#### SALE REPORT AND ANALYSIS





# DISCLAMER

#### DISCLAIMER:

This is an imaginary case study I use this to show my skill in Data analysis field. Data applied in this case is provided by **DA Zone** competition hosted by FTU II.





QUESTION 1:

How many percentage of customer are female?

QUESTION 2:

Overall Sale report of Quarter 4 in 2019

QUESTION 3:

Presentations are communication tools that can be lectures.

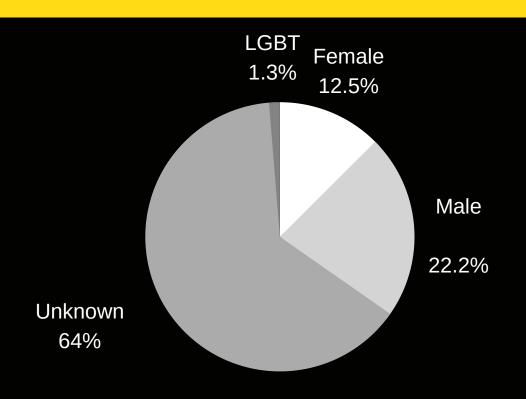
# QUESTION 1:

#### BRIEF BACKGROUND

To prepare for the company's upcoming events for loyal customers. Ms. Yen - store manager needs to know the company's percentage of female loyal customers to prepare special gifts.



#### PERCENTAGE OF FEMALE CUSTOMER



#### Problem arise:

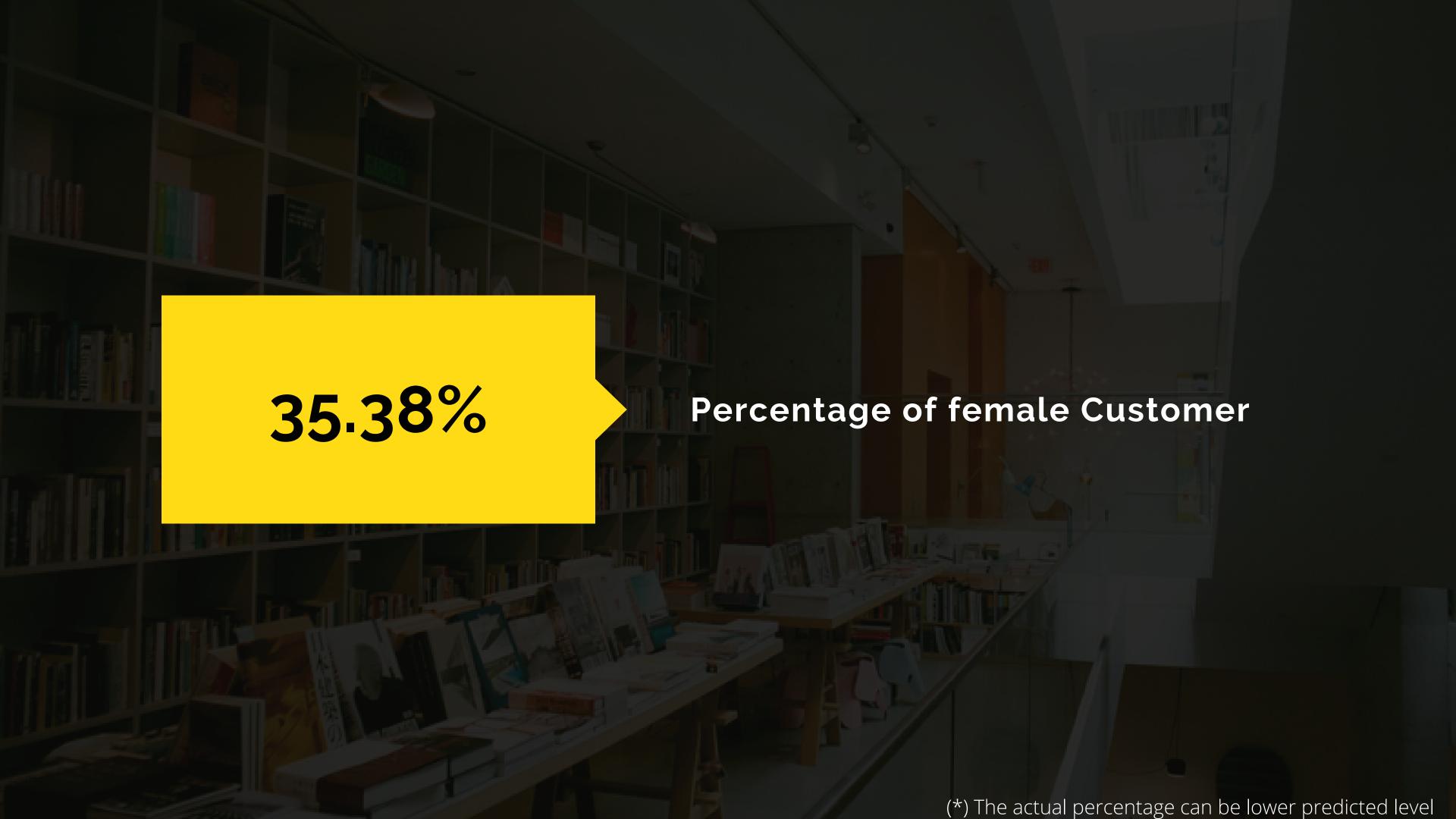
- There are 64% of customer have not recorded their gender, this will lead to mis-prediction.
- To solve this problem need to apply statistic.

Data export from SAP system



# Formula to predict percentage of female customer:

$$p(p \le f + \frac{\sqrt{f(1-f)}}{\sqrt{n}}U_{\alpha}) = 1 - \alpha$$



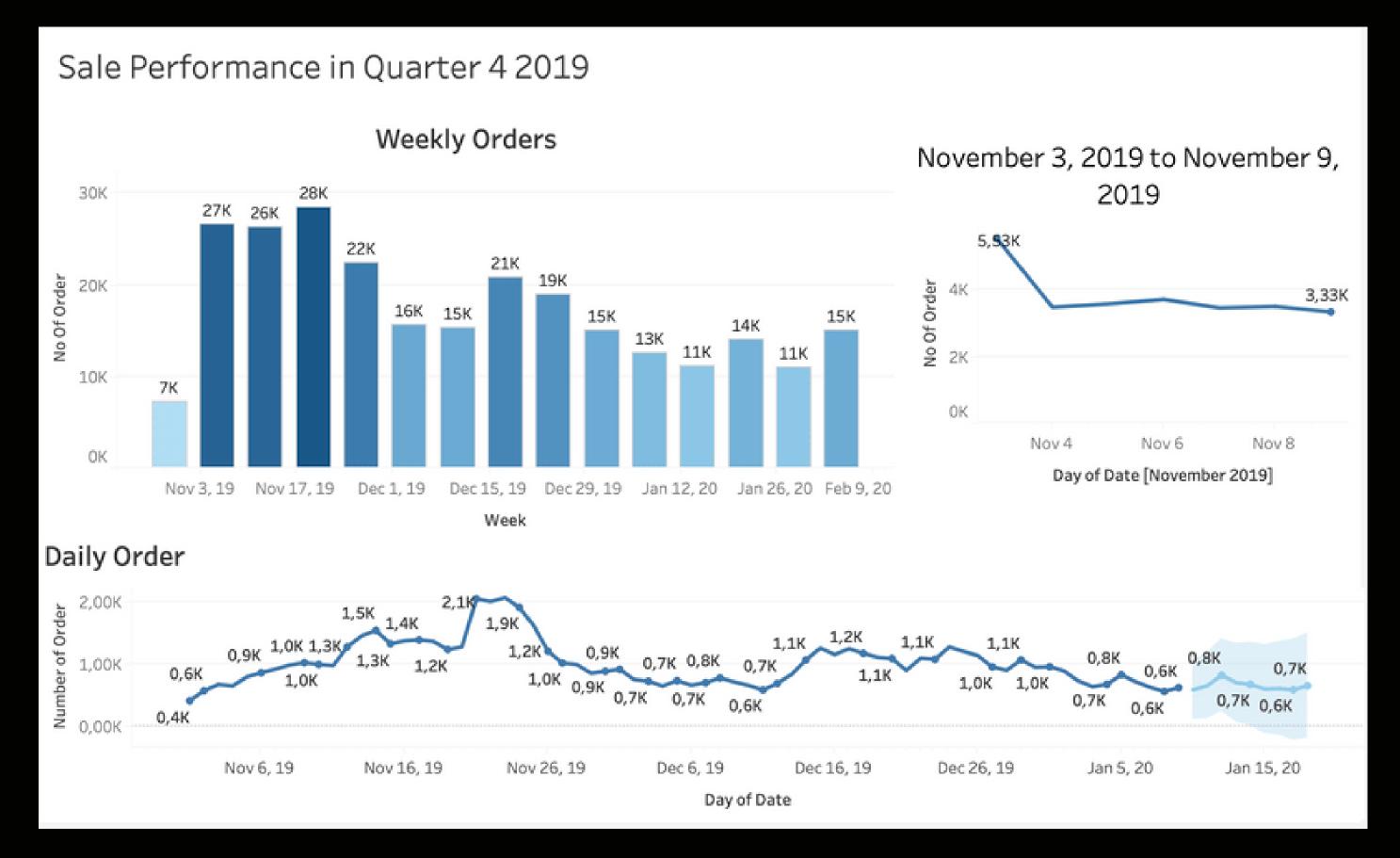
# QUESTION 2:

#### BRIEF BACKGROUND

Ms. Nhung - New business manager wants to know the company's sale performance in the last quarter of 2019 and wants the team to give a forecast of the number of orders in the following month.



#### **OVERALL SALE PERFROMANCE:**



(\*) This image is exported from Tableau. If you want a close look, you can visit my Tableau Public page

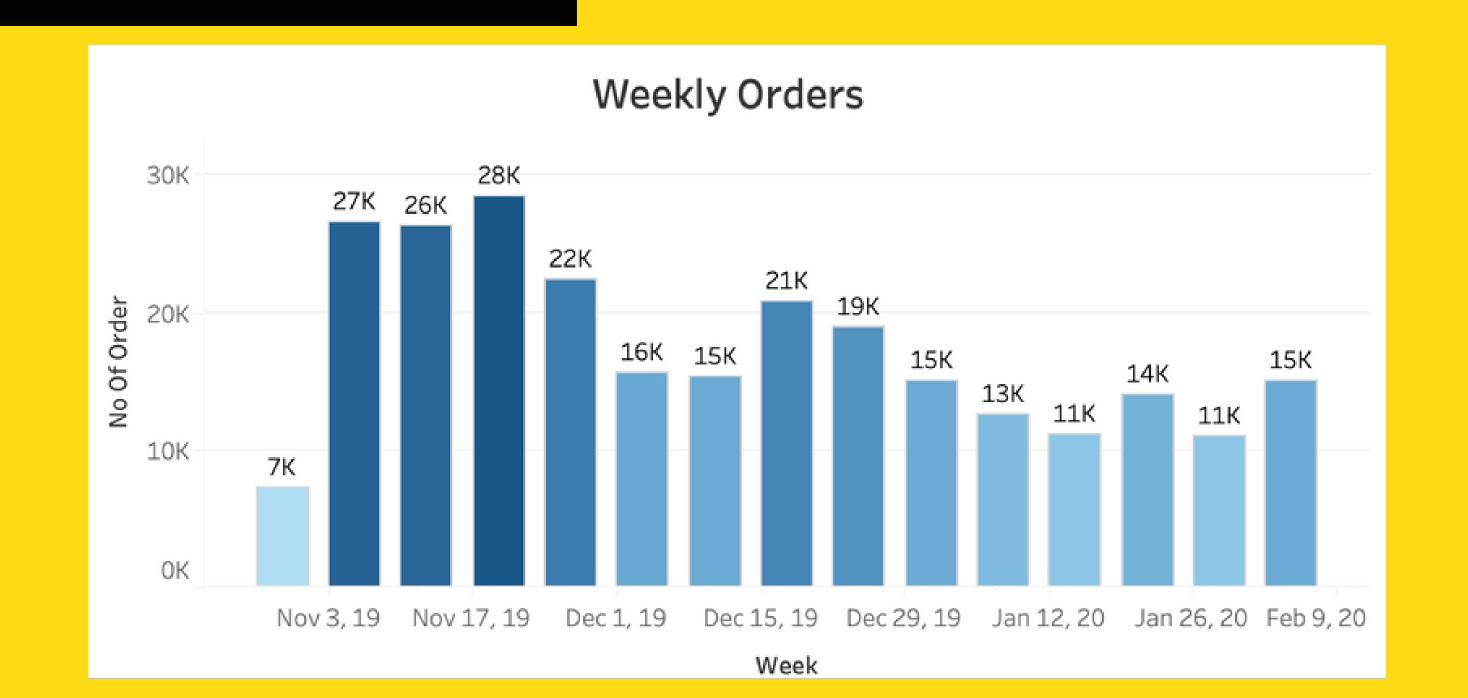


### Report:

- Number of orders in general is on a downward trend.
- Predict that there will be 660 orders in March every day.

#### QUANTITY OF ORDERS EVERY WEEK

In general, there is also a downward trend. By the end of January 2020, the company had a **60%** decrease in weekly orders.



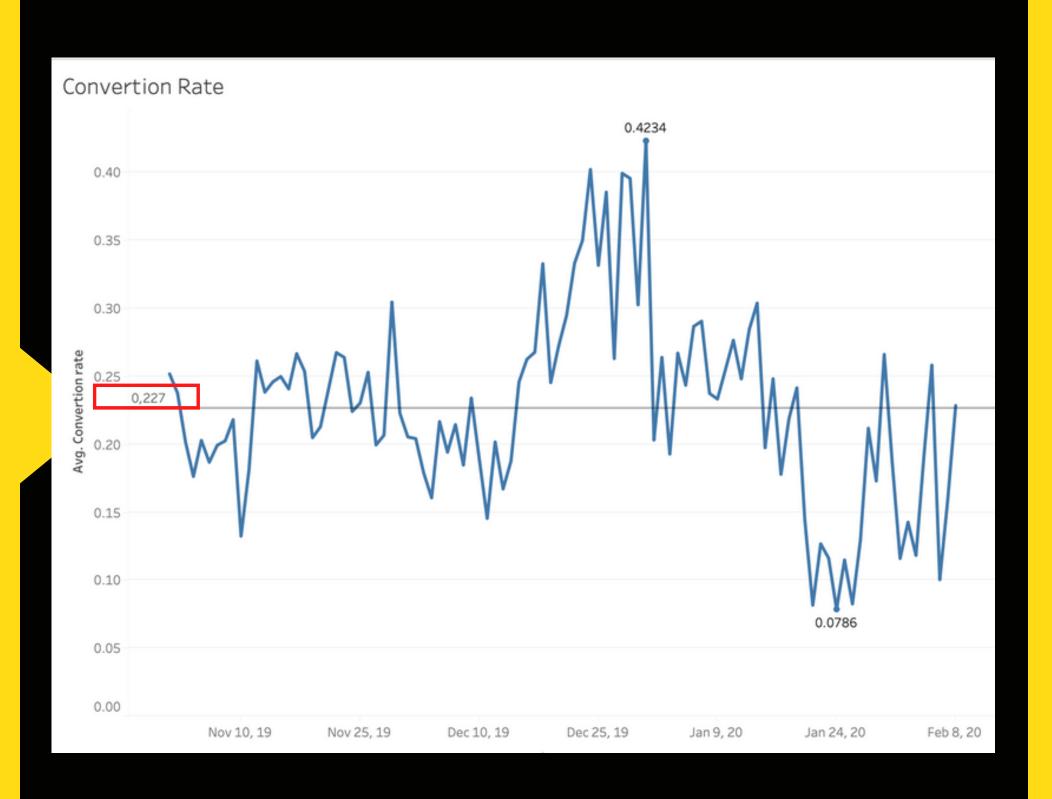
# QUESTION 3:

#### BRIEF BACKGROUND

Mr. Nhật - CEO wants to re-evaluating the effectiveness of its advertising and communications. He wants to know the customer conversion rate; the number of new and old customers repurchase by day



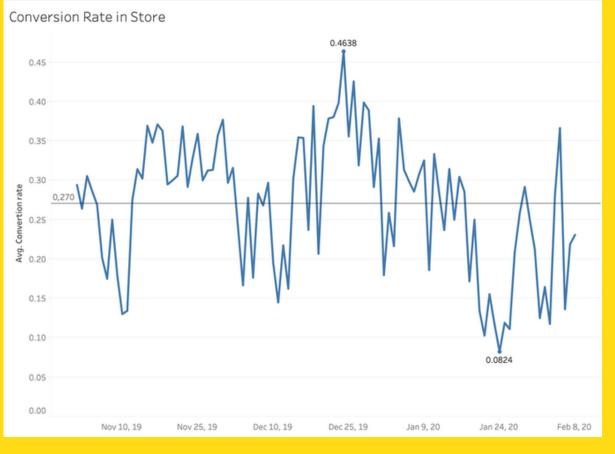
# CONVERSION RATE



# AVERAGE OF 3 SALES CHANNELS

- Average conversion rate is
   0.227 which mean 22,7% of customer first visit and buy
- The highest Conversion rate is
   0.4234
- The **lowest** is **0.0786**
- Conversion rate has a sharp
  drop (December 26, 2019 January 25, 2020) maybe this is
  the impact of Covid-19 but it is
  necessary to consider the
  conversion rate at each sales
  channel to draw conclusions

# CONVERSION RATE OF EACH SALES CHANNELS



0.6667

Conversion Rate on Ecommerce

Nov 25, 19

Dec 10, 19

Dec 25, 19

Jan 9, 20



0.3814

Conversion Rate in Company Site

#### **Ecommerce:**

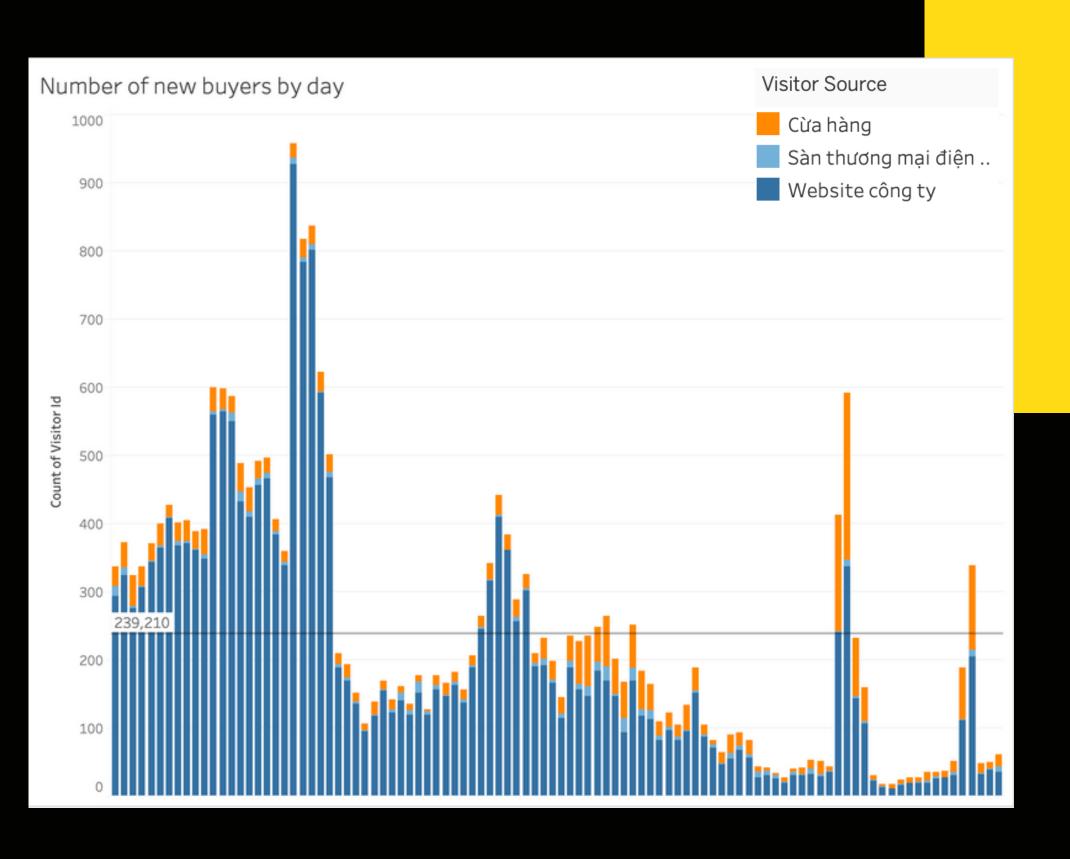
Ecommerce is a potential channels but SMA Co.,LTD seems "forget" this channel. This channel have **the lowest conversion rate**. In this channel, **the amplitude of increase and decrease** is also **the largest** proves that the e-commerce channel has not reached many customers

#### Hold Market is impacted by Covid-19

Severe drop in conversion rate (which has been mentioned before) is a common situation of the whole market. Because all three distribution channels are faced with

#### Store:

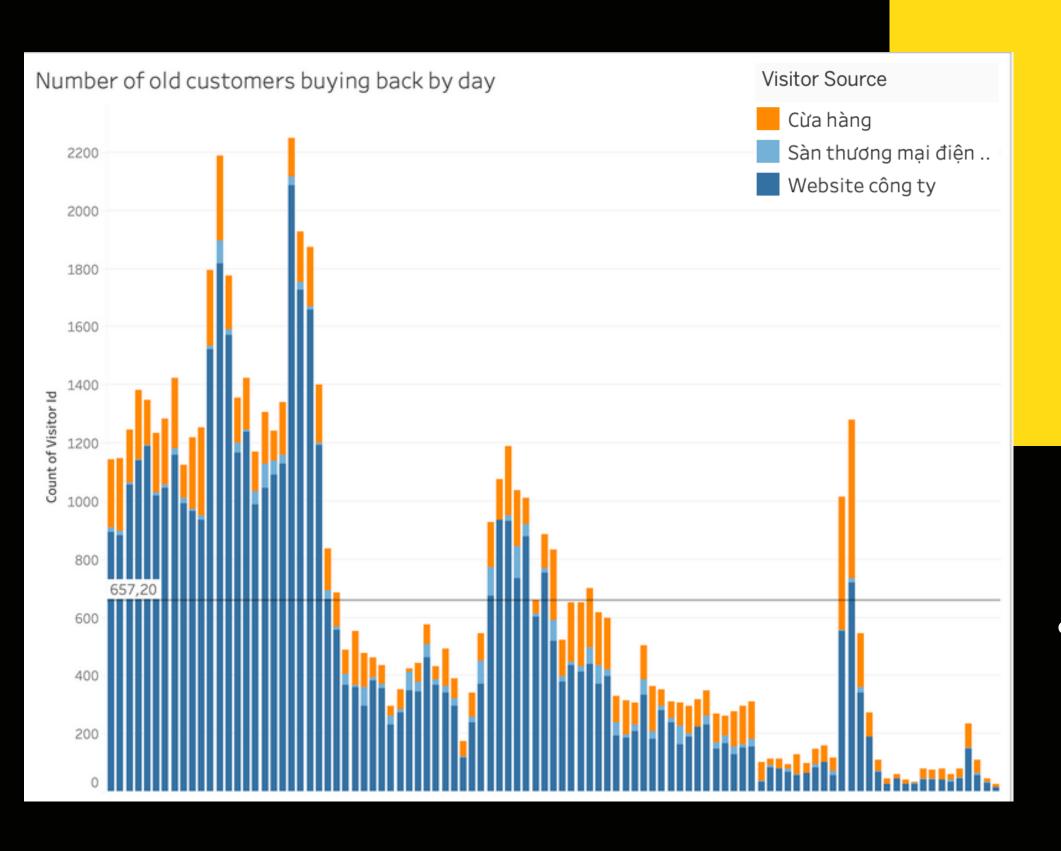
Store has the highest conversion rate. On average, 27% of customers who visit the store will make a purchase.



# NUMBER OF NEW BUYERS

EVERY DAY

 Average every day, company have 240 new customers.



# NUMBER OF OLD BUYERS

REPURCHASE EVERY DAY

• On average, every day there are 657 old customers buy back from the company.

#### **Suggestion 1:**

The company is **not doing well in finding new** customers. Customers know about the company mainly through the website. The company **needs to** more e-commerce **channels** because this is a potential channel to expand the customer base

#### **Suggestion 2:**

Communication activities are doing well when attracting more than 600 old customers to re-purchases every day. But the **number of** customers is concentrated on the website company should **channel**, the launch communication activities in 2 remaining channels to increase the attraction.

