



Australian Shopping Cart Analysis

Meet Our DataTeam

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OVERVIEW

[Shopping Cart]

E-commerce
with **clothing**
products



Our Customer is
from **8 States** of
Australia



616 Active customer
of **1000 total**
customer we have



\$ 1.03 M
Total Sales



Jan - Oct 2021
Our sales time

PROJECT GOALS

In this October our sales performance is the **worst performance** of all time. Our sales experienced a **downward trend** where **monthly sales** slowly decreased.

Main Objective

How to increase Gross Merchandise Value (GMV) by next month?

Scope of Problem

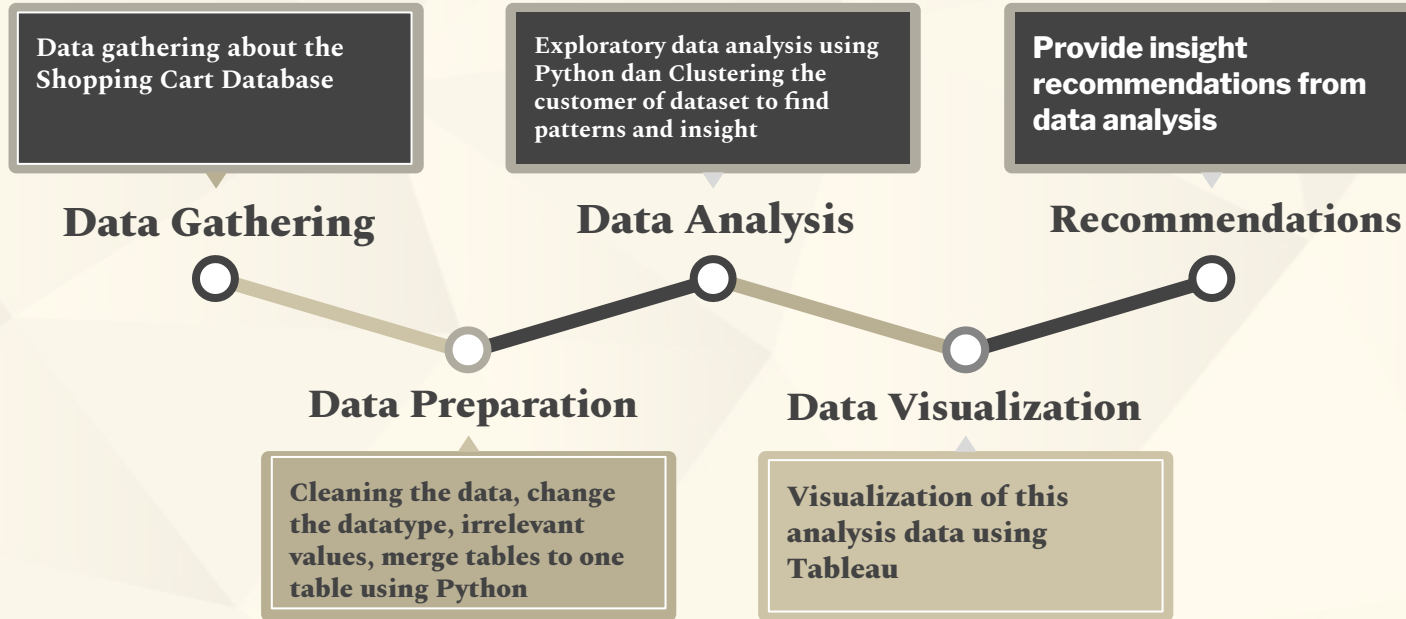
Analyzing important aspects of the *causes of the decrease in GMV* and *customer behavior* from each segmentation to contribute to impacting the **increase in GMV in the following month**

OBJECTIVE

**Aspects that
increasing impact
on GMV**

**Customer Behavior
Segmentation
(Clustering)**

METHODOLOGY



EXECUTIVE SUMMARY



1

Sales Report

The movement of our sales tends to go down. At the beginning of this year we had \$ **119K** of GMV while in the last **3 months** we only had \$ **95K** average of GMV



3

Average product quantity sold per month

There are **36 kind of products**. Average quantity of each products sold per month is **27 unit's**



2

Number of repeat customer still low

We have 616 active customers. Average transactions per customer is only **1 transaction** while amount orders per customer is \$ **1,675**



Business Questions

1. Why has **GMV** decreased?

- How many **quantity of order** per month?
- How many **transactions per month**?
- How many **customer** do **transactions per month**?
- How long does it takes to processing the orders ? (**lead time**)
- which product gives the **best contribution** to GMV

2. How **behavior** of each customer?

- Which customers who made the **most transactions**?
- How much **Average Order Value (AOV)**?
- How is **customer segmentation** based on the **quantity of orders** and the **amount of money** they spend?
- How Customer **demographics** and their **preferences**?



DATA (SOURCE) GATHERING PROCESSING

Shopping Cart Database

This dataset contains data of customers, products, orders, and sales.

DATASET TABLES

Customers



Products



Orders



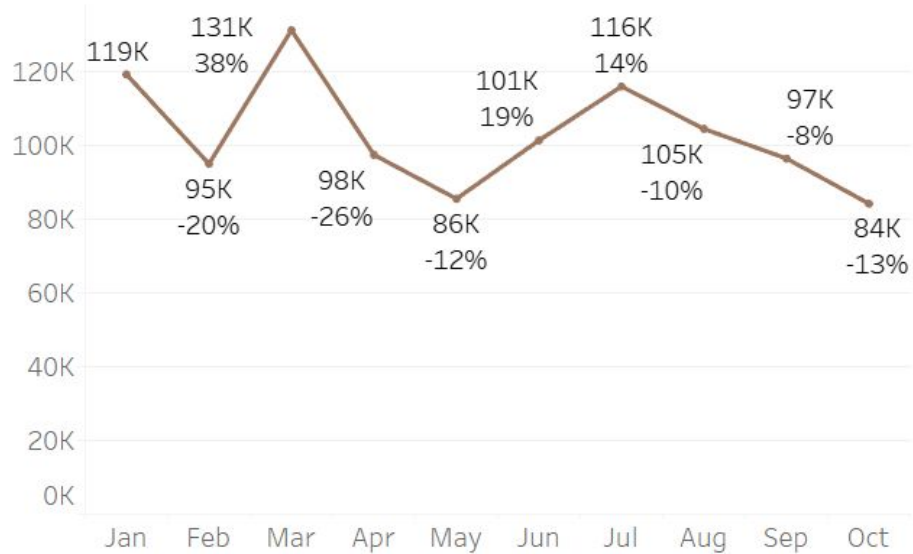
Sales



- Combine/Merge all tables into single table to make it easier to do the analysis

Our Total Sales **decreased** significantly in the third quarter

Trendline Sales



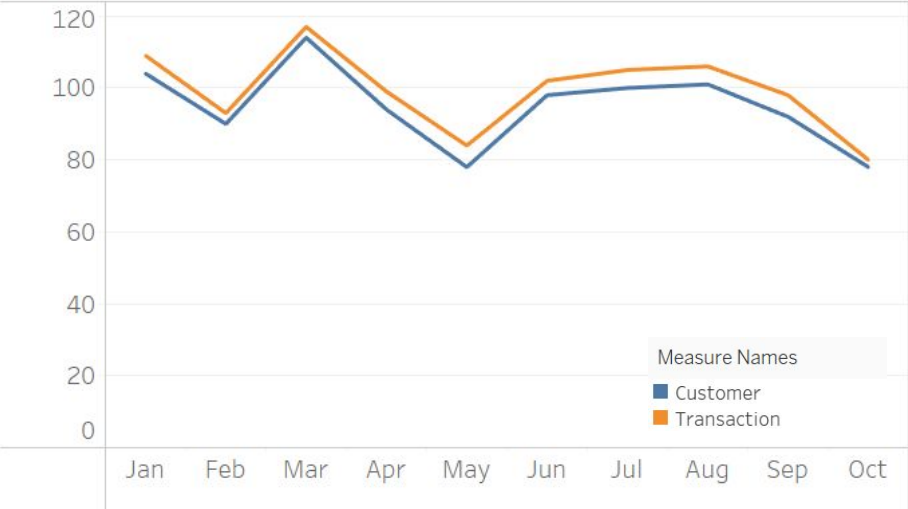
- The peak of sales occurred in **March**
- Movement of our sales run into **downtrend**
- Our **highest growth rate** occurred in **March** with **38.16%**
- The **growth rate** from **March** to **April** fell **drastically** until **-25.76%**
- From July to October successively **decreased**

What happened?

Key challenges in keeping sales on the track

Avg Customer Transactions	AOV per Customer
1.6	\$ 1,675

Total Order vs Customer



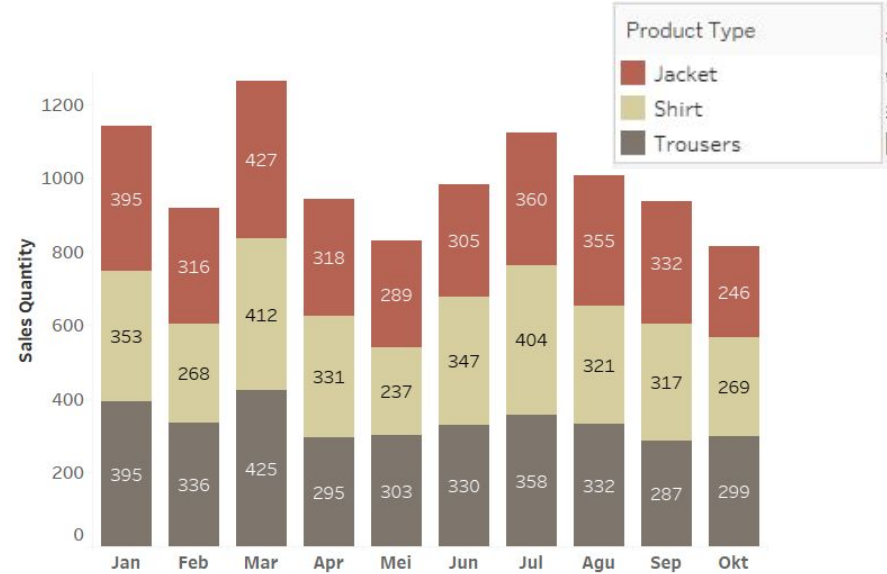
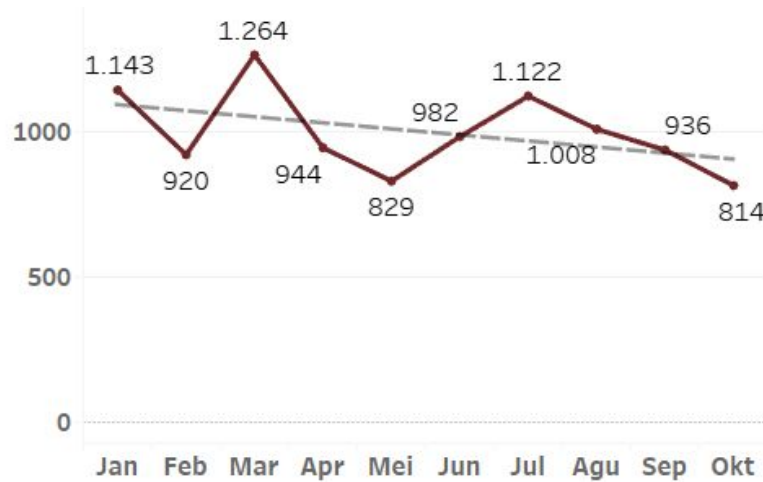
In terms of increasing sales, we already had a **good indicator from total order per customer**. Meanwhile we still have an issue, the data shows us **a lot of customers only make transaction once**.

There are **616 people** who already did a transaction. We can try to pursue at least **15 % of our customer (93 customers)** make a transaction within amount **\$ 1,675** in the next month.

In this case we can achieve about **\$ 155,775** total sales in next month

Same with total sales, Total Quantity seems **decreased** slightly in the long term

Total quantity of product per month



- **Highest total quantity of product sold** of all time is on **March**
- Total order run into **slightly downtrend**
- For **3 product types**, there are **12 products** for each type. Each product quantity sold on **average is 27 units per months** (Our product is not fast moving enough. If we breakdown per day, it means there is a possibility that our product on a certain day is not sold)

Suggested better service regarding lead time

Company	Lead Time
Our company	14 days
Competitor X	< 4 days
Competitor Y	< 5 days

Currently, we still have an issue with lead time. It takes time about **14 days** while the **competitor just takes 4-5 days**

Suggestion :

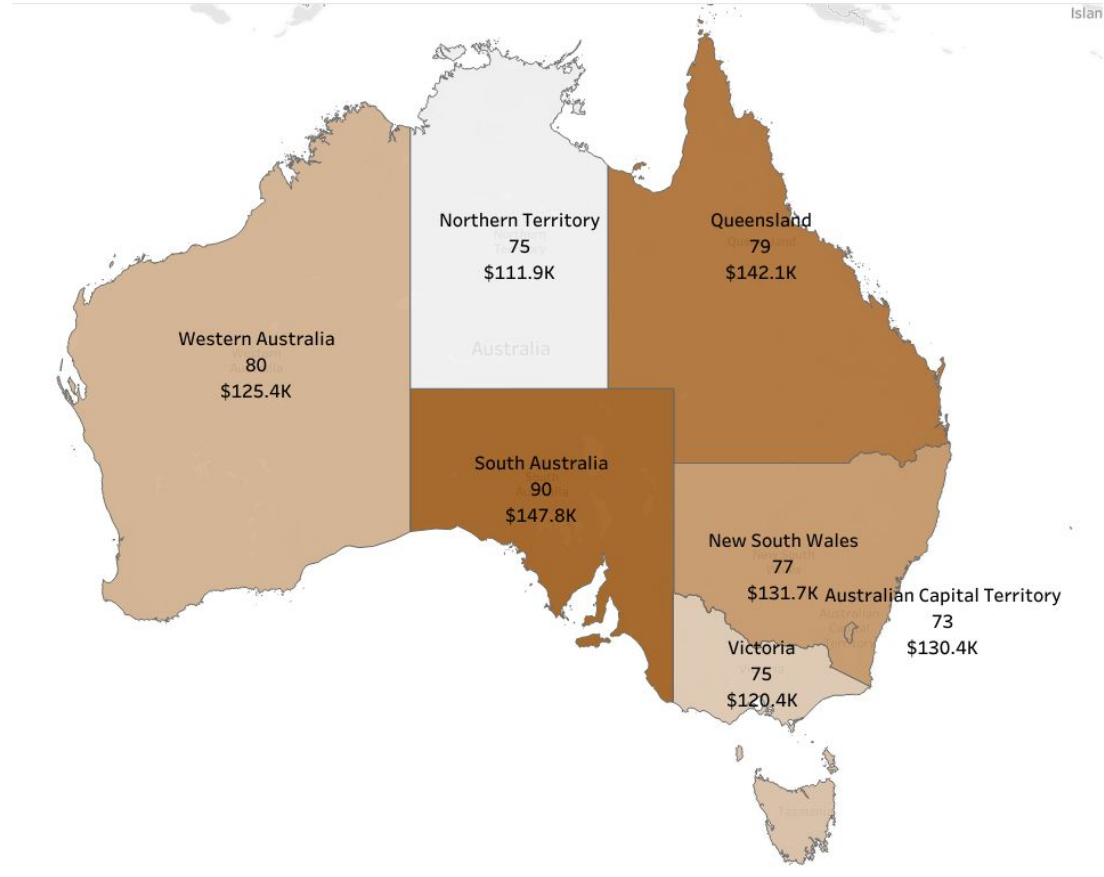
- Choose Vendors That Are Closer to Your Warehouse
- Automate Our Order Processing Workflows
- Improve Internal Communications



The highest total sales by state in Australia is South Australia with \$ 147,8K

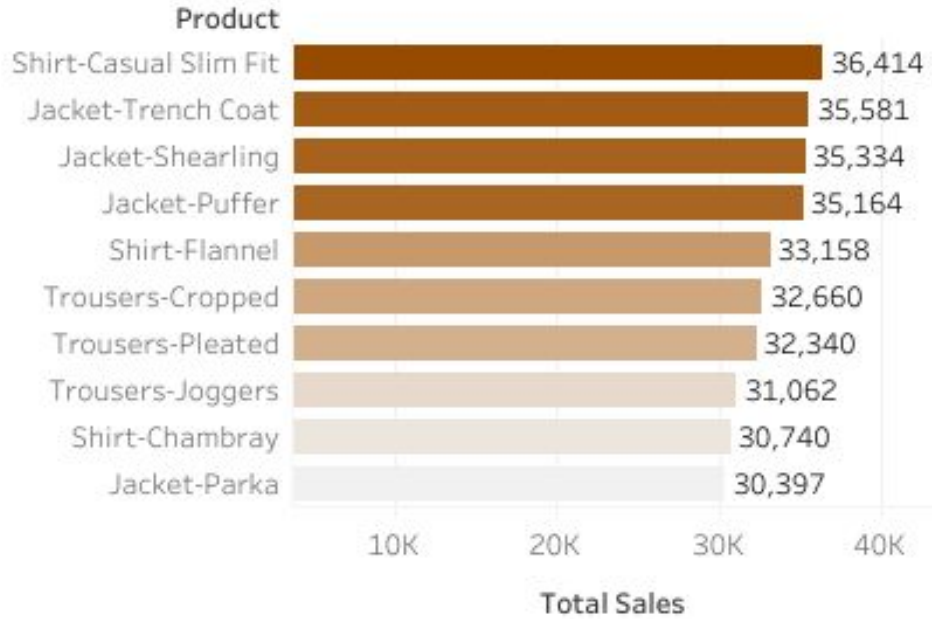
Australia Geo Map

- Darker colors indicate greater **total sales**
- The **highest total** sales were **South Australia**, followed by **Queensland**
- **The most** customer from **South Australia**



Our Top 10 of Product with the most sold

Top Product on Sales



- The number one product is **Shirt-Casual Slim Fit** with **\$ 36,414 total sales**
- Our top sales of product type is **Shirt** and **Jacket**

What is the top product for each month?

Top 3 Products of each Month

Jan	Feb	Mar	April	May
<ul style="list-style-type: none">● Jacket-Puffer● Jacket-Trench Coat● Shirt-Flannel	<ul style="list-style-type: none">● Trousers-Joggers● Shirt-Casual Slim Fit● Jacket-Windbreaker	<ul style="list-style-type: none">● Jacket-Puffer● Trousers-Tracksuit Bottom● Shirt-Flannel	<ul style="list-style-type: none">● Jacket-Trench Coat● Jacket-Bomber● Trousers-Chinos	<ul style="list-style-type: none">● Jacket-Trench Coat● Jacket-Denim● Jacket-Coach
June	July	Aug	Sep	Oct
<ul style="list-style-type: none">● Shirt-Casual Slim Fit● Shirt_Polo● Trousers-Cargo Pants	<ul style="list-style-type: none">● Jacket-Puffer● Shirt-Casual Slim Fit● Trousers-Relaxed Leg	<ul style="list-style-type: none">● Jacket-Trench Coat● Jacket-Shearling● Trousers-Drawstring	<ul style="list-style-type: none">● Trousers-Pleated● Trousers-Relaxed Leg● Shirt-Chambray	<ul style="list-style-type: none">● Trousers-High-Waisted● Trousers-Cords● Jacket-Shearling

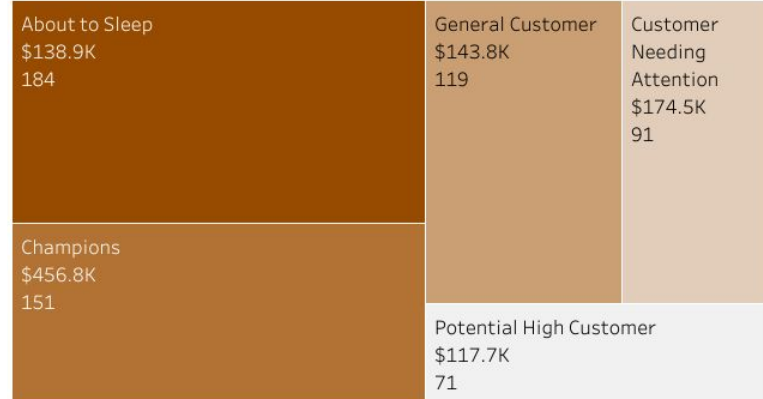
- The lighter color of the month's name means the best total sales than the others
- The product name in bold in the table means the top product that has a major influence on total sales

It is known that the **Jacket-Puffer**, **Jacket Trench Coat** and **Shirt-Flannel** products have a **major influence** on **total sales**.

As we can see, our sales product on **October** the customer no longer buy **Jacket-Puffer**, **Jacket Trench Coat** and **Shirt-Flannel** in a big amount, this can be the cause of **decreased** of our **GMV**.

Our customer segmentation is divided into **five segments** by their order quantity and total money they spend

Customer Segmentation



Trend Sales per segment



**RFM
Score**

Segments	Recency	Frequency	Monetary
Champions	62.6	14.7	3025.4
Potential High Customer	54.3	7.9	1657.7
General Customer	81.4	5.8	1208.3
Customer Needing Attention	228.4	9.2	1918.3
About to Sleep	175.4	3.7	755.1

SEGMENTS SUMMARY

Shopping Cart Database

Champions



- Baby Boomer, Gen Millennial
- Female
- Australian Capital Territory
- Trousers Slim Fit
- 151 customers

Potential High Customer



- Baby boomer, Gen X
- Non-binary
- Northern Territory
- Trousers Pleated
- 71 customers

General Customer



- Baby boomer, Gen X
- Bigender
- Queensland
- Trousers High Waisted
- 119 customers

Customer Needing Attention



- Baby Boomer, Gen Millennial
- Non-binary
- South Australia
- Shirt Casual Slim Fit
- 91 customers

About to Sleep



- Baby Boomer, Gen Millennial
- Agender
- Australian Capital Territory
- Trousers Joggers
- 184 customers

Segments	Persona
Champions	<ul style="list-style-type: none"> • Top Spender that spending more than other • The 2nd customer behavior • The most generation Baby Boomer and Gen Millennial
Potential High Customer	<ul style="list-style-type: none"> • Sales is increasing by time, highly potential to be the Champions level • The lowest customer behavior • The most generation Baby Boomer and Gen X
General Customer	<ul style="list-style-type: none"> • Spending on sales is increasing but amount of total sales is still low • The 3rd customer behavior • The most generation Baby Boomer and Gen X
Customer Needing Attention	<ul style="list-style-type: none"> • Big Amount of sales but decreasing by time and lost on May • The 4th customer behavior • The most generation Baby Boomer and Gen Millennial
About to sleep	<ul style="list-style-type: none"> • Spending on sales is relative stagnant/constant. • The most customer behavior • The most generation Baby Boomer and Gen X



SEGMENT RECOMMENDATION

Champion



More benefit and suggestion



- Priority customer service
- Top product suggestion

Potential High
Customer



Stimulate to buy more various
products and make more
transactions



- Product suggestion
- Offer loyalty program and
priority program

General
Customer



Stimulate to buy more various
products and make more
transactions



- Product suggestion
- Give discount for adding
more quantity
- Reward transaction in a
certain period

SEGMENT RECOMMENDATION

Customer Needing
Attention



Stimulate to make more
transactions and give personal
touch



- Give discount for adding more quantity
- Special benefit for returned Customer
- Personal contact by email, notifications from apps and call

About to sleep



Stimulate to make more
transactions and give personal
touch



- Promo for returned customer
- Personal contact by email, notifications from apps and call

Recommendations:



Customers :

- Based on segment recommendation
- We can try to pursue at least **15 % of our customer**. We can achieve about **\$155,775** total sales in next month



Invite New Customers :

Do Campaign to gain more **new user** to join in our Shopping cart and make them to do **first transaction**



Delivery Process :

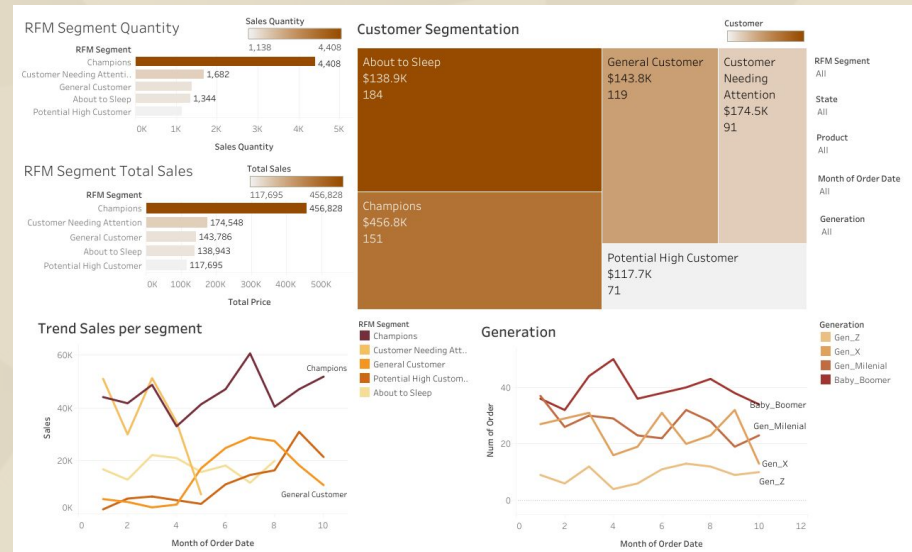
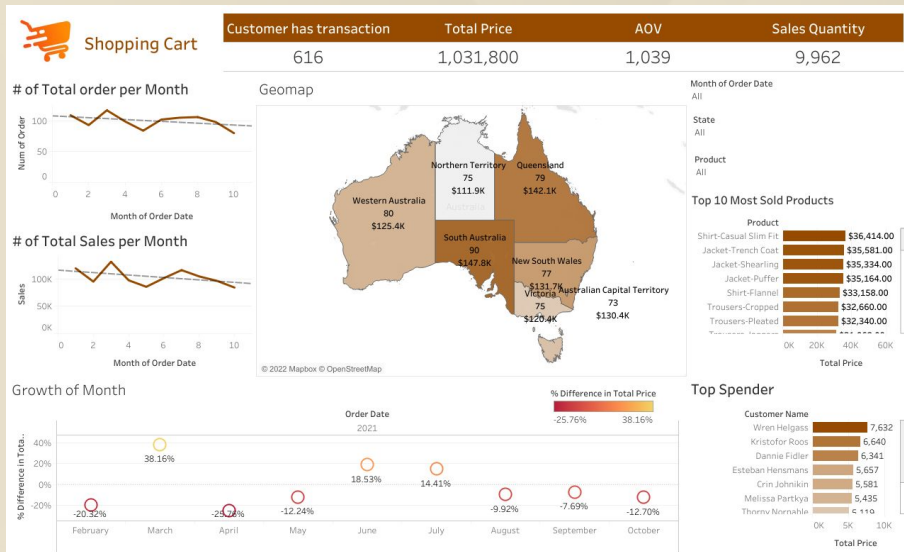
Decrease the processing time from order date to delivery date to **make it faster** than competitor



Product :

Suggest the to stakeholder to increase the sales of each product especially **Jacket-Puffer, Shirt-Flannel, Jacket-Trench Coat**

DASHBOARD SNAPSHOT



[LINK DASHBOARD](#)



Thank You .

APPENDICES



DATASET

RFM CLUSTERING

DASHBOARD