



Data Analysis

Python for Business Analytics

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Analysis Outline

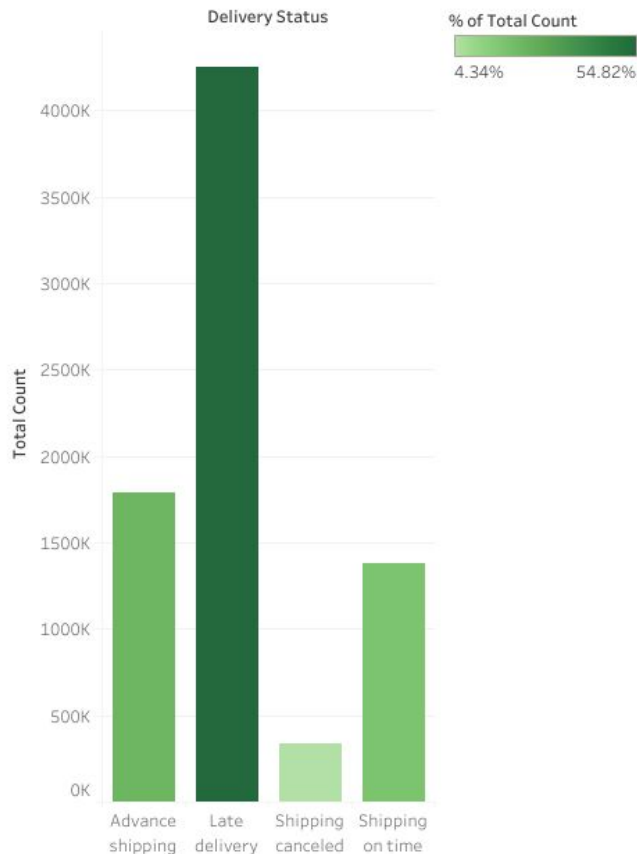
- 01 Problem: Alarming Rate of Late Deliveries
- 02 Data Analysis: Region, States, Shipping Mode and Electronics
- 03 Solution: Conclusive Opportunities



01

Problem: Alarming Rate of Late Deliveries

Total Deliveries



Alarming Rate of Late Deliveries

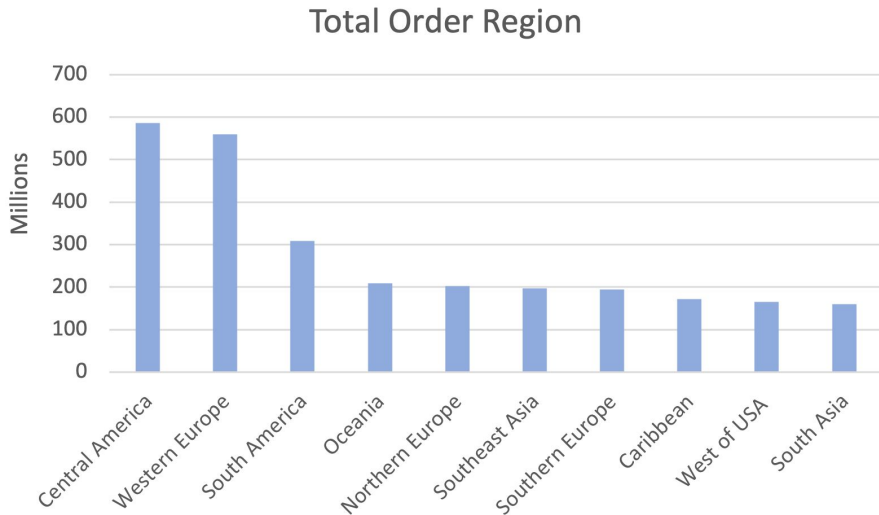
Our perspective began with the customer experience, revealing a concerning 55% of late deliveries.

02

Data Analysis: Region, States, Shipping Mode and Electronics

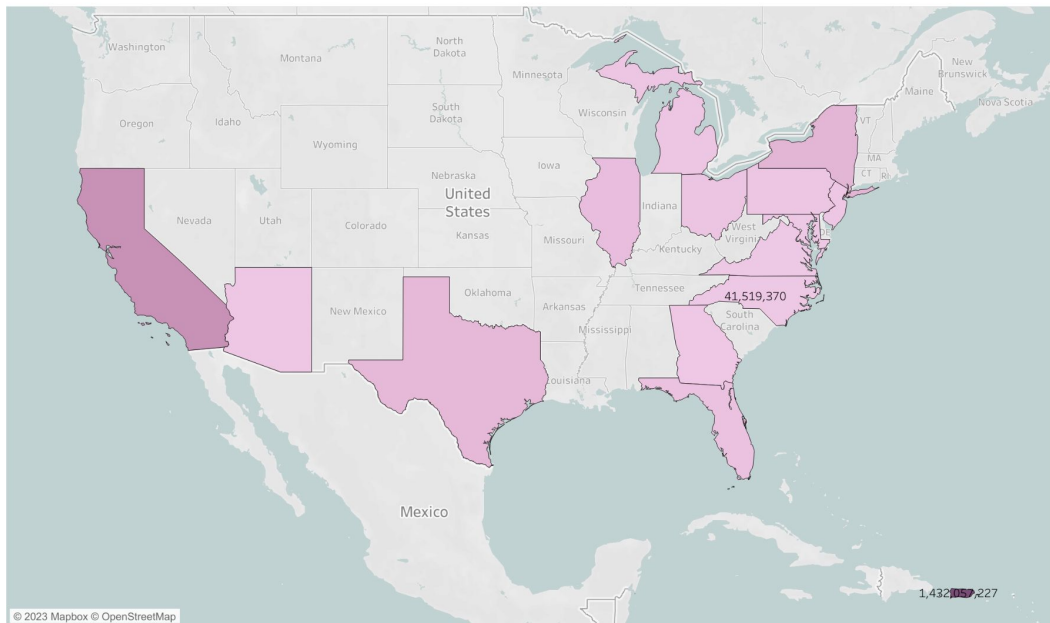
Region Order Distribution

Given the large quantity of late deliveries, we wanted to visualize how region order distribution looked like in order to take our next steps.



Total Deliveries to Customer States

Customer State



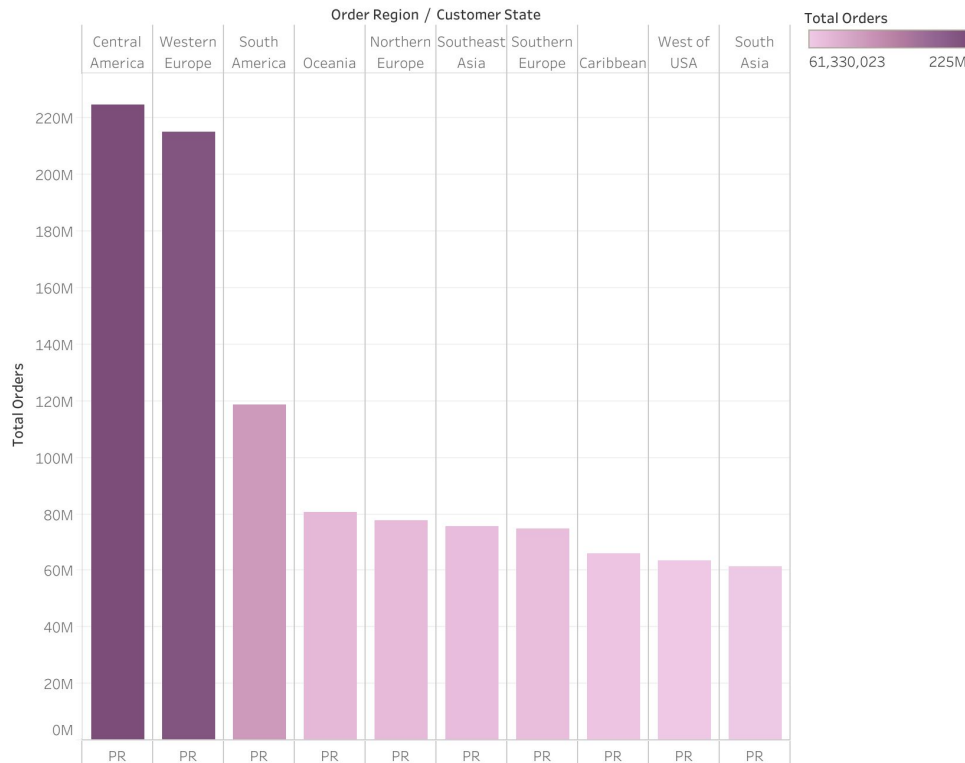
TotalOrders (top 15 custo..

41,519,370 1B

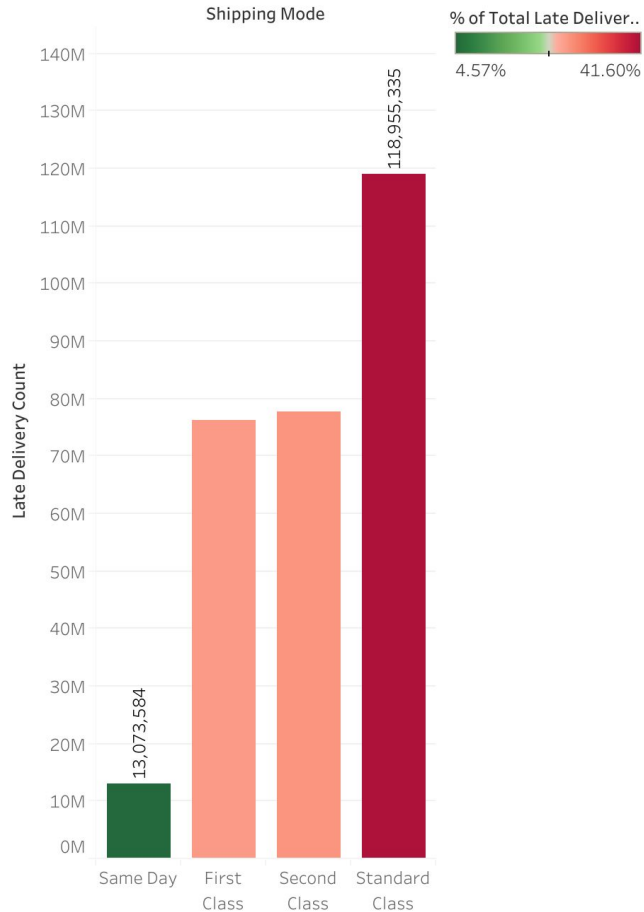
Category Vs Region Vs State

The goal is not to emphasize the percentage of late deliveries by order region but to identify patterns suggesting potential challenges with overseas shipments

Order Region VS PR



Shipping Mode & Late Delivery Count



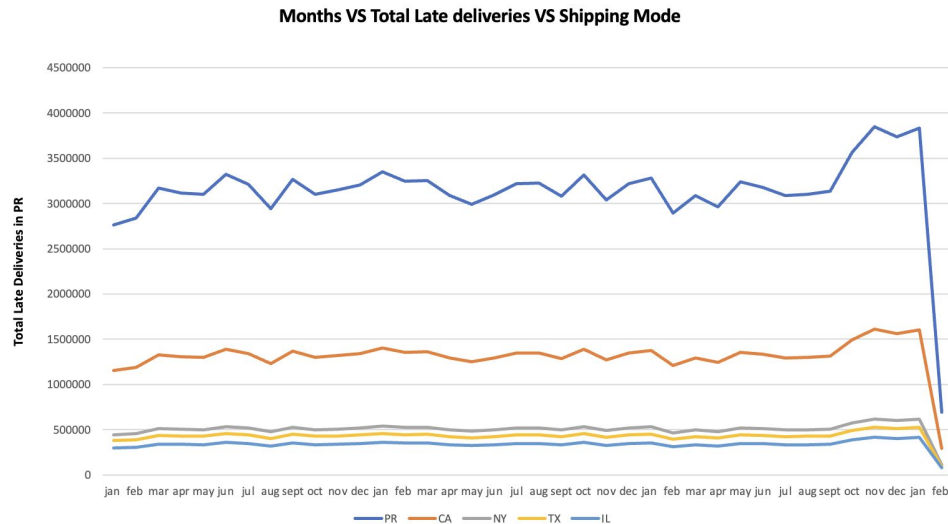
Shipping Mode

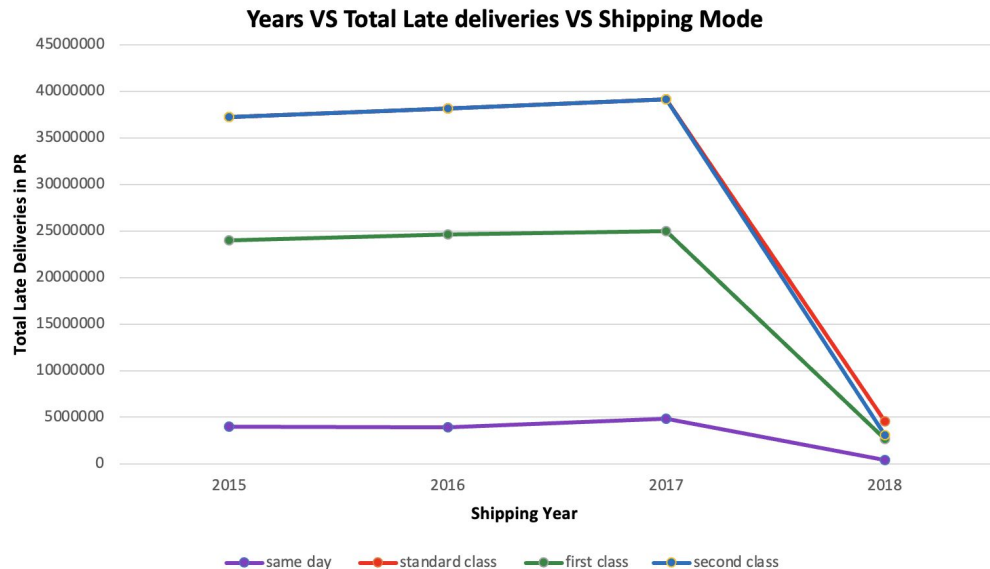
Standard Class shipping mode results in about 119 million or about 42% late deliveries in Puerto Rico.

Standard Class Late Shipment from 2015-2018

Late delivery count from 2015-2018 for
PR, CA, NY, IL, and TX.

Data available up to: **February 6th, 2018**





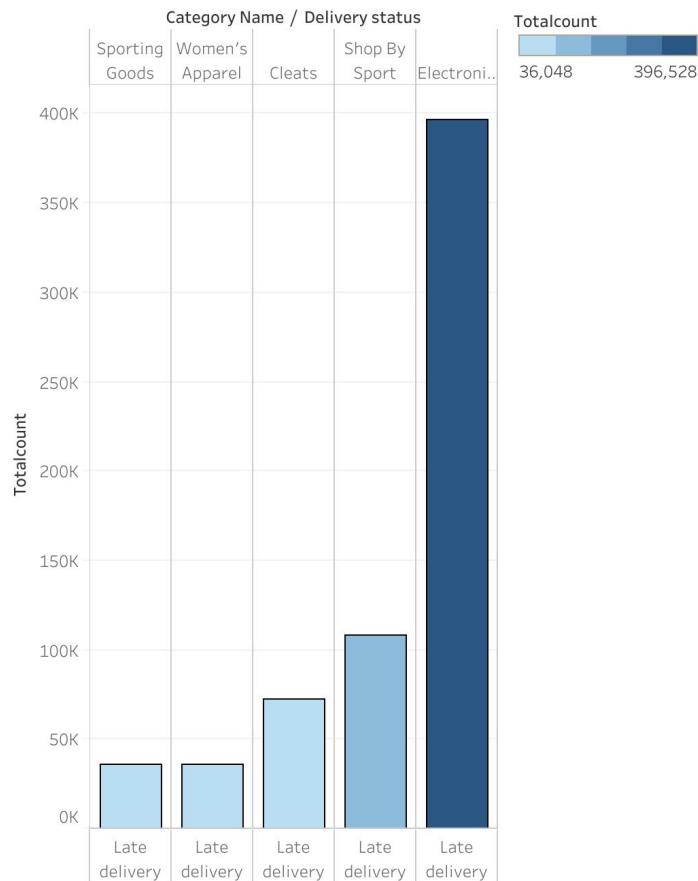
Shipping Mode Results Over Time

The number of late delivery appears to be decreasing with time, but it appears to still be in the millions.

Late Deliveries by Top Categories

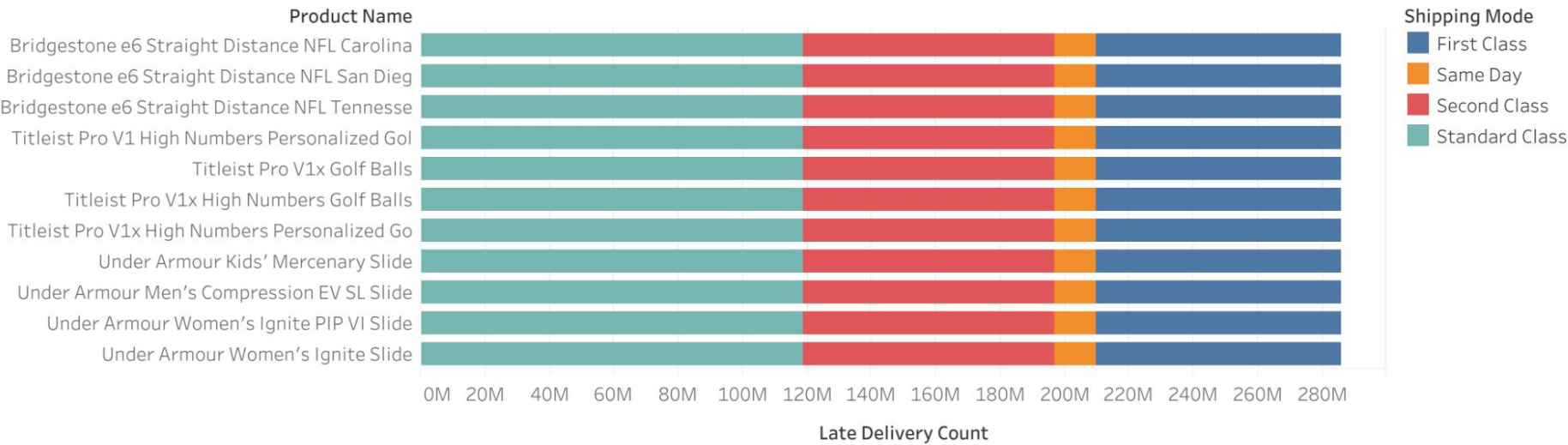
Conducting further analysis on late deliveries, noticeably majority of the categories were “Electronics”.

Late Delivery for Top 5 Categories



Product Name Under Electronics

Product names under Electronics VS. Shipping Mode



03

**Solution: Conclusive
Opportunities**

Closing Thoughts

Opportunities

Given the recurring issue of late deliveries to Puerto Rico when orders are shipped, here are some recommendations:

1. Ensuring data is clean: Product names under correct category
2. Access to more customer registration data through 2015-2018
3. Diversifying our suppliers to Puerto Rico
4. Establishing stronger customer communication

**Thank you for
listening!**