



Looker Studio

# FINAL PROJECT DATA ANALYSIS DATA VISUALIZATION

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Intensive Bootcamp Data Analysis Batch 18 | MySkill

**MySkill**

# Overview

## Project

Looker Studio is a free reporting and dashboarding tool that enables us to generate fully customizable visualizations of our app data. We can combine data from multiple data sources to generate a rich dashboard to share with stakeholders

## Dataset

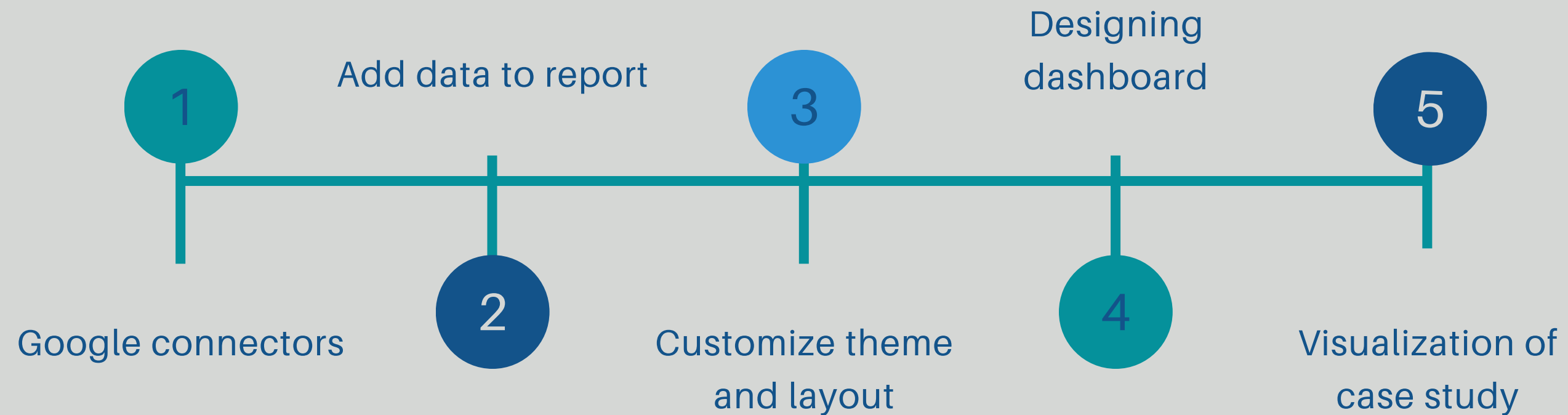
The dataset used is order detail from Tokopedia (not real data) in the period 2021 to 2022.

# Dataset

## order\_detail:


1. id → unique number of order / id\_order
2. customer\_id → unique number of customer
3. order\_date → date when transaction was made
4. sku\_id → unique number of product (sku is stock keeping unit)
5. price → price listed on price tag
6. qty\_ordered → number of items purchased by customer
7. before\_discount → total price value of product (price \* qty\_ordered)
8. discount\_amount → total product discount value
9. after\_discount → total price value of product when reduced by discount
10. is\_gross → indicates customer has not paid for order
11. is\_valid → indicates customer has made payment
12. is\_net → indicates transaction is complete
13. payment\_id → unique number of payment method
14. sku\_name → name of the product
15. base\_price → price of the item listed on the price tag / price
16. cogs → cost of goods sold / total cost to sell 1 product
17. category → product category
18. registered\_date → date the customer started registering as a member
19. payment\_method → payment method used

# Highlights



# Data Preparation

Google connectors



Google Sheets

By Google

Connect to Google Sheets.

Customize theme and layout

Theme and Layout

THEME

LAYOUT

Current Theme  
Custom

Customize

Add data to report

Spreadsheet

Search

Search Spreadsheets

Copy of df\_viz\_finpro

Worksheet

Search

Search Worksheets

df\_viz\_finpro

# Dashboard Design

Download report

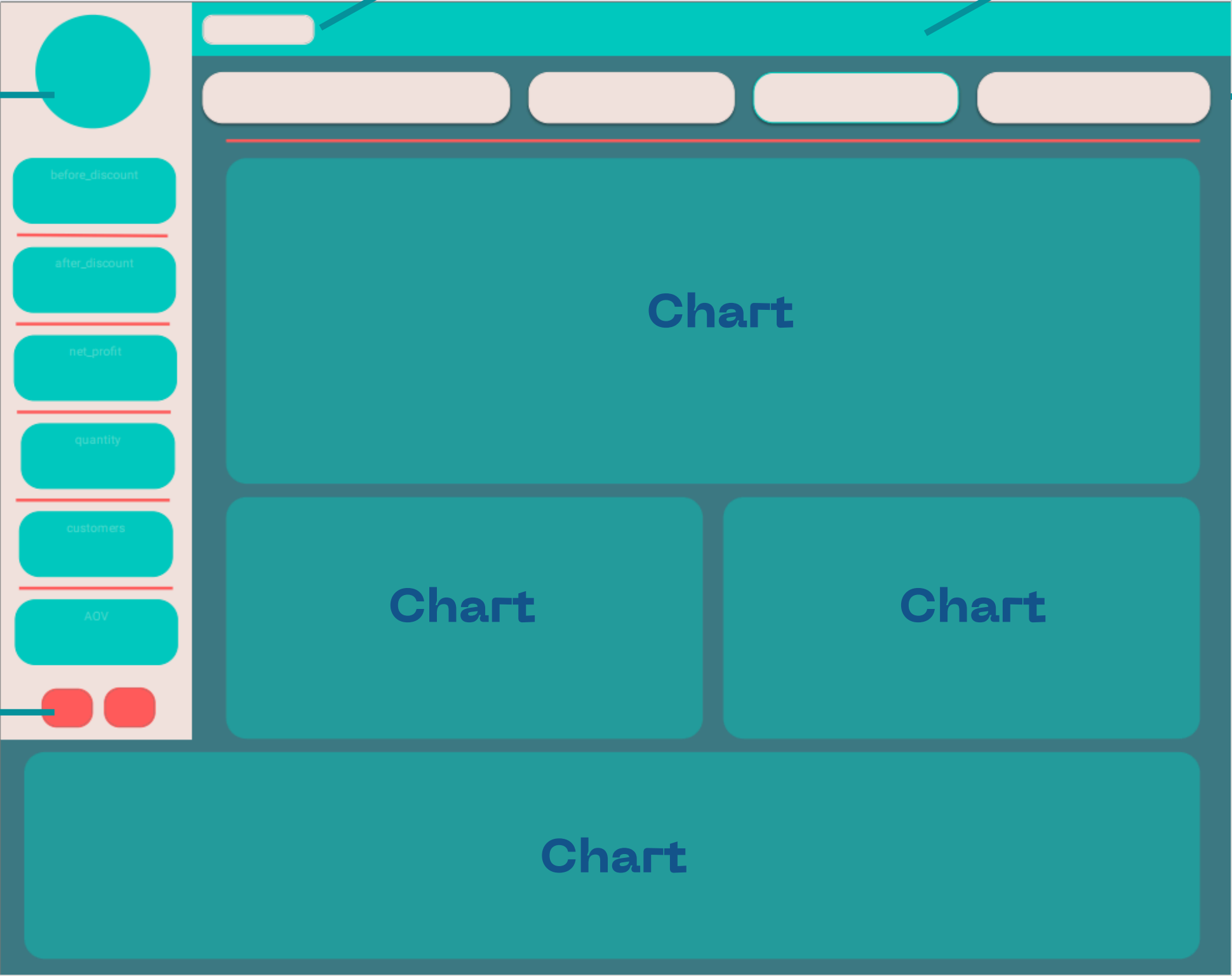
Title

Company logo

Slicers

Scoreboards

Page navigation



# Case Study

## 01

The marketing team wants to see the development of the campaign in 2022, what is the trend like? An explanation is given and how the call to action is so that the team can make a decision in the future. Dashboard in the form of:

a. The relationship between Sales Value (before discount), Net Profit, and AOV (average order value).

Note:

- Net profit = Sales Value (before discount) – (cogs \* qty)
- AOV = Sales Value (before discount) / Total Unique Order

b. There are slicers Order Date, Category, Sales Value, Transaction Value, Payment.

Note:

- Transaction Value:
  - Valid → is\_valid = 1
  - Not Valid → is\_valid = 0
- Payment → payment\_method

# Add Fields

## Add calculated field

**Field Name**

e.g. New Calculated Field

net\_profit

Formula (?)

```
1 before_discount - ( cogs * qty_ordered )
```

**Field Name**

e.g. New Calculated Field

AOV

Formula (?)

```
1 SUM( before_discount ) / COUNT_DISTINCT( id )
```

**Field Name**

e.g. New Calculated Field

value\_trx

Formula (?)

```
1 CASE
2 WHEN is_valid = 1 THEN 'valid'
3 WHEN is_valid = 0 THEN 'invalid'
4 END
```

**Field Name**

e.g. New Calculated Field

week

Formula (?)

```
1 CASE
2 WHEN day IN ( 'Saturday', 'Sunday' )
3 THEN 'weekend' ELSE 'weekday'
4 END
```



# Visualization

01

## Slicers

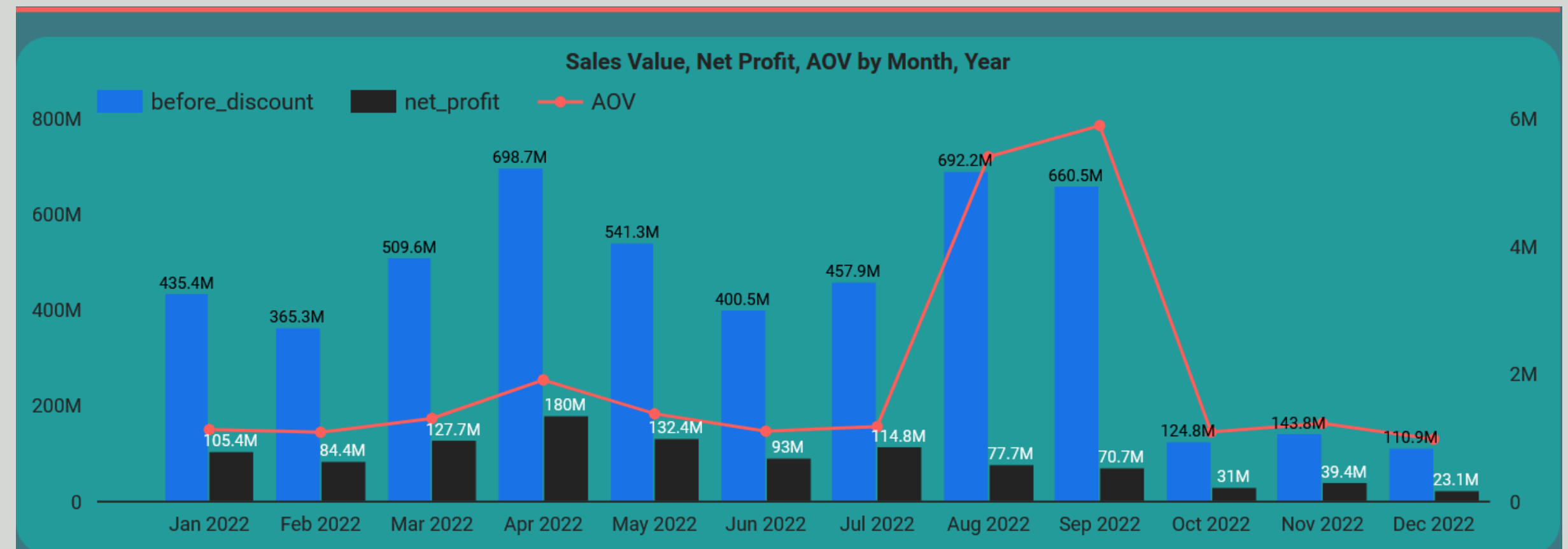
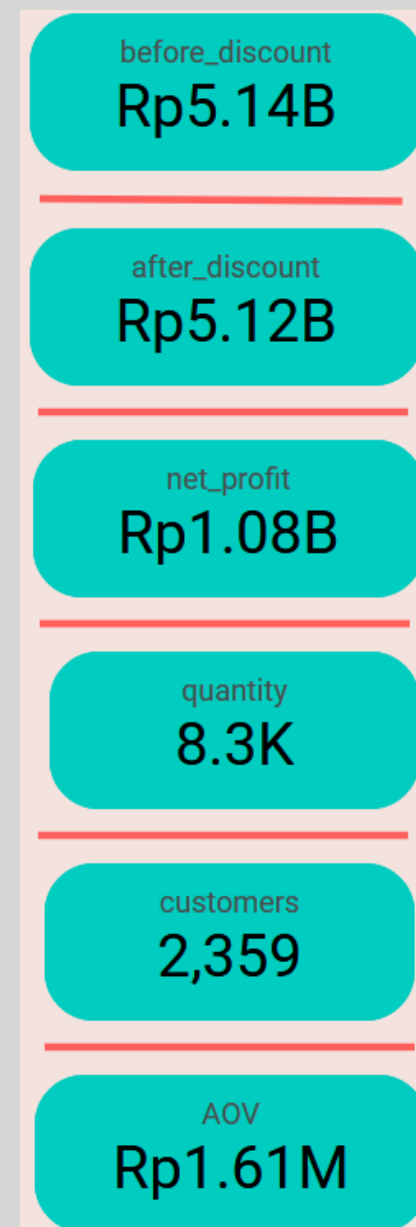
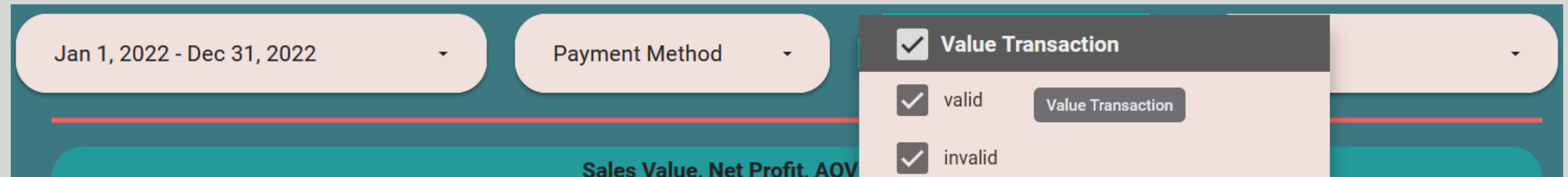
Range date : 1  
January 2022 – 31  
December 2022

## Combo chart

During 2022, April  
had the highest  
sales value while  
December had the  
lowest.

## Scoreboard

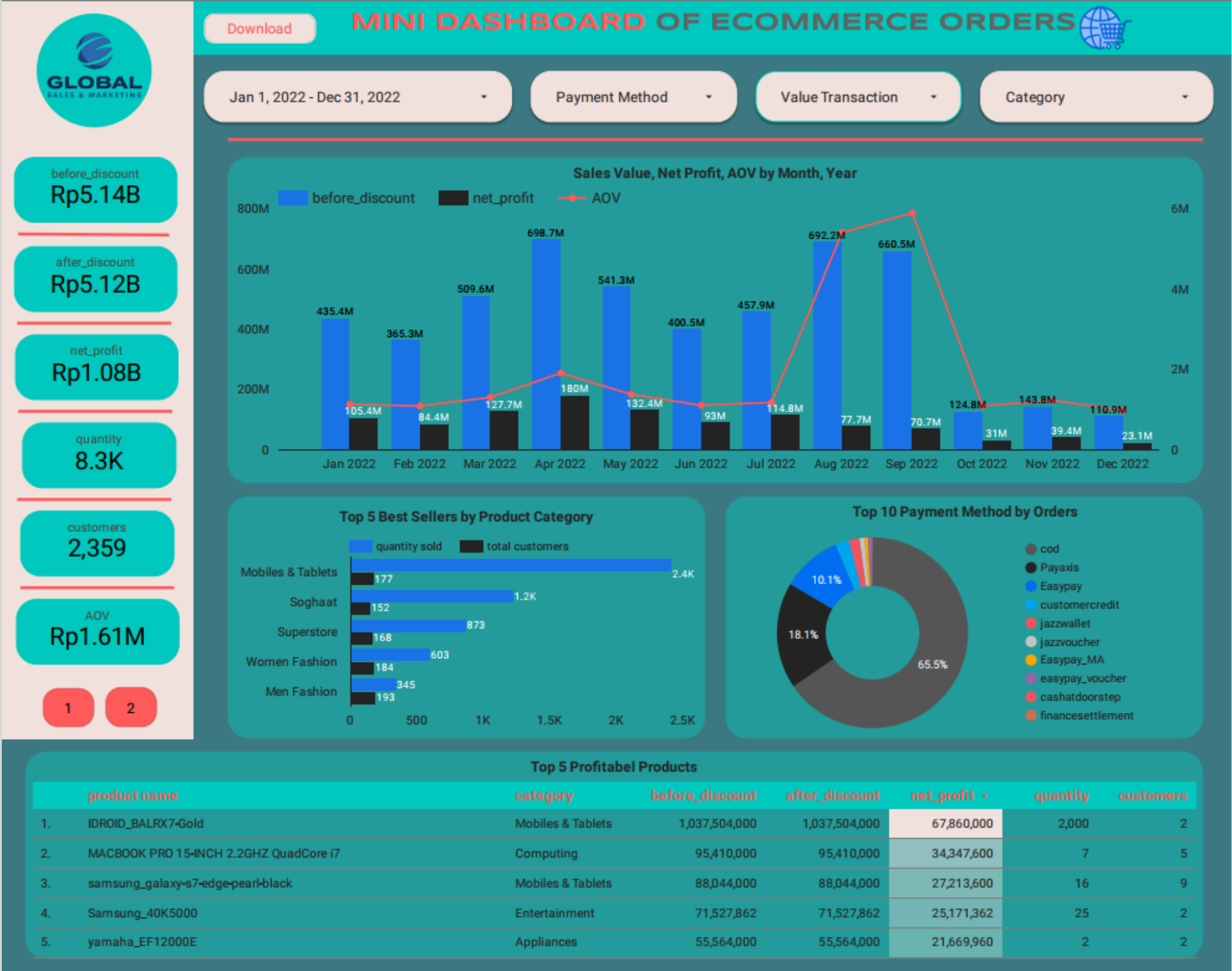
In 2022, sales  
value reached  
5,14B and earned  
profit 1,08B had  
each average  
order value 1,61M



# Visualization

01

See details, click [here](#)



# Insights

01

## Background

The relationship between Sales Value (before\_discount), Net Profit, and AOV (average order value)

## Finding

The Average Order Value (AOV) is a metric used to measure the average amount spent by customers per transaction and is calculated by dividing total sales value by the number of orders. Higher-priced products tend to increase the AOV. When AOV increases, profit potential often rises because customers are spending more per transaction.

## Recommendation

When Average Order Value (AOV) is high, but profit is low:

- Analyze which products or product categories are frequently purchased and consider promoting higher-margin products.
- Encourage customers to add high-margin items to their orders through cross-selling or upselling strategies.
- Review and potentially limit discount usage on low-margin items or set a minimum spend requirement for discounts to improve profitability.

# Case Study

## 02

Can show:

a. The table contains:

- Product Name
- Category
- Before Discount
- After Discount
- Net Profit
- Qty
- Customer (unique value)

b. There are slicers: Order Date, Category, Value Transaction, Payment

c. Scorecard:

- Before Discount
- After Discount
- Net Profit
- Quantity
- Customer (unique value)
- AOV

# Case Study

02

- c. During 2022, display the mobile & tablet category that has been paid via jazzwallet. How much is the quantity and customer?
- d. Create a chart based on dashboard point C.

Jan 1, 2022 - Dec 31, 2022

Payment Method

Value Transaction

Category (1)

☒ Mobiles & Tablets

Top 5 Profitabel Products

	product name	category	before_discount	after_discount	net_profit	quantity	customers
1.	IDROID_BALRX7-Gold	Mobiles & Tablets	1,037,504,000	1,037,504,000	67,860,000	2,000	2
2.	samsung_galaxy-s7-edge-pearl-black	Mobiles & Tablets	88,044,000	88,044,000	27,213,600	16	9
3.	iphone_7-128GB-wof-Jet Black	Mobiles & Tablets	113,335,306	113,335,306	18,596,946	20	20
4.	iphone_7-128GB-wof-Matt Black	Mobiles & Tablets	102,497,832	102,439,832	14,931,288	18	18
5.	iPhone7Plus-Red-256GB	Mobiles & Tablets	64,876,480	63,873,667	13,624,200	10	10

### Slicers

- Range date : 1 January 2022 – 31 December 2022
- Category : Mobiles & Tablets

### Table

The list of top 5 profitable products of Mobiles & Tablets category

### Background

Find top seller products of mobiles & tablets category in 2022 and see the profitability

### Finding

- In 2022, product number 1 is Android operating system gadget which are the most in demand, 2000 units sold and earned the highest profit of 65 million and above.
- Product number 3 is more purchased than number 2 but the profit is lower.

### Recommendation

To maximizing profit on high-volume sales:

- Many marketplaces offer dynamic pricing tools that adjust prices based on competitors and demand. Setting a minimum profitable price while staying competitive keeps your products attractive and helps you capture more sales at the best price point.
- Consider introducing higher-margin versions of popular products or limited-edition items that can attract customers willing to pay a premium.

### Slicers

- Range date : 1 January 2022 – 31 December 2022
- Category : Mobiles & Tablets
- Valid transaction : valid

### Bar chart

Products sold of the category is 1,2K from 72 of buyers

### Donuts chart

There is no jazzwallet payment method on mobiles & tablets purchasing

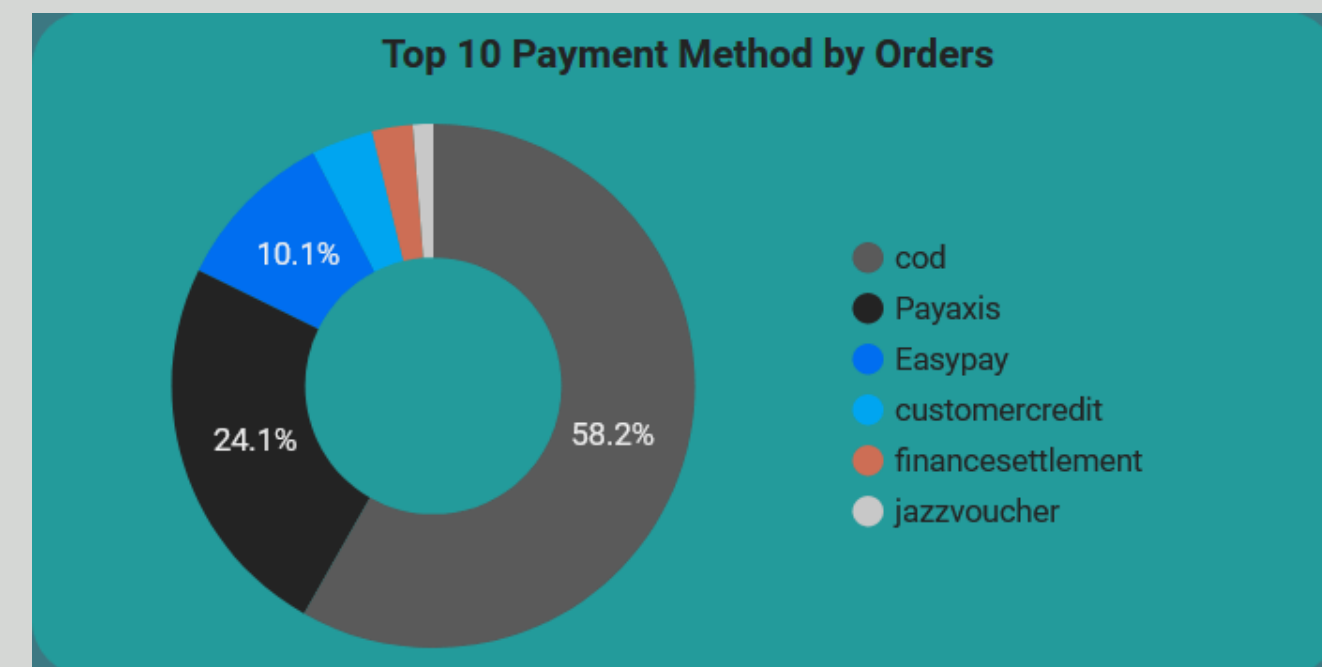
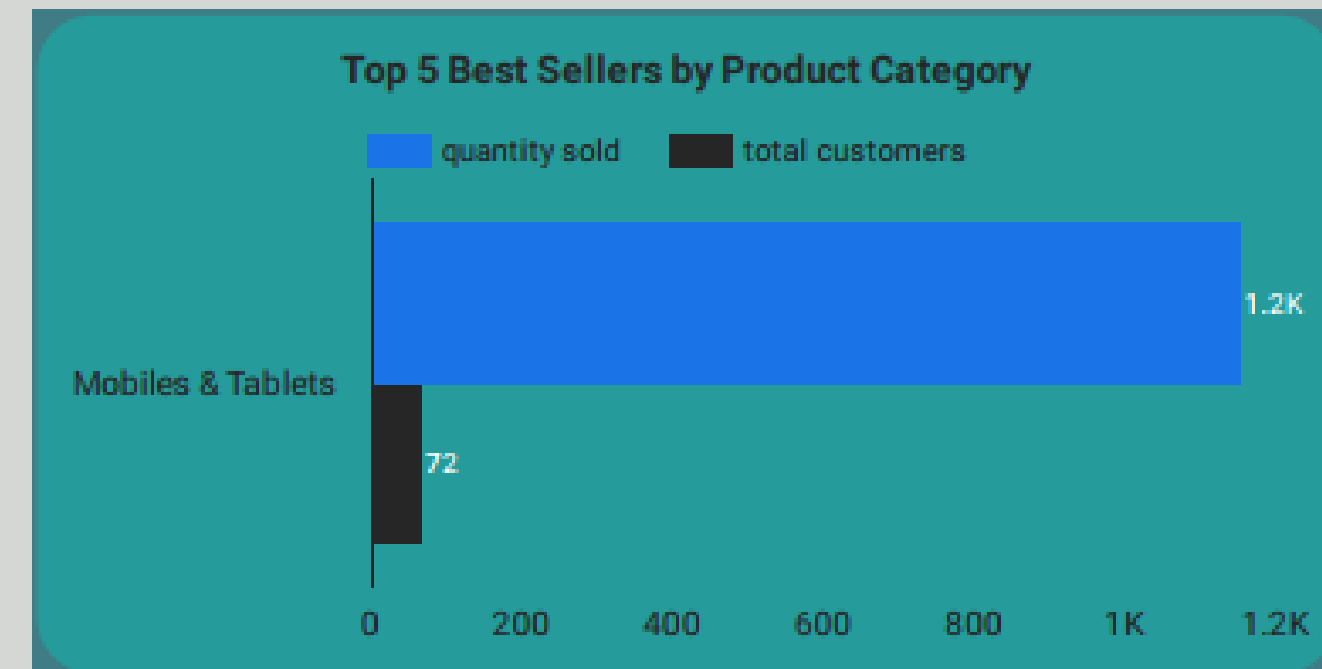
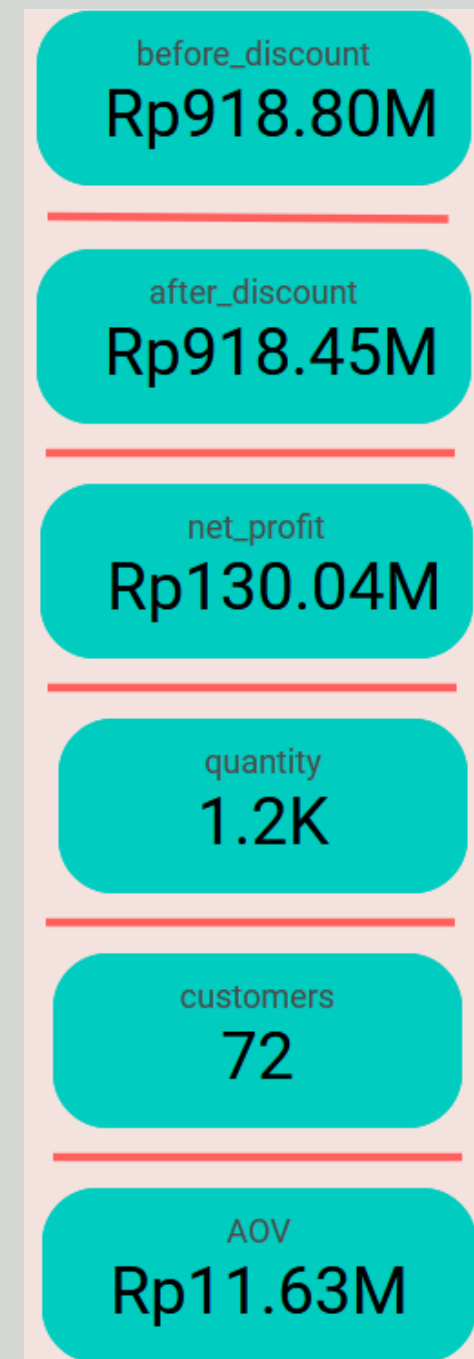
Jan 1, 2022 - Dec 31, 2022

Payment Method

Value Transaction... (1)

Category (1)

☒ Mobiles & Tablets



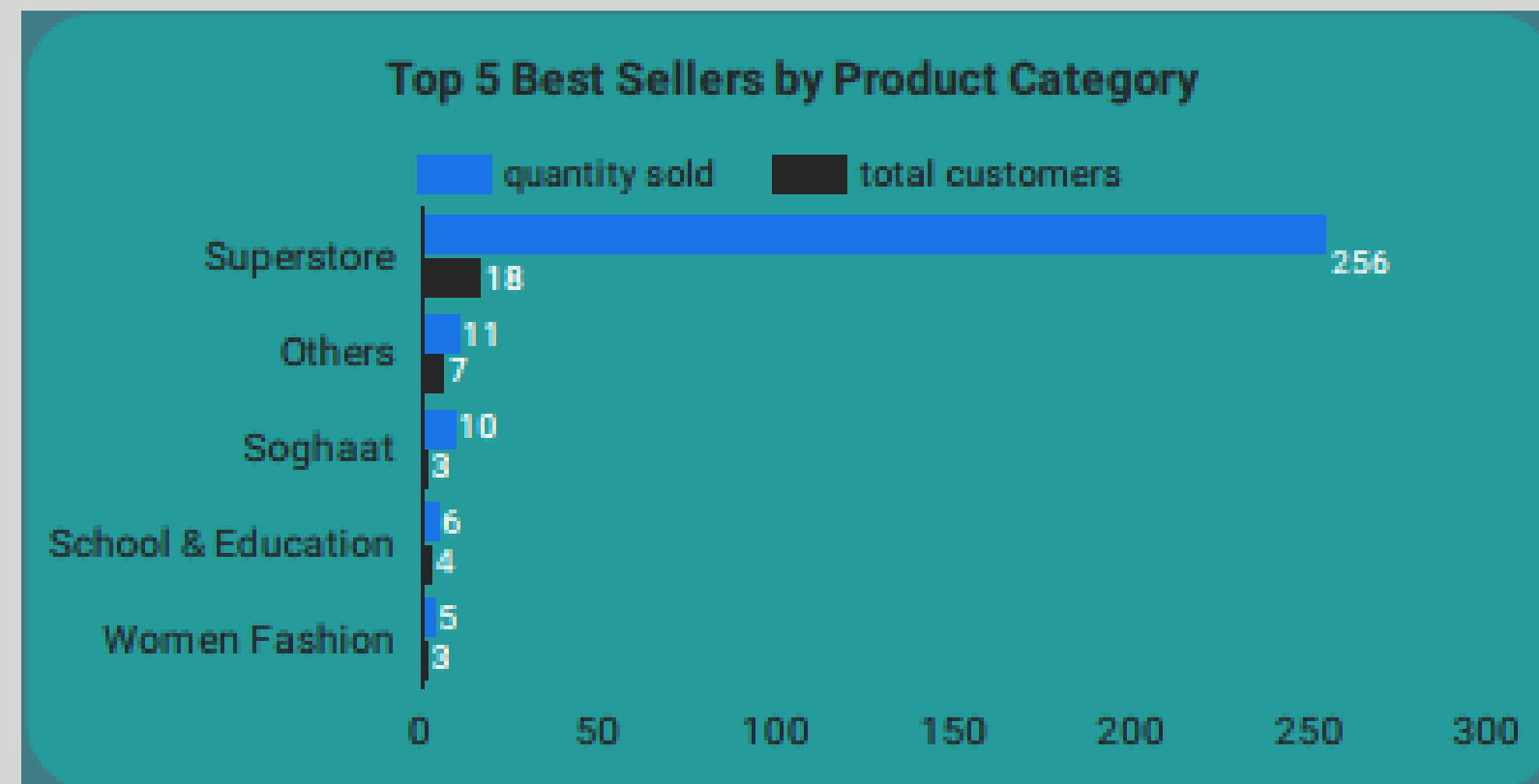


Jan 1, 2022 - Dec 31, 2022

Payment Method:...(1)

Value Transaction

Category



### Slicers

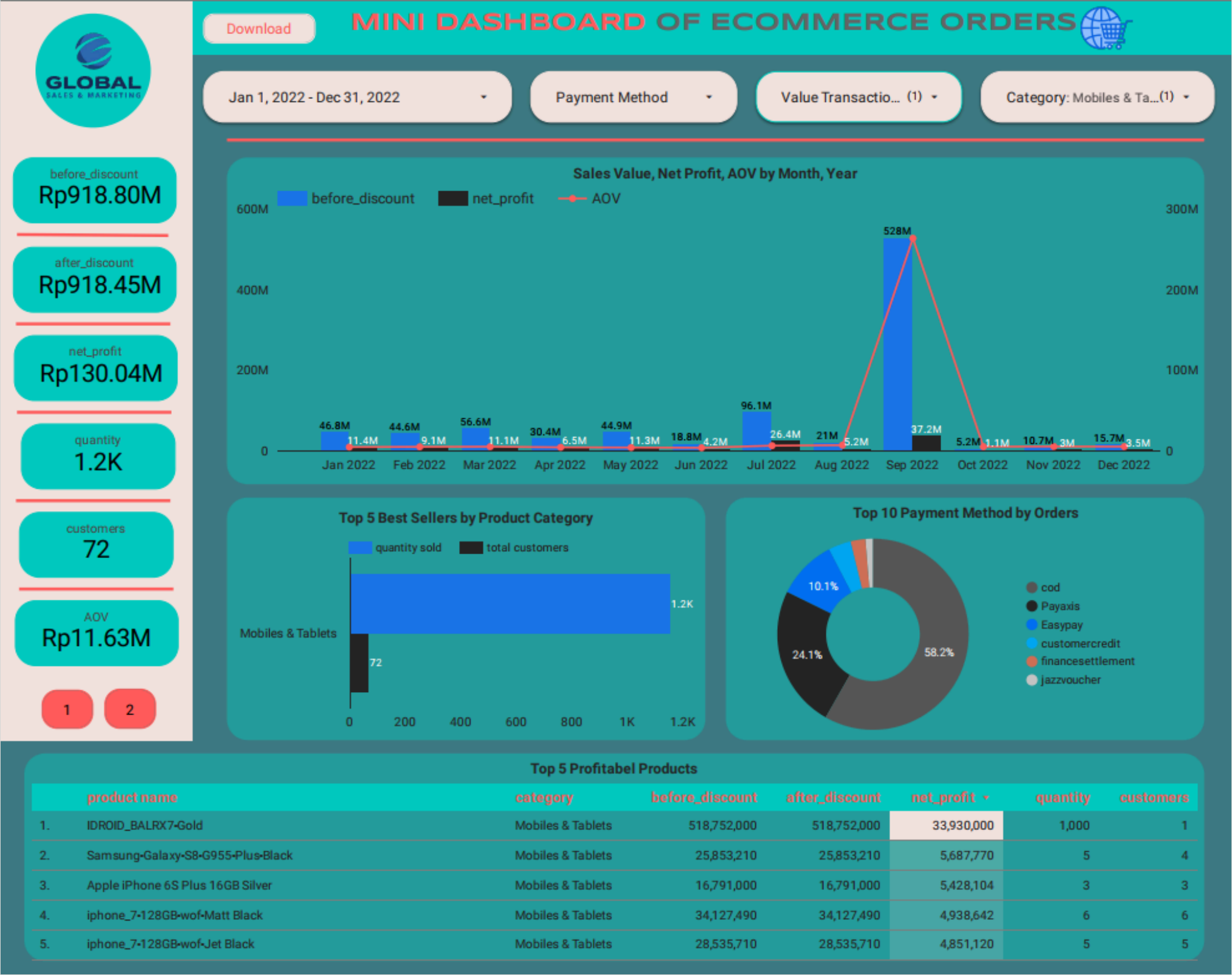
- Range date : 1 January 2022 – 31 December 2022
- Payment method : jazzwallet

### Bar chart

Top 5 product categories for payments using Jazzwallet include: superstore, others, soghaat, school & education, women fashion.

**Insights :** This e-wallet brands may be less popular than others due to factors such as limited accessibility, lower brand trust, fewer incentives, or lack of integration with popular merchants and services.

See details, click [here](#)



# Insights

02

## Finding

- In 2022, mobiles & tablets products are top-sellers. They serve as communication tools, work devices, entertainment hubs, and more, making them essential and frequently replaced items by rapid advancements in technology.
- COD is a popular payment method of valid transaction for mobiles category. Gadgets often come with a high price tag, and buyers may feel more comfortable paying upon delivery to ensure the item's arrival and quality.

## Recommendation

To make e-wallets more popular than Cash on Delivery (COD):

- Providing cashback, discounts, and rewards for e-wallet payments
- Implementing quick, automated refund processes for returns or failed orders makes e-wallets more attractive.
- Adding features like "buy now, pay later" can make e-wallets appealing for customers who want the option to delay payment of high price without carrying cash at the time of purchase.

## Background

Find top seller of category product in 2022 and the payment tends to be through what method

# THANK YOU!

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