



GOVERNMENT ARTS AND SCIENCE COLLEGE- PAPPIREDDIPATTI

DEPARTMENT OF PHYSICS

PROJECT REPORT

NAAN MUDHALVAN ONLINE COURSE

PROJECT NAME

ESTIMATION OF BUSINESS EXPENSES

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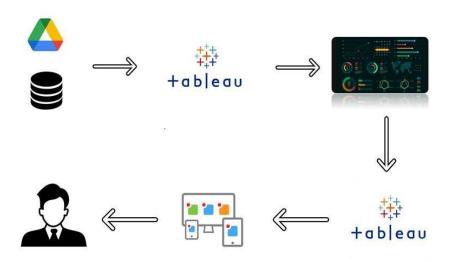
Estimation of Business Expenses

1 Introduction

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:



1.1 Overview Of The Project Problems

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.

2 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.

3 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.

1.2 Purpose

Budgeting: It helps a business plan and allocate funds for various operational costs, such as rent, utilities, salaries, and supplies.

Financial Planning: Estimating expenses aids in creating a financial forecast and determining the capital required to sustain and grow the business.

Cost Control: It allows a company to identify areas where costs can be minimized or optimized to improve profitability.

Pricing Strategy: Expense estimates are essential for setting competitive prices for products or services while maintaining profitability.

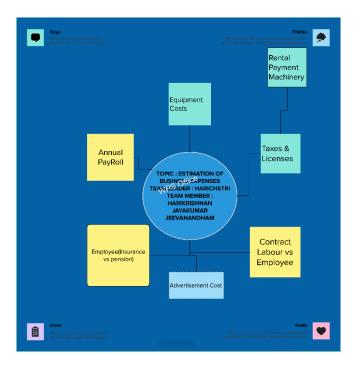
Decision Making: Accurate expense estimates are crucial for making informed decisions, such as expanding, investing, or cutting expenses.

Reporting: These estimates are used in financial statements and reports for internal and external stakeholders.

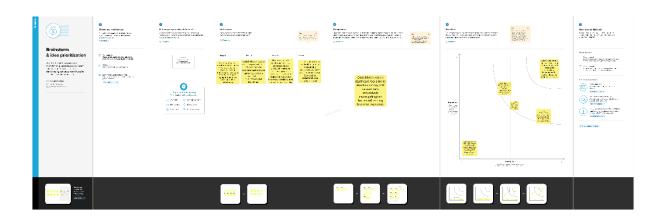
Tax Planning: Properly estimating expenses can help a business plan for tax liabilities and deductions

2 Problem Definition & Design Thinking

2.1 Empathy Map (screenshort)



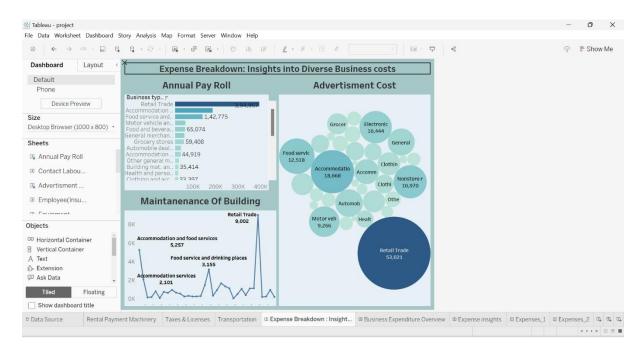
2.2 Ideation & Brainstorming Map (screenshort)



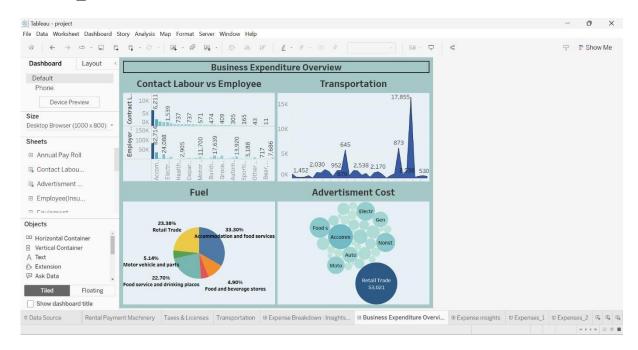
3 PROJECT RESULT

- Dashboard(screenshort)
- Story(screenshort)

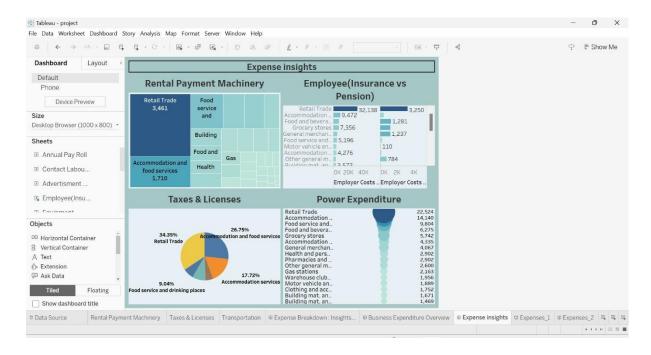
Dashboard_1



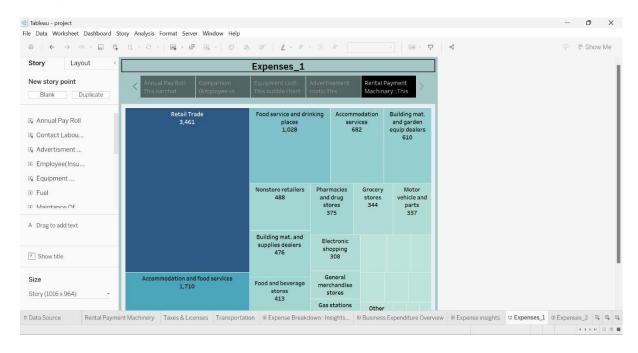
Dashboard_2



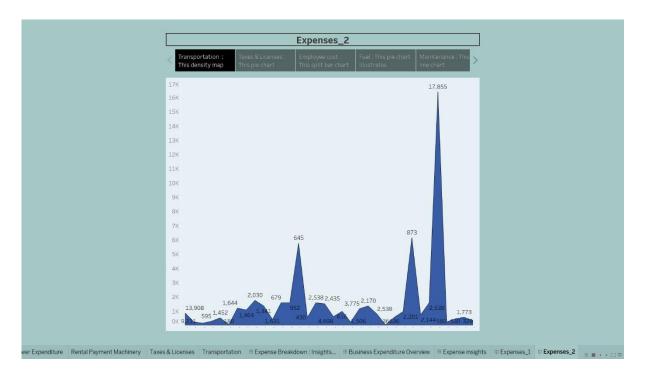
Dashboard_3



Story_1



Story_2



4 ADVANTAGES & DISADVANTAGE

- 1. **Inaccuracy:** Estimates may not always reflect actual costs, leading to potential financial mismanagement.
- 2. **Uncertainty:** Economic and market changes can make it challenging to estimate expenses accurately.
- Complexity: Some expenses, especially in large or complex organizations, can be difficult to estimate with precision.
- 4. **Overestimation or Underestimation:** Businesses may inadvertently overestimate or underestimate expenses, affecting budgets and financial performance.
- 5. **External Factors:** Expenses can be influenced by external factors like regulatory changes, which are difficult to predict.
- 6. **Time-Consuming:** Preparing detailed expense estimates can be time-consuming and divert resources from other essential tasks.
- 7. **Data Availability:** Accurate estimation relies on the availability of historical data and market information, which may not always be readily accessible.

8. **Resource Intensive:** Creating and maintaining expense estimates can be resourceintensive, especially in industries with complex financial structures.

5 APPLICATIONS

a field that involves the use of data and statistical methods to analyze and interpret data, has numerous applications across various aspects of business. Here are some key applications of business analytics

- Industrys
- Companies

6 FUTURE SCOPE

Tools and techniques for data visualization will continue to advance, making it easier for individuals to understand and interpret data.

7 CONCLUSION

The future of data analytics holds significant potential in various industries and domains. It will continue to be a critical tool for decision-making, innovation, and competitive advantage. As the data landscape evolves, professionals skilled in data analytics will be in high demand, making it an exciting field for career opportunities.

8 APPENDIX

Source code

Data set link