

Analysis of Brazilian E-Commerce Public Dataset by Olist

Academi Week 4

Kevin Wibowo

Goals and Dataset

Goals

To know how well the growth of the e-commerce and specifically know something that happening from 3 years sales by Olist and hopefully can gives recommendation from the analysis

Dataset

Brazilian E-Commerce Public Dataset by Olist
Source: Kaggle, 2018

Customer Order Pattern

Monthly

Total Order by Time



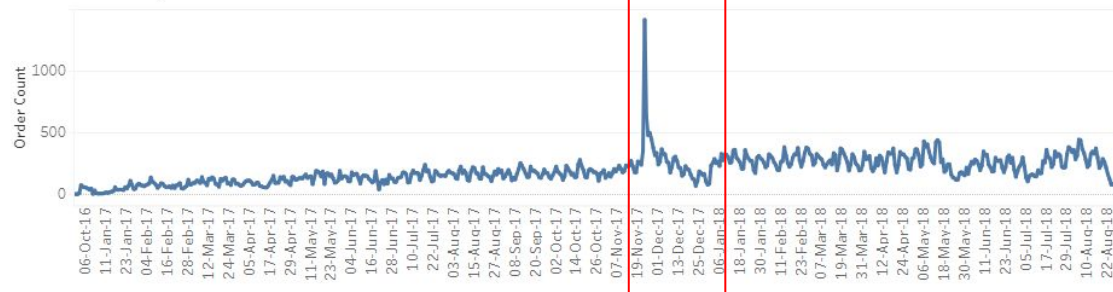
- The order is stably increasing from time to time but reach a plateau condition on 2018 then suddenly dropped on September

- The plateau condition probably because [Amazon](#) started its first big move into merchandise on Brazil in October 2017

- High spike on Nov 17 because of [black friday](#) event on 24 Nov 17

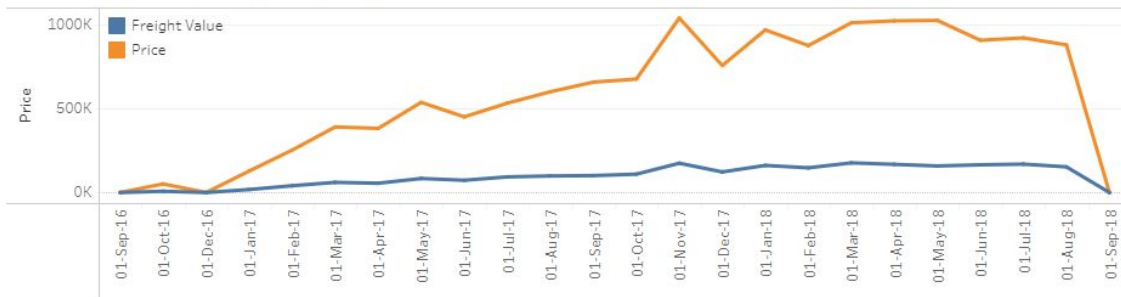
Daily

Total Order by Time



Customer Spending and Shipping Price

Total Customer Spending by Time

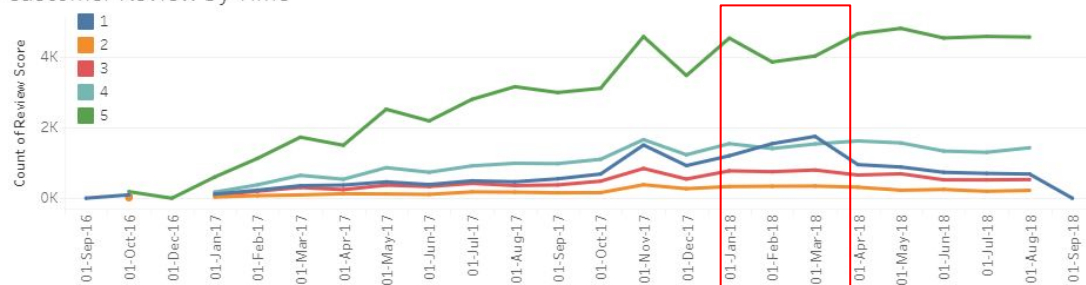


- Price of items going up and down from time to time while freight value/shipping price rather stable but start to increasing on June 2018

	Oct 16	Feb 17	Jun 17	Oct 17	Feb 18	Jun 18
Avg Price (R\$)	133.9	125.6	120.1	122.1	111	123.1
Avg Freight Value (R\$)	19.93	20.14	19.48	19.74	18.66	22.42

Customer Review

Customer Review by Time



- The review seems balanced from 2016 until latest data but there is a big spiked of **bad review** on February and March 2018

- It possibly related to high **canceled order** on February 2018 which almost twice than bad review on Nov 17 (highest before Feb 18)

- This event probably has something to do with Olist system

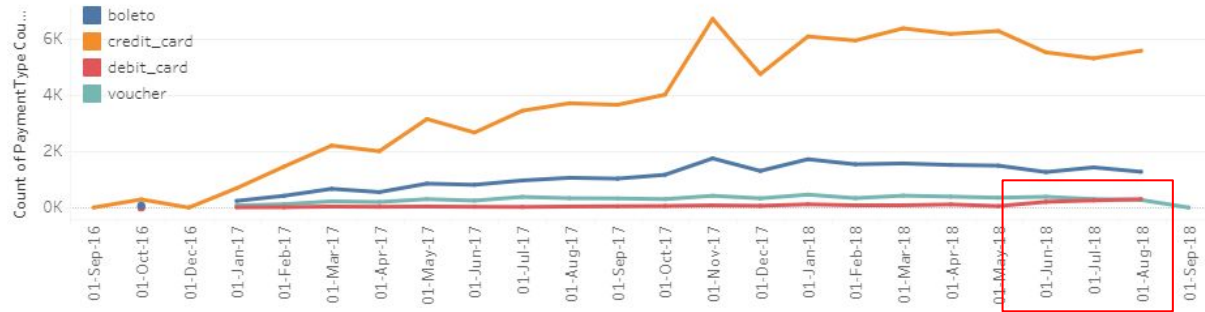
Customer Review by Time



Canceled
Order

Payment Type

Payment Type by Time



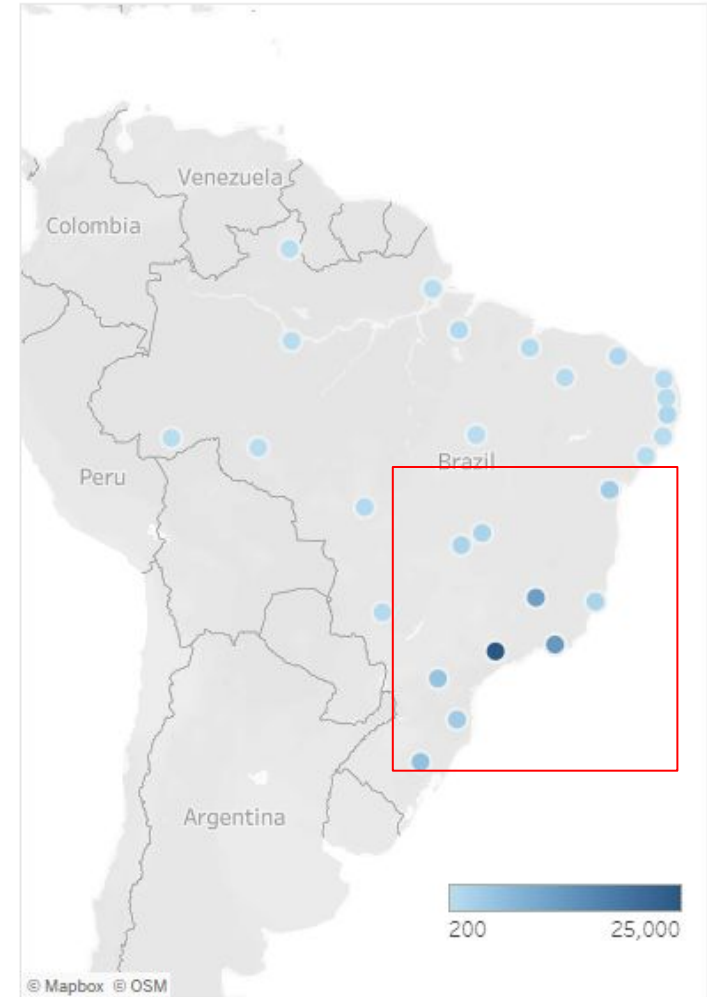
- Most of the customers use credit cards for the payment
- There is a slightly increase on debit card payment from May 2018

Customer Location

90% of the order (88123/97255) comes from 10 state which 7 of them has the highest population on Brazil.

- Sao Paulo
- Rio de Janeiro
- Minas Gerais
- Rio Grande do Sul
- Parana
- Santa Catarina
- Bahia
- Federal District/Brasilia
- Goias
- Espirito Santo

Customer Location



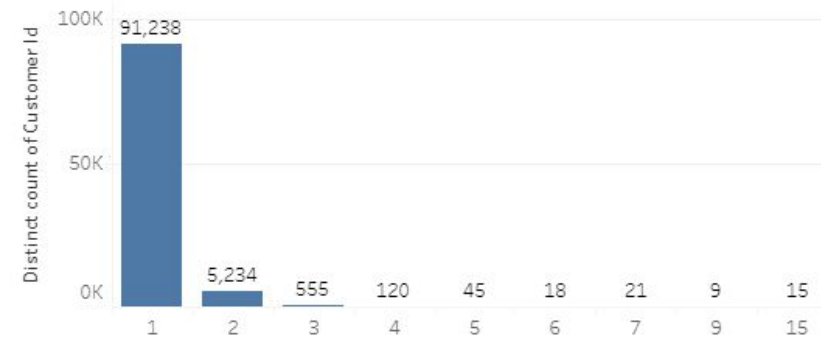
Customer Loyalty & Favorite Products

- 93.8% of the transactions was done by one-time buyers (91238/97255)

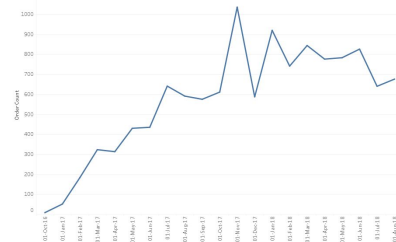
- 5 most favorites products are bed bath table, health beauty, sports leisure, computer accessories, and furniture decors.

- Health/beauty and housewares (6th favorite order) category have good trend that keep increasing from 2016 until 2018, while the other favorite products trends is either plateau or decreasing starts from March 2018

Order Frequency from Same Customer



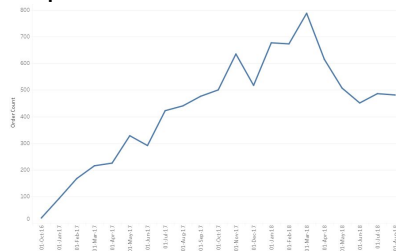
Bed bath table



Health and beauty



Sports leisure



Housewares



Conclusion and Recommendation

- The sales keep increasing until early 2018 that reach plateau condition then decreasing slightly
- Looking at Black Friday event on 2017, I believe that more promotional activities can increase Olist sales
- Consider reaching out to customer with debit payment because it looks good based on latest trend
- Olist is located in Curitiba, Parana and the sales was concentrated on Sao Paulo and the big cities near that so establishing store in different cities that far from those can potentially increase Olist sales in wider area.
- Consider making promotional event for favorite products that have decreasing trends on 2018 (bed bath table, sports leisure, computer accessories, and furniture decor)