E-Commerce: Product Range Analysis

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Mission statement:

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In order to be available to help our managers taking the right decisions and boost revenue we obviously need to know relevant customer preferences, and this is our main goal!: to analyze customer's purchase history to come up with a relevant product range which would optimize purchases and offers.
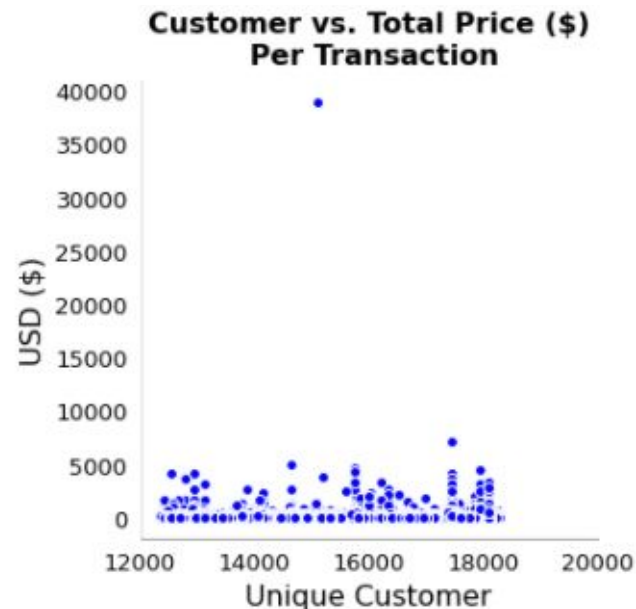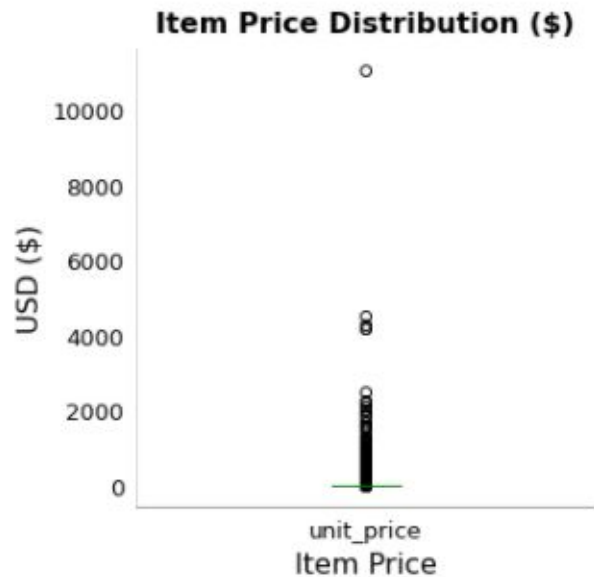
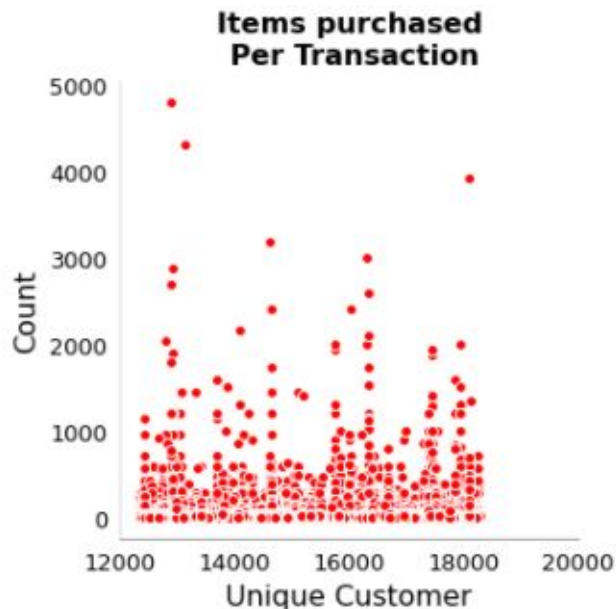# report outline

General Overview

Top 50 customers by Revenue

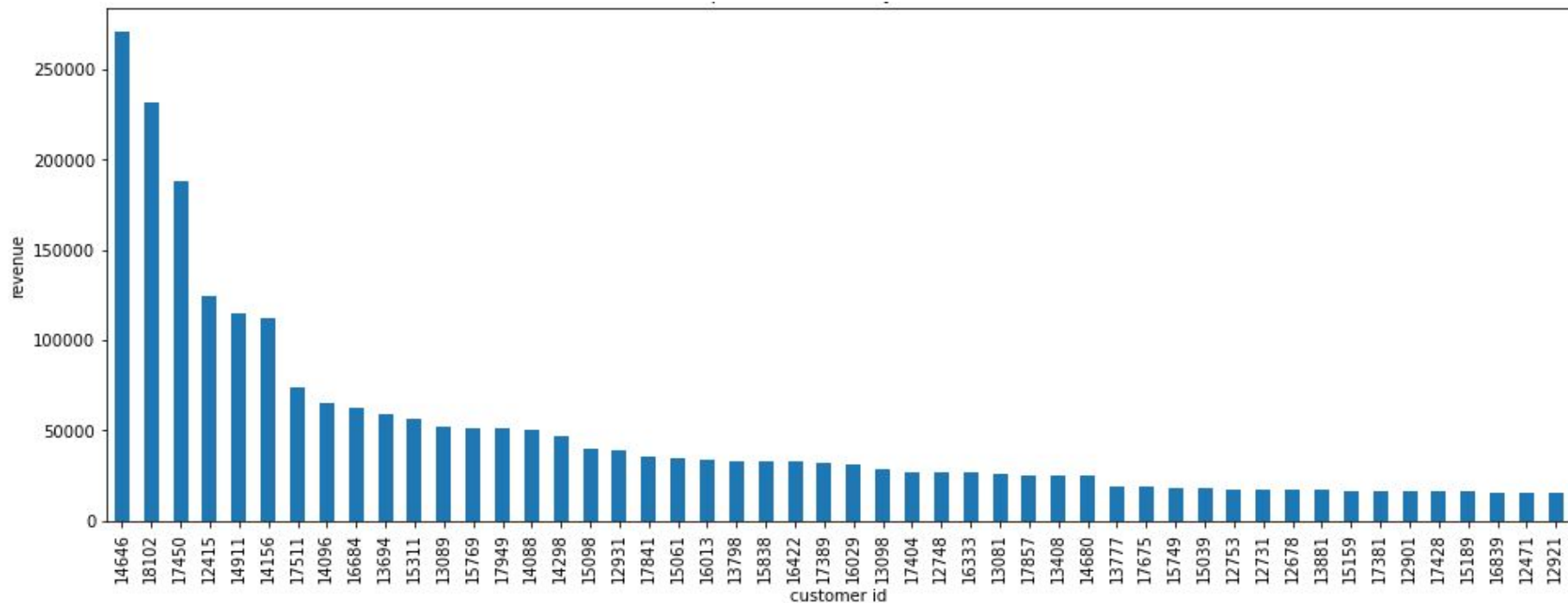**Recent and all time revenue and number of orders by categories**

RFM segmentation

More recommendations

- Most of the customers bought less than 1000 items.
- We see a lot of customers buying more than 200 items (in a year, the data period we have). It is unusual for a person to buy more than 200 items in a year from the same store. So it is clear that we have two types of customers: individuals and wholesales.
- Price per unit is mostly less than 1000 dollars, so the items being sold are relatively cheap
- Most of the customers spend less than 1000$ per transaction.

Top 50 out of 4206 buying customers are bringing 26% of total revenue. So there is sense to pay more attention to this customers, especially while talking about marketing.

Decorations items leads in terms of Revenue

We know that our data is from 2019-01-02 to 2019-12-07. We can say that at the end of the year customers prefer to buy things for their home and garden that kitchen items. Sounds logical! With all the holidays, people decide to fix their houses; The garden also needs to be tidied up as winter approaches.

For all rest of the categories, recent times revenue distribution similar to all time distribution.

Recent: Revenue by category

All Time: Revenue by category
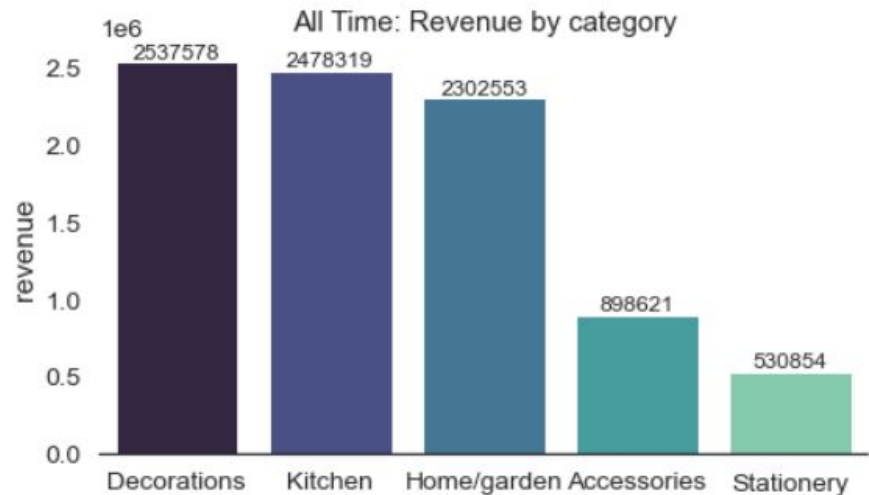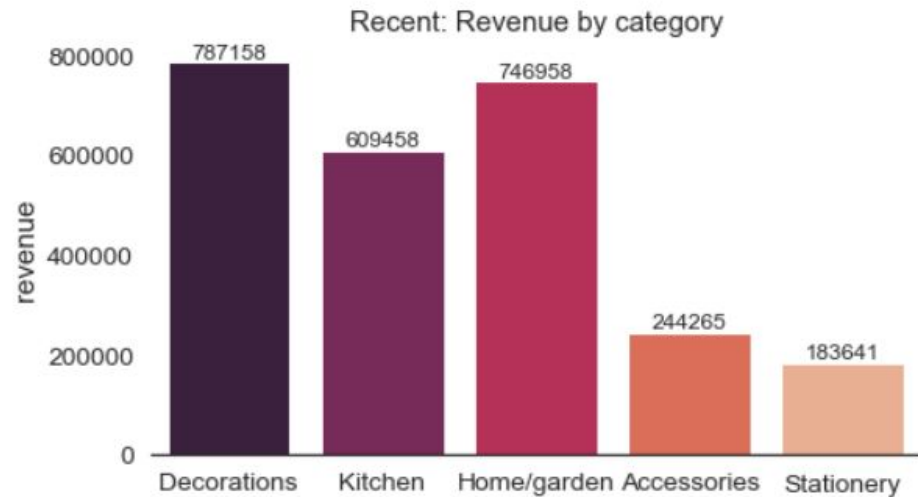
Decorations items leads in terms of number of orders

Recent times numbers of orders distribution similar to all time distribution

All times: Number of orders by category

- Decorations: 140603
- Kitchen: 124072
- Home/garden: 99581
- Accessories: 48514
- Stationery: 36783

Recent: Number of orders by category

- Decorations: 48965
- Kitchen: 34519
- Home/garden: 31443
- Accessories: 13871
- Stationery: 11792
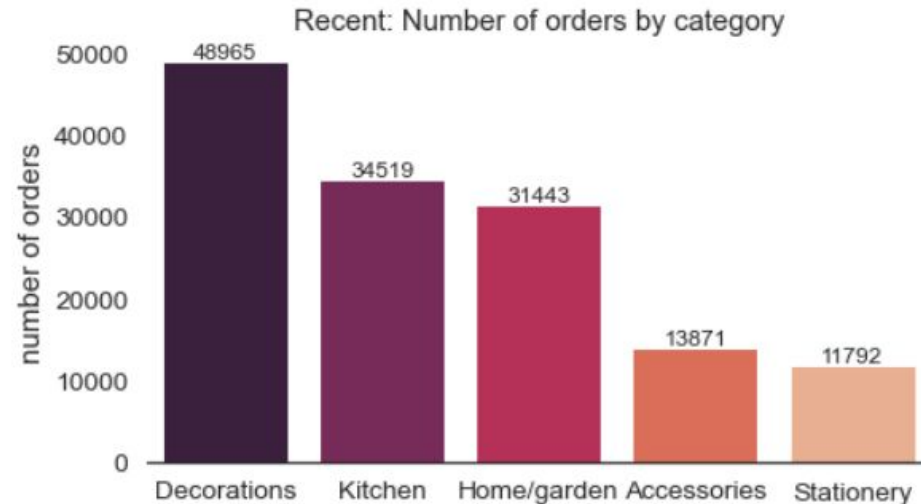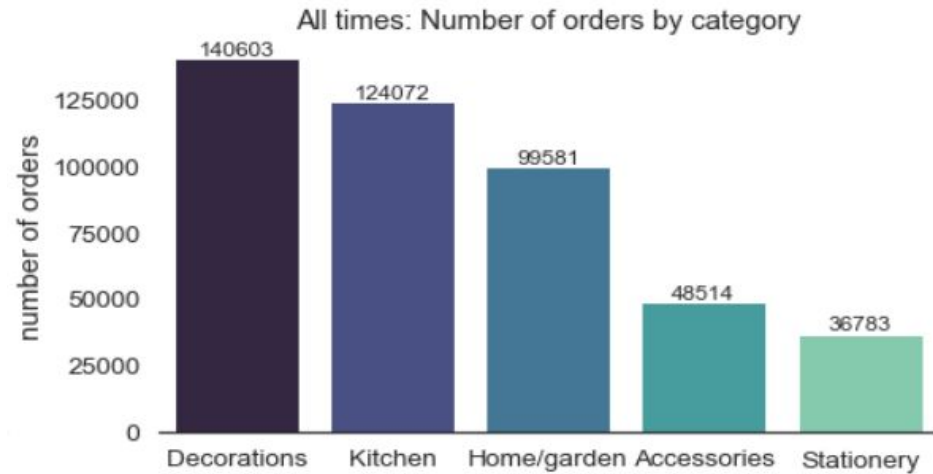
The store sold more items around the end of the year, Christmas holidays.

About the wholestochers: in office working hours the amount of items sold increase in a dramatic way: maybe just wholestochers making their work? Anyway, the office hours are our "money time", and the company need to pay extra attention to this customer behaviour.

Number of items sold by month
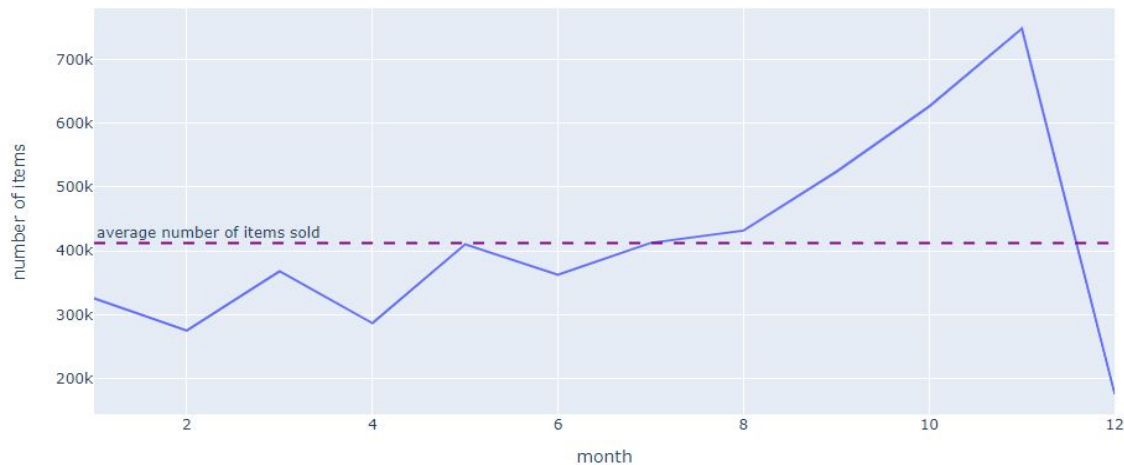
Number of items sold by hour
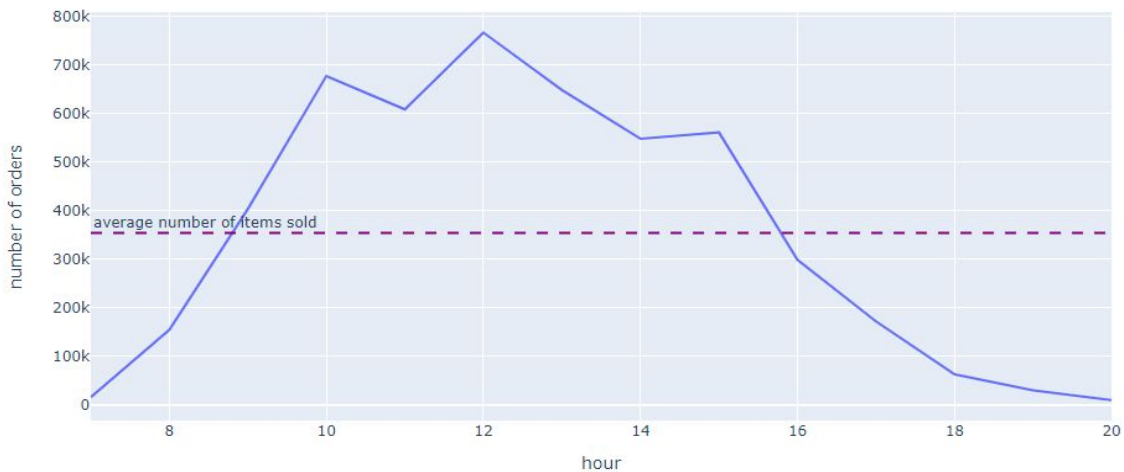
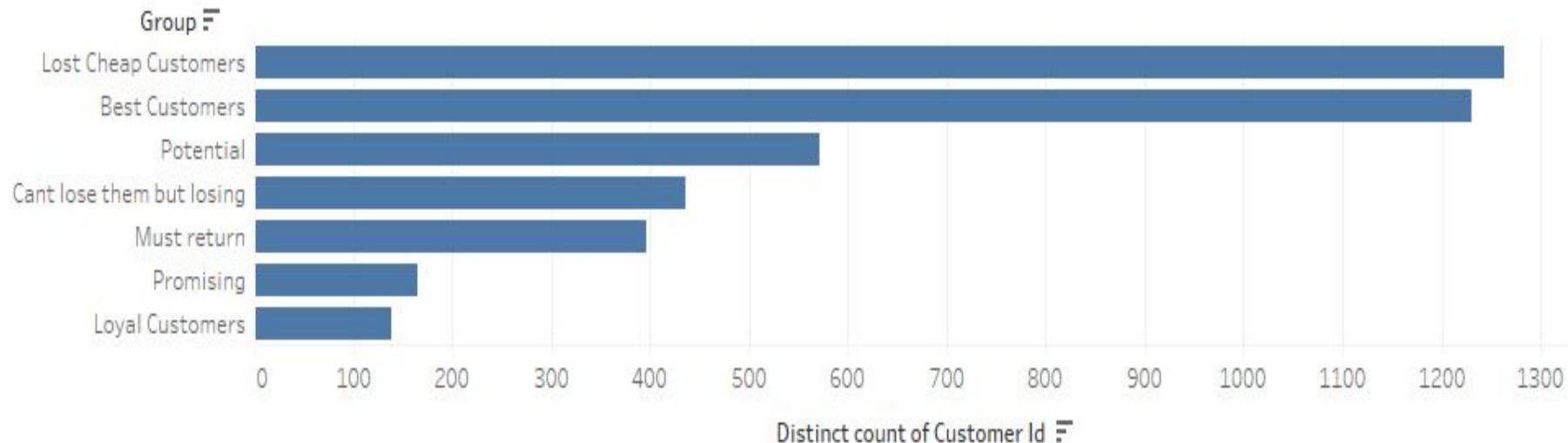# RFM segmentation

RFM stands for the three dimensions:

Recency – How recently did the customer purchase?
Frequency – How often do they purchase?
Monetary Value – How much do they spend?

Activity	Best Customers 222 Customers who bought most recently, most often and spend the most.	Lost Cheap Customers 111 Last purchase long ago, purchased few and spend little.	Loyal Customers 221 Customers who bought recently and also bought often.
Promising 212 Recent customers and spent a good amount.	Must Return 122 Made largest orders and often. But haven't returned for a long time.	Can't lose them but losing 121, 112 Similar to Must Return but with smaller monetary value or smaller frequency value.	Potencial 211 Bought recenty, but don't order often and don't spend a good amount.

split by groups

Group

Group	Distinct count of Customer Id
Lost Cheap Customers	
Best Customers	
Potential	
Cant lose them but losing	
Must return	
Promising	
Loyal Customers	

RFM segmentation and number of customers in each group

Lost cheap customers leads in terms of distinct counts. Bad news!
Best customers is the second group in terms of number of customers, this are good news!
For all rest of categories the numbers are not amazing, but we can work on it!

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Actionable tip	Best Customers 222 No prices incentives, New products and loyalty programs	Lost Cheap Customers 111 Don't spend too much trying to re-acquiere.	Loyal Customers 221 Upsell higher value products. Ask for review – how to increase sales revenue?.
Promising 212 Offer membership /loyalty program. Keep them engaged. Ofter personalised recommendations.	Must Return 122 Win them back via renewals or newer products. Talk to them if necessary. Highest possible personalisation.	Can't lose them but losing 121, 112 Provide helpful resources on the site. Send personalised emails.	Potencial 211 Price Incentives and discounting tactics. Offer relevant products.

What else do we recommend?

Give extra customer support and extra marketing work at the office working hours – The money time.

Make reforms in order to make easier for wholestochers to make purchases.
Find out the items wholestochers like to buy, and recommend them this items to all of them.

Thanks!

We hope you'll use these tips, and recommendations to go out and hit the online shopping market!

Feel free to ask questions or ask for more information.

Was my pleasure,
Ruth Benzaquen.