

1.INTRODUCTION:

1.1Overview:

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.

1.2 Purpose:

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.

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.

Social Impact:

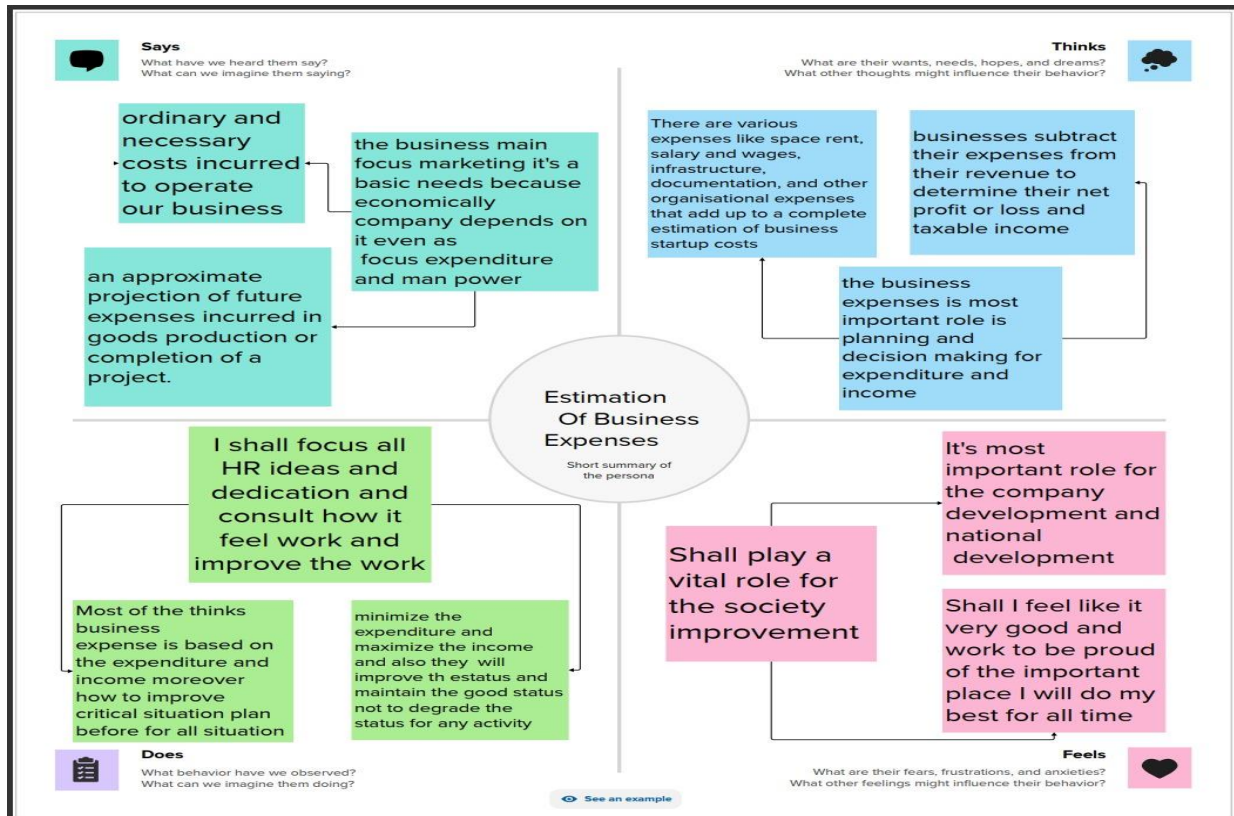
The analysis of business expenses and financial management has a significant social impact. It contributes to economic stability by optimizing costs and fostering long-term sustainability. Effective expense management creates job opportunities and supports the workforce. It allows for better resource 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:

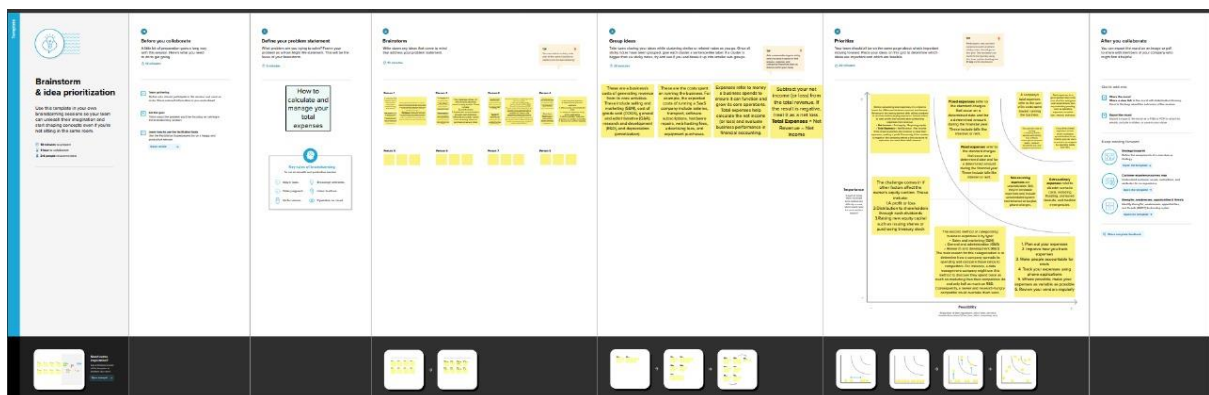
Analysing business expenses has a profound impact on various aspects of business operations. It helps optimize costs, improve profitability, and ensure financial stability. Expense analysis enables

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.

2.1 Empathy Map:

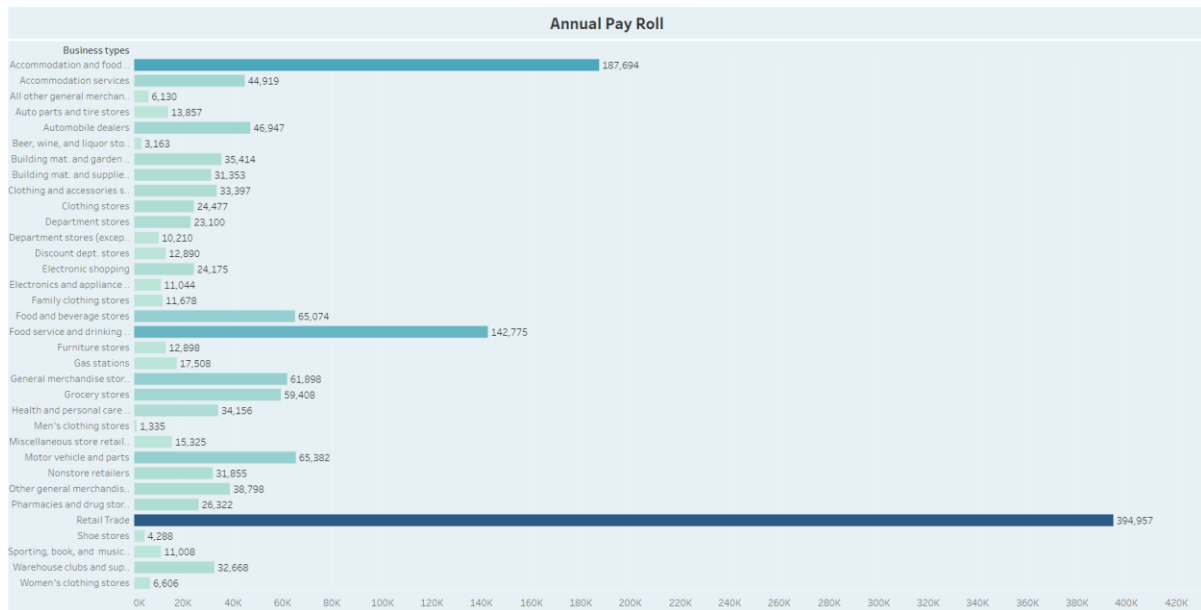


2.2 Brainstroming:



Result:

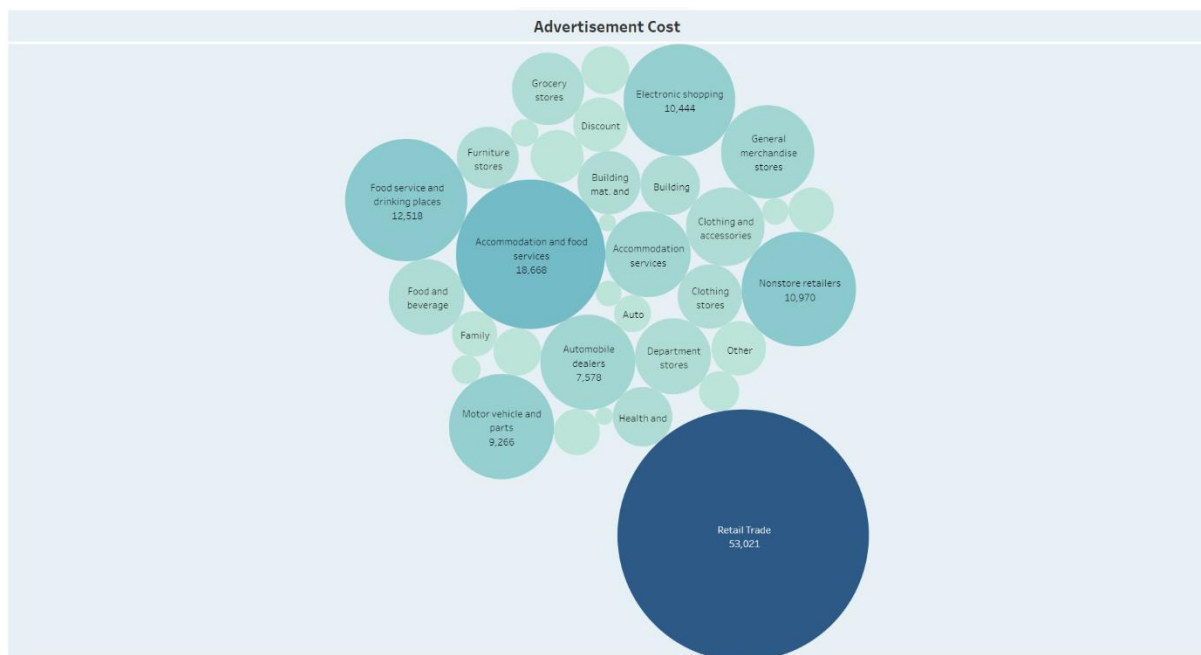
Activity 1.1 : Annual PayRoll



Explanation video link:

https://public.tableau.com/views/projecttwb_16971366829240/AnnualPayRoll?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Activity 1.2 : Advertisement Cost



Explanation video link:

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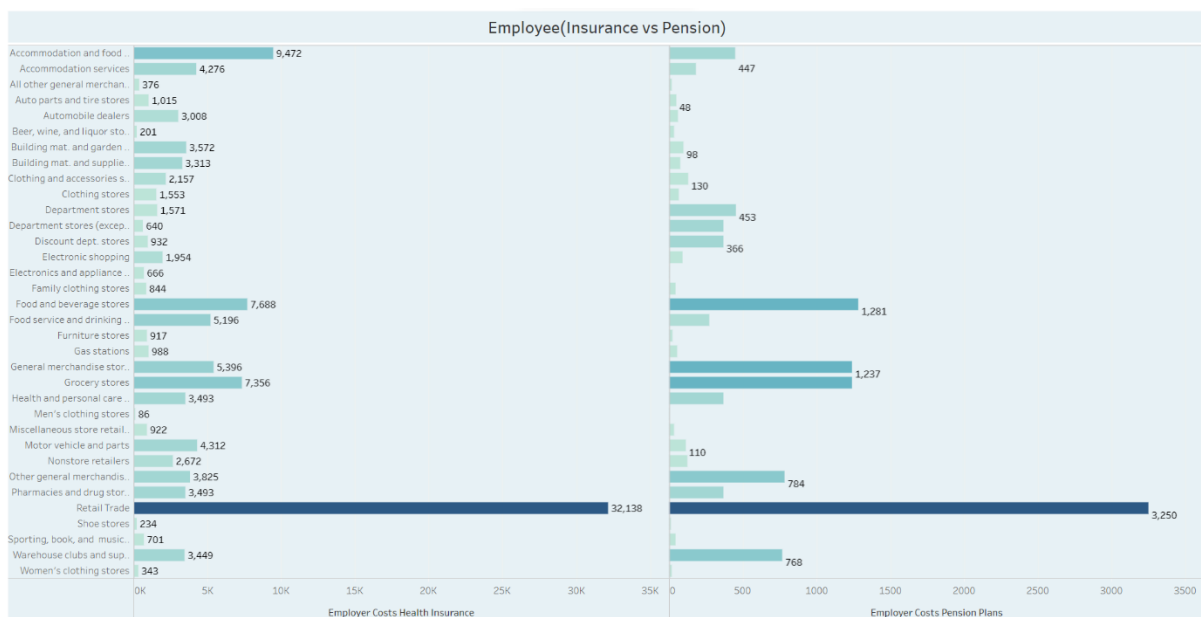
Activity 1.3 : Contract Labour vs Employee



Explanation video link:

https://public.tableau.com/views/projecttwb_16971366829240/ContractLabourvsEmployee?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Activity 1.4 : Employee(Insurance vs pension)



Explanation video link:

https://public.tableau.com/views/projecttwb_16971366829240/EmployeeInsurancevsPension?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

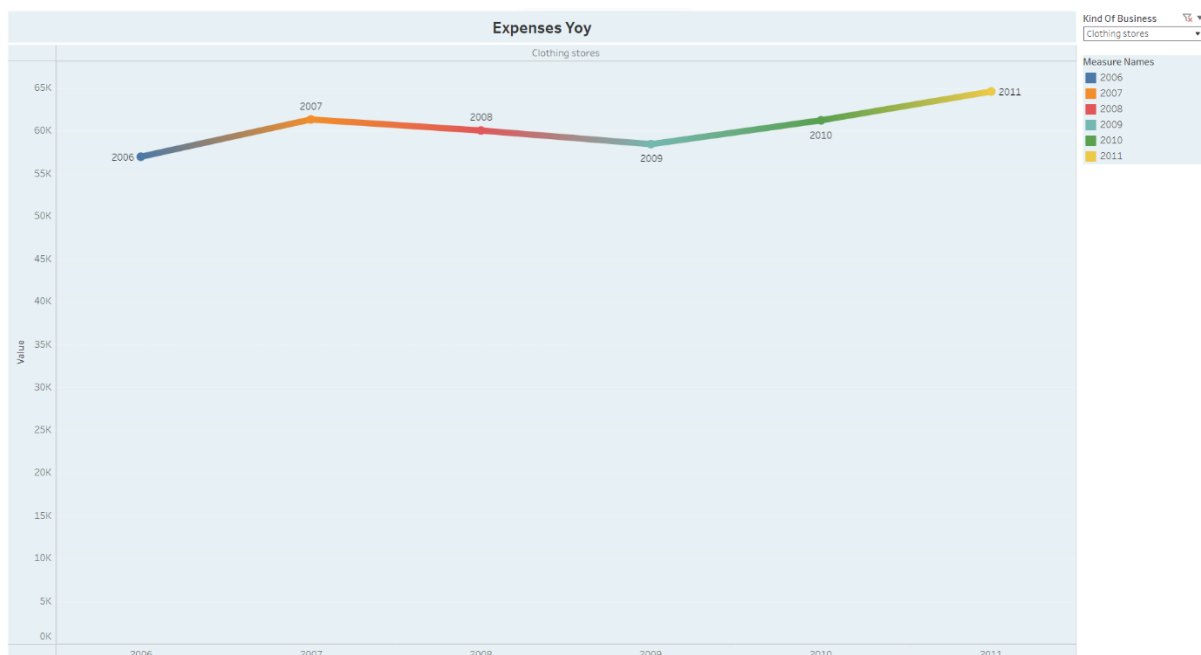
Activity 1.5 : Equipment Costs



Explanation video link:

https://public.tableau.com/views/projecttwb_16971366829240/EquiomentCosts?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

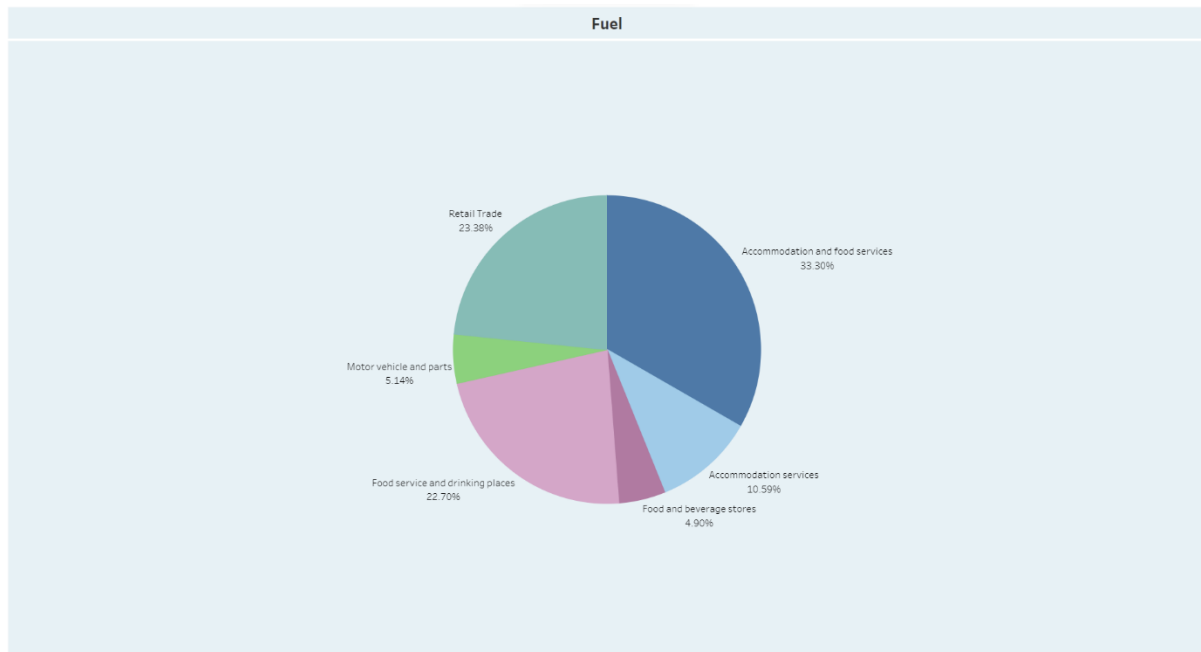
Activity 1.6 : Expenses YoY



Explanation video link:

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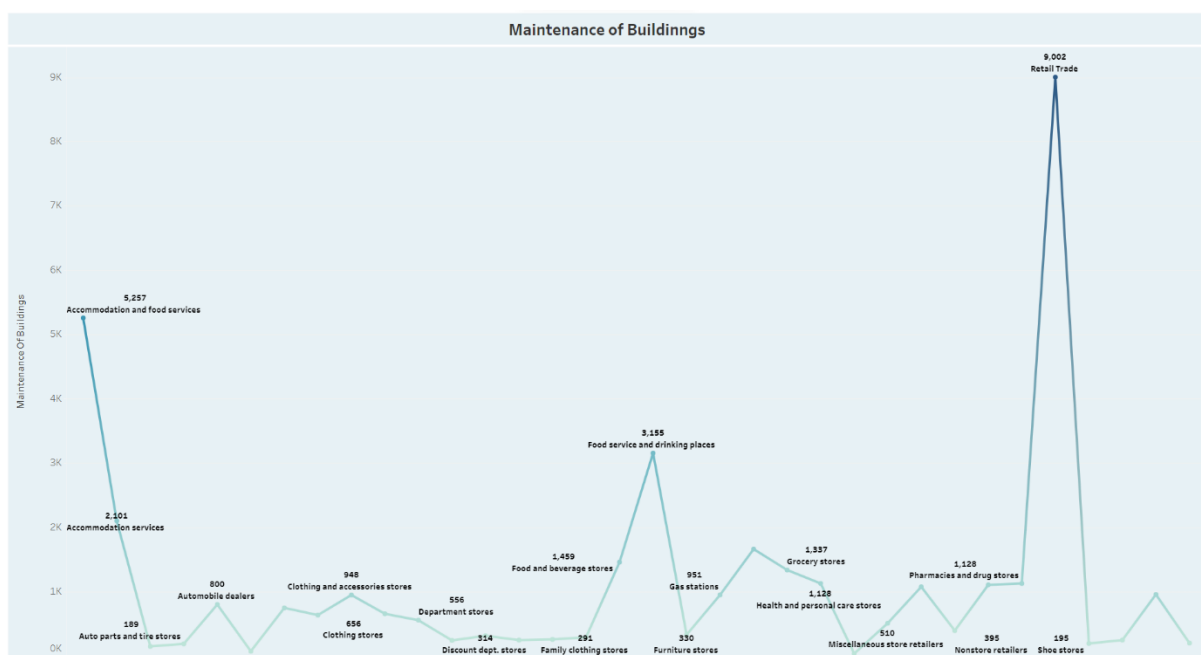
Activity 1.7 : Fuel



Explanation video link:

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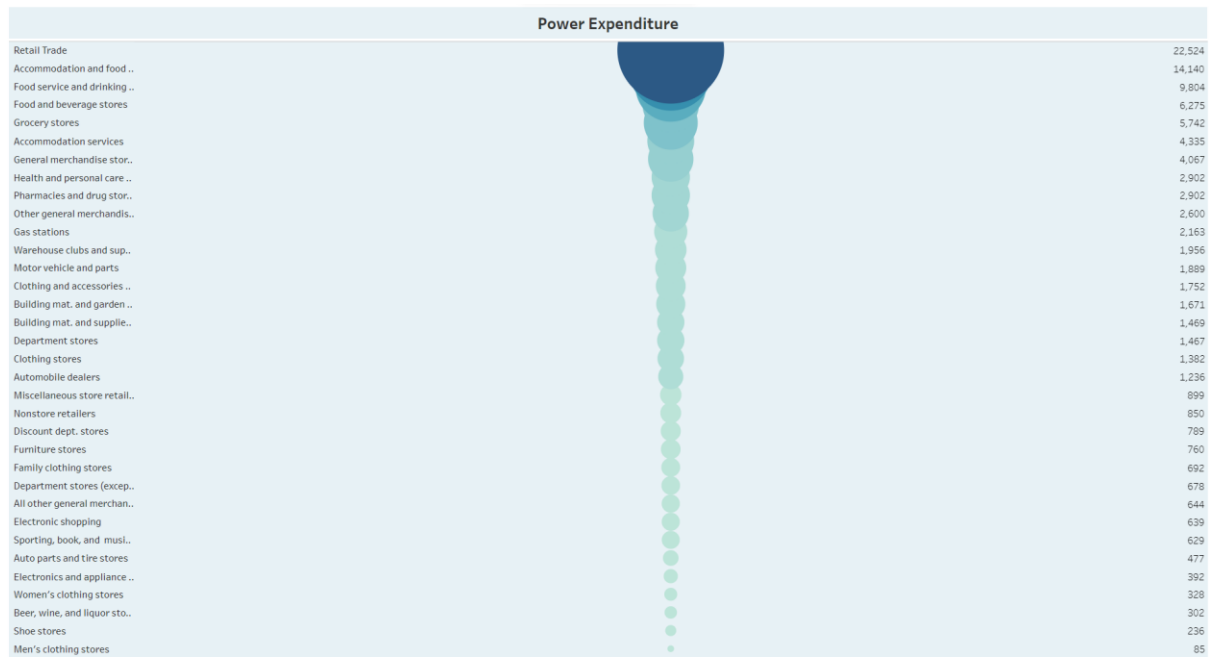
Activity 1.8 : Maintenance of Buildings



Explanation video link:

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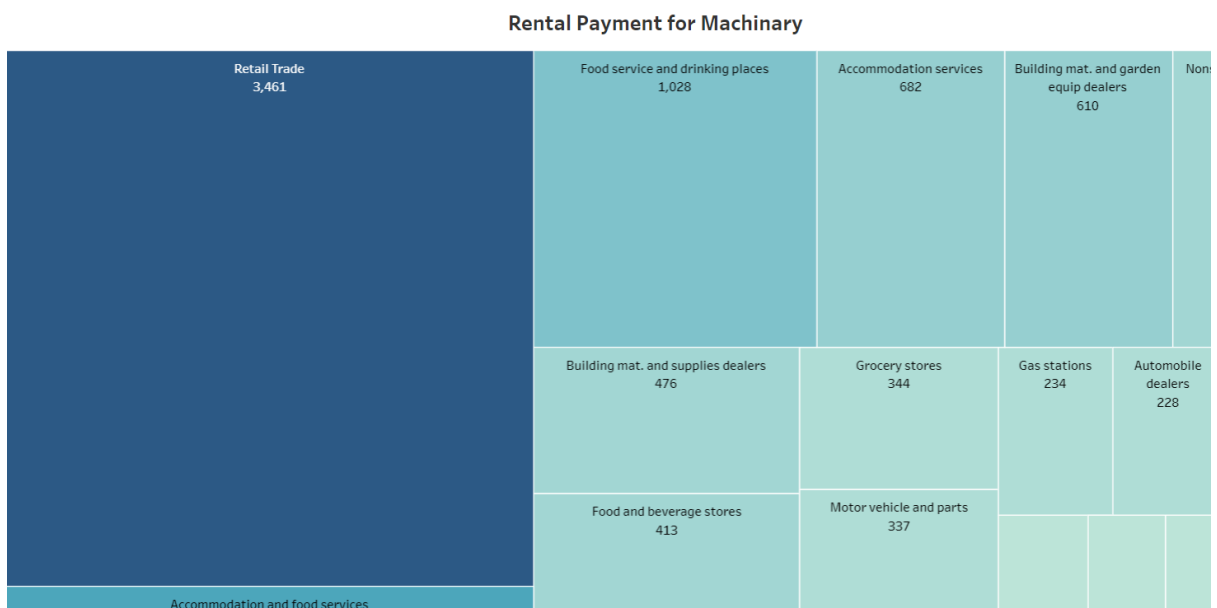
Activity 1.9 : Power Expenditure



Explanation video link:

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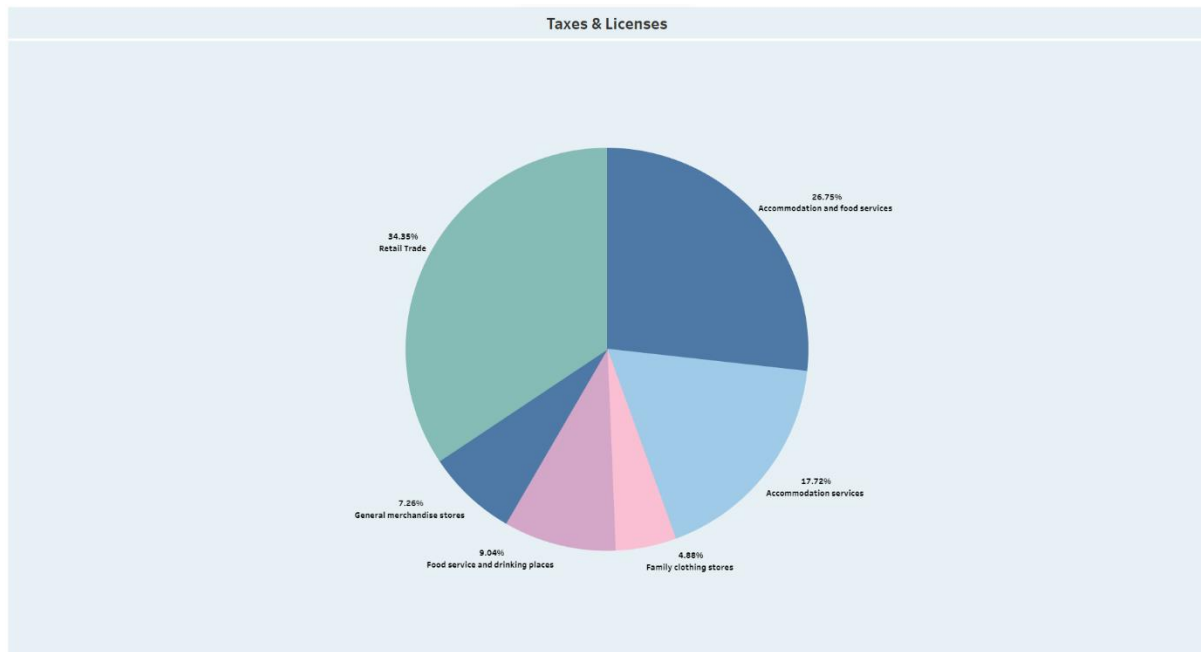
Activity 1.10 : Rental Payment Machinery



Explanation video link:

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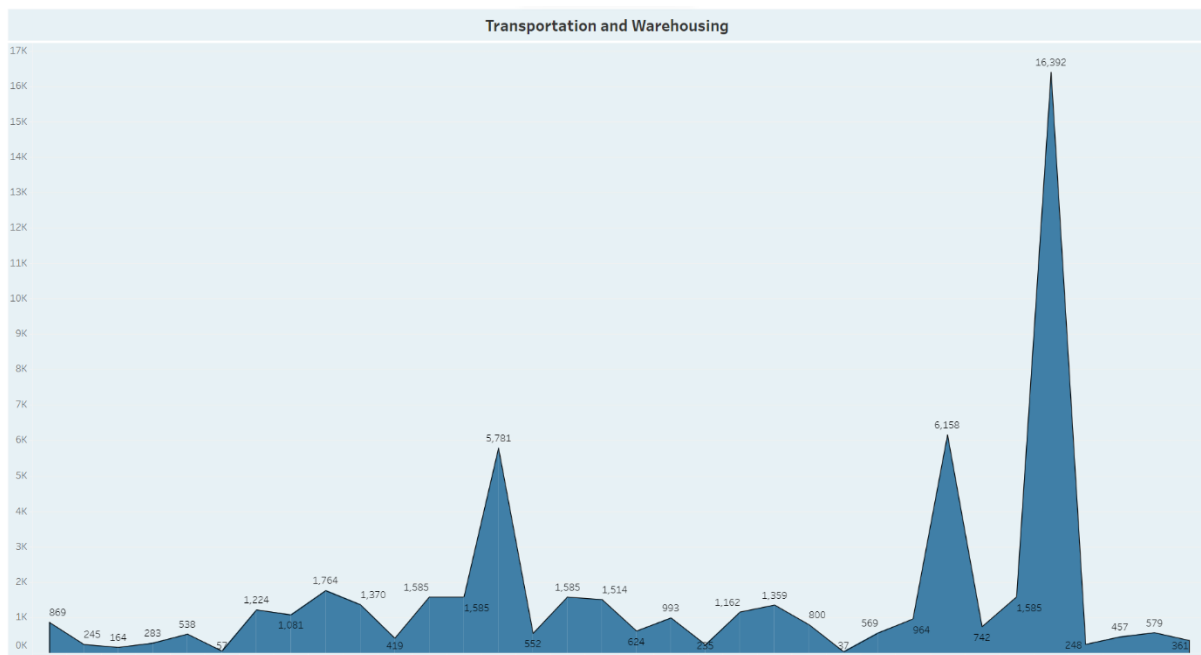
Activity 1.11 : Taxes & Licenses



Explanation video link:

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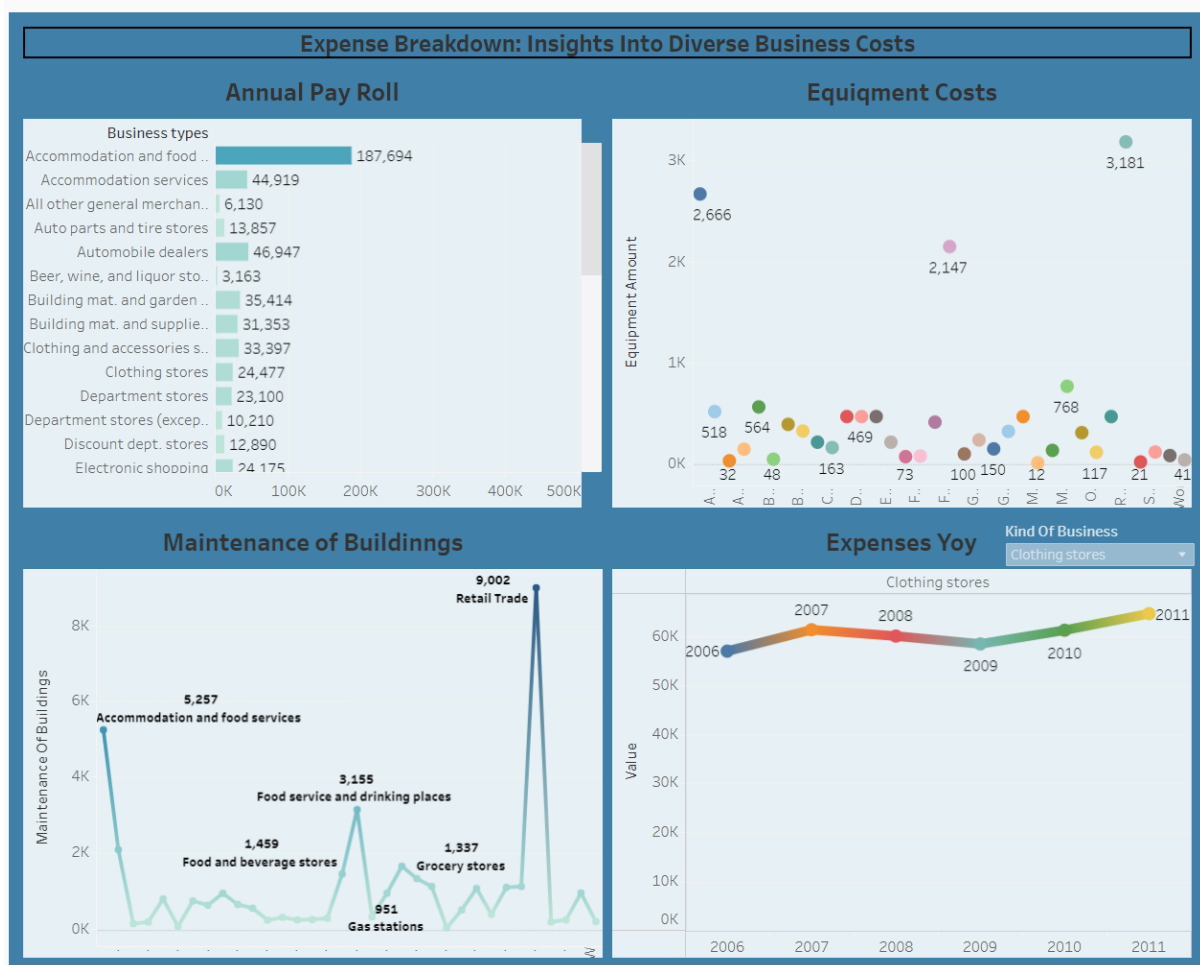
Activity 1.12 : Transportation And Warehousing



Explanation video link:

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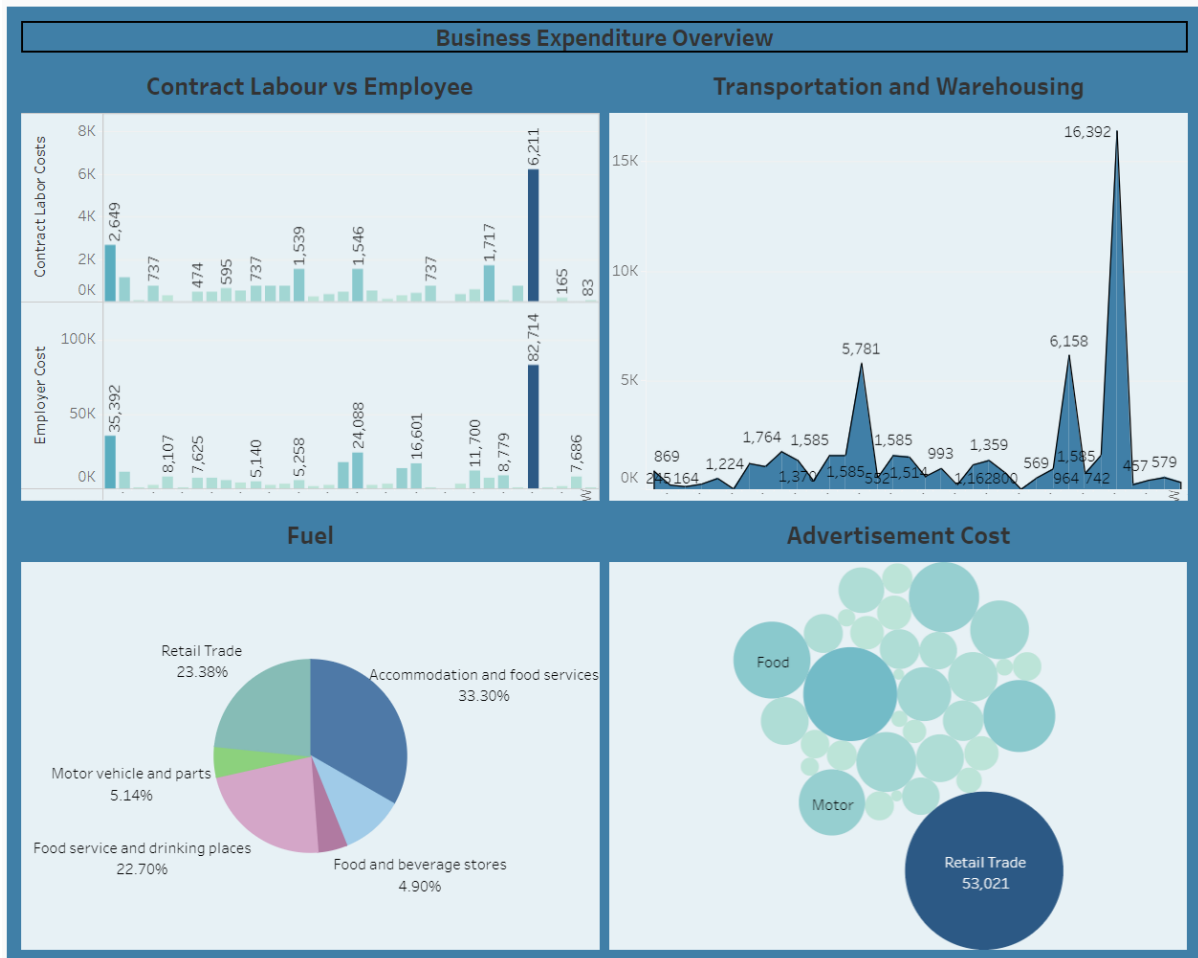
Activity 1.13 : Dashboard 1 (Expense Breakdown: Insights Into Diverse Business Costs)



Explanation video link:

https://public.tableau.com/views/projecttwb_16971366829240/ExpenseBreakdown?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

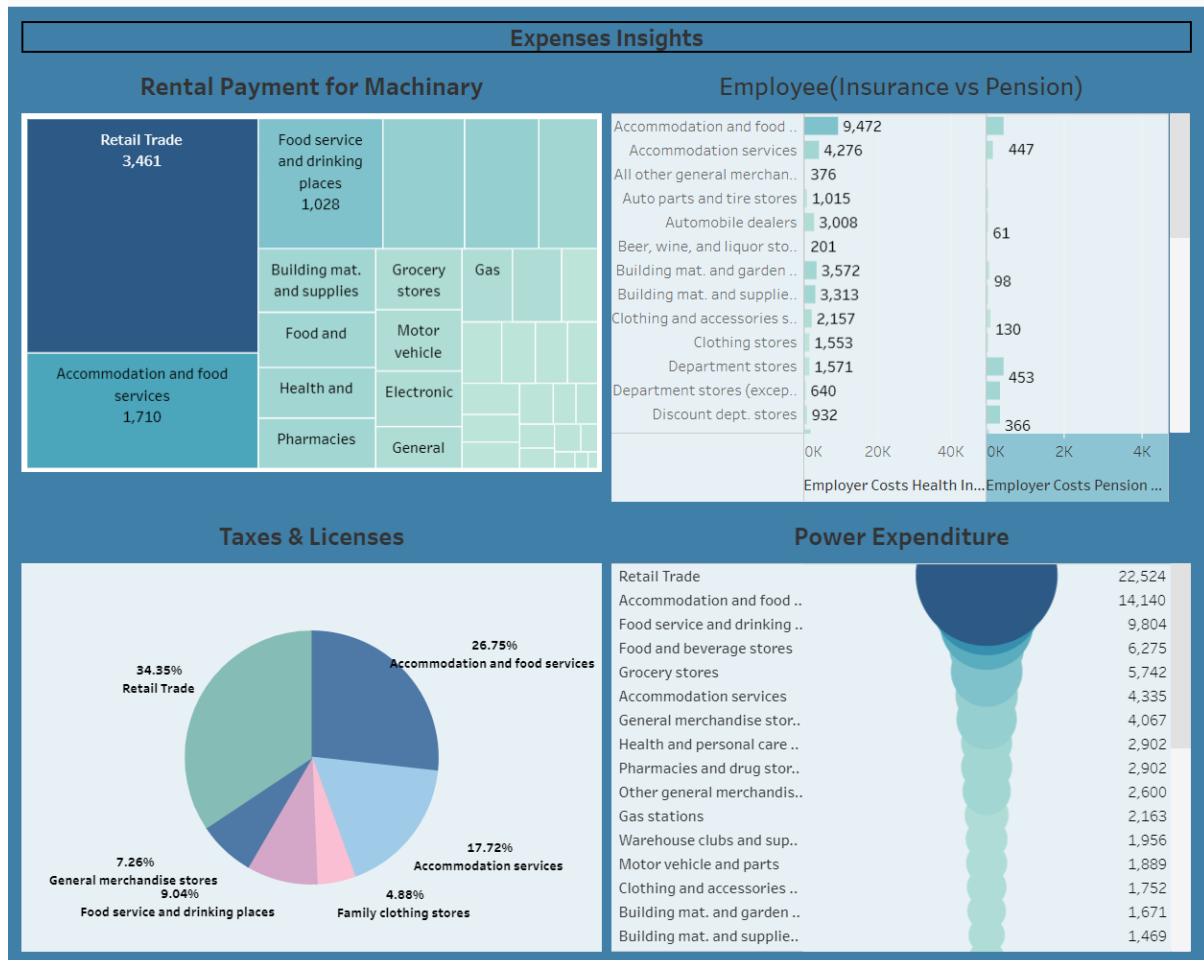
Activity 1.2 : Dashboard 2 (Business Expenditure Overview)



Explanation video link:

https://public.tableau.com/views/projecttwb_16971366829240/BusinessExpenditure?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

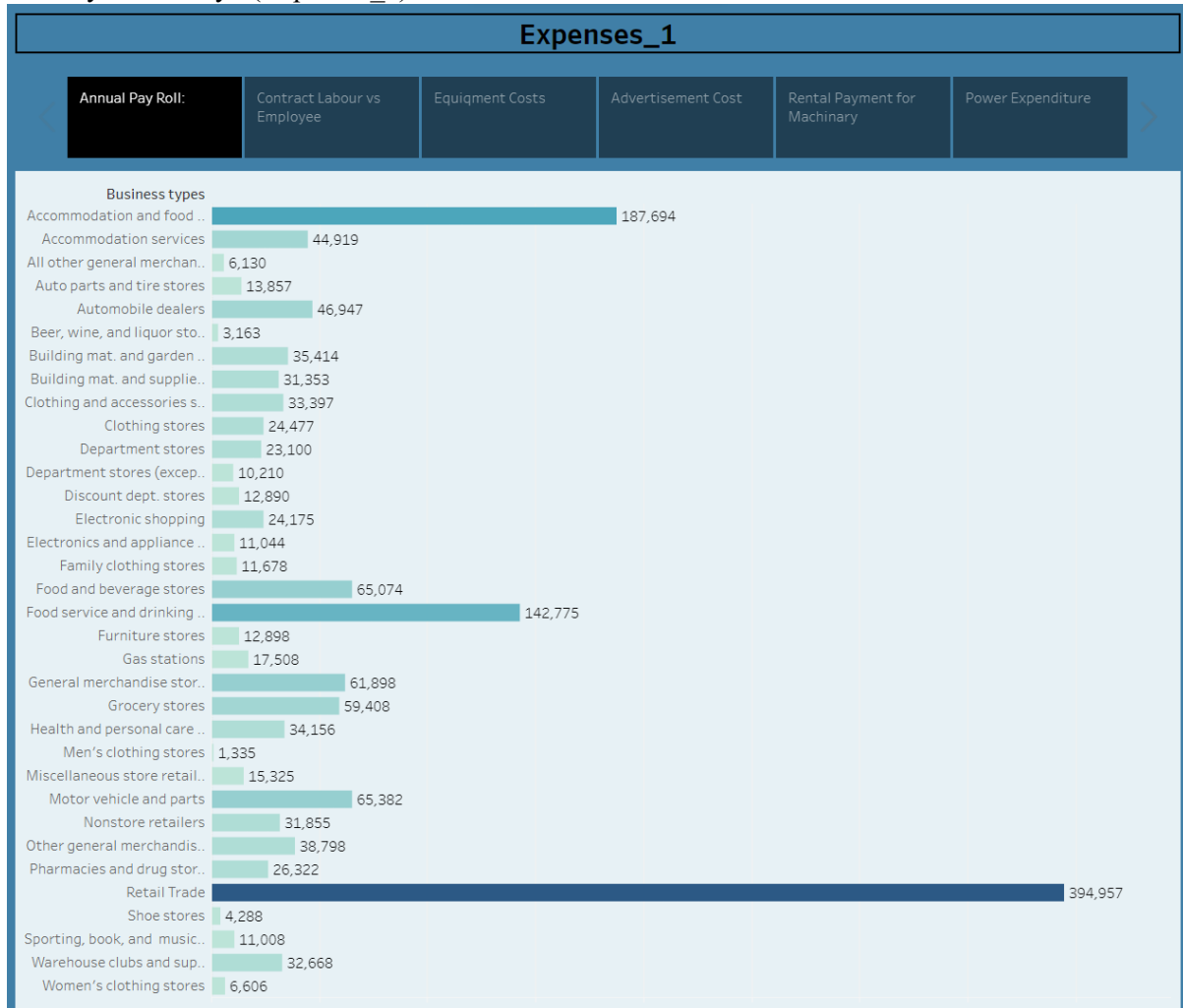
Activity 1.3 : Dashboard 3(Expenses Insights)



Explanation video link:

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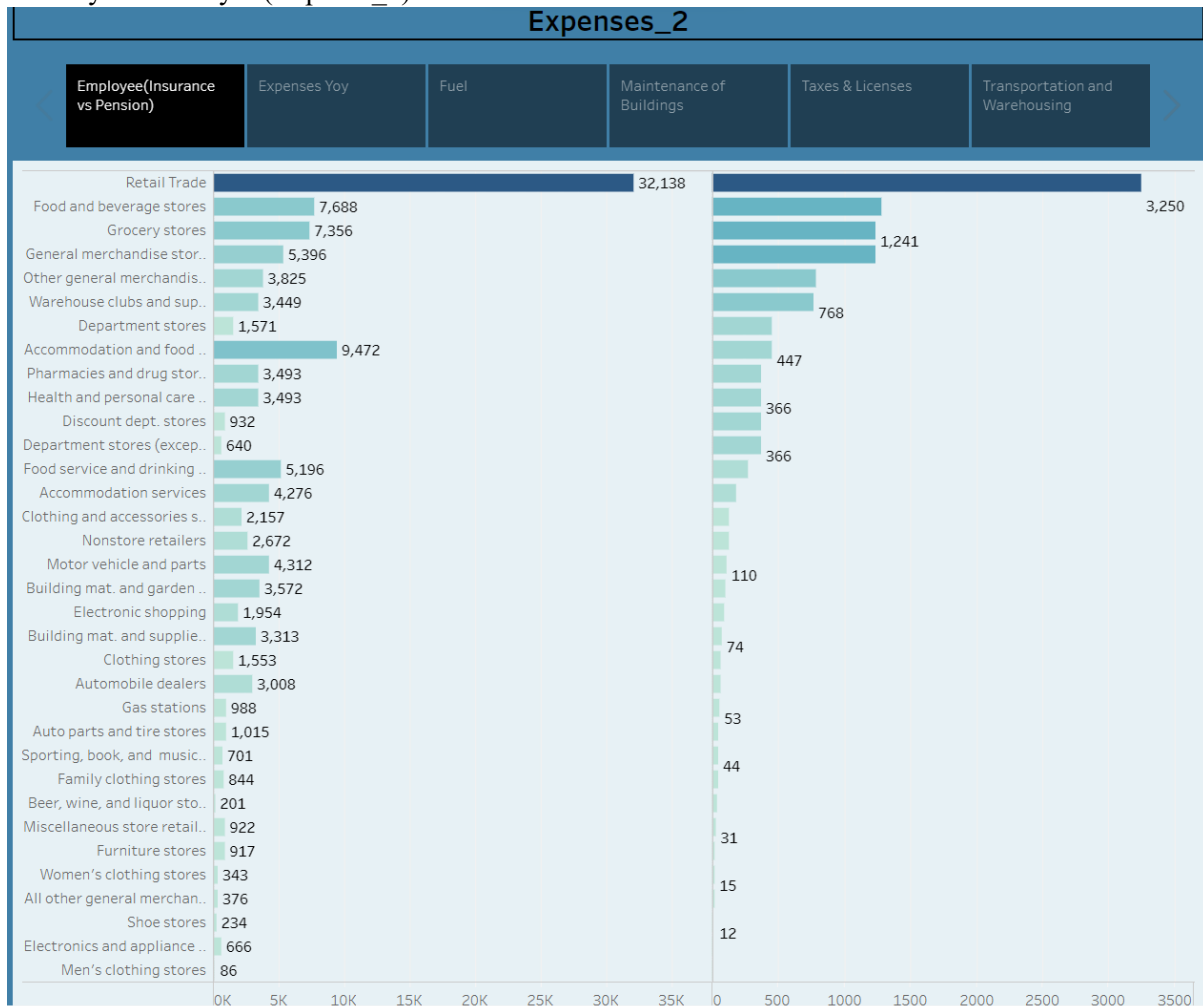
Activity 1.1 : Story 1(Expenses_1)



Explanation video link:

https://public.tableau.com/views/projecttwb_16971366829240/Expenses_1?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Activity 1.2 : Story 2 (Expense_2)



Explanation video link:

https://public.tableau.com/views/projecttwb_16971366829240/Expenses_2?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

4. Advantages and Disadvantages of the proposed solution

Advantages:

1. Adaptability:

Managers appreciate cost accounting because it can be adapted, tinkered with, and implemented according to the changing needs of the business. Unlike the [Financial Accounting Standards Board](#) (FASB)-driven financial accounting, cost accounting need only concern itself with internal eyes and internal purposes.

2. Ease of Monitoring and Controlling Labor Costs

Labor costs are easier to monitor and control through cost accounting. Depending on the nature of the business, [wage expenses](#) can be taken from orders, jobs, contracts, or departments and sub-departments. This means management can pick and choose how it determines efficiency and productivity. This is very important when estimating the marginal productivity of individual employees.

3.Ability to View Data in Different Ways

Cost accounting can be thought of as a sort of three-dimensional puzzle. Accounts, calculations, and reports can be manipulated and viewed from different angles. Management can analyze information based on criteria that it values, which guides how prices are set, resources are distributed, capital is raised, and risks are assumed. It's a crucial element in [management discussion and analysis](#).

Disadvantages:

1.Costs:

The benefits of cost accounting come with a price. Since costing methods differ from organization to organization, it's not clear how these costs might manifest themselves until a specific firm is examined.

2.Complexity:

Generally speaking, complex cost accounting systems require a lot of work on the front end, and constant adjustments need to be made for improvements.

3.Additional Steps to Verify Accuracy:

Even if the rigidity of financial accounting creates some inherent disadvantages, it does remove the uncertainty and misapplication of accounting guidelines of cost accounting. Uncertainty equals risk, which always comes at a cost. This means additional—and often more vigorous—[reconciliation](#) to verify accuracy.

4.Reliance on Highly-Skilled Talent:

Higher-skilled [accountants](#) and [auditors](#) are likely to charge more for their services. Employees have to receive extra training and must sufficiently cooperate with data input. Non-cooperation can render ineffective an otherwise beautifully constructed system.

5.Applications:

- Estimates provide an explanation for an allocated budget, their time frame, or magnitude of a set of elements.
- If projects are planned without the use of estimates, It could lead to inadequate budgets and unrealistic time frames.
- If there is limited information or knowledge in a project, a rough estimate can initially be created. As more information becomes available this estimate can be refined over time to improve its accuracy and help ensure the projects success.
- Draw up budgets
- Evaluate cash flow
- Manage client expectations
- Decide on the overall scope of a project
- Plan schedules and costs related to potential projects before beginning them
- Predict future business expenses and evaluate performance
- Identify key cost drivers
- Highlight areas of potential optimization or concern

- Inform future activity
- Calculate production costs using the actual costs/actual output accounting method.

6.Conclusion:

- Availability of a cost optimization strategy in the company and ensuring proper awareness amongst the employees
- Availability of policies and procedures at a functional level with a robust review mechanism at defined intervals
- Conducting market research for rate benchmarking during procurement process including new vendor development
- Establishment of a vigorous Supply chain Management for the operational effectiveness of processes, considering the segregation of duties at each department level
- Outsourcing non-critical business functions to enhance efficiency and leverage quick hits to fund longer term opportunities

7.Future Scope:

- **To determine an estimate's scope, cost analysts must identify the customer's needs. That is, the cost estimator must determine if the estimate is required by law or policy or is requested. For example, 10 U.S.C. § 2434 "Independent cost estimates; operational manpower requirements" requires an independent cost estimate before a Major Defense Acquisition Program (MDAP) can advance into system development and demonstration or production and deployment.**
- **The statute specifies that the full life-cycle cost—all costs of development, procurement, military construction, and operations and support, without regard to funding source or management control—must be provided to the decision maker for consideration.**
- **Where appropriate, the Program Manager (PM) and the cost estimating team should work together to determine the scope of the cost estimate.**
- **The scope will be determined by such issues as the time involved, what elements of work need to be estimated, who will develop the cost estimates, and how much cost estimating detail will be included.**
- **Where the program is in its life cycle will influence the quantity of detail for the cost estimate as well as the amount of data to be collected. For example, early in the life cycle the project may have a concept with no solid definition of the work involved.**
- **A cost estimate at this point in the life cycle will probably not require extensive detail. As the program becomes better defined, more detailed estimates should be prepared.**
- **Once the cost analysts know the context of the estimate or the customer's needs, they can determine the estimate's scope by its intended use and the availability of data.**

8.APPENDIX:

1.[NUREG/BR-0058 DFC, Rev. 5, \[3:13\] Appendix B, "Regulatory Analysis Guidelines of the U.S. Nuclear Regulatory Commission" \(nrc.gov\)](#)

2. [9.7 Appendix: Comprehensive Example of Bad Debt Estimation - Principles of Accounting, Volume 1: Financial Accounting | OpenStax](#)
3. [1111 \(unescap.org\)](#)