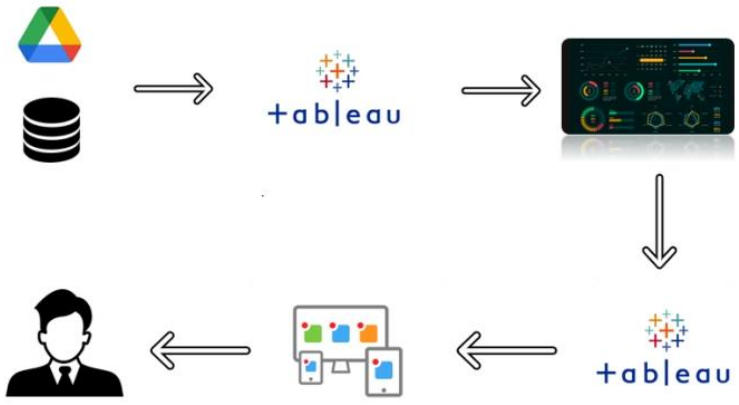
Estimation of Business Expenses

Project Based Experiential Learning Program

Estimation of Business Expenses

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 cost drivers, and highlights areas of potential optimization or concern. The visual representations allow for intuitive analysis, facilitating a deeper understanding of expenditure patterns and their implications for business performance. 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.

Technical Architecture:



Project Flow :

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

- Define Problem / Problem Understanding
    - o Specify the business problem
    - o Business requirements
    - o Literature Survey
    - o Social or Business Impact.

- Data Collection & Extraction
    - o Collect the dataset
    - o Connect Dataset with Tableau

- Data Preparation
    - o Prepare the Data for Visualization

- Data Visualizations
    - o No of Unique Visualizations

- Dashboard
    - o Responsive and Design of Dashboard

- Story
    - o No of Scenes of Story

- Performance Testing
    - o Amount of Data Rendered to DB
    - o No of Calculation Fields
    - o No of Visualizations/ Graphs

- Web Integration
    - o Dashboard and Story embed with UI With Flask

- Project Demonstration & Documentation
    - o Record explanation Video for project end to end solution
    - o 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: 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. The report should facilitate the identification of key cost drivers, enabling stakeholders to understand the primary factors contributing to expenses. 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. Studies highlighted labour costs, material costs, overhead expenses, and marketing expenditures as key drivers. Accurately identifying and tracking these drivers was emphasized as essential for effective expense management and control. The role of technology in expense analysis emerged as a significant theme. Researchers underscored the utilization of advanced data analytics tools and techniques, including data visualization platforms like Tableau, to enhance expense analysis and reporting. These technologies enable businesses to gain deeper insights into their spending patterns, identify trends, and make data-driven decisions for cost optimization.

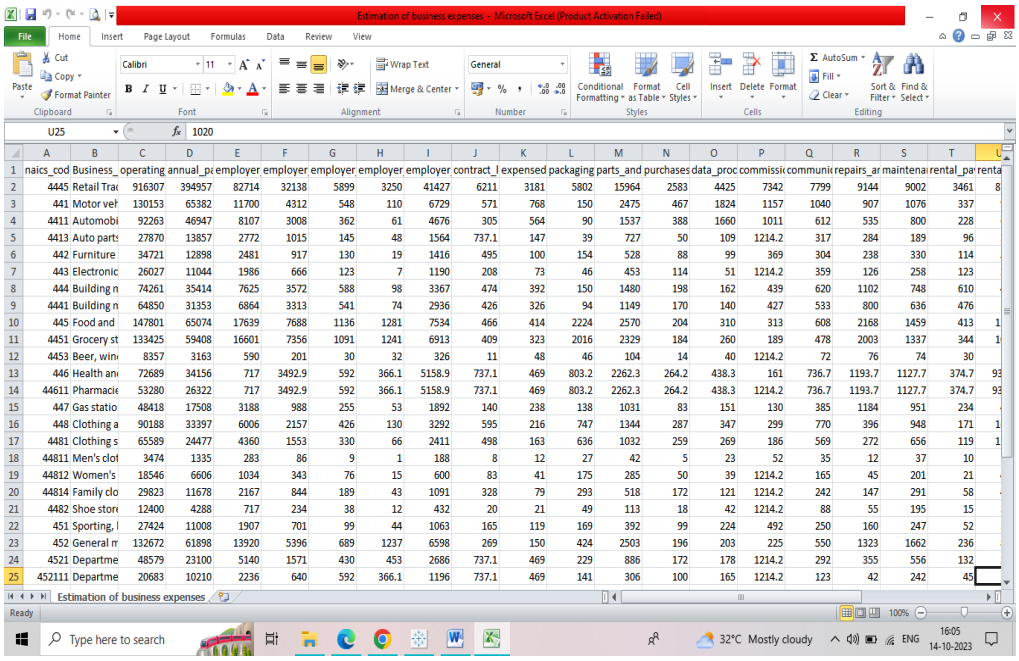
Overall, the literature survey revealed a rich body of knowledge on business expenses, covering cost analysis methodologies, cost drivers, benchmarking approaches, and the role of technology. These insights serve as a foundation for our subsequent analysis and visualization of expenses in this report.

Activity 4: Social or Business Impact.

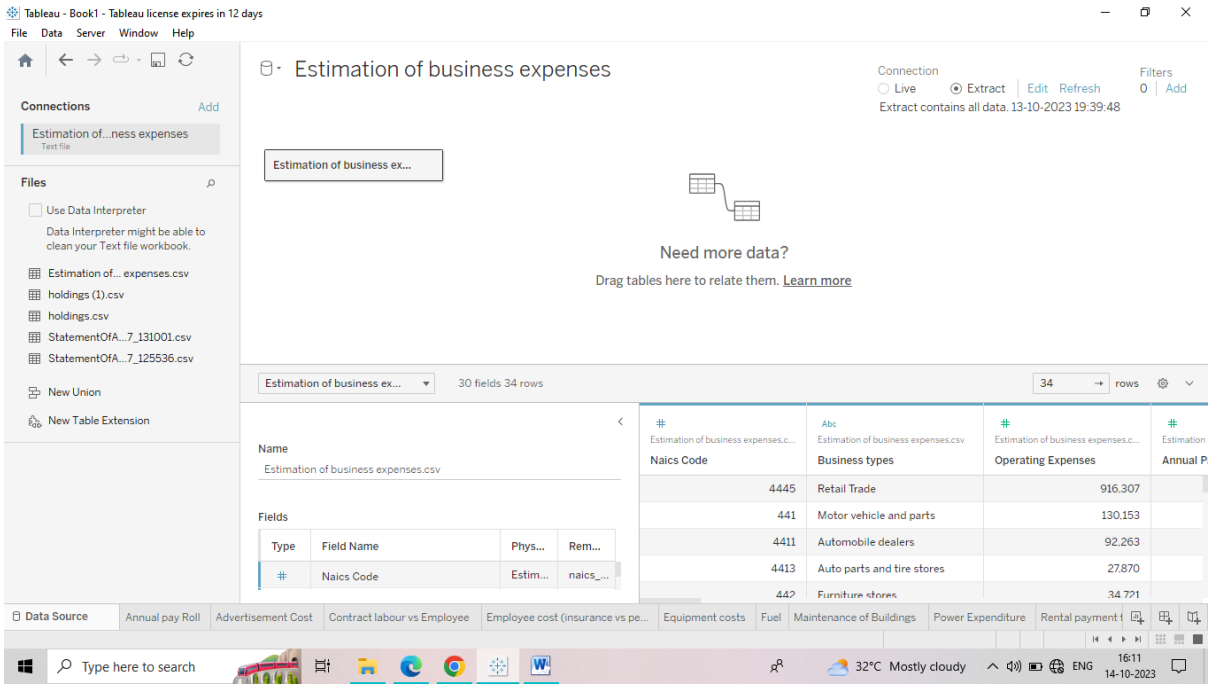
Social Impact: The analysis of business expenses and financial management has a significant social impact. It contributes to economic stability by optimizing costs and fostering long-term sustainability. Effective expense management creates job opportunities and supports the workforce. It allows for better resource allocation, enabling businesses to invest in innovation and community engagement. Responsible expense management aligns with societal expectations and promotes social responsibility. Non-profit organizations benefit from expense analysis, enabling them to maximize their 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. Expense analysis enables businesses to allocate resources effectively, make informed decisions, and create realistic budgets and forecasts. It enhances competitiveness, attracts investors, and mitigates financial risks. By understanding and managing expenses, companies can drive growth, maintain a strong financial position, and make strategic business decisions with confidence.

Downloading the dataset:

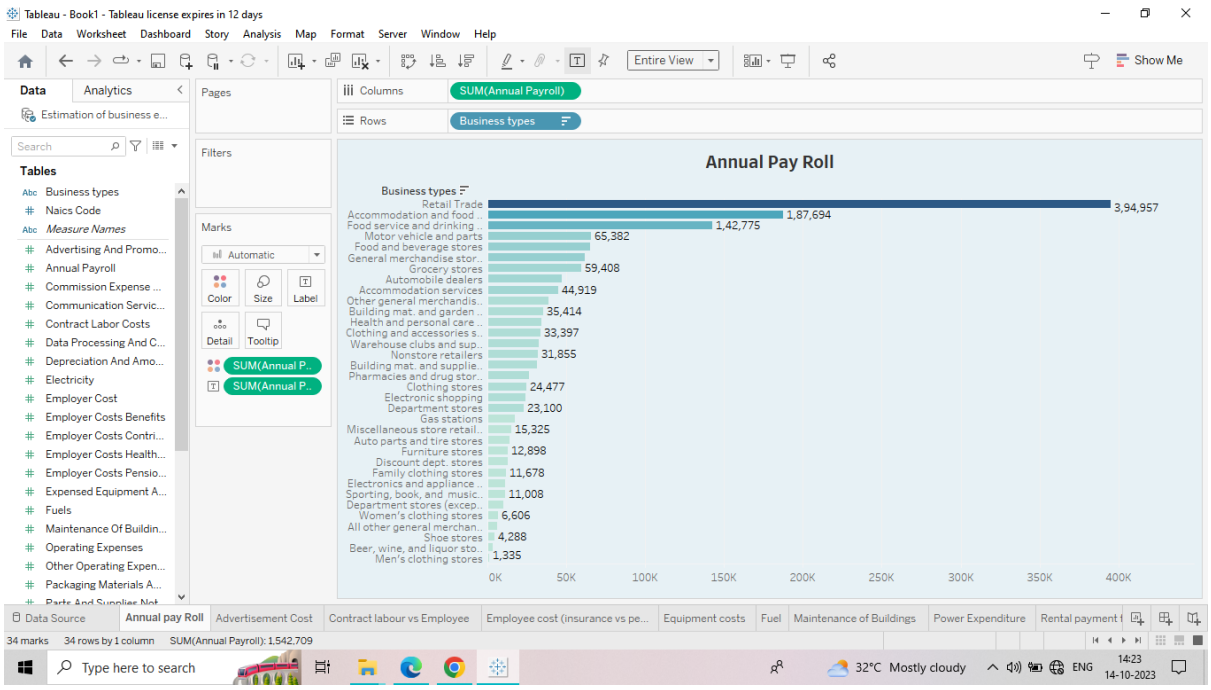


Connect dataset with tableau:

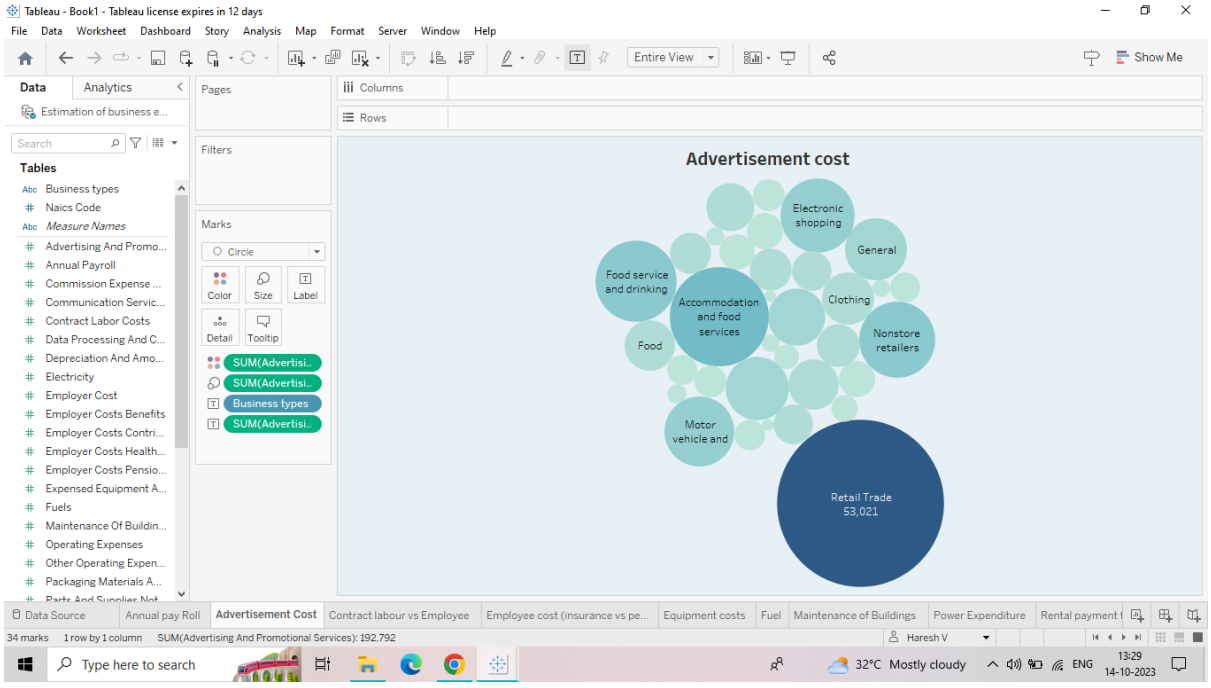


Data visualization:

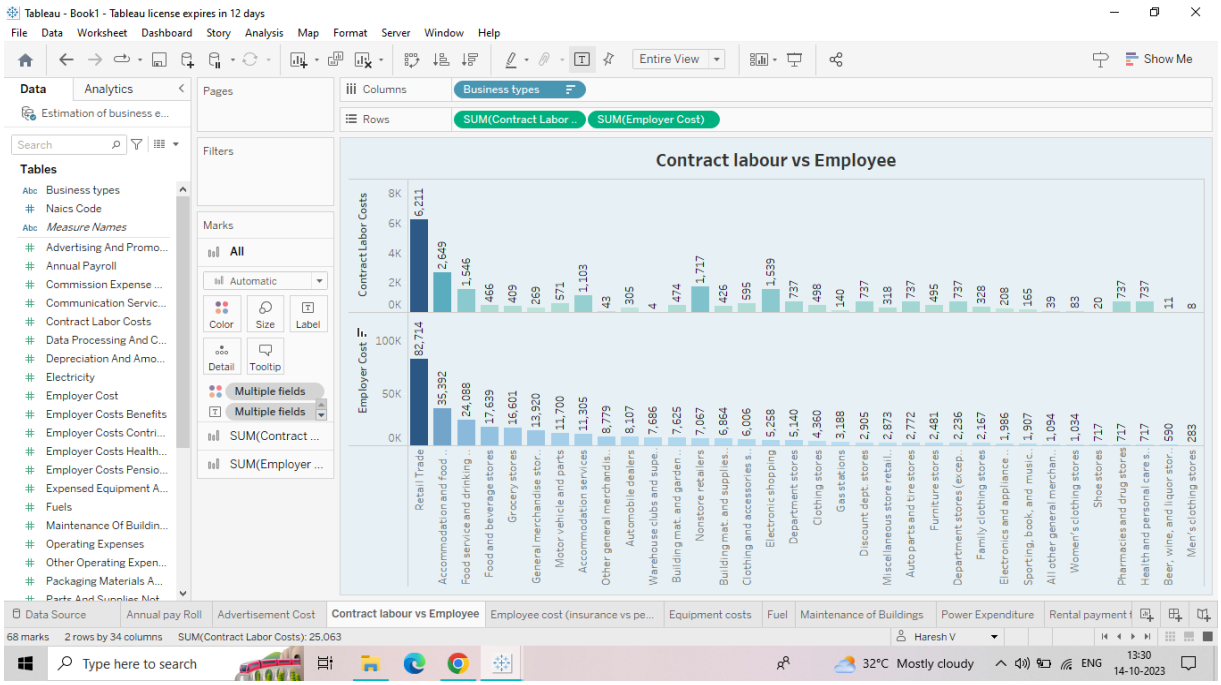
ANNUAL PAY ROLL:



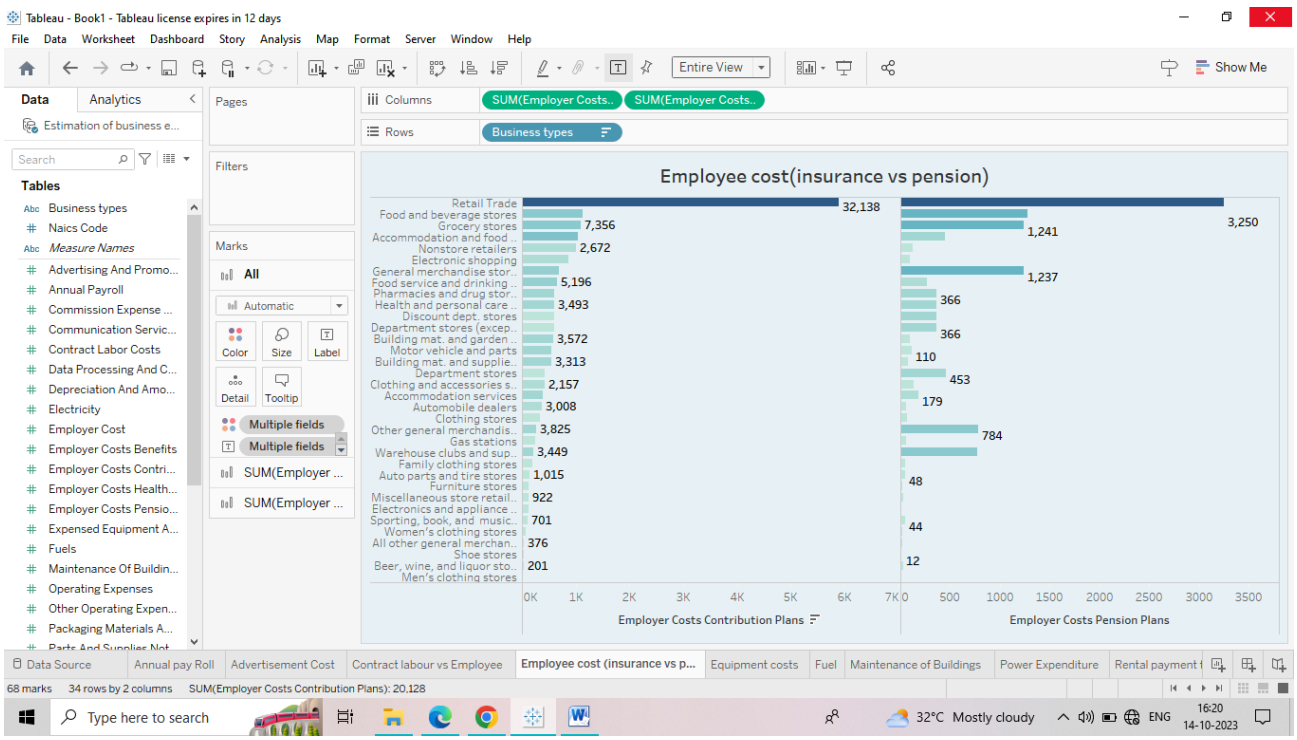
ADVERTISEMENT COST:



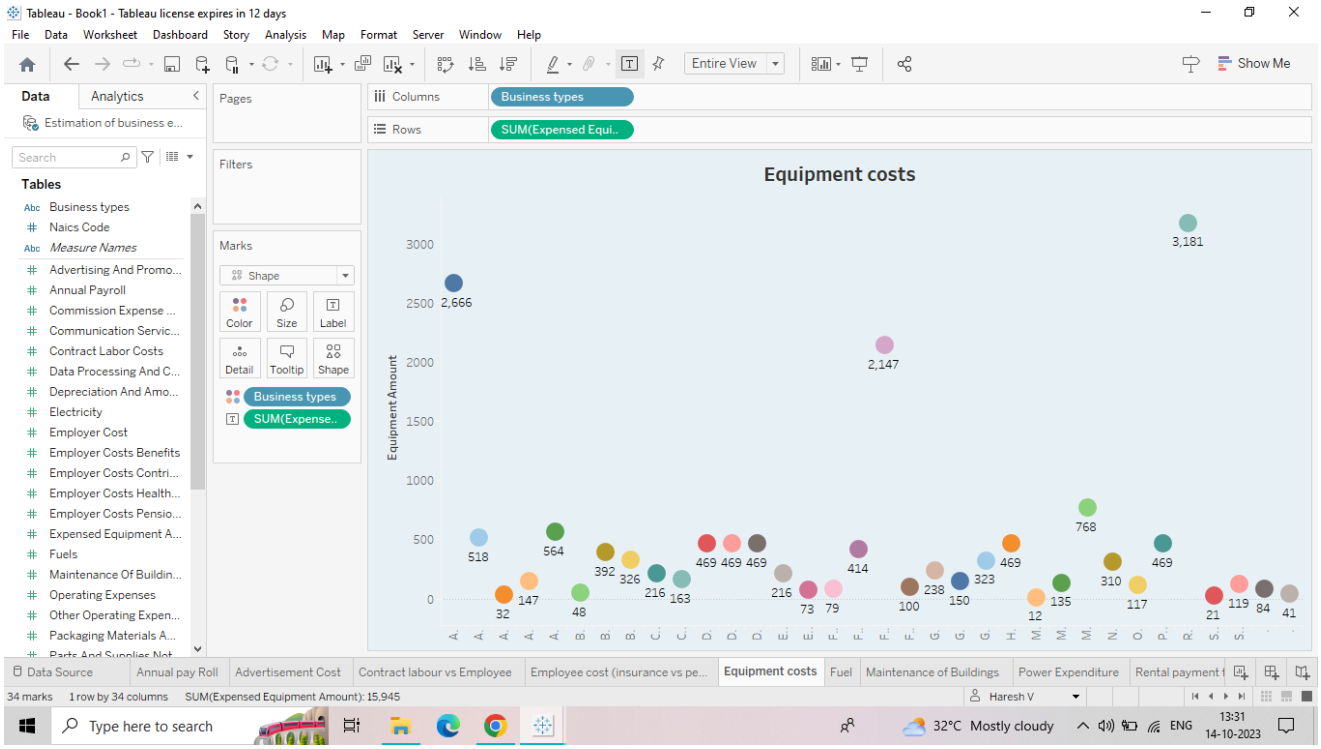
CONRTACT LABOUR VS EMPLOYEE:



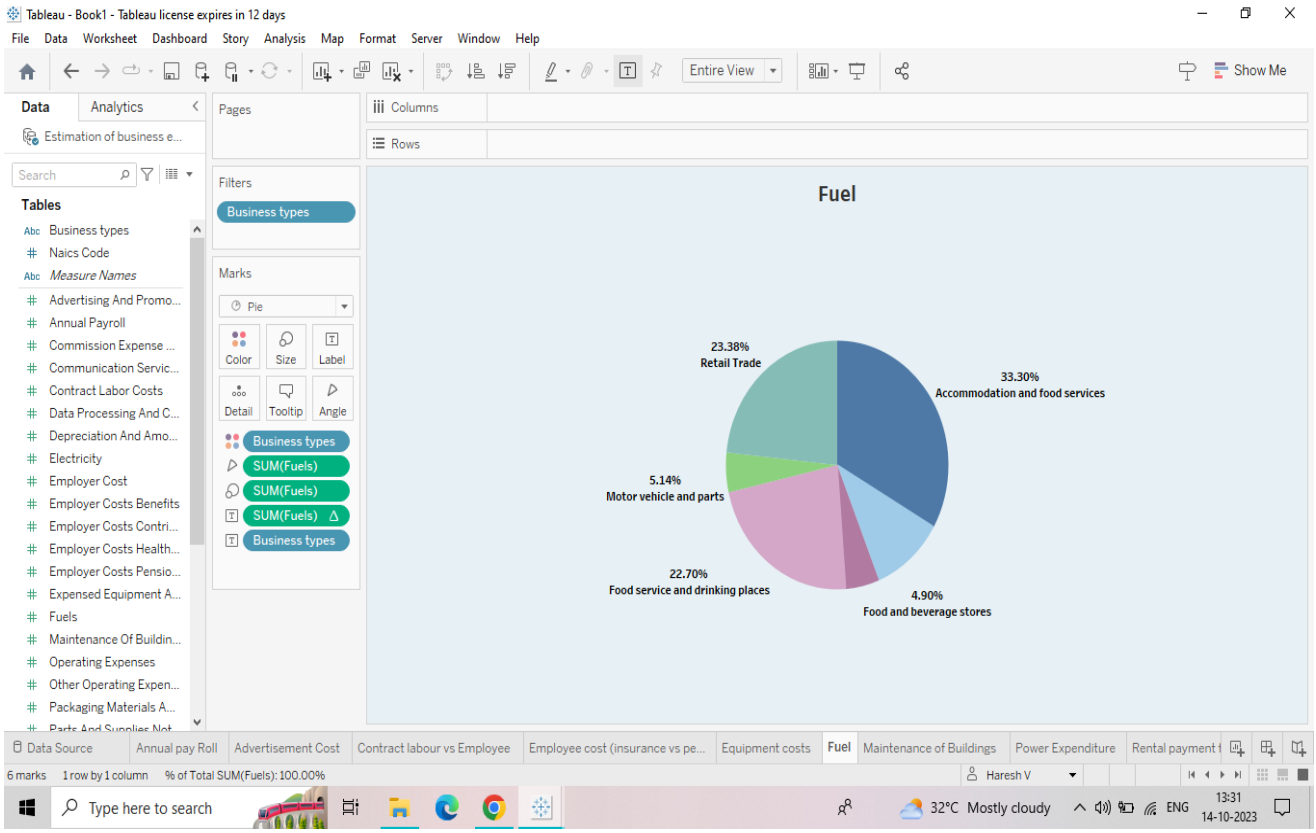
EMPLOYEE COST (INSURANCE VS PENSION):



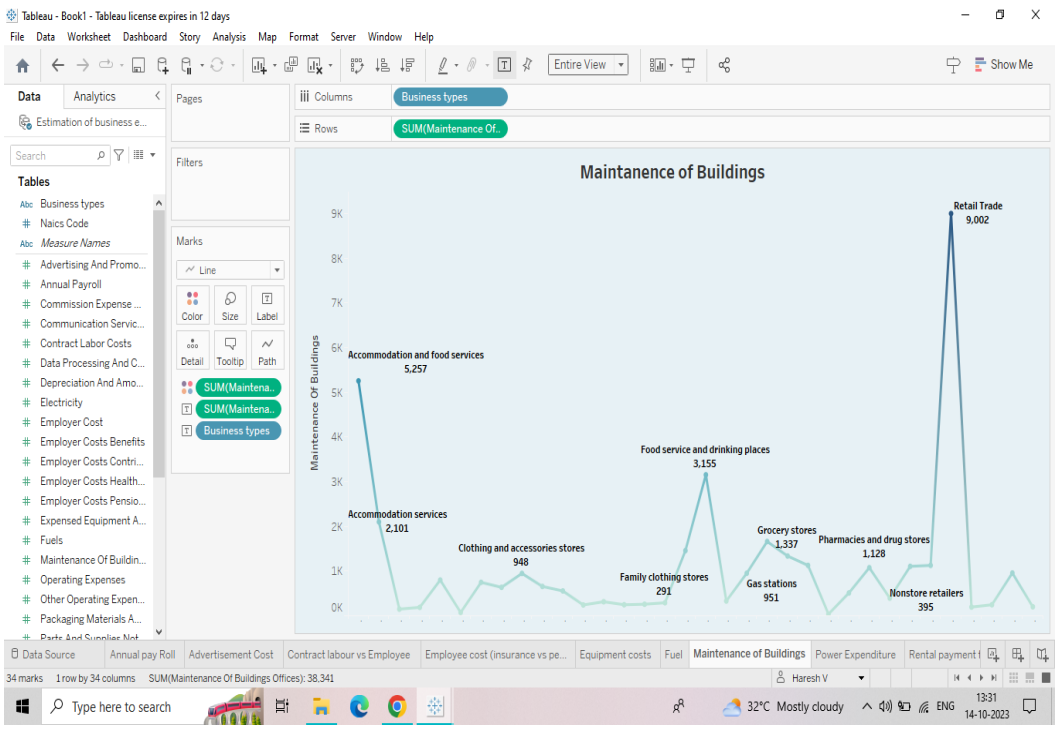
EQUIPMENT COSTS:



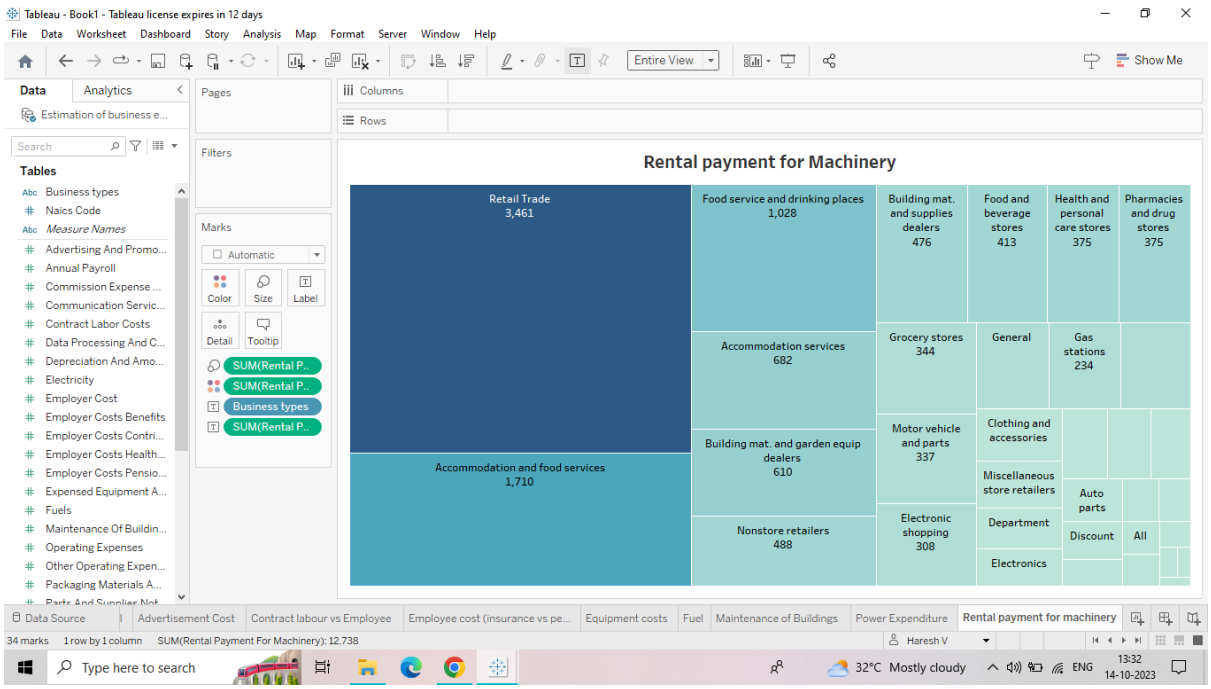
FUEL:



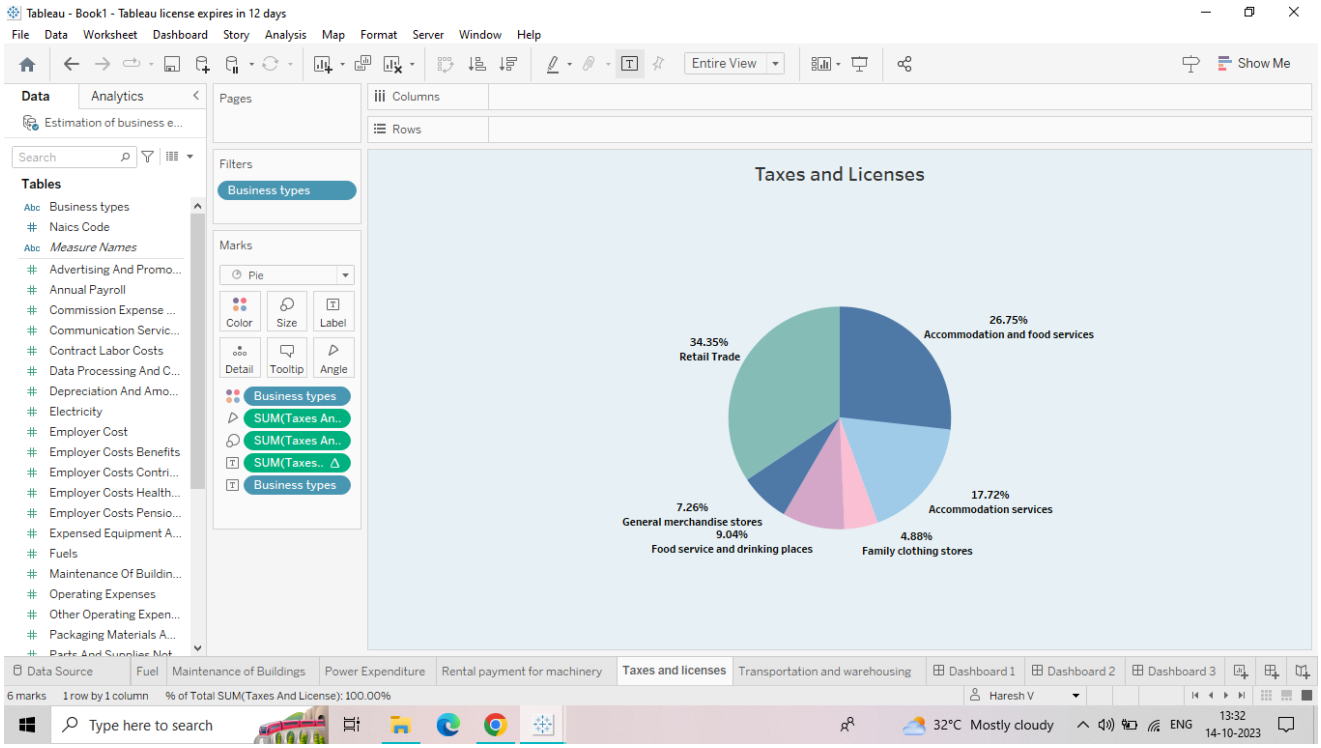
MAINTANENCE OF BUILDINGS:



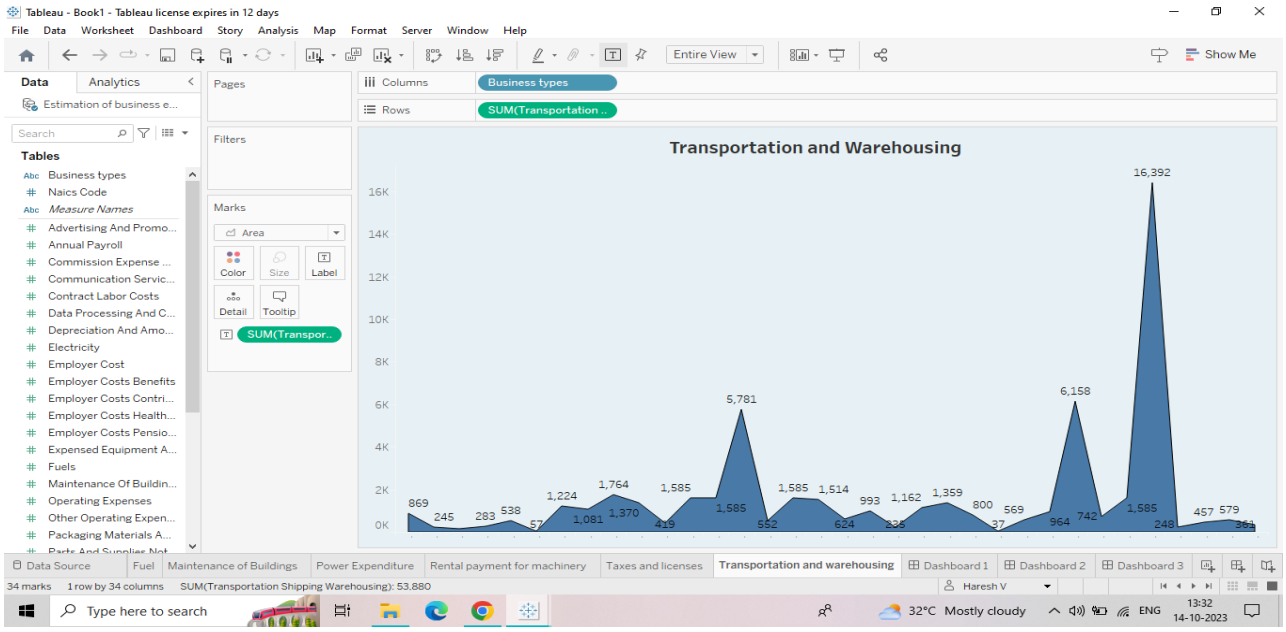
RENTAL PAYMENT FOR MACHINERY:



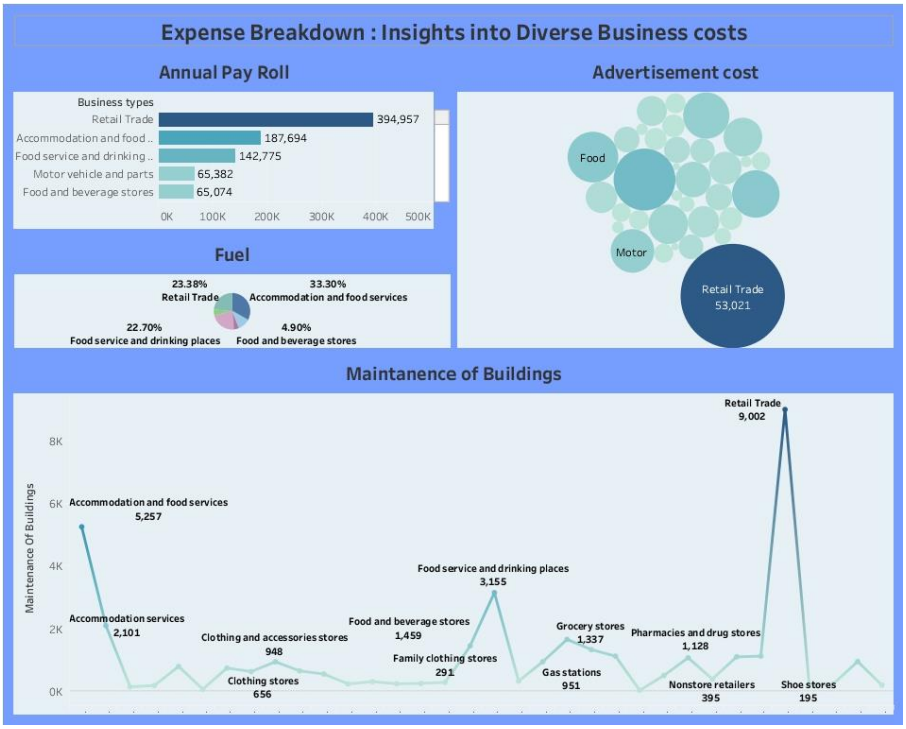
TAXES AND LICENSES:

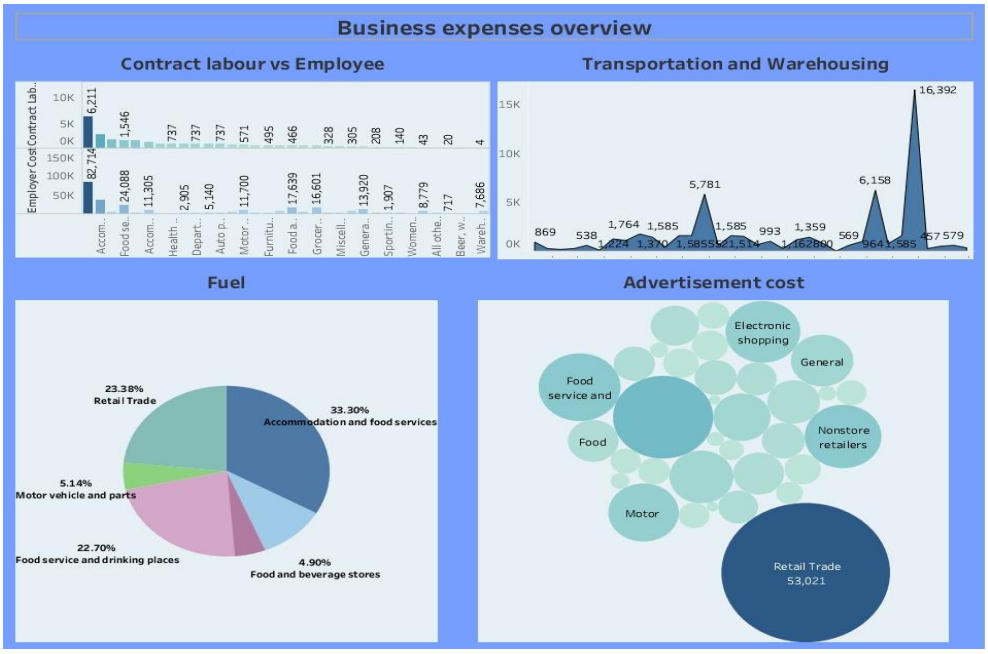


TRANSPORTATION AND WAREHOUSING:



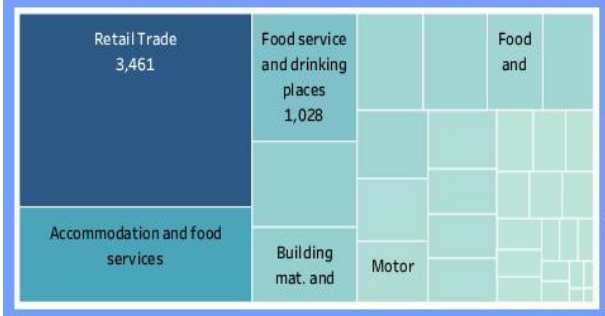
DASHBOARDS:


Expense Breakdown : Insights into Diverse Business costs
Annual Pay Roll
Business types
Retail Trade 394,957
Accommodation and food .. 187,694
Food service and drinking .. 142,775
Motor vehicle and parts 65,382
Food and beverage stores 65,074
0K 100K 200K 300K 400K 500K
Advertisement cost
Food
Motor
Retail Trade 53,021
Fuel
23.38% Retail Trade
33.30% Accommodation and food services
22.70% Food service and drinking places
4.90% Food and beverage stores
Maintanence of Buildings
Maintenance Of Buildings
8K 6K 4K 2K 0K
Accommodation and food services 5,257
Accommodation services 2,101
Clothing and accessories stores 948
Clothing stores 656
Food and beverage stores 1,459
Family clothing stores 291
Food service and drinking places 3,155
Gas stations 951
Grocery stores 1,337
Pharmacies and drug stores 1,128
Nonstore retailers 395
Retail Trade 9,002
Shoe stores 195


Business expenses overview
Contract labour vs Employee
Employer Cost Contract Lab..
10K 5K 0K
150K 100K 50K
6,211 1,546 737 737 737 571 495 466 328 305 208 140 43 20 4
82,714 24,088 11,305 2,905 5,140 11,700 17,639 16,601 13,920 1,907 8,779 717 7,686
Accom... Food se... Accom... Health... Depart... Auto p... Motor... Furnitu... Food a... Grocer... Miscell... Genera... Sportin... Women... All othe... Beer, w... Wareh...
Transportation and Warehousing
15K 10K 5K 0K
869 538 1,764 1,585 5,781 1,585 993 1,359 569 6,158 16,392
1,224 1,370 1,585 1,514 1,162 800 964 1,585 457 579
Fuel
23.38% Retail Trade
33.30% Accommodation and food services
5.14% Motor vehicle and parts
22.70% Food service and drinking places
4.90% Food and beverage stores
Advertisement cost
Electronic shopping
General
Food service and
Food
Nonstore retailers
Motor
Retail Trade 53,021

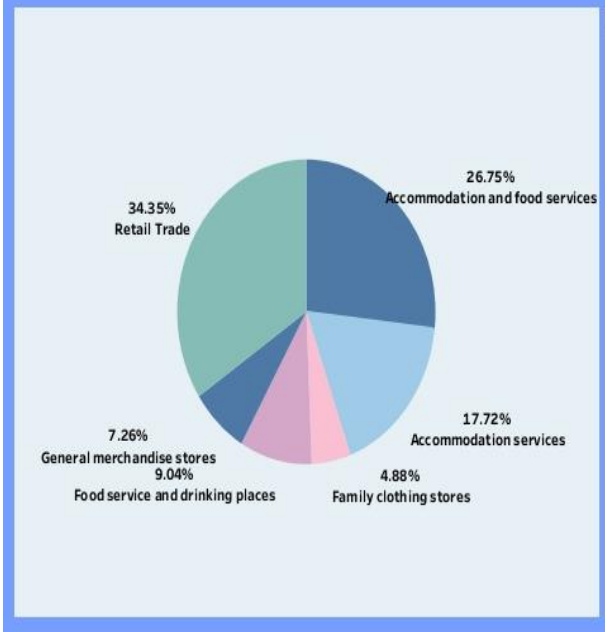
Expense insights

Rental payment for Machinery

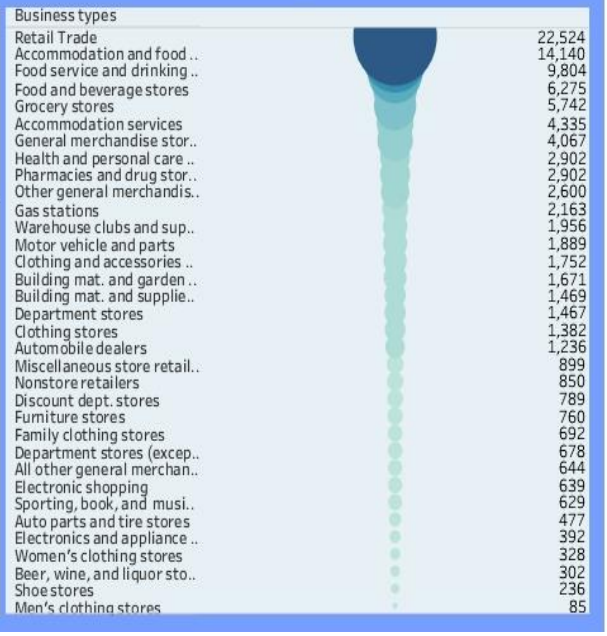


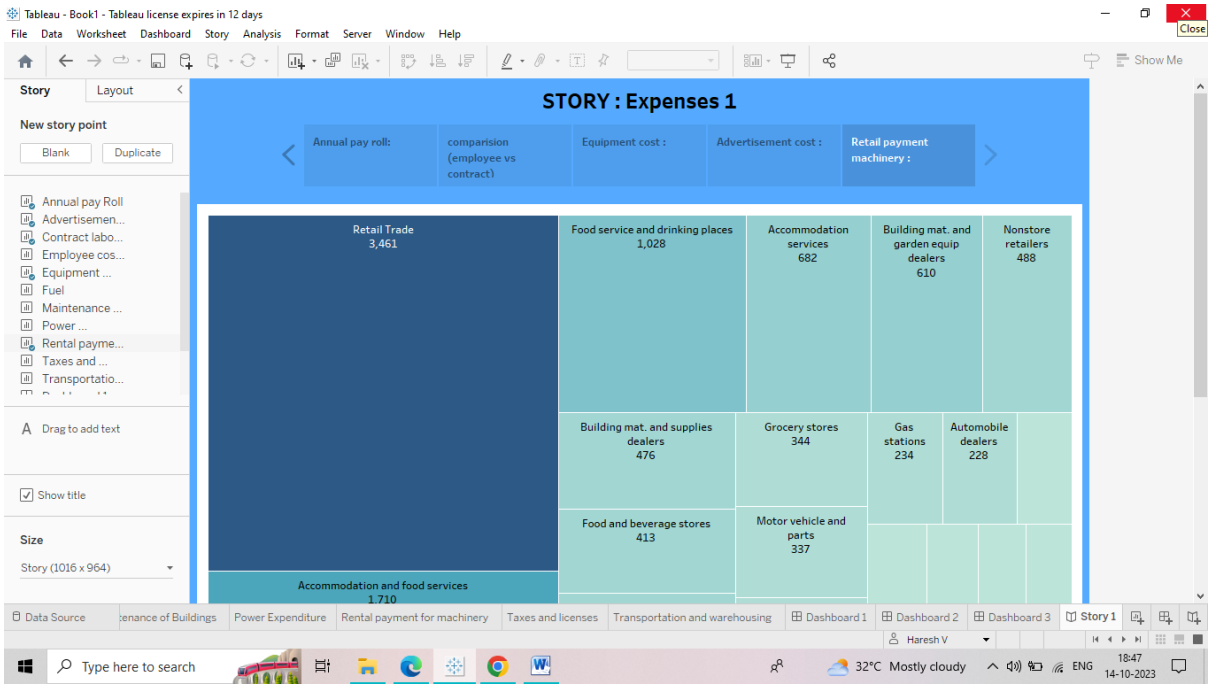
Employee cost(insurance vs pension)

Taxes and Licenses



Power Expenditure





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 Create a document as per the template provided.

THANK YOU