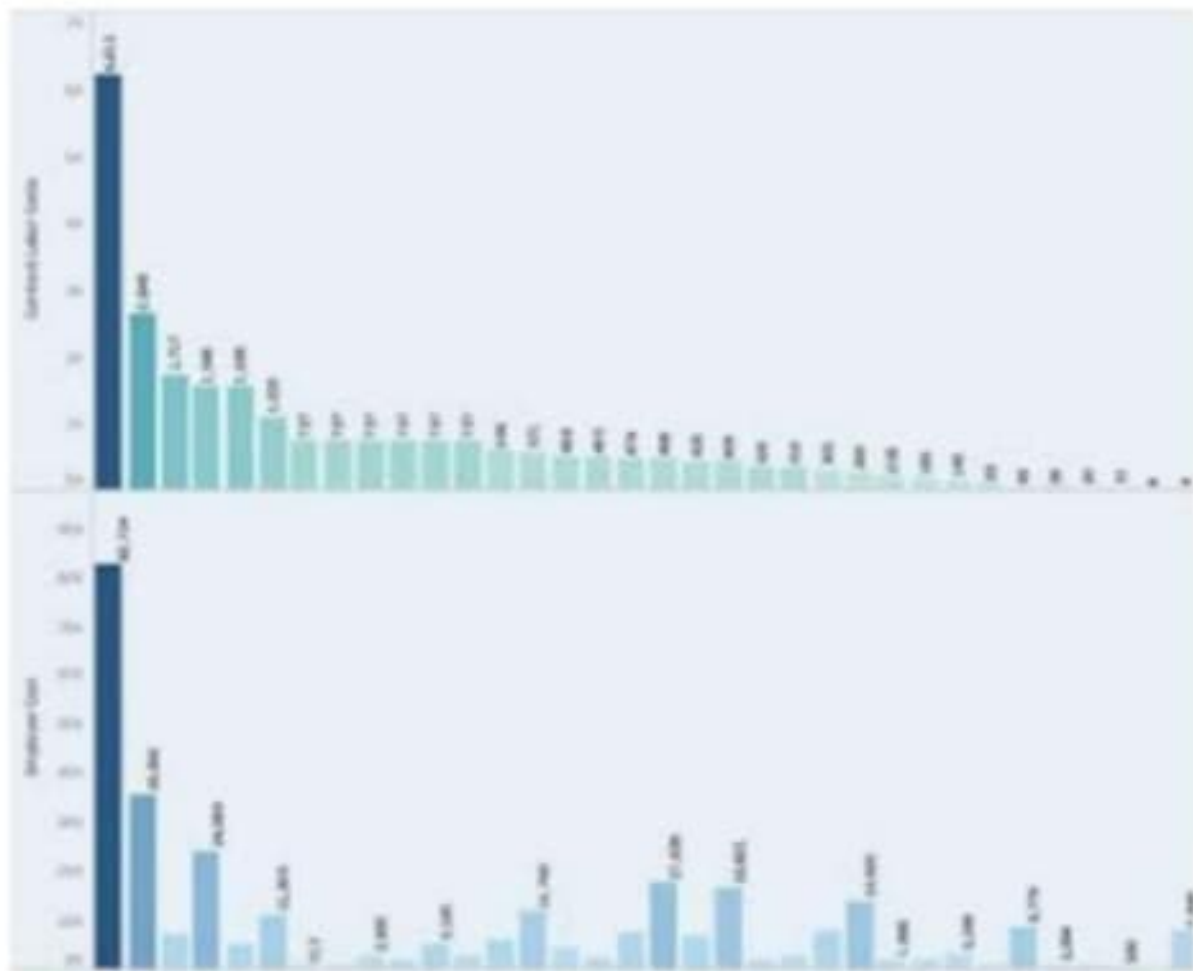
RESULT:



Activity 1: Prepare the Data for Visualization:

- This process helps to make the data easily understandable and ready for creating visualizations to gain insights into the performance and efficiency.***

Milestone 4: Data Visualization:



Milestone 4: Data Visualization

- ***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:

- *Some common types of visualizations that can be used to analyse the performance and efficiency of banks include bar charts, line charts, heat maps, scatter plots, pie charts, Maps etc.*

Milestone 5: Dashboard



Milestone 5: Dashboard

- ❖ *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.*

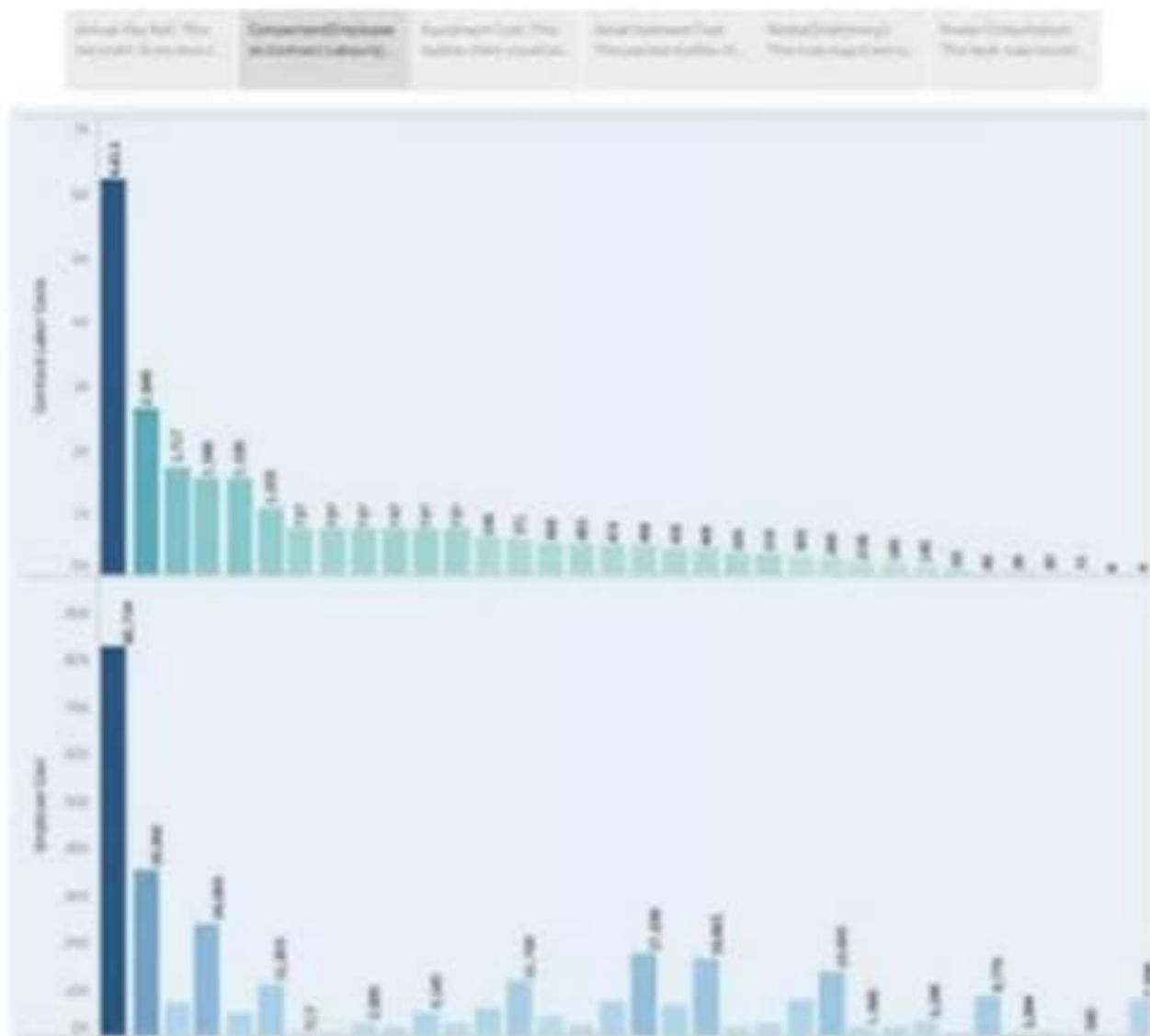
Milestone 6: Story

- ✓ **Data stories can be told using a variety of mediums, such as reports, presentations, interactive visualizations, and videos.**

Activity 1.1 : Story 1



Activity 1.2 : Story 2



APPLICATION:

- *Combining personal and business expense tracking capabilities lures many users to this app — as does the convenience of scanning receipts.*

CONCLUSION:

In conclusion, cost estimation is an important component of project management that ensures projects are finished on schedule and within budget. Since inaccurate cost estimates can have serious financial consequences for businesses, accurate cost estimating is crucial for all stakeholders engaged in a project.