

Case Study:

You work for an e-commerce company ABC, and you've been asked analyze and present your findings to the Sales and the Operations heads. The solution should include a summary of current state of the business, business and customer trends that you observe from the data and a proposal (if any) for areas where you think the company can improve.

Here are some assumptions we'll consider on the data that has been [shared](#):

- It's currently September 2018 (e.g., filter out all data after September 2018)
- The company's inception was January 2017 (so you can filter out all data before January 2017)
- Company is US-based, but launched in Brazil (which is why some information is in Portuguese)
- You can assume all orders are delivered (so ignore the order state field)

Build a framework to answer the questions. If you're not sure what the questions are, create questions for yourself to answer. It makes the process of digging for data so much easier. It's hard to come up with an answer if you don't know what the questions are. If you're not sure what the question at hand is, you might need to play with the data a bit to understand what seems to be the problem at hand. For this particular case, the ask is really clear, we need to create a summary which includes current state of the business, business trends that you observe from the data and a proposal (if any) for areas where you think the company can improve.

Here are a few pointers to help you get started:

- Current State → Reflect on the current state of business
- Revenue → how much money are we making?
- Volume of sales → how many orders are we getting?
- Customer summary based on spend + behavior
- Are there any trends that you observe in the customer's spend?
- How should we present customer satisfaction?
- Is customer satisfaction a problem? What are your observations?

What we would like you to showcase:

1. You do not have to necessarily answer all questions above. Let the solution be a presentation of YOUR analysis and findings. We're interested in what YOU see and unearth from the data.
2. Flaunt your Data Modeling and DAX capabilities (Time-Intelligence, Aggregations, Statistics etc.)
3. Build views in Power BI that support your findings
4. We set no limits: Go ahead and perform statistical analysis and model building outside of Power BI using a tool/language of your choice (if you think Power BI limits you), *but we recommend you present your final findings and tell your story using Power BI.*

Data Share:

Please download the zip file from the Github repository at the link below.

<https://github.com/casestudyshare/data>

Orders dataset: Provides information for each item ordered

Order items dataset: Information for items within each order and the cost to ship and price broken out for each item within an order.

Order payments dataset: Provides information regarding payments made on each order. Make sure you aggregate total payment for each order to get unique order price.

Product dataset: Provides information about the product.

Product category name translated dataset: This dataset is Brazilian, so all categories are in Portuguese, join category name on this table to get the translated category.

Order reviews dataset: This table has review information for each order.

Customers dataset dataset: This dataset has information regarding customer_id, which links directly to order_id in the orders dataset. However, to get the unique customer id for each order you need to link to this table.