



E-COMMERCE

DELIVERY PERFORMANCE

ANALYSIS

CONTENT

01

BACKGROUND

02

OBJECTIVES

03

ANALYSIS

04

STRATEGY

BACKGROUND

- Olist is the largest e-commerce site for sellers in Brazil. It connects merchants and their products to the main marketplaces there. Merchants are able to sell their products on Olist and ship them directly to the customers using Olist logistics partners.
- ~ 100k data containing information on Olist orders from 2016 to 2018 has been made available for the analysis

The Olist logo is displayed in white lowercase letters on a solid blue square background.

GOALS AND OBJECTIVES



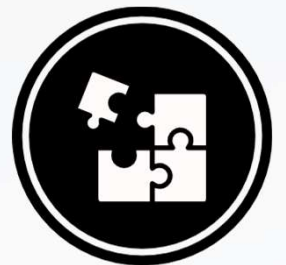
Understand the delivery services provided by Olist logistic partners from 2016 to 2018



Evaluate delivery services performance



Develop strategies to enhance delivery services performance and boost customer satisfaction





01

**BUSINESS
CONTEXT
UNDERSTANDING**

02

**DATA
CLEANING**
Excel

03

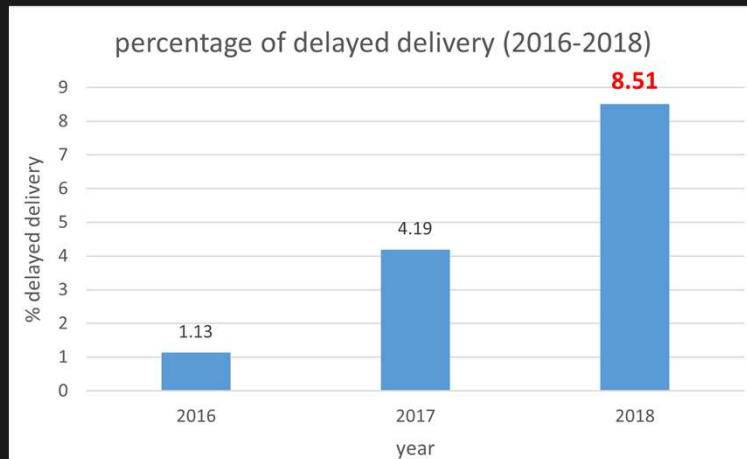
**DATA
ANALYSIS**
MySQL

04

**STRATEGY
DEVELOPMENT**

Delay in Delivery

- The overall average % of delayed delivery was 6.65%
- % of delayed packages increased each year from 1.13% in 2016 to **8.51%** in 2018



**% of packages
delayed in delivery
were **increasing**
from 2016 to 2018**



Delay in Delivery

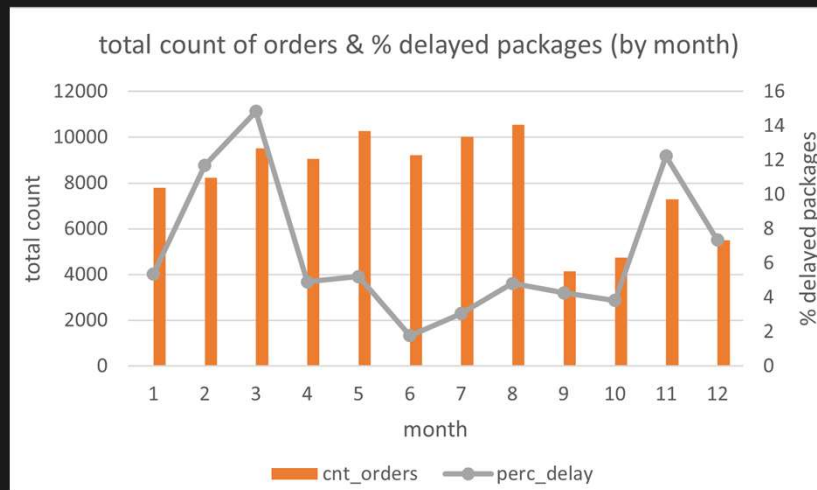
On average, customer satisfaction was **4.29** for on-time delivery whereas it was only **2.27** for delayed delivery

Note: the satisfaction score was measured on a scale of 1–5

**significant discrepancy
in customer satisfaction
between on-time delivery
and delayed delivery**

Delay in Delivery

- A package was more likely to be delayed in winter and spring, especially in March and November.
- The delay was not particularly associated with the workload (i.e. the total number of orders)



Seasonality played a role in delay rate

Top 5 states w/ the lowest customer satisfaction

state	order cnt	avg days until		% delay	satisfaction
		delivered			
MA	715		21.34	17.06	3.84
AL	398		24.41	20.85	3.84
RR	41		29.34	12.2	3.90
SE	334		21.38	14.97	3.91
PA	939		23.60	10.65	3.91

- These states tend to have much **smaller numbers of orders**, and the average days from purchase to delivery compared to the overall average (18.67 days)

Top 5 states w/ the largest volume of orders

state	order cnt	avg days until		% delay	satisfaction
		delivered			
SP	40470		8.69	4.42	4.25
RJ	12278		15.18	11.92	3.96
MG	11351		11.92	4.47	4.19
RS	5361		15.25	6.06	4.19
PR	4919		11.93	3.96	4.24

- Overall, states with larger numbers of orders tend to have lower % of delay packages and higher satisfaction.
- One exception is state **RJ** which had significantly higher % of delay packages.

Locations where customers placed orders was also a contributing factor to delivery

Why does optimizing delivery matter?

A satisfied customer:

- Is more likely to become repeat customers
- often share their positive experiences with friends and family, both in person or through social media, which can attract new customers

By improving delivery process, we can boost our customer satisfaction, increase profitability, and pave ways to long-term success.



STRATEGIES



Prioritize improving the quality of delivery services in states with high order volume, such as RJ, through more effective inventory management and other means

STRATEGY N°1



Pay attention to the seasonal impact on delivery services, especially during months prone to delays. Prepare in advance and collaborate proactively with logistics partners to develop contingency plans

STRATEGY N°2



Implement local distribution centers or warehouses in or near states with low number of orders

STRATEGY N°3

THANK YOU

