

A PROJECT REPORT

An Estimation Of Business Expenses

Fundamentals of Data analytics with Tableau – Smartbridge
Project Based Experimental Learning Program- Naan Mudhalvan



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PROJECT GUIDE

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1 . INTRODUCTION

Over view

To provide an overview of estimating business expenses you should consider:

- costs***These are expenses that remain relatively stable,such as rent,insurance, and salaries.
- Variable costs***These expenses fluctuate with business activity,like raw materials or utilities.
- One time costs***Inlcude startup expenses like equipment purchase or legal fees.
- Operational costs***Day-to-day expenses like,marketing,office supplies, and maintenance.
- Contingency*** Budget for unexpected cost or emergencies.
- Budget period***determine if you're estimating expenses monthly quarterly or annually.
- Historical Data***Use past financial records to guide your estimates.
- Market research*** Analyse industry benchmarks for costs averages.
- Inflation***Account for potential price increases.
- Technology***Use accounting software for accurate tracking and forecasting

Understanding Consumer Behaviour :

Understanding consumer behavior is crucial for businesses

- **Needs and wants***consumers have various needs and wants needs and essential,like food,while wants are desires,like luxury items
- **Motivation***understanding what motivates consumers can help businesses tailor products or services to meet those motivations.it could be convenience,status,or price
- **Influences***various factors influences consumer behavior,including cultural,social,personal, and psychological factors

Purpose

Budgeting

Expense estimation is fundamental for creating a budget. It helps businesses plan and allocate resources efficiently, ensuring they have enough funds to cover their costs.

Financial planning

Estimating expenses allows for long-term financial planning, helping businesses set realistic financial goals and strategies.

Cost control

By forecasting expenses, businesses can identify areas where cost control is needed and take measures to reduce unnecessary spending.

Risk management

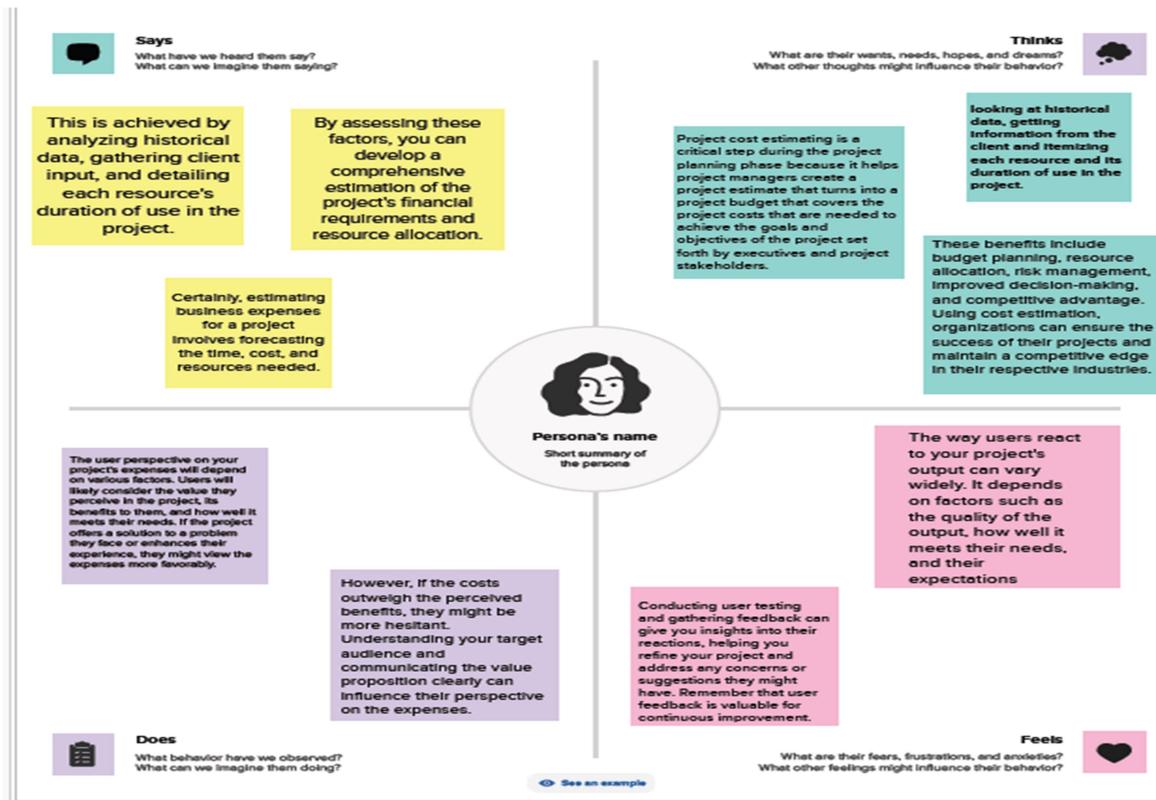
By estimating expenses, businesses can prepare for unforeseen financial challenges and manage risks effectively.

Tax planning

Accurate expenses estimates aid in planning, ensuring that businesses can maximize deductions and comply with tax regulations.

2. PROBLEM DEFINITION & DESIGN THINKING

2.1 Empathy map



Overall, the project aims to equip businesses with actionable insights derived from in-depth analysis and understanding of consumer behaviour and market trends. These insights are intended to inform strategic decision-making, enhance operational efficiency, and drive sustainable growth and success within the chosen market or industry.

- The mapping process helps distill and categorize your knowledge of the user into one place. It can be used to categorize and make sense of qualitative research (research notes, survey answers, user-interview transcripts)

2.2 Ideation & brainstorming map

Template

Brainstorm & idea prioritization

Use this template in your own workspace or invite others so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

10 minutes to prepare
1 hour to collaborate
2-8 people recommended

Before you collaborate

A little bit of preparation goes a long way when you're getting started. Here's what you need to do to get going:

- Team gathering: Define who will participate in the session and send an invite. Share relevant information or pre-work sheet.
- Define goal: Think about the problem you'll be focusing on solving in the brainstorming session.
- Learn how to use the facilitation tools: Use the Facilitation Superpowers to run a happy and productive session.

10 minutes

Define your problem statement

What problem are you trying to solve? Frame your problem statement. Might we statement. This will be the focus of your brainstorm.

5 minutes

Brainstorm

Write down any ideas that come to mind that address your problem statement.

10 minutes

Person 1

Data Integration and Analysis: Develop a system that can integrate with the organization's financial systems to provide real-time data. This method should take into account various factors such as sales, variable costs, operational expenses, overheads, and potential fluctuations in the market. This approach allows businesses to predict future trends and make informed decisions over a specific time period, accounting for factors like growth, market conditions, and external market conditions. The solution should be user-friendly, adaptable to other industries, and capable of generating reliable estimates for budgeting, financial planning, and decision-making.

Machine Learning and Predictive Modeling: Utilize machine learning algorithms to analyze historical data and predict future expenses based on current market conditions. These models should consider various variables, such as sales volume, consumer behavior, production rates, and industry benchmarks.

Person 2

Real-time Data Updates: Incorporate real-time data feeds from various sources to update expense estimates as new information becomes available. This allows businesses to quickly adjust their estimates based on sudden changes in demand, supply chain issues, and economic fluctuations.

Customization and Flexibility: Design the system to be customizable to fit the specific needs of different businesses. Different business models have unique expense structures, and the system should accommodate these differences.

Person 3

Scenario Analysis: Implement the ability to perform scenario analysis, allowing businesses to simulate different financial situations and understand the potential impact on expenses. This feature aids decision-making and risk assessment.

User-friendly Interface: Create an intuitive and user-friendly interface that allows non-financial personnel to interact with the system. This promotes better cross-functional collaboration and alignment between various departments.

Validation and Learning: Build a feedback loop that continuously learns from the accuracy of past estimates. As new data becomes available, the system should refine its algorithms and models for even more precise predictions.

Security and Privacy: Ensure that sensitive financial data is securely stored and that the system adheres to all relevant data privacy regulations.

Group Ideas

Take turns writing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a memorable label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

20 minutes

Prioritize

Your team should all be on the same page about what's important and what's not. Keep moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

20 minutes

You collaborator

You can export the mural as an image or pdf to keep track of the progress of your company who might find it helpful.

Quick add-ons

- Share the mural: Share the mural with stakeholders to keep them in the loop about the outcome of the session.
- Export the mural: Export a copy of the mural as a PNG or PDF to attach to emails, include in slides, or save in your drive.

Keep moving forward

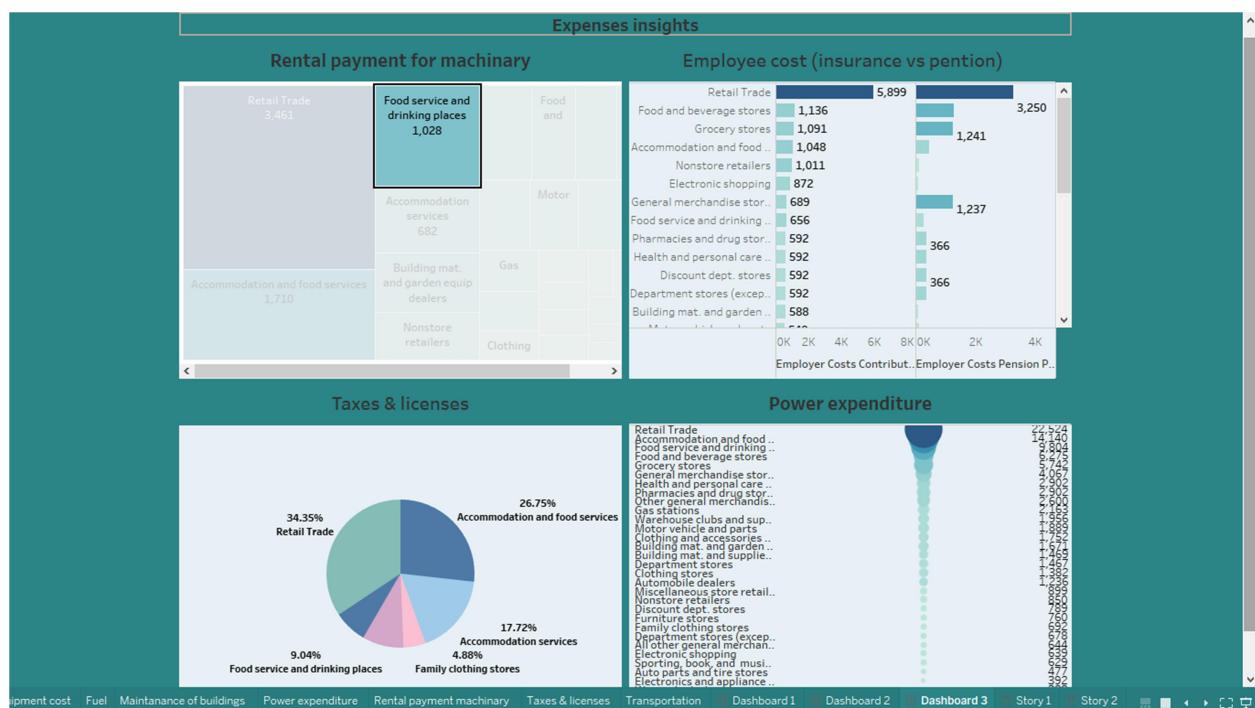
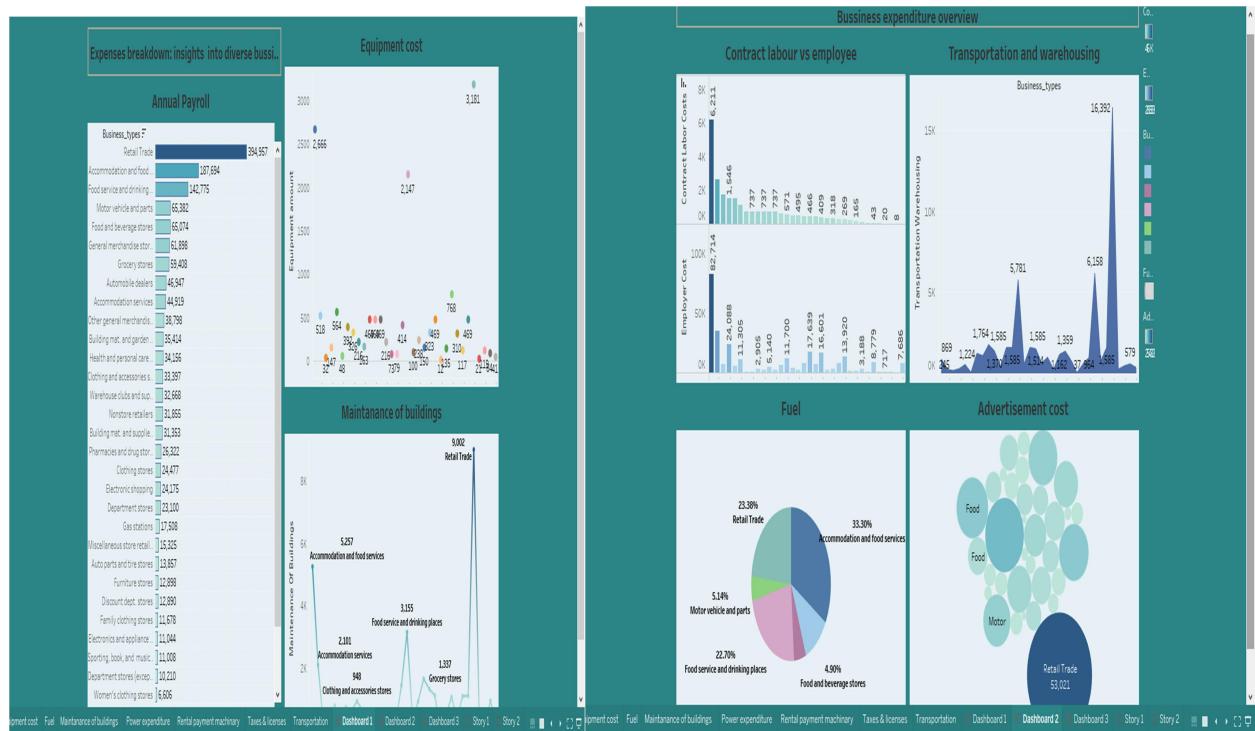
- Strategic blueprint: Create a visual component of a new idea or strategy.
- Customer experience journey map: Map the customer's journey through various touchpoints, including sales, marketing, customer service, and post-purchase. Efficiently analyze data to identify patterns, trends, and opportunities for improved experiences.
- Strengths, weaknesses, opportunities & threats: Identify strengths, weaknesses, opportunities, and threats for a project or initiative.

Share template feedback

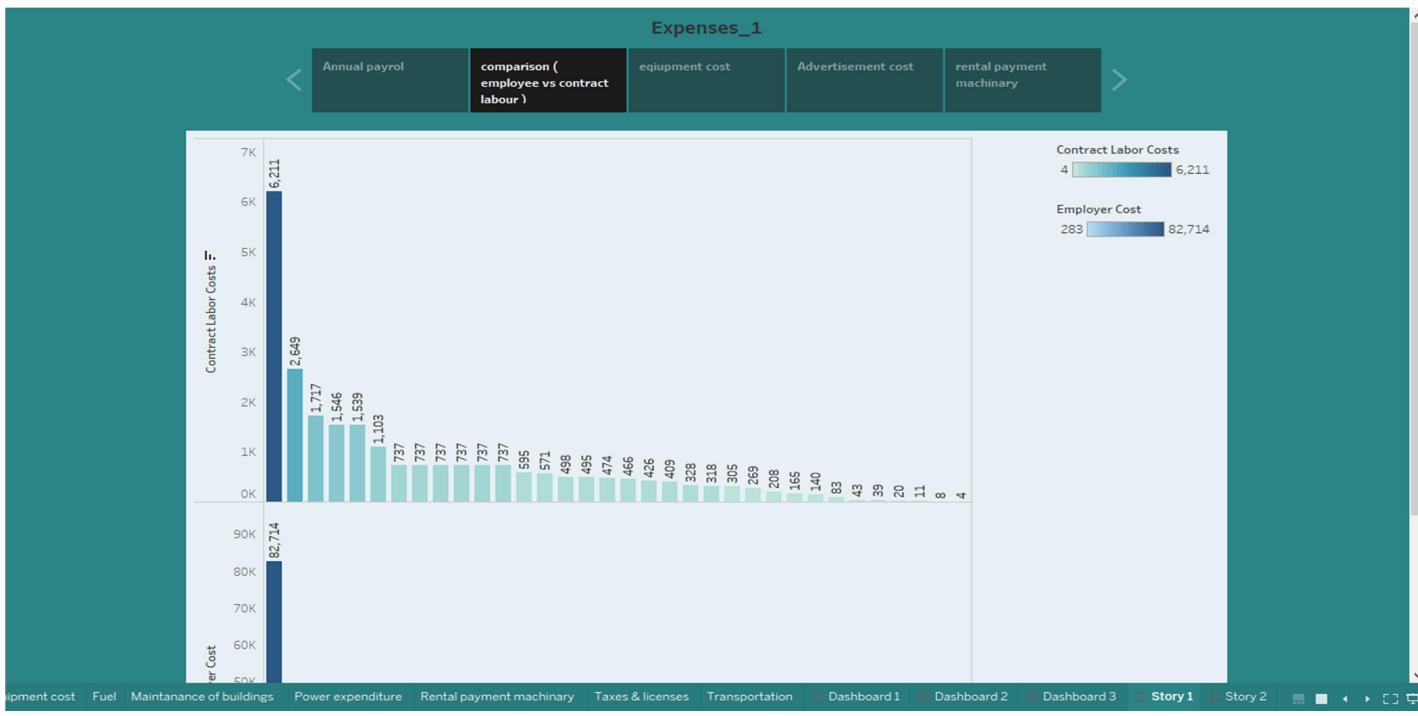
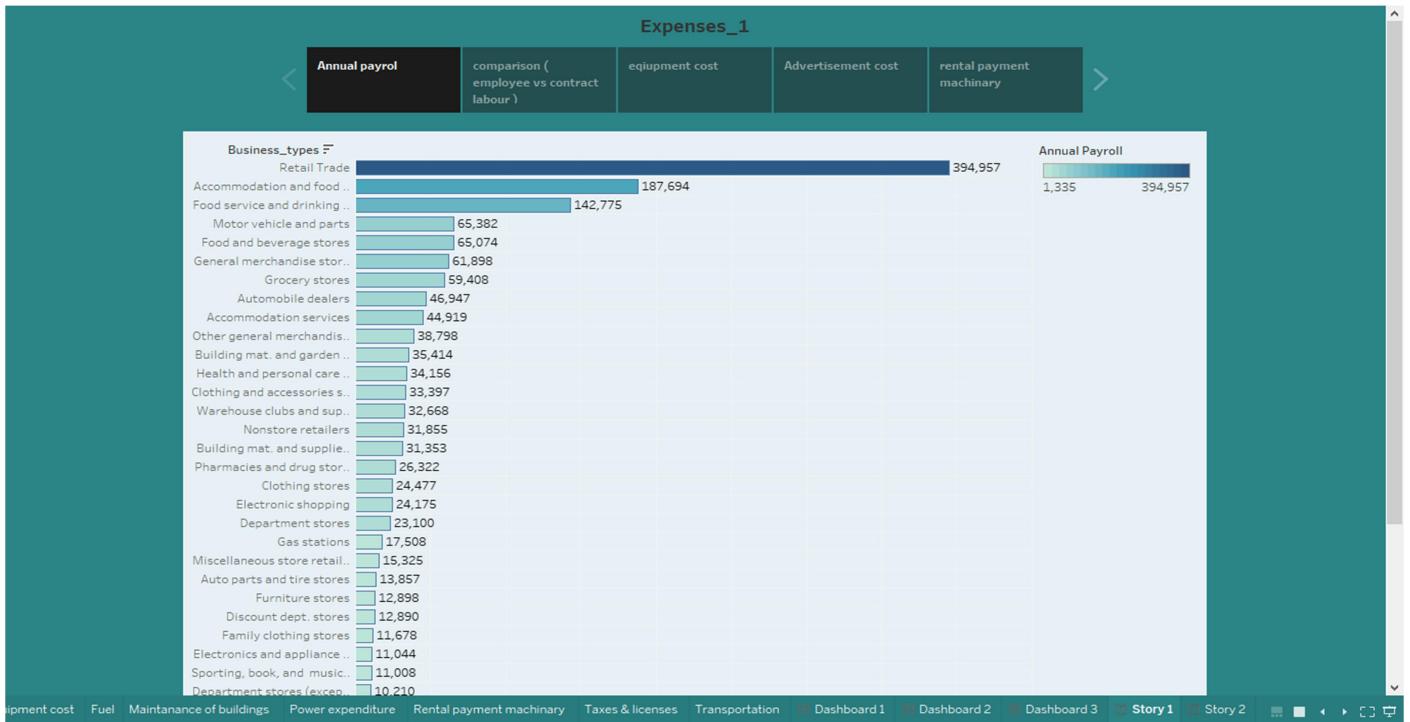
- Brainstorming gives the class a chance to tap into their previous knowledge and form connections between the current topic and what they have already learned. It also encourages them to listen and consider others' ideas thereby showing respect for their fellow classmates

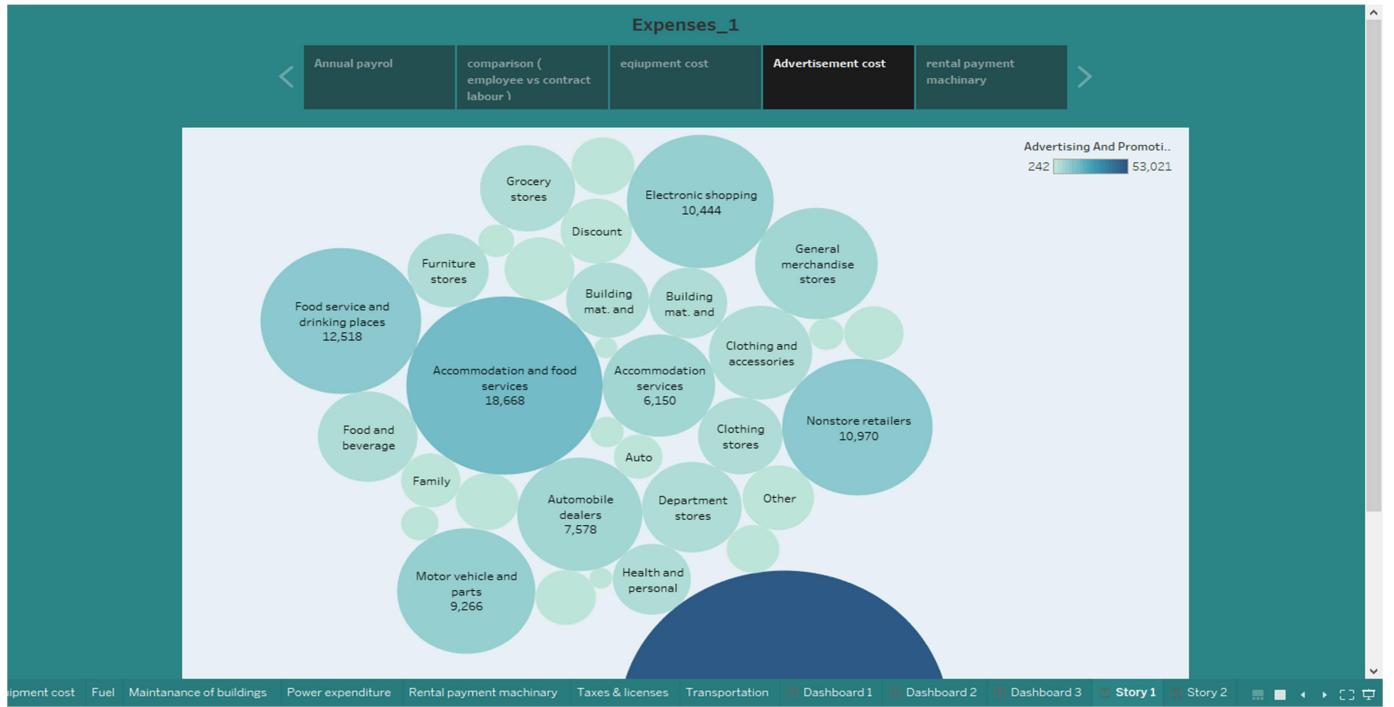
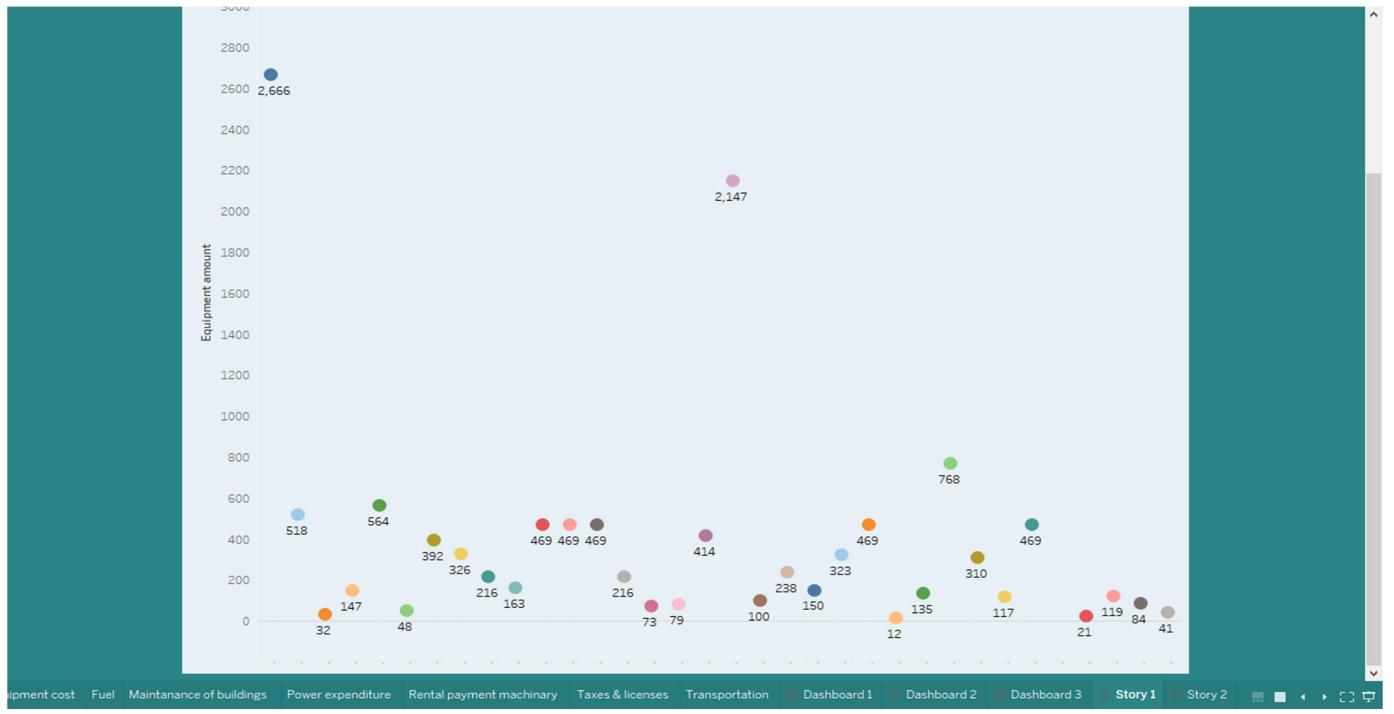
3. RESULT

DASHBOARD IN TABLEAU

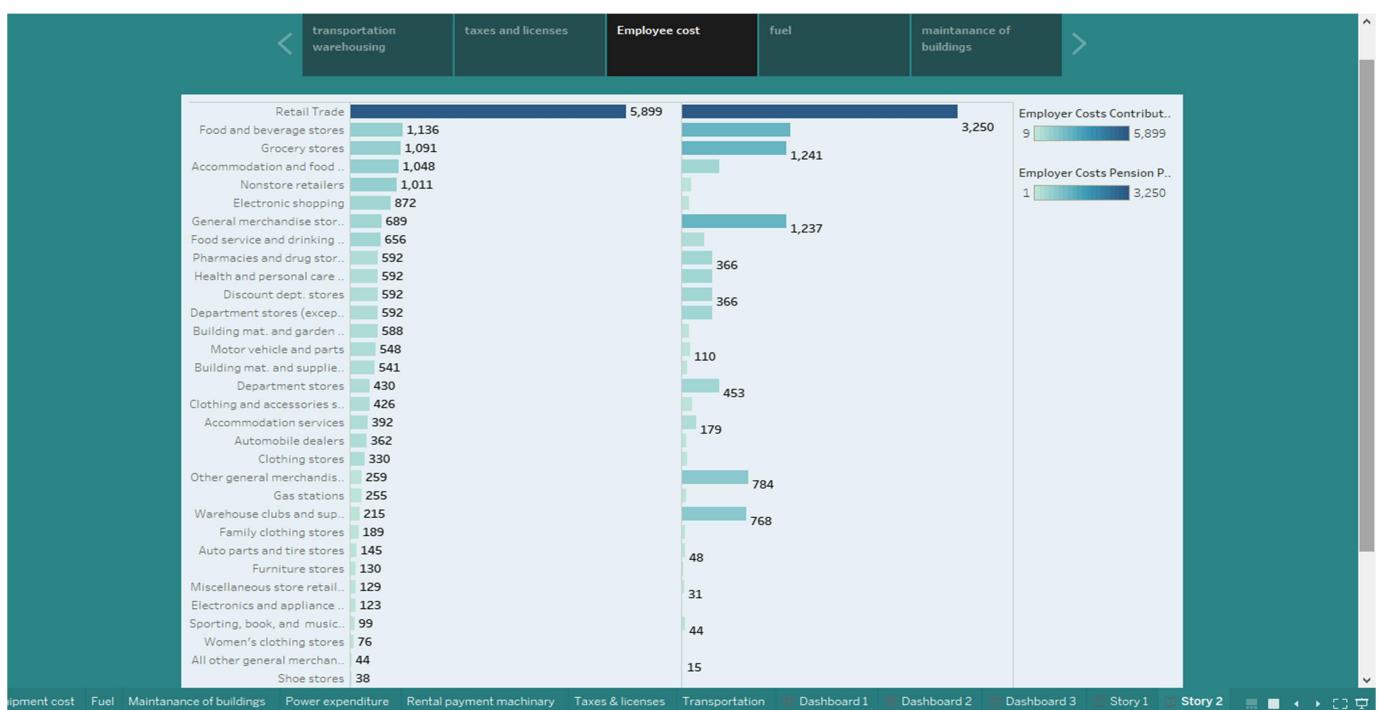
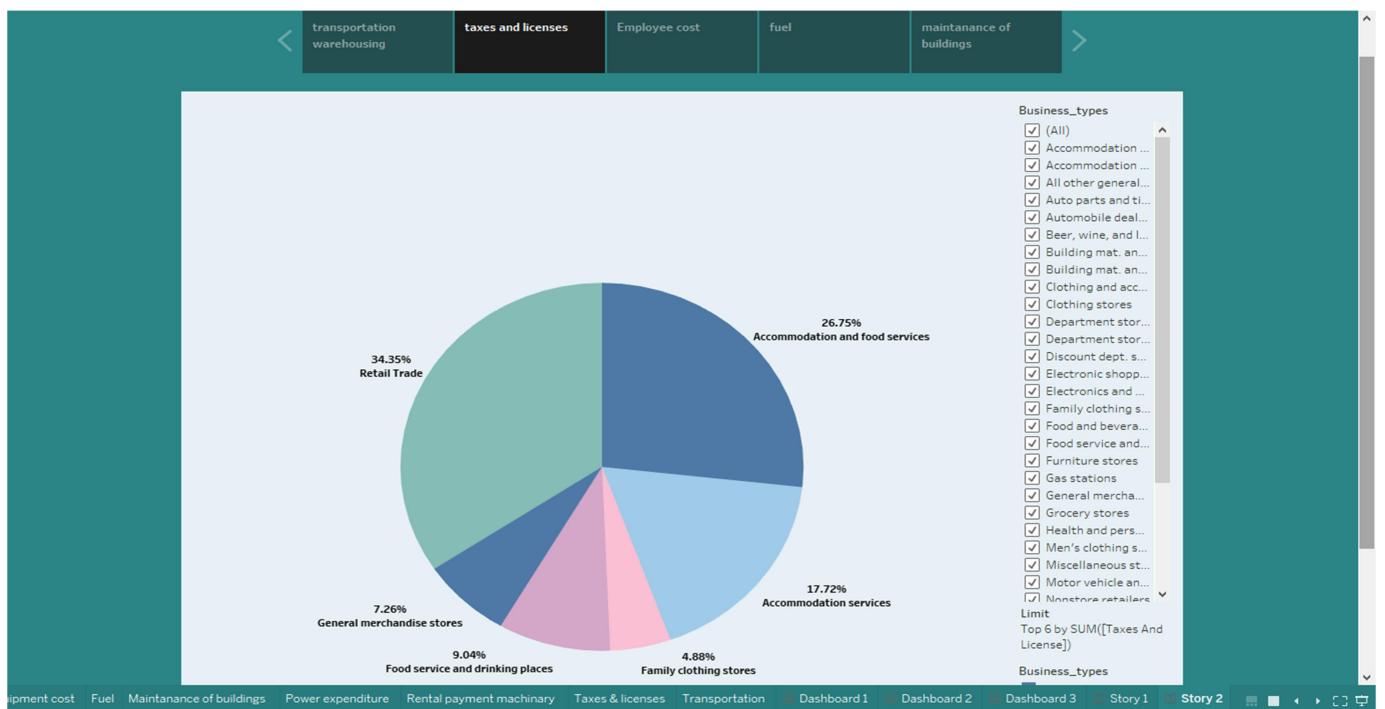


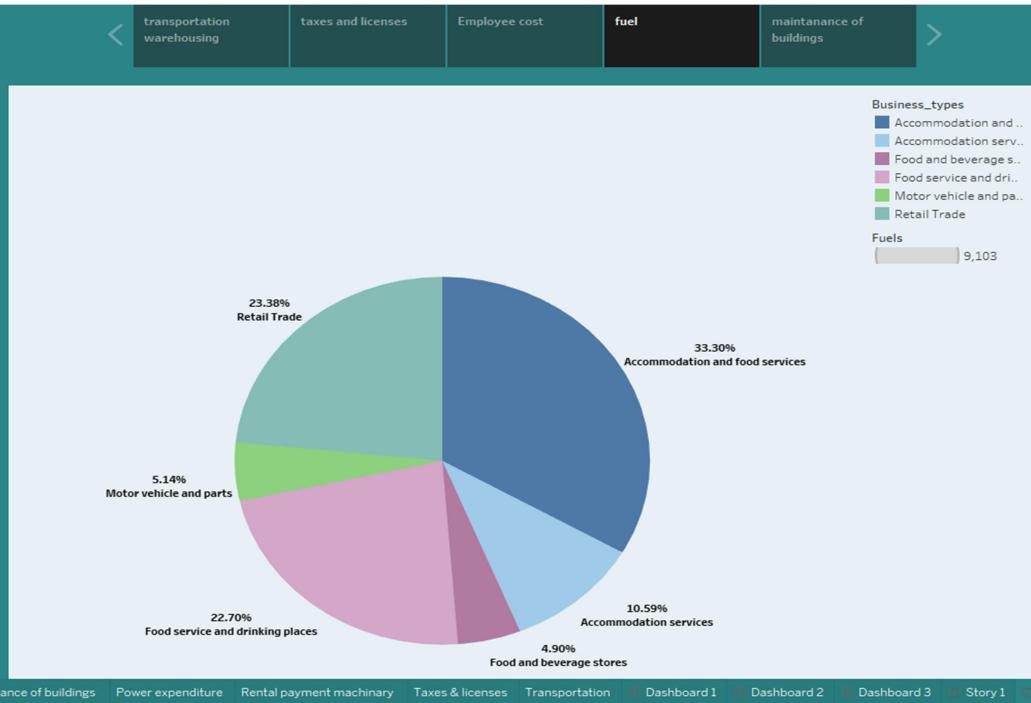
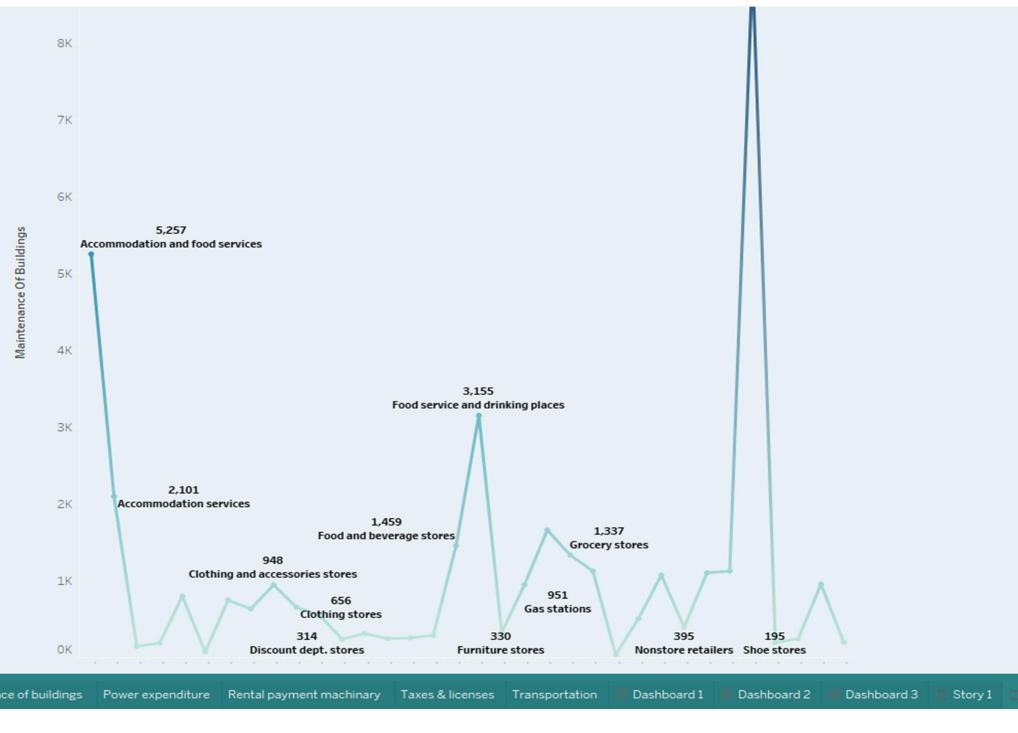
STORY IN TABLEAU











ADVANTAGES & DISADVANTAGES

ADVANTAGES

Problem Resolution:* The proposed solution should address the underlying problem or challenge, leading to its resolution or mitigation.**Improved Efficiency:*** Solutions often aim to streamline processes, reduce wastage, and improve overall efficiency within an organization.**Cost Savings:*** Effective solutions can lead to cost savings through reduced expenses or more efficient resource allocation.**Increased Productivity:*** Solutions that enhance workflows or remove bottlenecks can result in increased productivity among employees or systems.**Enhanced Quality:*** Solutions can improve the quality of products, services, or processes, leading to higher customer satisfaction.**Competitive Advantage:*** Implementing innovative or unique solutions can provide a competitive edge in the market.**Risk Reduction:*** Solutions may help mitigate risks or vulnerabilities, ensuring business continuity and stability.**Scalability:*** Effective solutions should be scalable to accommodate future growth or changes in demand.**Customer Satisfaction:*** Solutions that directly impact customer experience can lead to higher levels of customer satisfaction and loyalty.**Compliance:*** Solutions can help organizations comply with industry regulations or legal requirements, reducing legal and financial risks.

DISADVANTAGES

Implementation Costs:* Some solutions may require significant upfront investments in terms of resources, technology, or personnel. **Time-Consuming:*** Implementing a new solution can be time-consuming, leading to disruptions in existing workflows and processes. **Resistance to Change:*** Employees may resist or have difficulty adapting to new systems or processes, which can hinder implementation. **Unintended Consequences:*** A solution may solve one problem but create new issues or unintended consequences elsewhere in the organization. **Integration Challenges:*** If the proposed solution needs to integrate with existing systems or software, compatibility and integration challenges may arise. **Training Requirements:*** Employees may require training to effectively use the new solution, adding to the time and cost of implementation. **Maintenance and Upkeep:*** Ongoing maintenance, updates, and support for the solution can be resource-intensive. **Security Risks:*** Implementing new technology or processes may introduce security vulnerabilities if not properly managed. **Cost Overruns:*** The actual costs of implementing the solution may exceed initial estimates, impacting the budget. **Uncertain ROI:*** It may be challenging to predict and measure the return on investment (ROI) for some solutions.

FUTURE SCOPE

The future scope of estimating business expenses is likely to evolve in response to changing business landscapes, technologies, and global trends.

Advanced Data Analytics:* The use of artificial intelligence and machine learning will enable businesses to analyze historical data and real-time information more accurately, leading to more precise expense predictions.

Predictive Analytics:* Businesses may increasingly adopt predictive analytics to forecast expenses based on a wide range of variables, allowing for proactive cost management.

Blockchain Technology:* Blockchain can enhance expense tracking and auditing by providing transparent, tamper-proof records, reducing fraud and errors.

Cloud-Based Solutions:* Cloud-based expense management software will continue to grow, offering scalability, real-time updates, and remote accessibility for businesses of all sizes.

Expense Automation:* Automation of expense tracking, reporting, and approval processes will become more sophisticated, reducing administrative burdens and errors.

Sustainability Metrics:* Estimating expenses related to sustainability initiatives and environmental impact will gain importance as businesses prioritize sustainability goals.