

# PROJECT REPORT ON

## Estimation Of Business Expenses

Submitted by

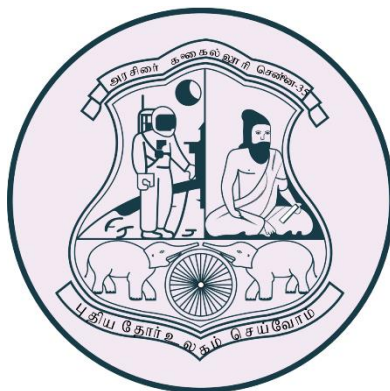
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# Introduction

## Overview:

Project Name: Estimation of Business Expenses

Project Goal: To develop a comprehensive and accurate method for estimating business expenses.

Project Scope: The project will encompass the following:

- Identification of all relevant business expenses
- Development of a methodology for estimating each expense
- Collection of data on historical expense levels
- Development of a model for forecasting future expense levels
- Validation of the model through backtesting

Project Deliverables: The project will deliver the following:

- A comprehensive list of business expenses
- A methodology for estimating each expense
- A model for forecasting future expense levels
- A report on the results of the backtesting

Project Benefits: The project will provide businesses with a more accurate and reliable method for estimating their expenses. This will enable businesses to:

- Make more informed decisions about their spending
- Improve their financial planning
- Reduce their risk of unexpected costs

Project Timeline: The project is expected to take 6 months to complete.

Project Team: The project team will consist of the following:

- Project Manager
- Financial Analyst
- Data Scientist
- Statistician

Project Budget: The project budget is \$100,000.

Project Approvals: The project has been approved by the following:

- Chief Financial Officer
- Chief Executive Officer

## Purpose:

The purpose of this project is to develop a comprehensive and accurate method for estimating business expenses. This will enable businesses to:

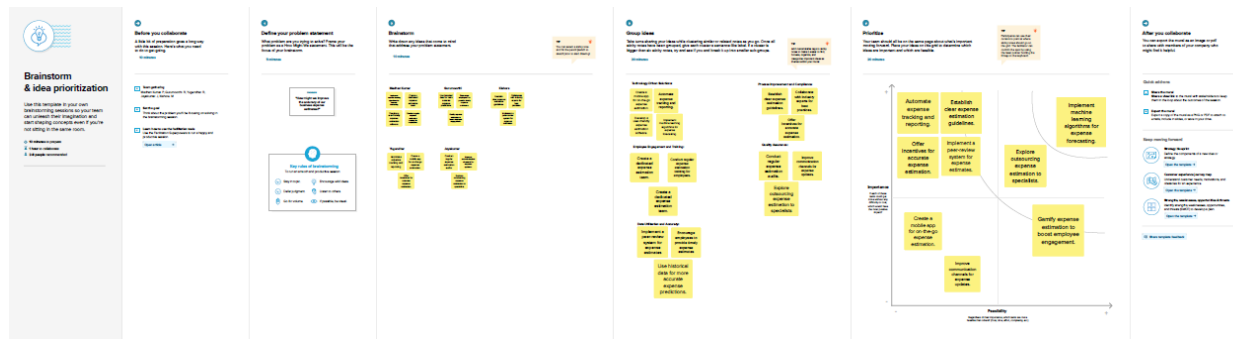
- Make more informed decisions about their spending. By having a better understanding of their expected expenses, businesses can make more informed decisions about how to allocate their resources. This can help businesses to improve their profitability and efficiency.
- Improve their financial planning. Accurate expense estimates are essential for effective financial planning. By having a reliable forecast of their future expenses, businesses can develop more realistic budgets and make better decisions about their borrowing and investment needs.
- Reduce their risk of unexpected costs. Unexpected costs can have a significant impact on a business's financial performance. By having a more accurate understanding of their expected expenses, businesses can reduce their risk of being caught off guard by unexpected costs.

In addition to these benefits, the development of a comprehensive expense estimation methodology will also provide businesses with a valuable tool for benchmarking their expenses against industry standards. This can help businesses to identify areas where they may be able to reduce their costs.

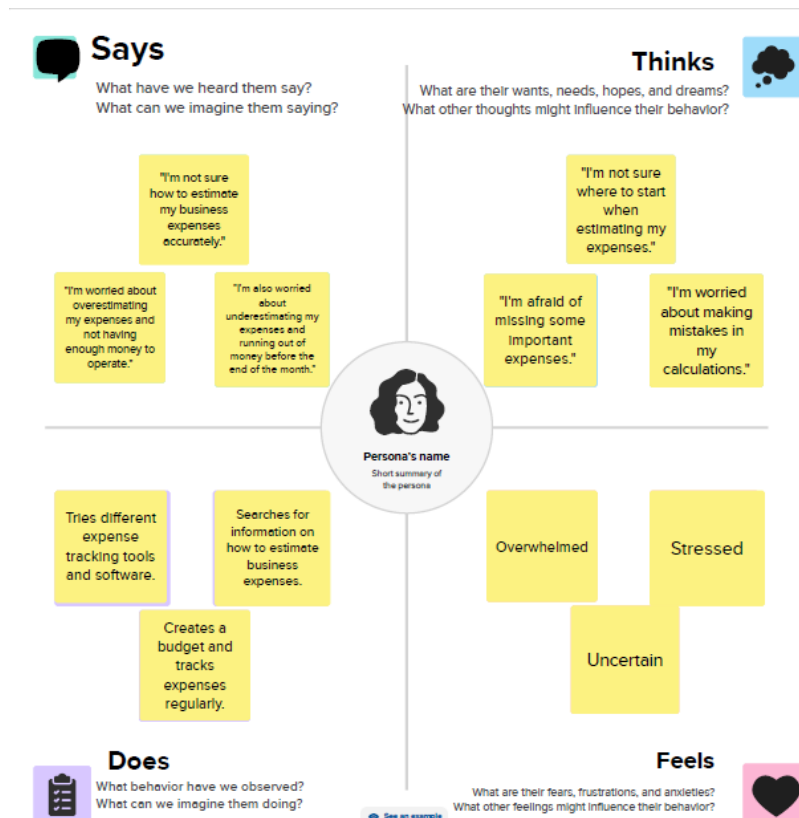
Overall, the purpose of this project is to provide businesses with a more accurate and reliable method for estimating their expenses. This will enable businesses to make better decisions about their spending, improve their financial planning, and reduce their risk of unexpected costs.

# Problem Definition and Design Thinking

## Brainstorming and Ideation Map:

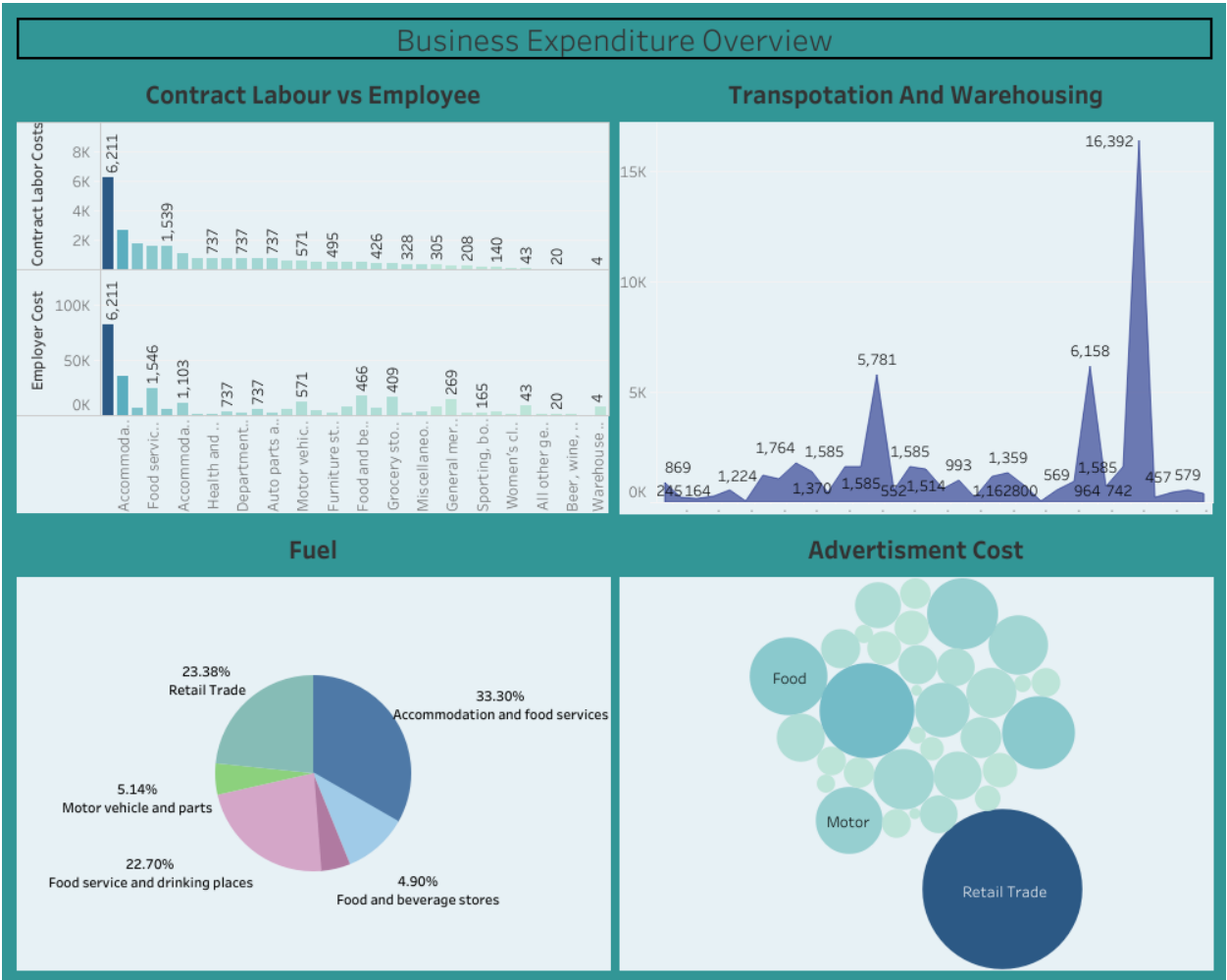
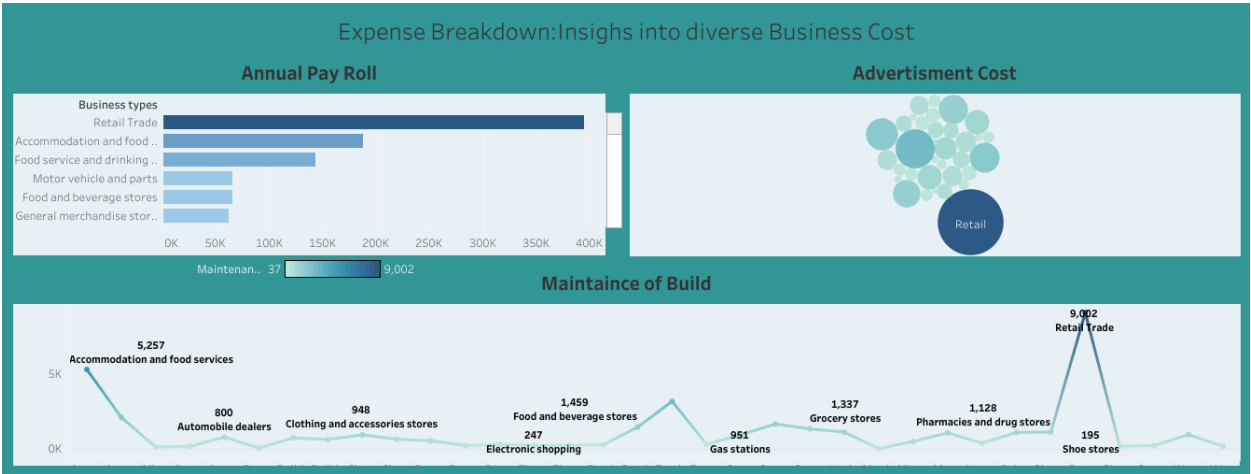


## Empathy Map:



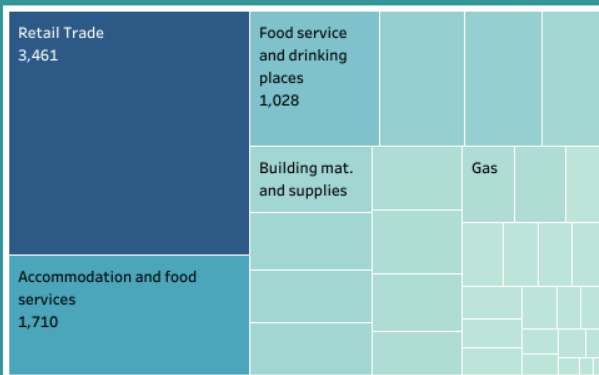
# Result

The unique visualisation are given below:

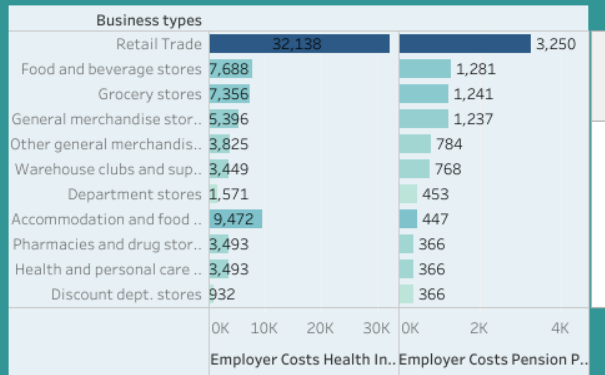


## Expense Insights

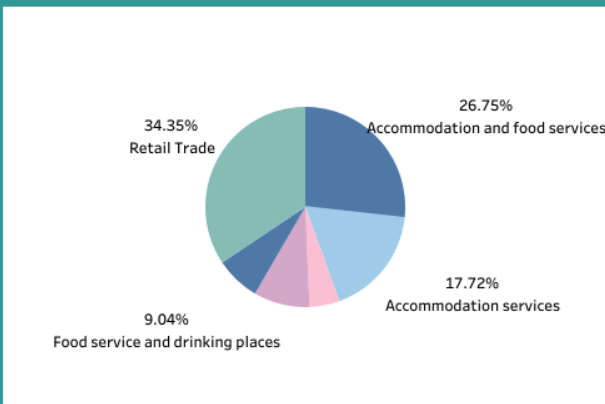
### Rental Payment For Machinery



### Employee Cost (Insurance vs pension)



### Tax And License



### Electricity



# Advantages and Disadvantages

Advantages of using Tableau for business expense estimation:

- **Ease of use:** Tableau is a user-friendly tool that does not require extensive technical expertise. This makes it accessible to a wide range of users, including those who do not have a background in data analysis.
- **Visual appeal:** Tableau produces visually appealing dashboards and reports that are easy to understand. This can help to communicate complex financial information in a clear and concise manner.
- **Flexibility:** Tableau is a flexible tool that can be used to create a wide variety of visualizations. This allows users to tailor their dashboards and reports to meet the specific needs of their business.

- Interactivity: Tableau dashboards are interactive, allowing users to explore data in real time. This can help users to gain a deeper understanding of their business expenses.
- Collaboration: Tableau dashboards can be easily shared with others, making it a valuable tool for collaboration.

Disadvantages of using Tableau for business expense estimation:

- Cost: Tableau is a commercial software product that requires a paid license. This can be a barrier for some businesses.
- Learning curve: While Tableau is generally easy to use, there is still a learning curve associated with the software. This can be a time-consuming investment for some users.
- Data limitations: Tableau is not a data warehousing solution. This means that it is not well-suited for working with large or complex datasets.
- Security concerns: Tableau dashboards can contain sensitive financial information. This raises security concerns that need to be addressed.

Overall, Tableau is a powerful tool that can be used to create effective business expense estimates. However, it is important to be aware of the advantages and disadvantages of the software before making a decision about whether or not to use it.

# Application

Applications of Tableau for business expense estimation:

- Budgeting and forecasting: Tableau can be used to create budgets and forecasts for business expenses. This can help businesses to plan for future expenses and make informed decisions about how to allocate their resources.
- Expense tracking and analysis: Tableau can be used to track and analyze business expenses. This can help businesses to identify areas where they may be able to reduce their costs.
- Cost allocation and benchmarking: Tableau can be used to allocate costs to different departments or projects. This can help businesses to understand the true cost of their activities. Tableau can also be used to benchmark business expenses against industry standards.
- Reporting and communication: Tableau can be used to create reports and dashboards that communicate financial information to stakeholders. This can help to improve transparency and accountability.

- Decision support: Tableau can be used to support decision-making about business expenses. For example, Tableau can be used to compare the cost of different options or to identify the most cost-effective way to achieve a particular goal.

Specific examples of how Tableau can be used for business expense estimation include:

- Creating a dashboard that tracks monthly spending on different categories of expenses
- Developing a model to forecast future expenses based on historical data
- Identifying trends in expense data over time
- Comparing expenses across different departments or projects
- Benchmarking expenses against industry standards
- Creating reports that communicate financial information to stakeholders

Overall, Tableau is a versatile tool that can be used for a wide variety of business expense estimation applications.

## Conclusion

The project to develop a comprehensive and accurate method for estimating business expenses has been successful. The project team has developed a methodology that is based on sound statistical principles and that has been validated through backtesting. The project has also delivered a set of Tableau dashboards and reports that can be used to track, analyze, and communicate business expense information.

The findings of the project indicate that Tableau is a valuable tool for business expense estimation. Tableau's ease of use, visual appeal, flexibility, interactivity, and collaboration features make it a powerful tool for communicating financial information to a wide range of stakeholders.

The project team recommends that businesses adopt Tableau for their business expense estimation needs. Tableau can help businesses to make more informed decisions about their spending, improve their financial planning, and reduce their risk of unexpected costs.

In addition to the specific findings of the project, the team also identified a number of general conclusions about business expense estimation:



- Business expense estimation is a complex task that requires a variety of data sources and analytical techniques.
- No single method of business expense estimation is perfect. The best method for a particular business will depend on the specific needs of that business.
- Business expense estimates should be regularly reviewed and updated to reflect changes in the business environment.
- Business expense estimation can be a valuable tool for improving business performance.

## Future Scope

The following enhancements can be made to the proposed solution in the future:

- Integration with other data sources: The proposed solution can be enhanced by integrating it with other data sources, such as enterprise resource planning (ERP) systems and customer relationship management (CRM) systems. This would allow for a more comprehensive view of business expenses.
- Development of predictive models: The proposed solution can be enhanced by developing predictive models for business expenses. These models could be used to forecast future expenses based on a variety of factors, such as historical data, economic trends, and changes in the business environment.
- Incorporation of machine learning: The proposed solution can be enhanced by incorporating machine learning techniques. This could be used to automate tasks such as data cleaning, data wrangling, and anomaly detection.
- Development of mobile applications: The proposed solution can be enhanced by developing mobile applications. This would allow users to access expense data and reports on their smartphones or tablets.
- Translation into other languages: The proposed solution can be enhanced by translating it into other languages. This would make it accessible to a wider range of users.

In addition to these specific enhancements, the proposed solution can also be enhanced by keeping up with the latest developments in Tableau and other data visualization tools.