



Presented with POWER BI

By Jose G. Lora

Agenda:

- Background information on the project
- Framing:
 - Problem statement
 - The Hypotheses created
- Data used
 - Extracted, Wrangled and Prepared
- Analysis
- Findings
- IF...

Background information on the project:

- I was asked to use the Data Analytics Workflow to dissect a business problem at Superstore.

Framing:

- The Regional Sales Director has noticed that – even though sales continue to experience year-over-year growth – profitability continues to decline.
- To explore this opportunity, I will focus on combining data that includes sales, regions, ship mode, category and profit

Hypothesis:

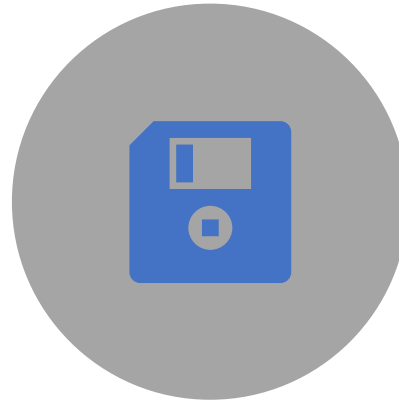
My hypothesis is that since we now live in a world of instant gratification and every merchant wants to be as fast as Amazon, Superstore is using faster and more expensive shipping methods that are affecting their profitability.

If we examine all the shipping methods used, we might identify different methods have higher shipping costs and are affecting profitability.

Extracted, Wrangled and Prepared:



WENT TO PG ADMIN AND PULLED THE QUERY SELECT
* FOR EACH OF THE 5 TABLES IN THE SUPERSTORE
DATA SET AND SAVED IT AS AN EXCEL FILE



OPENED THE FILES USING TRANSFORM DATA IN
POWER BI OPTION AND REMOVED SOME ITEMS THAT
WERE NOT GOING TO APPLY.

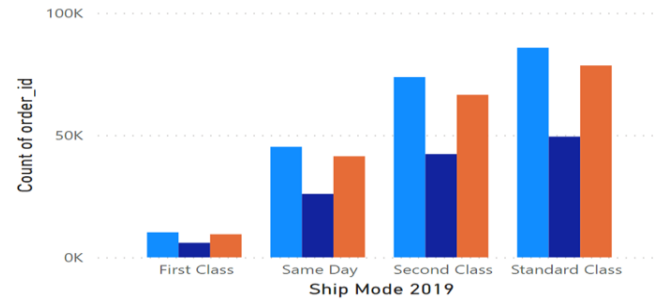


LOADED THE FILES INTO POWER BI AND SETUP
RELATIONSHIPS FOR ORDERS, REGIONS AND
PRODUCTS TABLES

Analyze

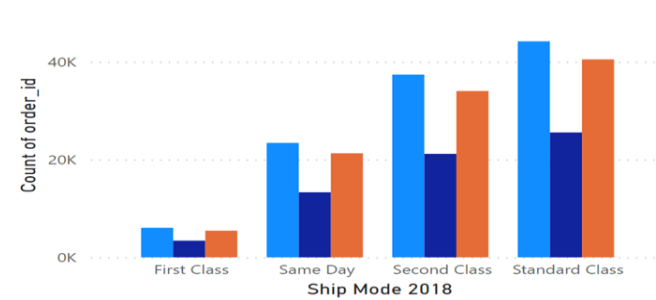
Count of order_id by ship_mode and region

region Americas APAC EMEA



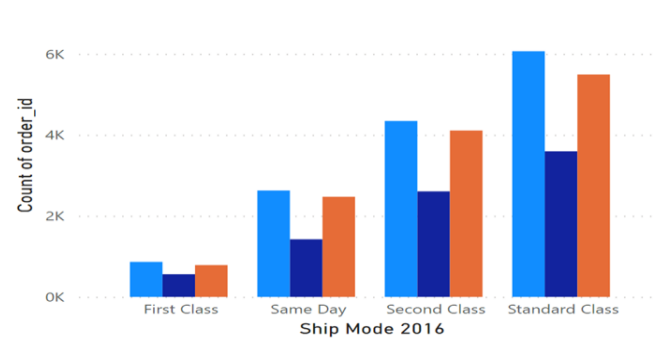
Count of order_id by ship_mode and region

region Americas APAC EMEA



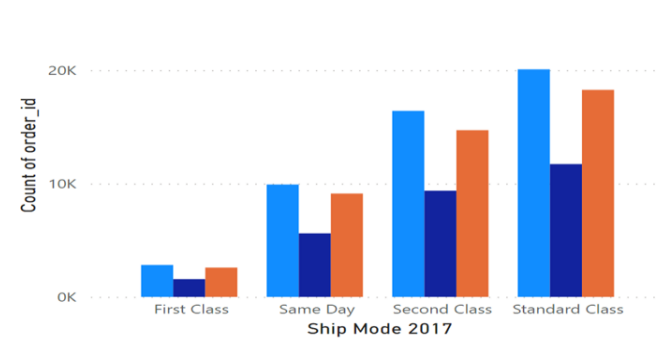
Count of order_id by ship_mode and region

region Americas APAC EMEA



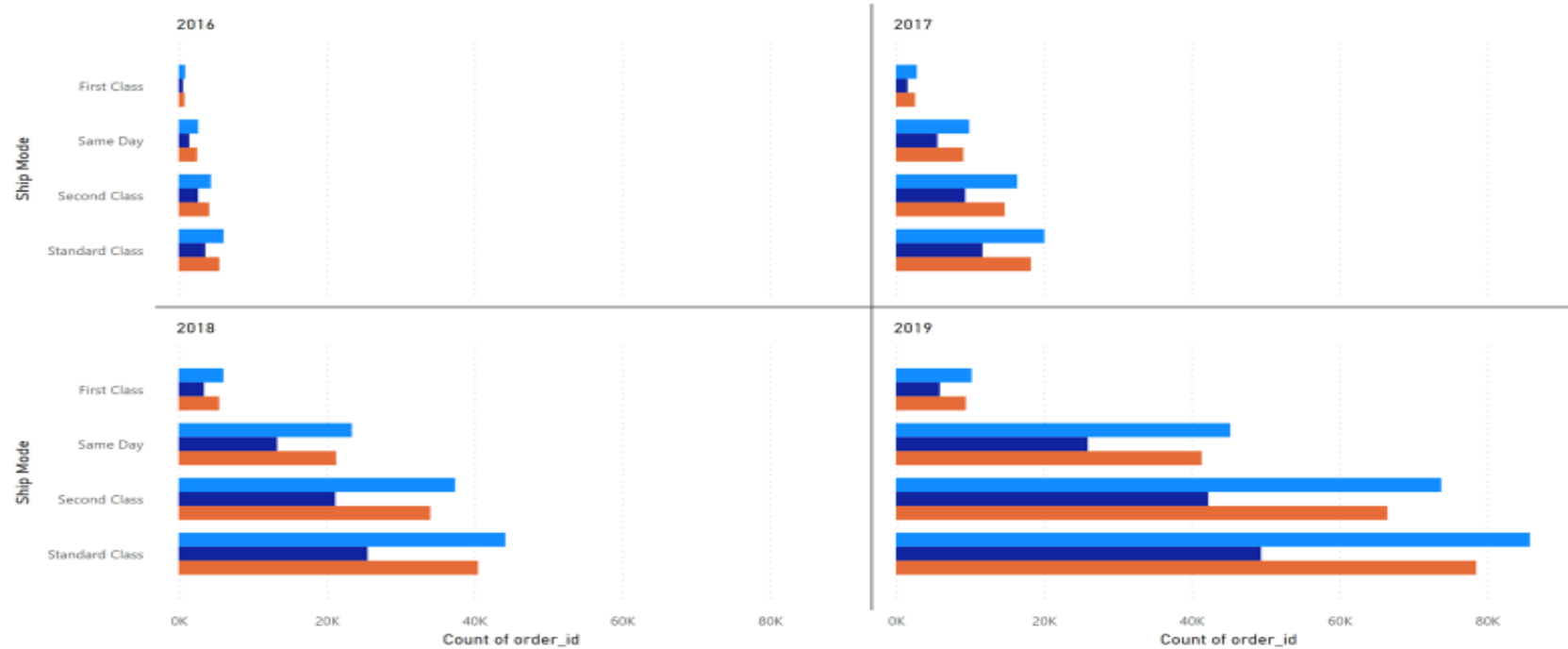
Count of order_id by ship_mode and region

region Americas APAC EMEA



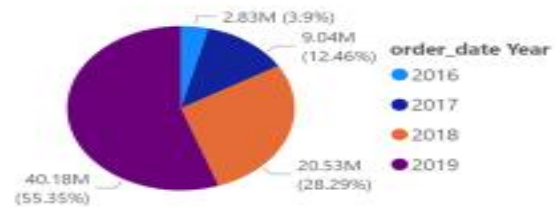
Analyze

Count of order_id by ship_mode, region and Year

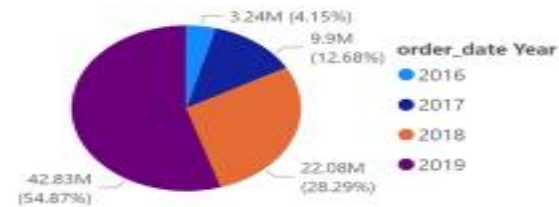


Analyze

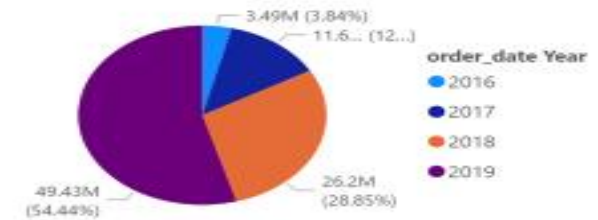
Office supplies sales by Year and category



Furniture sales by Year and category



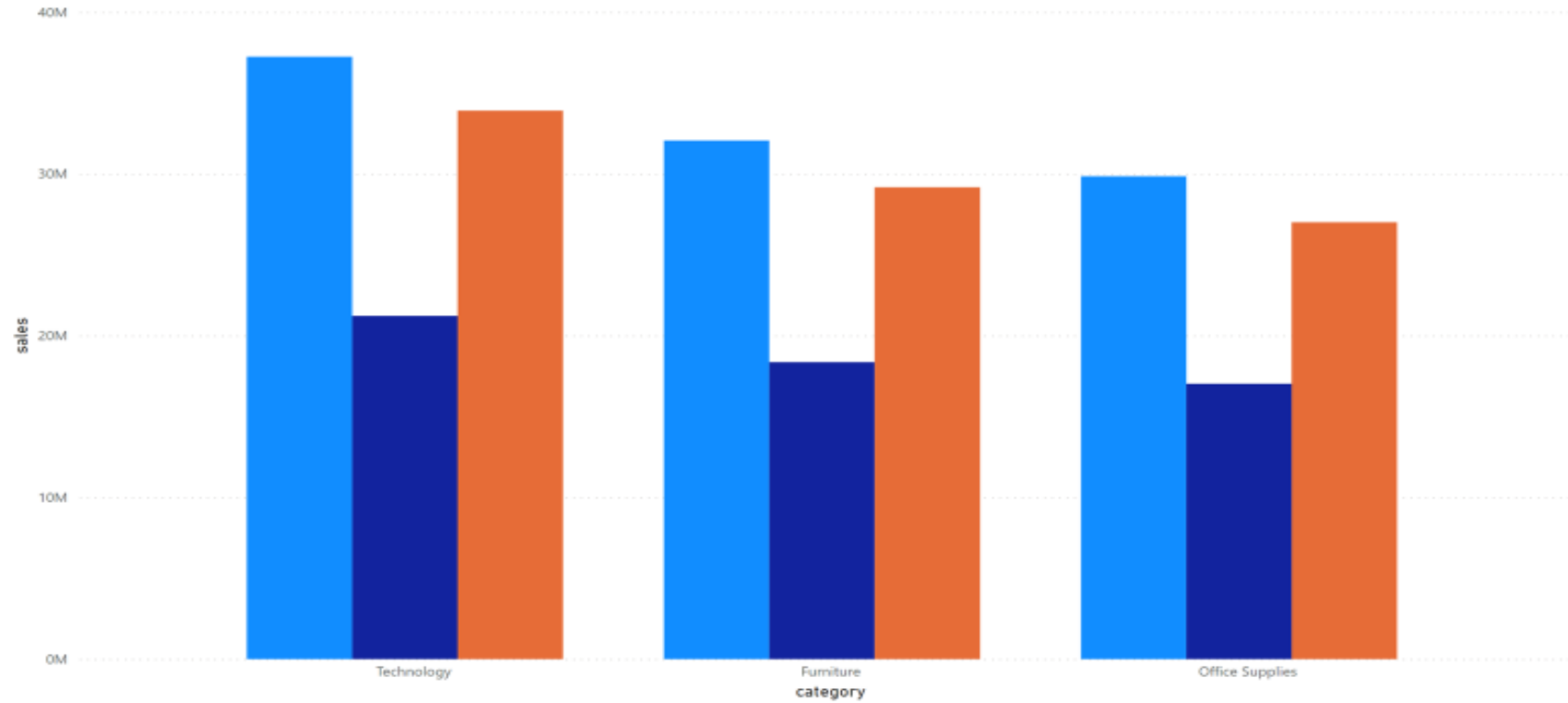
Technology sales by Year and category



Analyze

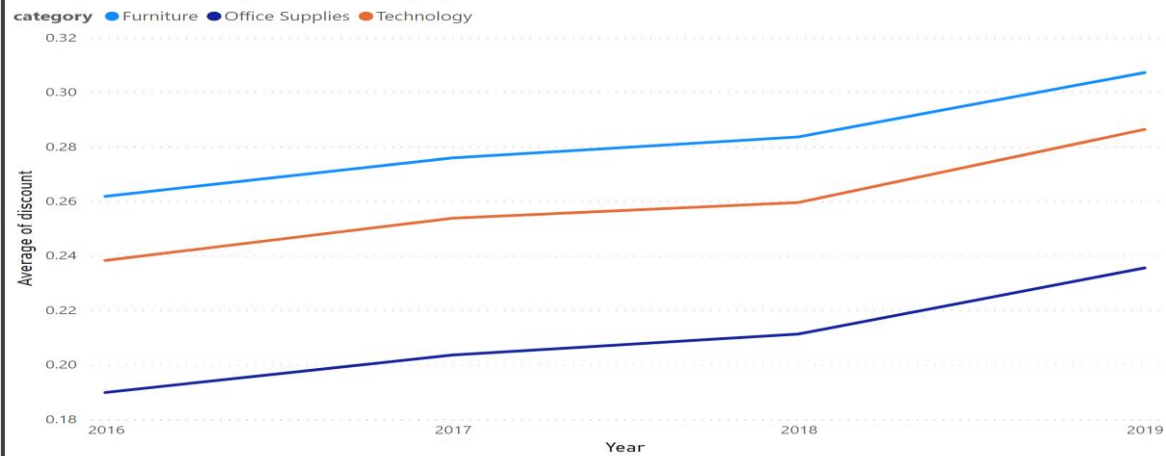
sales by category and region

region ● Americas ● APAC ● EMEA



Analyze

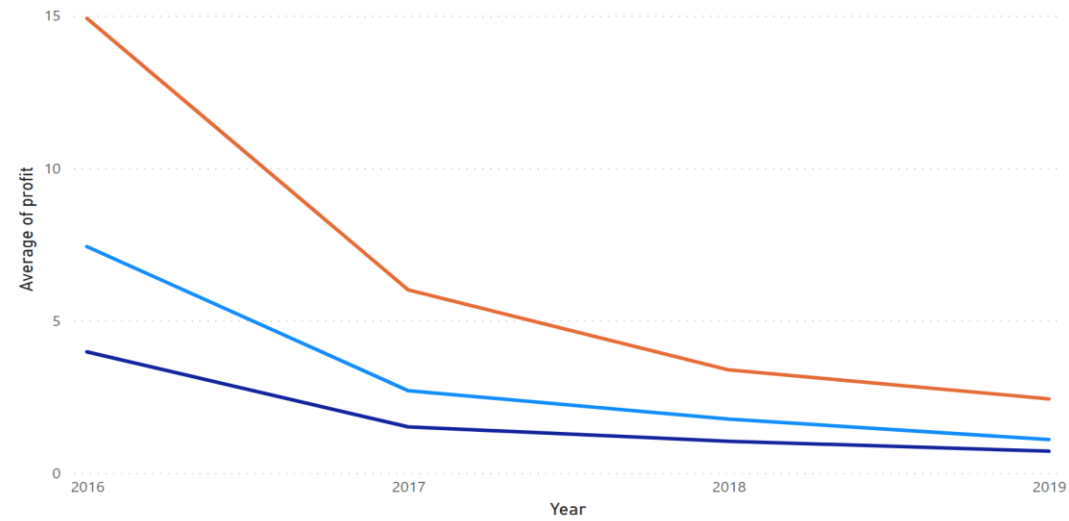
Average of discount by Year and category



Analyze

Average profit by Year and category

category ● Furniture ● Office Supplies ● Technology



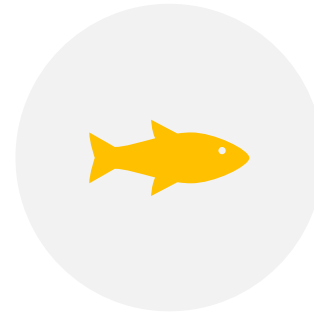
Findings



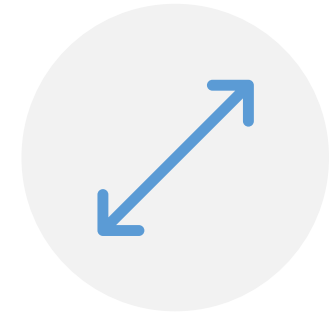
MORE EXPEDITIOUS SHIPPING
METHODS IS NOT THE CAUSE FOR
LOWER PROFITABILITY



THE DIFFERENT CATEGORIES HAD
NEGLECTIBLE GROWTH DIFFERENCES
FROM YEAR TO YEAR



FURNITURE HAD THE SECOND HIGHEST
NUMBER OF SALES BUT THE HIGHEST
AMOUNT OF DISCOUNTS



TECHNOLOGY PROFIT HAS PLUMMETED
BY OVER 10% IN THREE YEARS.



With a Genie...

- I would have asked for more time,
- Power BI from home
- More expertise using the program
- More specific details around profitability from Superstore HQ
- That would have allowed me:
 - More ability to work with and learn PowerBI and its tools
 - Ability to dig further in the numbers
 - Possibility to uncover the why behind the decline in profitability
 - Would have had the opportunity to drill down further