



BISHOP AMBROSE COLLEGE

COIMBATORE

DEPARTMENT OF MATHEMATICS

COURSE NAME: DATA ANALYTICS WITH TABLEAU

ACADEMIC YEAR : 2023 -2024

A PROJECT REPORT ENTITLED AS

ESTIMATION OF BUSINESS EXPENSES

WORK DONE BY

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TEAM ID : NM2023TMID13463

UNDER THE GUIDANCE

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DEPARTMENT OF MATHEMATICS

BISHOP AMBROSE COLLEGE,COIMBATORE

INDEX

S.NO	TITLE	PAGE NO
1	INTRODUCTION	1
2	DESIGN THINKING AND PROBLEM DEFINITION	3
3	RESULT	5
4	POSITIVE AND NEGATIVE ASPECTS	16
5	APPLICATION	17
6	CONCLUTION	19
7	FUTURE PLANS	20
8	APPENDIX	21

ESTIMATION OF BUSINESS EXPENSES

1..INTRODUCTION

1.1 overview

This paper explores the intriguing topic of business expenses and offers a visual tour of the varied costs faced by various firms. It displays how expenses are distributed, pinpoints the main sources of cost, and draws attention to any possible problem areas. The intuitive analysis made possible by the visual representations enables a greater comprehension of spending trends and the effects they have on company performance.

Decision-makers, financial analysts, and stakeholders can gather insightful information about a company's financial health, spot inefficiencies or opportunities, and make wise choices to maximize resources and promote growth. We used the Tableau application to extract the insights from the data and present the data as visualizations, dashboards, and stories.



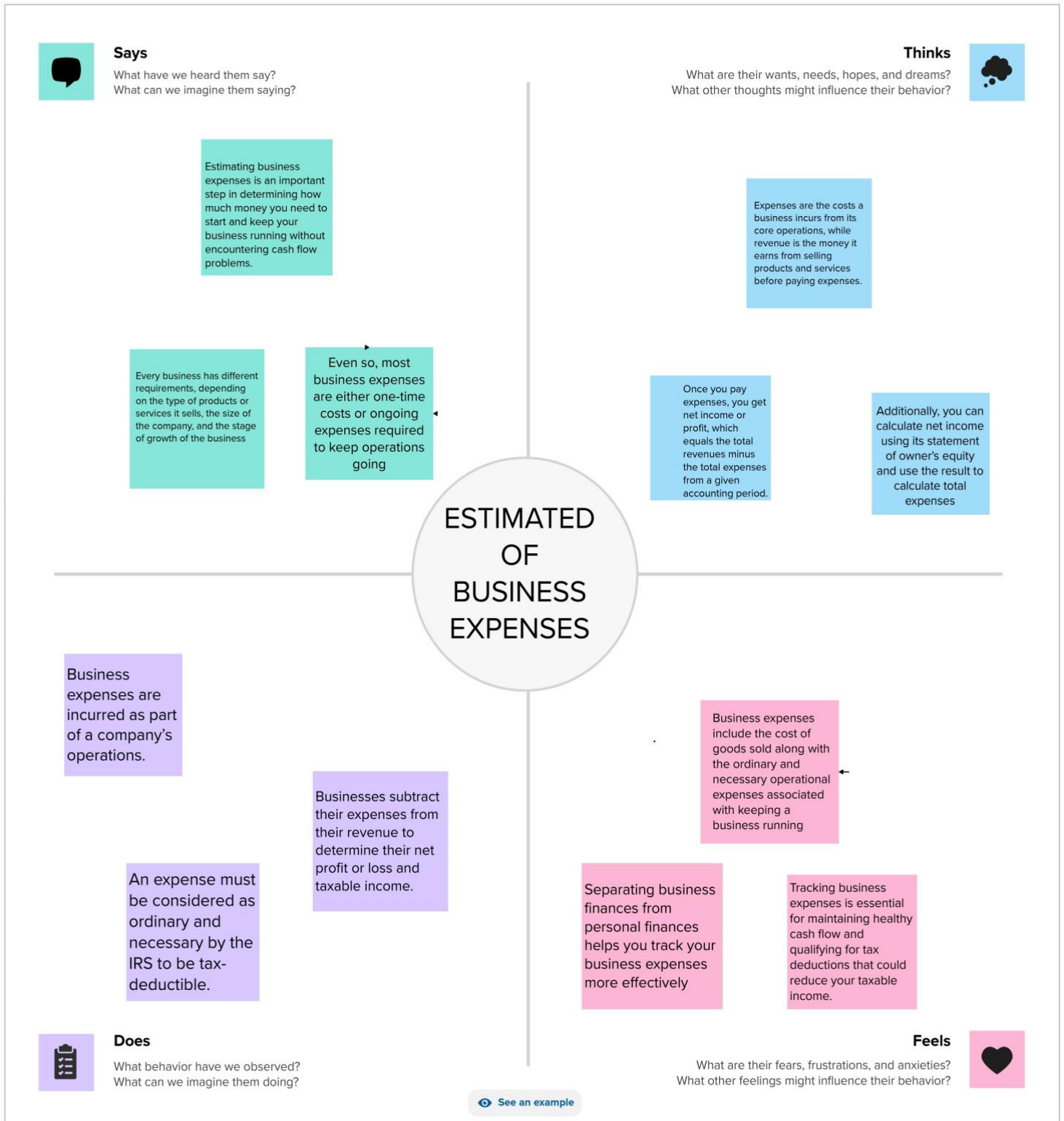
1.2 Purpose

The profit margins on diamond jewelery is much more than pure gold.

1. Gold bars are purchased in **kgs & tons** when the price falls
2. Customers buy gold jewelry in **grams**
3. So there is a **long time transition** of storage / stocking of gold bars to jewelry
4. Further on every jewelry purchase, there is a making charge mark-up. The actual manufacturer may charge 4–5% of weight or charge lumpsum per design (western concept). Whereas the jewelry seller charges around 15–28% as making charge. On some high end designs it can even be 35%.
5. Established jewellers make 50+% profit (old stocks vs new stocks ageing....etc. price difference)
6. The average business gestation for survival is around 12 years...thereon one can float in profits, till then it is tough to survive
7. In countries like India, where businessman to avoid taxation, converts the cash in to gold & parks it with jewellers with or without interest or holding charges. So when the "principle gold" is used, the hoarder gives part of the profit earned to the businessman who kept his black money in form of gold.
8. **Whenever the gold price drops, the making charges are increased to square off.** Nobody reduces making charge when the base gold price goes up. It is fixed to be at something like
 - a. bangles 8–14%
 - b. jewelry 26 % (earrings & other misc)
 - c. special ocassion designs 35%

2. DESIGN THINKING AND PROBLEM DEFINITION

2.1 EMPATHY MAP :



2.2 IDEATION & BRAINSTORMING MAPPING :

Brainstorm & idea prioritization

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

- Brainstorming process
- Team's columns
- 20 people recommended

Believe you can innovate

A belief in your problem gives you a way with this session. Here's what you need to get going.

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Define your problem statement

What problem are you trying to solve? Frame your problem as a clear, specific statement. This will be the focus of your brainstorm.

[Learn more](#)

Brainstorm

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

[Learn more](#)

Group ideas

Take turns sharing your ideas while sticky notes or index cards are up. One of sticky notes have been placed, give each other a thumbs up. If a sticky note is bigger than a sticky note, to get one of you and stick it up to make the group.

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Prioritize

Your team should all be in the same page about what's important, meaningful, and feasible. Place your ideas on the right to determine which ideas are important and which are feasible.

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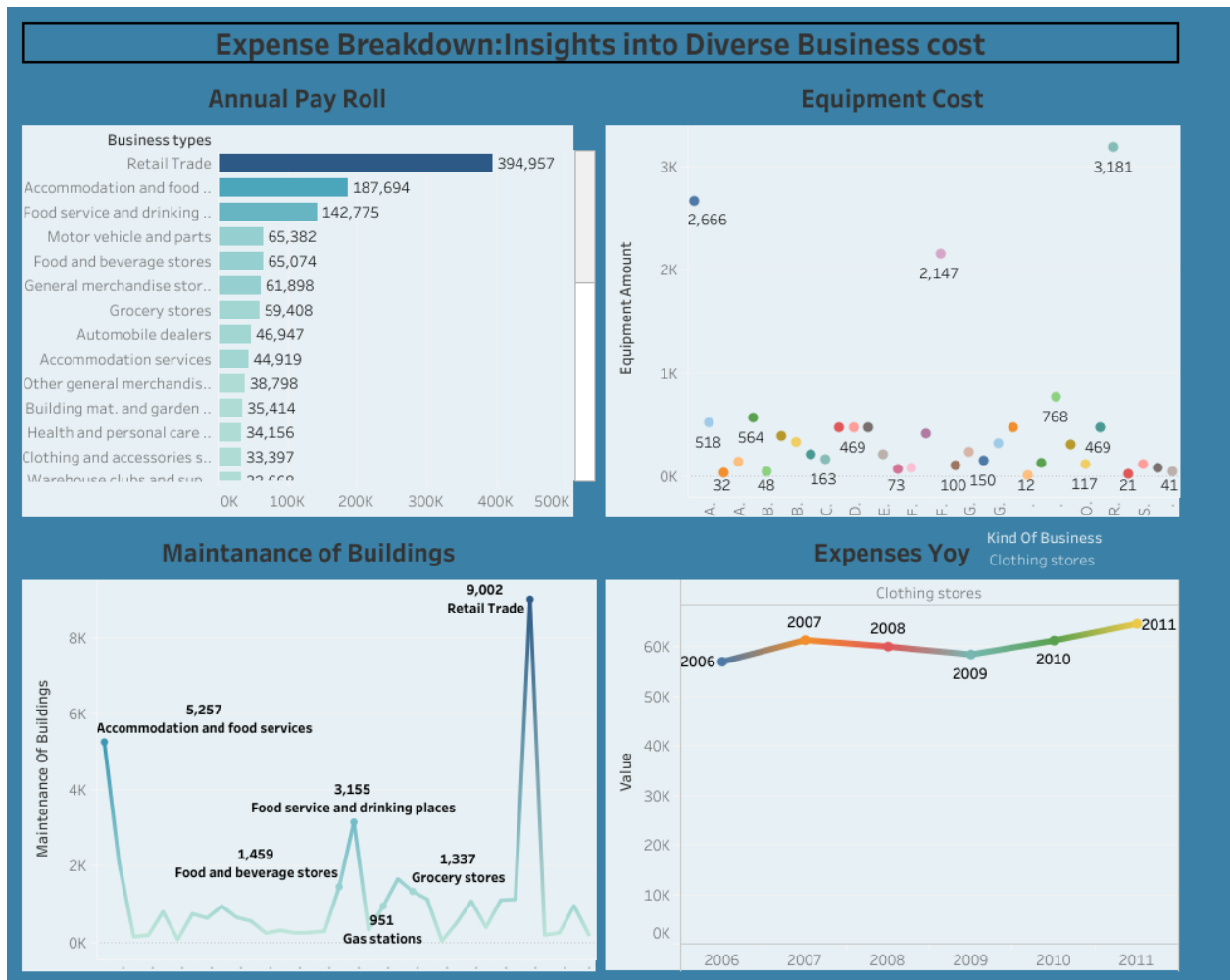
Prioritize

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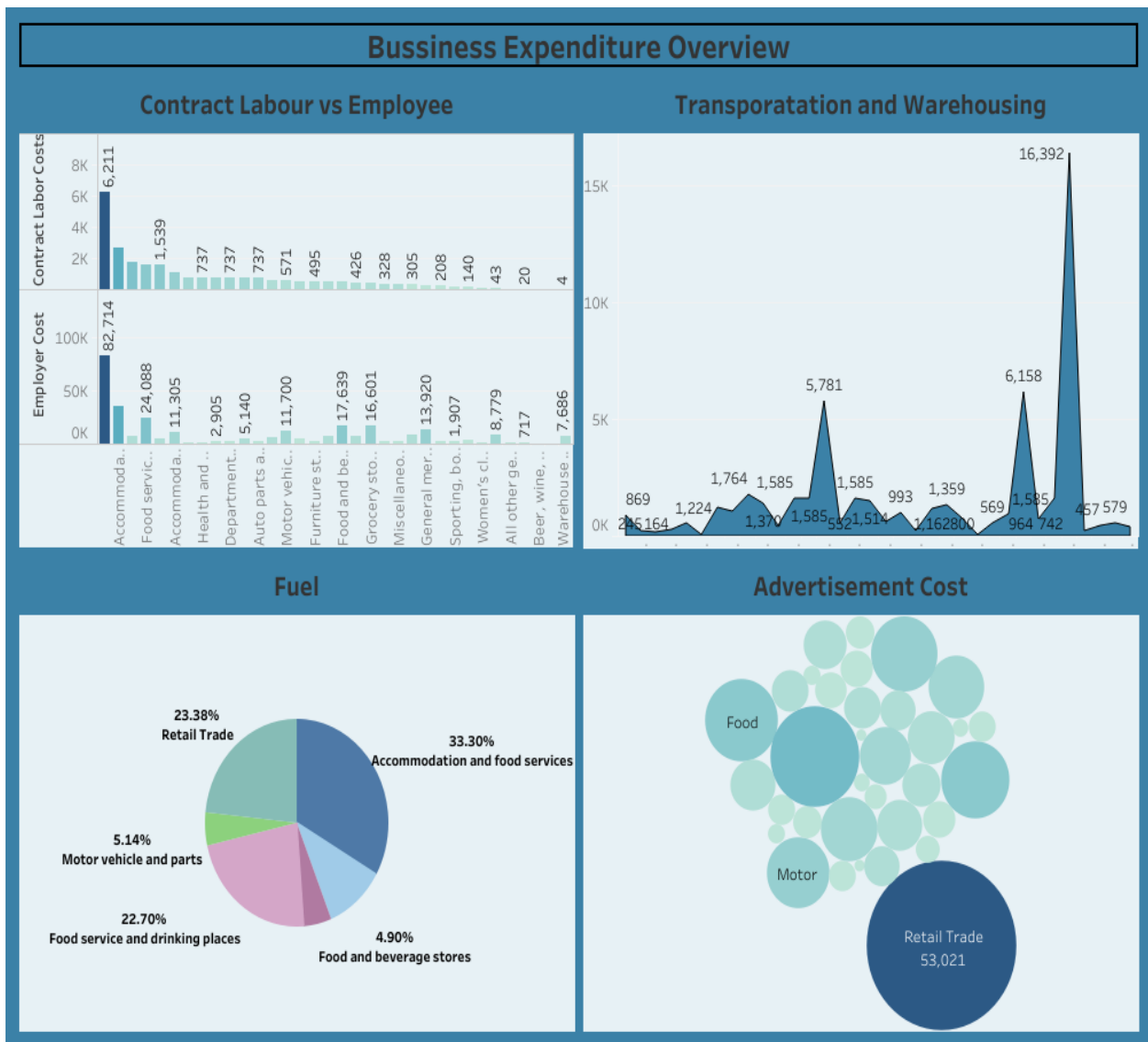
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3. RESULT

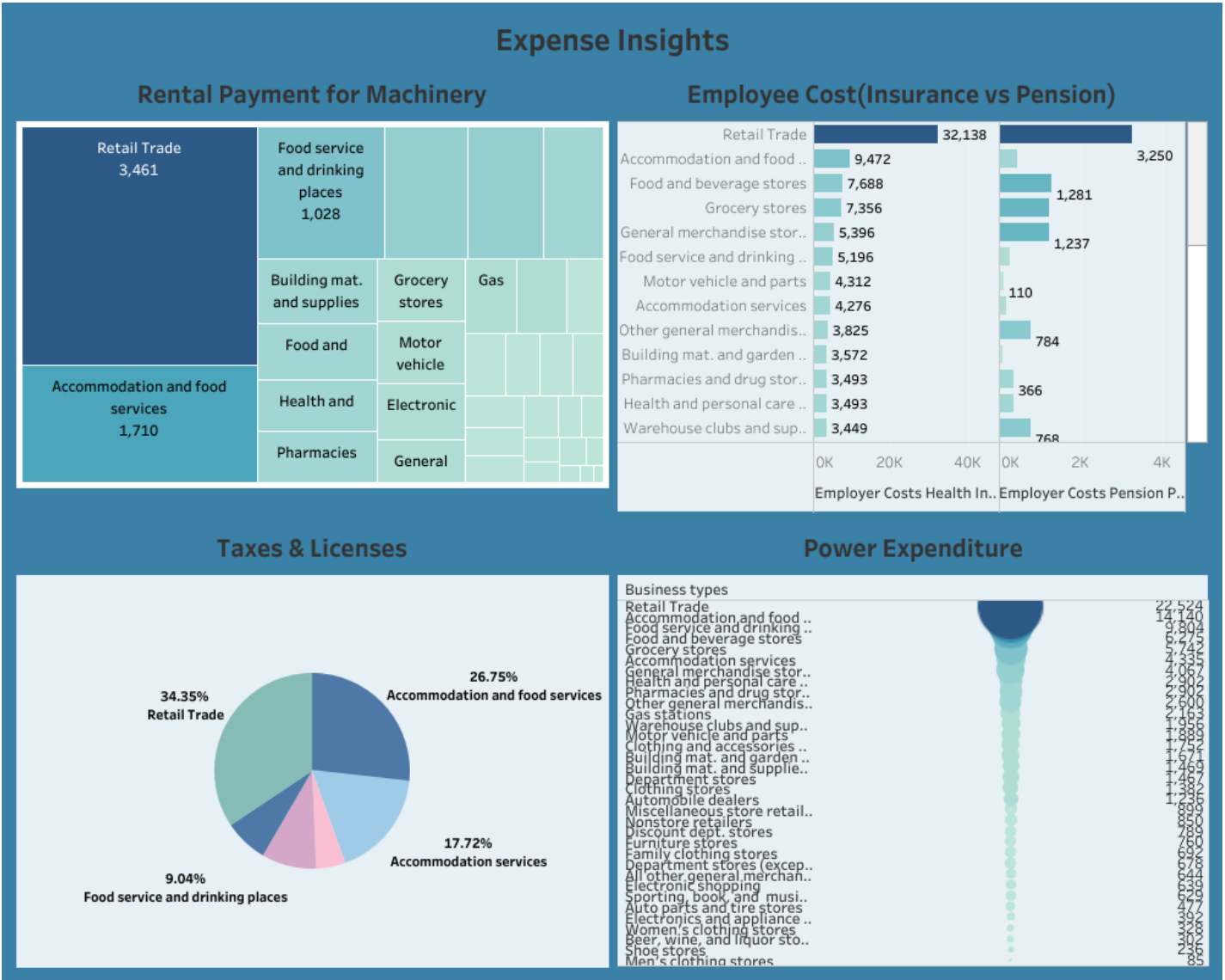
Dashboard 1:



Dashboard 2 :

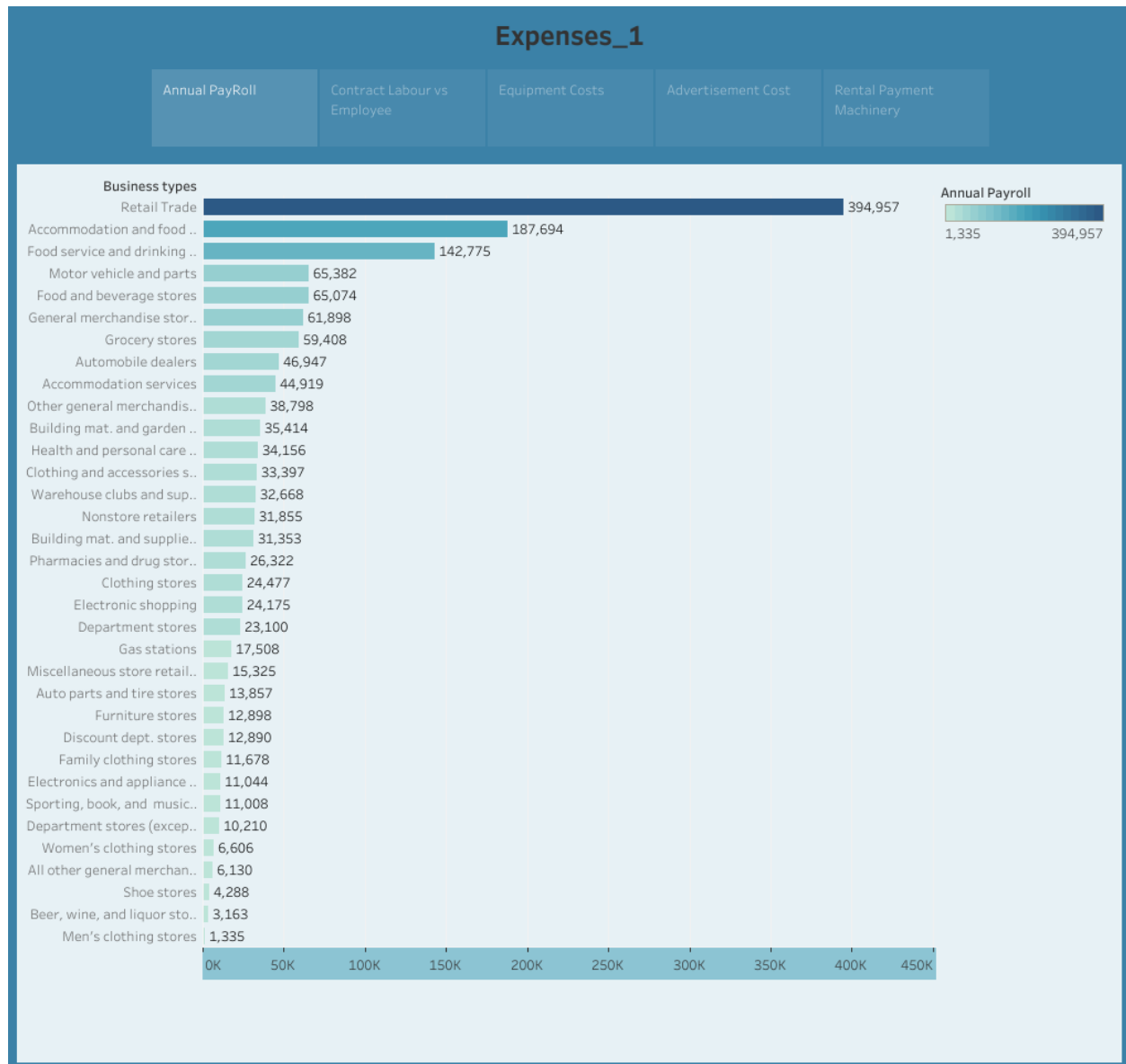


Dashboard 3:

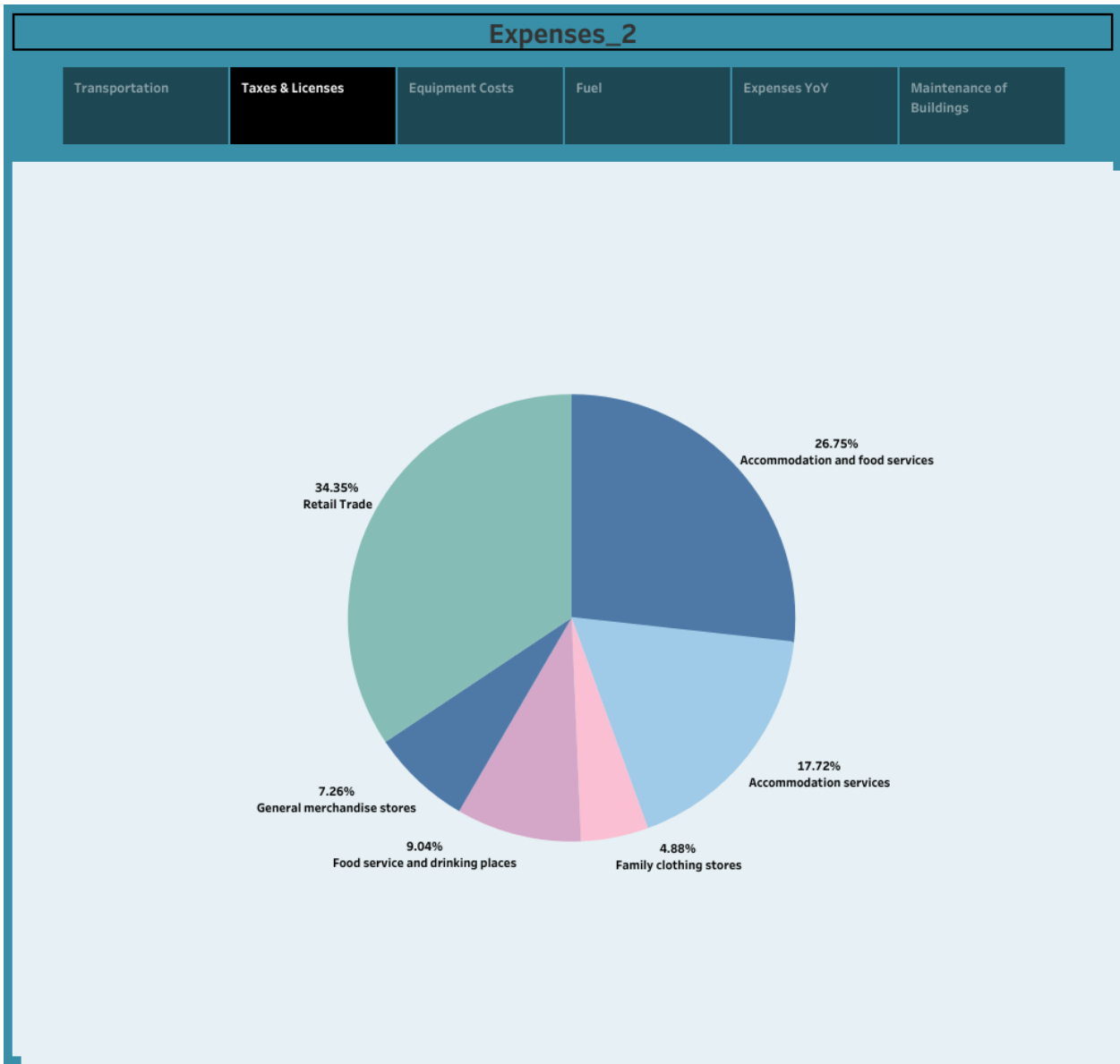


STORY

Story 1 :

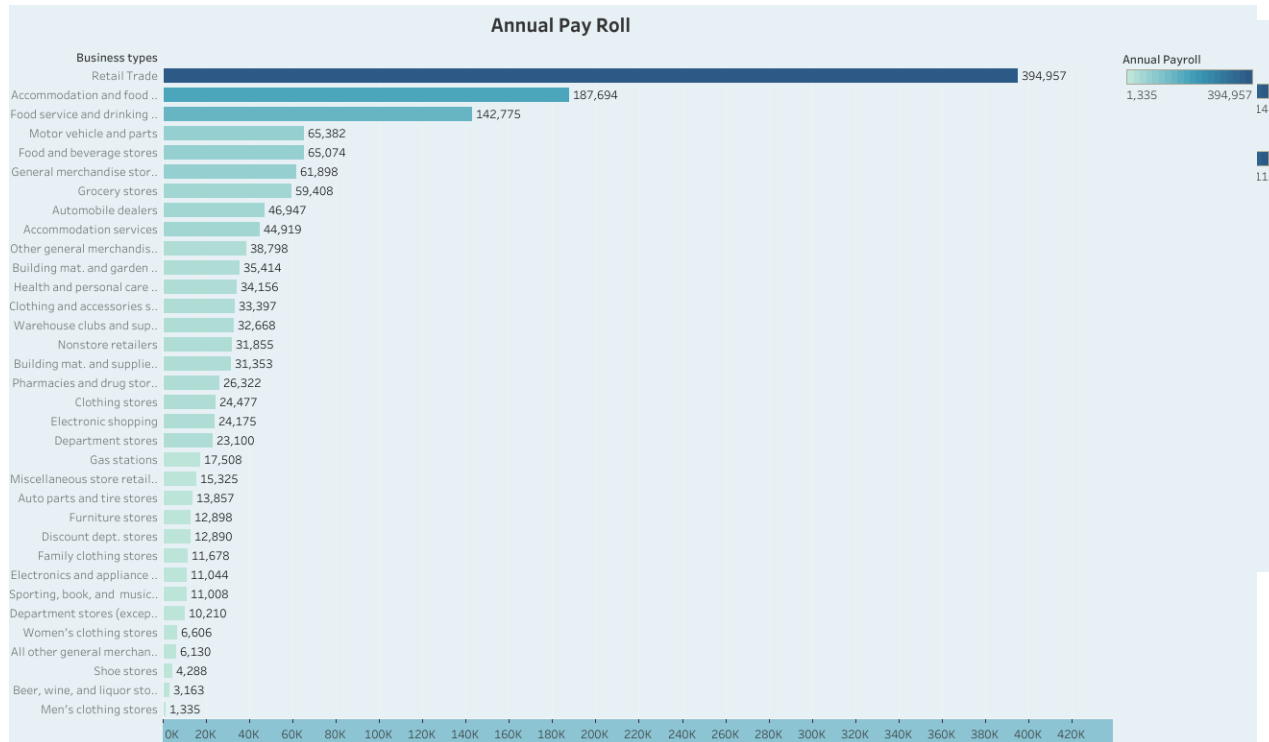


Story 2:

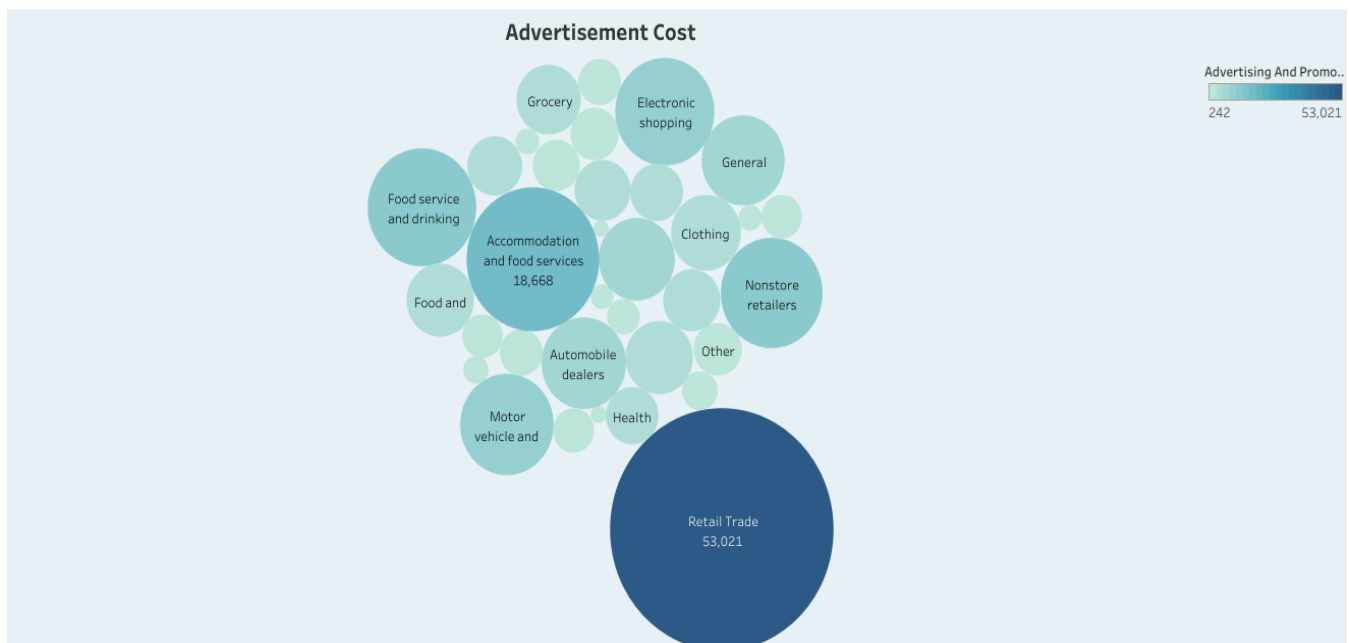


VISUALIZATIONS

1,Annual Pay Roll



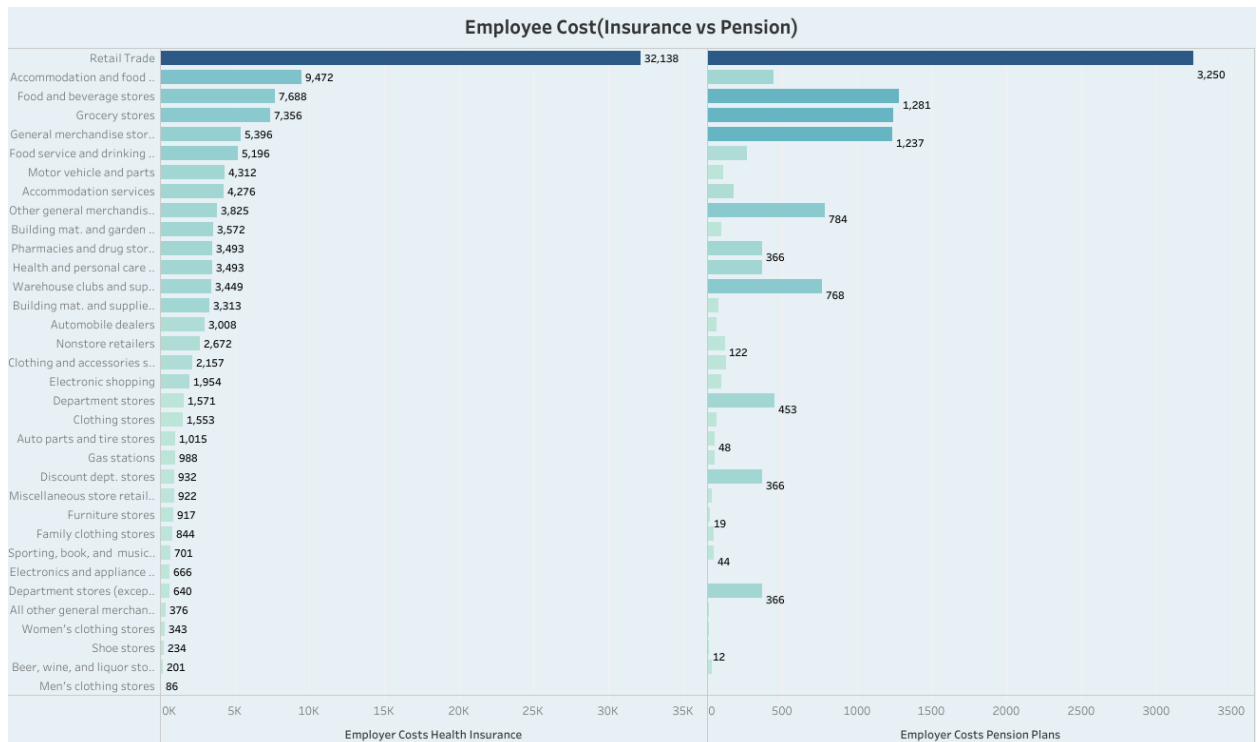
2.Advertisement Cost



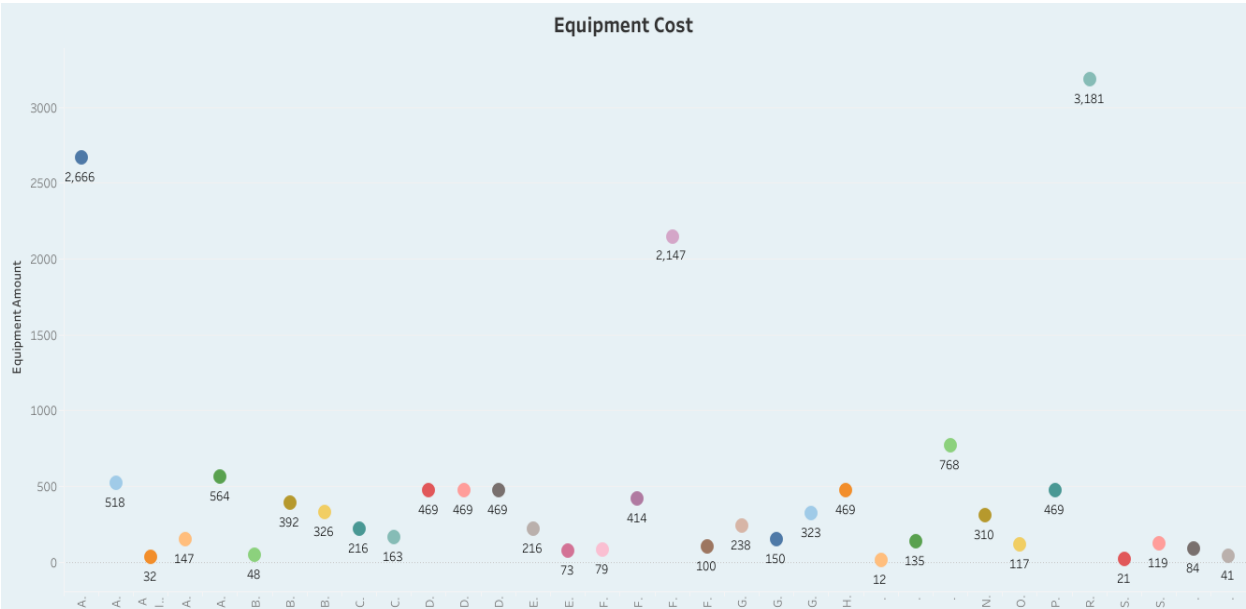
3. Contract Labour vs Employee



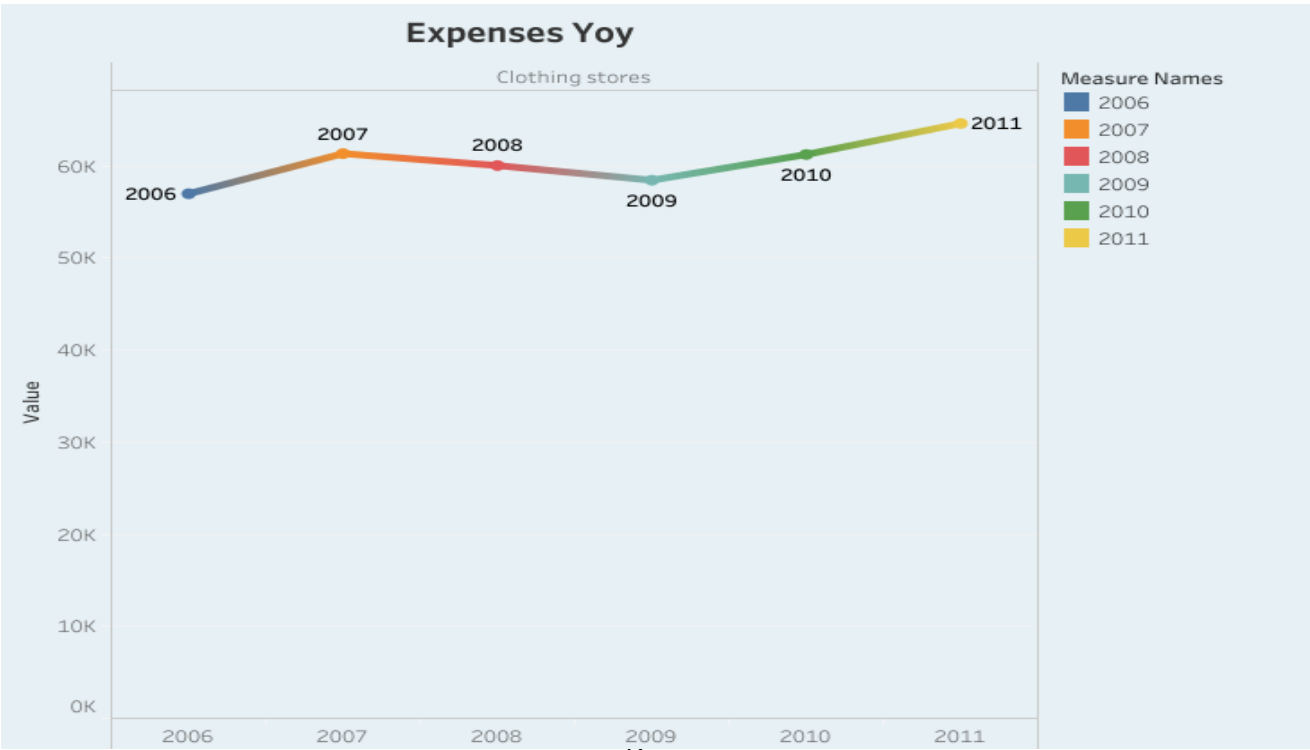
4. Employee (Insurance vs Pension)



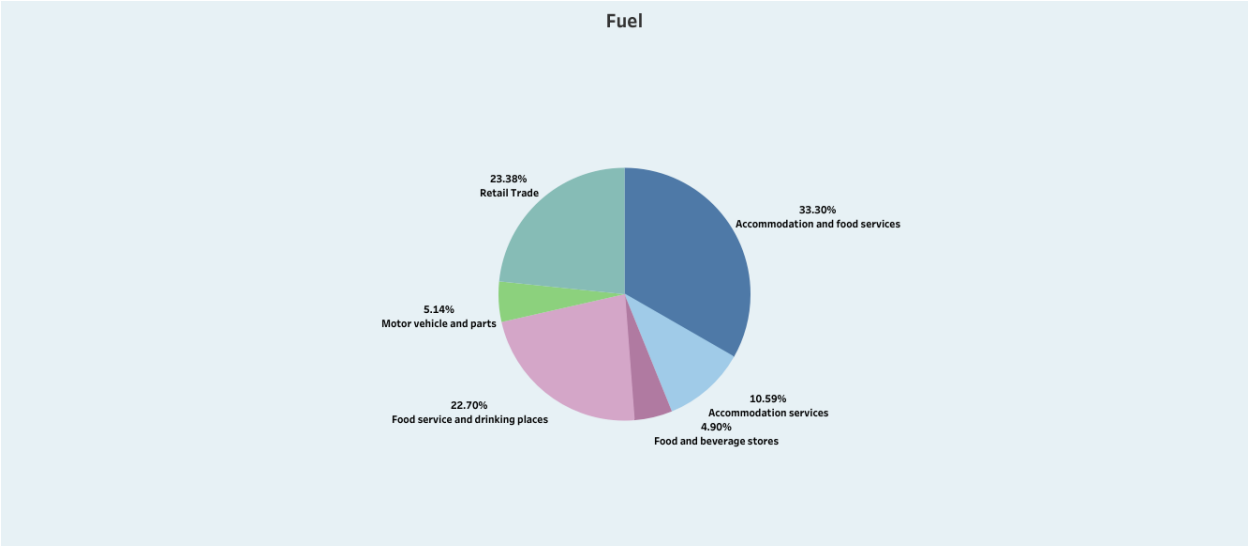
5. Equipment Cost



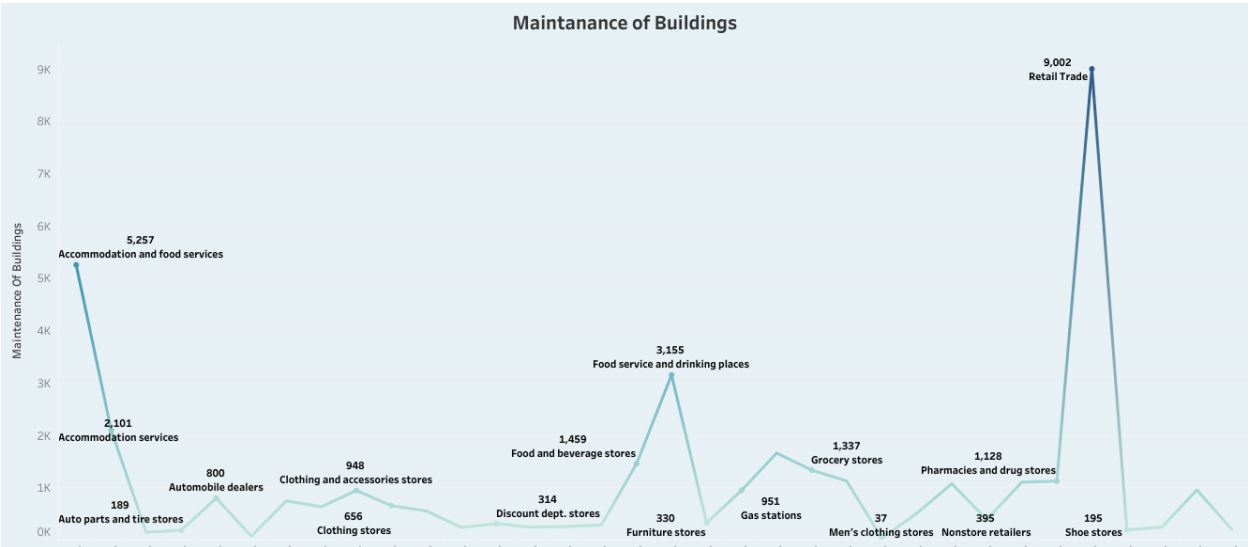
6. Expenses of Yoy



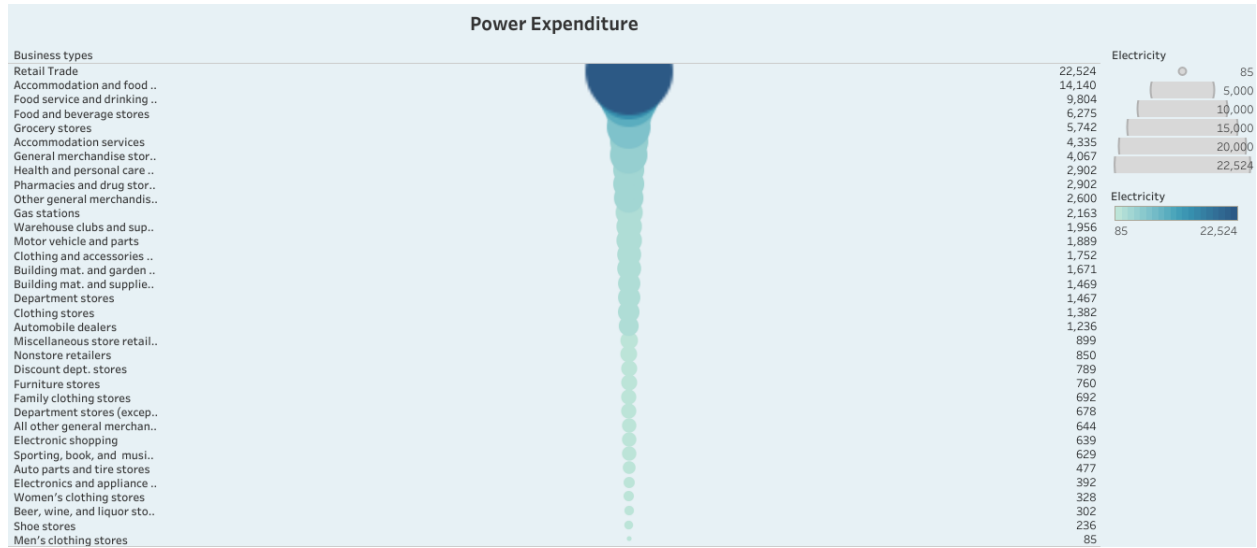
7. Fuel



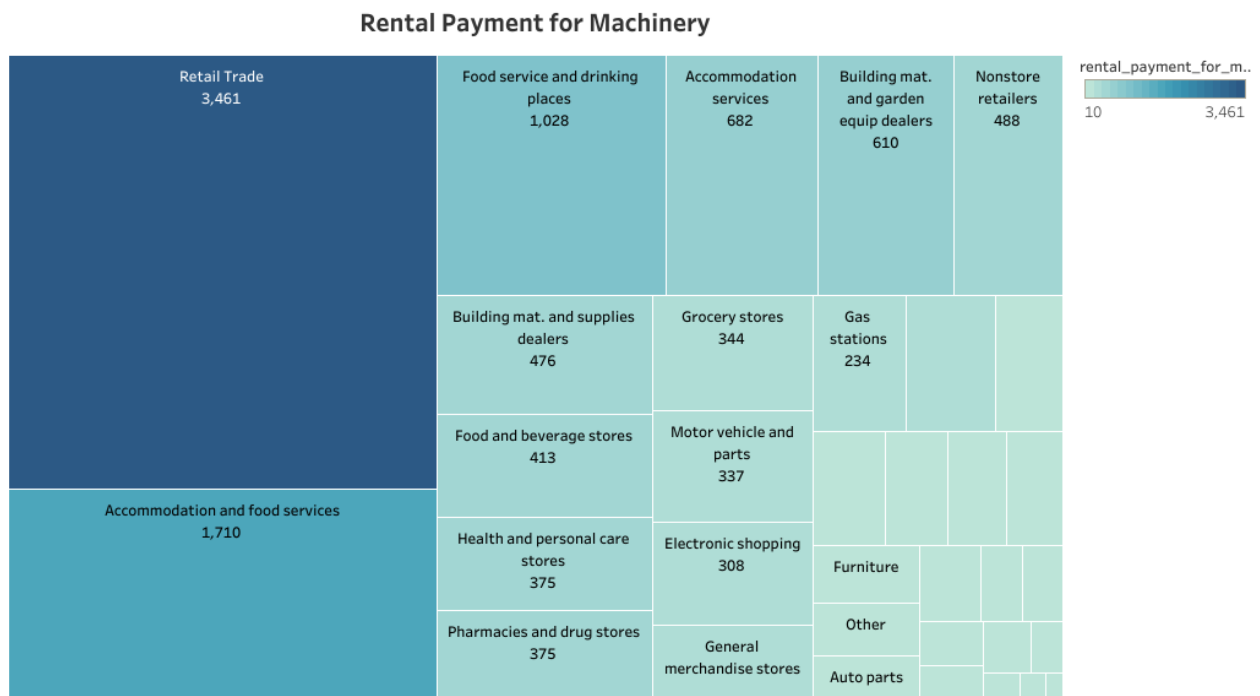
8. Maintanance of Buildings



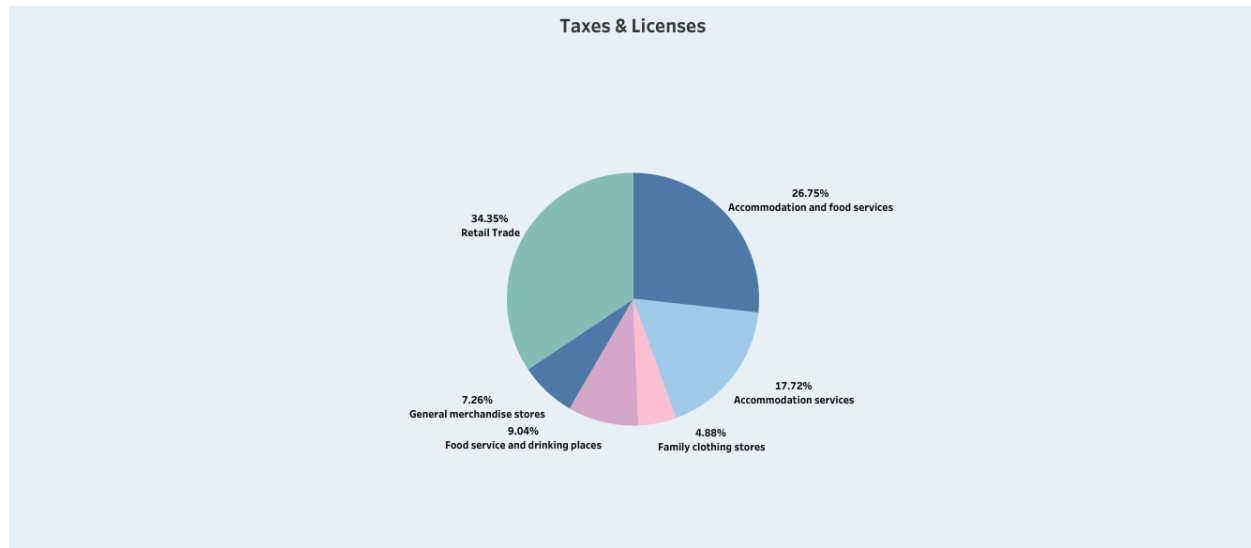
9. Power Expenditure



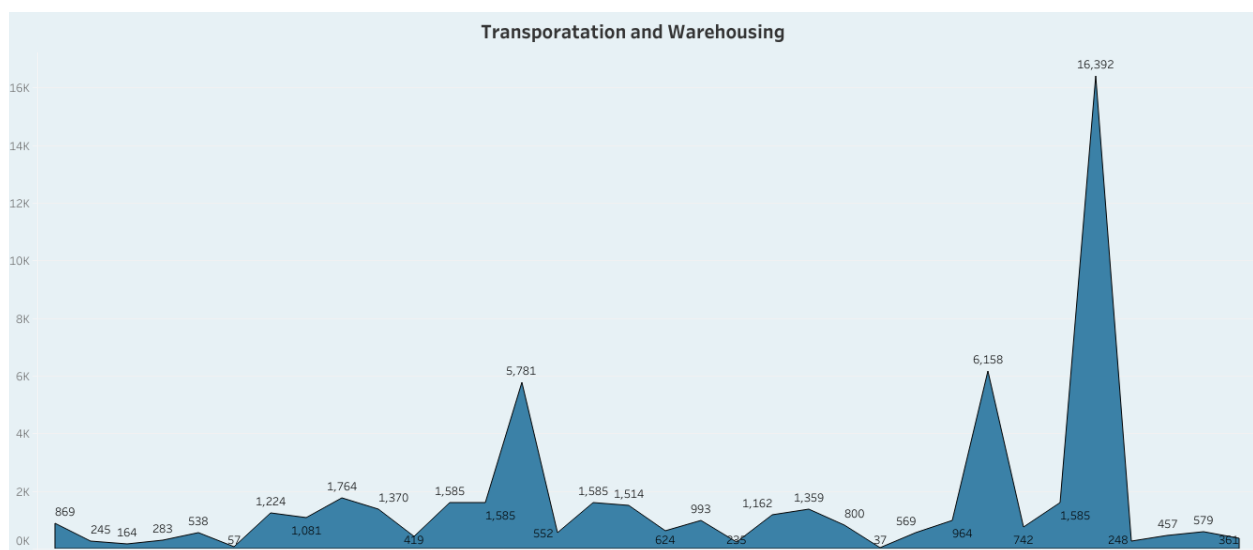
10. Rental Payment for Machinery



11. Taxes & Licenses



12. Transportation and Warehousing:



4. POSITIVE AND NEGATIVE ASPECTS

4.1 Positive Aspects

Gold has historically been extremely valuable due to a number of characteristics. It is typically found in nature in a relatively pure form, is appealing in color and brightness, resilient to the point of virtual indestructibility, and highly flexible



4.2 Negative Aspects

The requirement for consistent income is one of the biggest drawbacks of investing in gold. Contrary to other investment options like stocks and real estate, gold investments do not consistently provide cash flow.



5. APPLICATION

Uses of Gold

Gold is mostly used in the jewellery business, where it is frequently alloyed with other base metals to make it harder. The chemical element with the atomic number 79 symbol is gold. It is represented by the letter Au, which is short for aurum in Latin. This article lists a few significant uses for gold.

Table of Contents

- [Uses of Gold in Jewellery](#)
- [Applications of Gold in the Electronics Industry](#)
- [Applications of Gold in Medicine](#)

Gold's Uses in Jewellery

Gold is frequently used in jewellery and ornamentation because it is widely regarded as a "precious metal" by many. The fact that pure gold is a somewhat soft metal, though, is interesting to observe. Gold is frequently alloyed with other base metals, such as copper, to make it harder. As a result, the gold becomes harder and several of its other characteristics, including melting point and colour, are also changed. It should be mentioned that gold is frequently weaved into threads and used in needlework. Because gold is so expensive, anything made of it, including jewellery and clothing, is regarded as precious.

Applications of Gold in the Electronics Industry

In the electronics sector, gold is frequently utilised to provide corrosion-resistant electrical connectors. Many electrical gadgets, including computers, are known to use these electrical connectors. It's interesting to know that the typical smartphone is estimated to have 50 milligrammes of gold in it. Additionally, it should be mentioned that gold is frequently used as a coating in the connectors used in numerous significant wiring types, including USB cords, video cables, and audio cables.

Gold is perfect for use in electrical contacts because it resists corrosion. One of the most ductile metals known to man, gold is a good conductor of heat and is naturally non-toxic. As a result, switch contacts—which are frequently quite vulnerable to corrosion—are typically composed of gold. Additionally, extremely thin gold wires are frequently used to connect semiconductor

devices to their packages. Wire bonding is the term used to describe the process of connecting devices using tiny gold wires.

Applications of Gold in Medicine

- Applications for gold alloys in restorative dentistry are well known. For instance, it is well known that gold is frequently used as one of the components of the dental bridge or the crown in tooth restoration techniques.
- Gold is also essential to the process of immunogold labelling (also known as immunogold staining, abbreviated to IGS), which is used extensively in research in the fields of materials science and biology. Suspensions of gold nanoparticles, which are frequently referred to as colloidal gold.
- It is well known that the gold-198 isotope is utilised in nuclear medicine to treat various types of cancer. It should be mentioned that the half-life of this gold isotope is only 2.7 days.
- Other Niche Uses of Gold
- Gold is also crucial to the area of photography and is frequently used as a colouring agent in cranberry glass, where it is known to provide a very deep and rich red tint. It is known that gold is used in this application to change the colour of the silver bromide prints towards blue or brown tones.
- This substance is also used to build a number of artificial satellites. Since it is known to be a reflector of electromagnetic radiation (both infrared radiation and the radiation that falls under the visible spectrum), it is used here on the surfaces of the artificial satellites.
- Some chemical reactions also use gold as a heterogeneous catalyst. In these situations, gold In order to improve the effective surface area, gold is frequently distributed into nanoparticles.
- Gold is also utilised in gold compact discs, a high-end CD type in which the element serves as a reflective coating.

6. CONCLUTION

Over the past two decades, attitudes toward gold have significantly shifted, as a result of rising wealth in the East and a growing understanding of gold's place in institutional investment portfolios on a global scale.

Given its distinctive characteristics as a rare, highly liquid, and uncorrelated asset, gold can serve as a diversifier over time. Due to its dual status as an investment and a luxury good, gold has been able to produce annualised returns of about 8% since 1971, higher than those of bonds and commodities and on par with equities.

Due to its historical status as a safe-haven asset, gold performs best in high-risk situations. However, due to its attractiveness as both an investment and a consumer commodity, it can also produce profits in prosperous times. Given the continued political and economic unrest, as well as the concerns about the equity and bond markets, this dynamic is likely to persist.

7. FUTURE PLANS

In the minds and hearts of billions of people around the world, gold is a very significant commodity. Countries and individuals stockpile this priceless resource in an effort to safeguard their future. Today, it is possible to buy and sell it at various gold rates through a variety of media, removing the need for physical storage of this priceless metal. While the term "gold futures" may not be familiar to everyone, it is quickly gaining popularity in the nation. Gold futures are one such widely used method of engaging in the gold trade.

Benefits of purchasing gold futures

- The following list includes some of the main advantages of gold futures.
- As a buyer won't have to worry about locating secure storage facilities to store the gold, it reduces the need for quick storage.
- Participating in this trade requires less money because the buyer can pay a portion up front and the balance once the contract is signed.
- There is a sizable amount of liquidity available.
- There is a short-selling clause.

8. APPENDIX

Github link

https://github.com/androssrock7708/Estimation-of-Business-Expenses_NM2023TMID13463

Dashboard 1

https://public.tableau.com/views/androssproject/Dashboard1?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Dashboard 2

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Dashboard 3

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Story 1

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Story 2

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visualization 1

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visualization 2

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visualization 3

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visualization 4

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

visualization 5

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visualization 6

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visualization 7

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visualization 8

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visualization 9

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

visualization 10

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

visualization 11

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

Visualization 12

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

Video Demonstration Link:

https://drive.google.com/file/d/1JAqxIKUPDVWoZEUJO8tlbhF4vJFZRxDt/view?usp=drive_link