

# Analyzing eCommerce Data in Tableau

2023-05-05



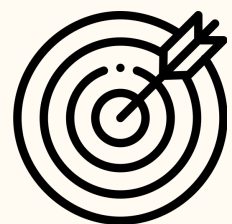
# About this case study



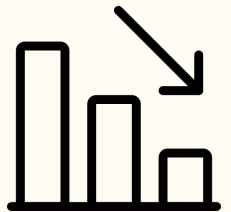
**Data:** We will sales data from a fictitious pet-supply store. The data is located in 4 CSV files.



**Primary Goal:** Analyze eCommerce data and build an executive dashboard



**Secondary Goal:** Optimize shipping costs by building a what-if analysis.



**Why?** Learn data modelling, clean-up, analysis, and visualization. Build real-world skills required to create insights from data.



# File Download

**Download all the files from:**

<https://cdn.mycontent.top/datacamp/webinar-files.zip>

There are two workbooks:

DataCamp-Webinar-Initial.twbx

DataCamp-Webinar-Solution.twbx



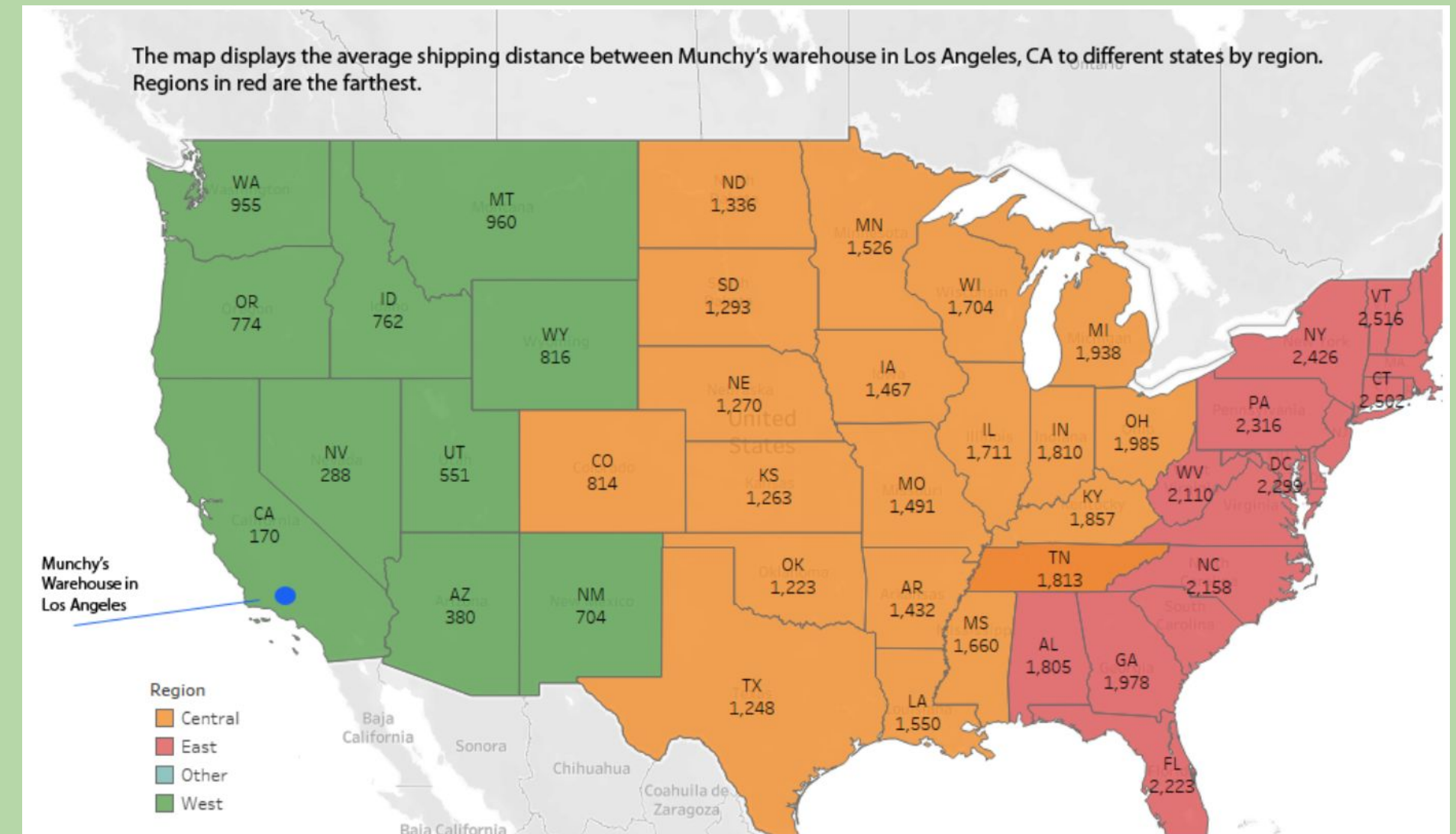
# About Munchy's Pet Supply



**Products:** Pet food and supplements, cleaning and grooming supplies.

**Target Market:** US residents and pet owners

**Business Goals:** Increase sales and reduce shipping expenses





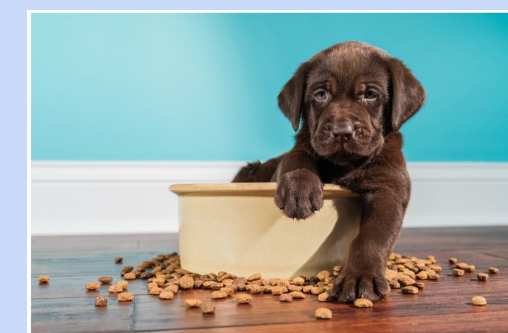
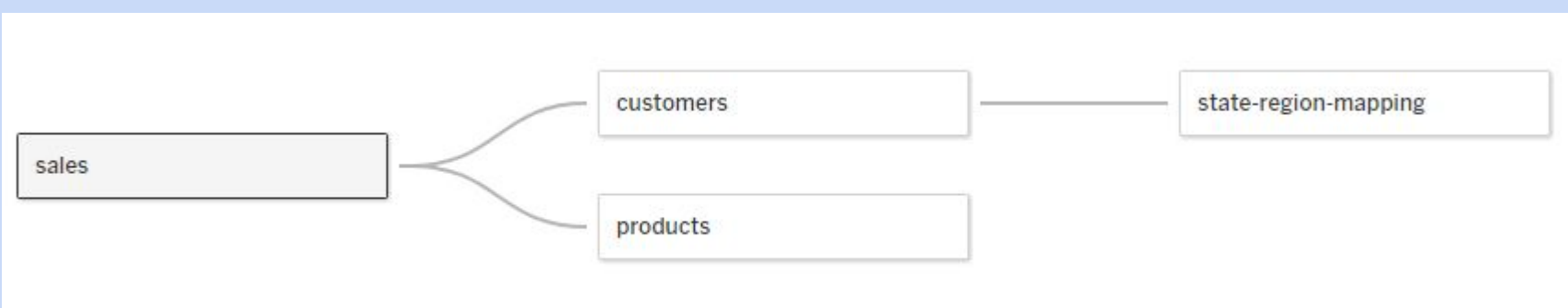
# The dataset

Sales table	
The sales table keeps information about every sale including the product, the customer, and the amount.	
Transaction Date	Date of purchase
Customer ID	Customer identifier
Description	Product description
Stock Code	Product code
Invoice No	An invoice contains multiple products and represents a single checkout
Quantity	Quantity of a product purchased
Sales	Total amount of a product in a single checkout
Unit Price	Unit price of a product

State mapping	
The state_mapping table maps multiple variations of state code and descriptions to a standardized state code.	
Order State	State code, description and all its variations
State	a standardized state code
Region	region name

Product table	
The product table keeps description, landed and shipping cost, weight and product category.	
Stock Code	Product code
Weight	Weight of a single unit
Landed Cost	Manufacturer cost + freight
Shipping_Cost_1000_r	Average cost of shipping 1000 miles to customers
Description	Most recent product description
Category	Product category

Customer table	
The customer table has customer identifier and their location information.	
Customer ID	Customer unique identifier
Order City	City
Order Postal	Postal code
Order State	State
Latitude	Latitude of customer location
Longitude	Longitude of customer location



# Shipping Costs 101



A single glass jar costs \$10/jar

Cost of shipping spice jars  
from California to Texas



9 jars cost \$45 or \$5/jar

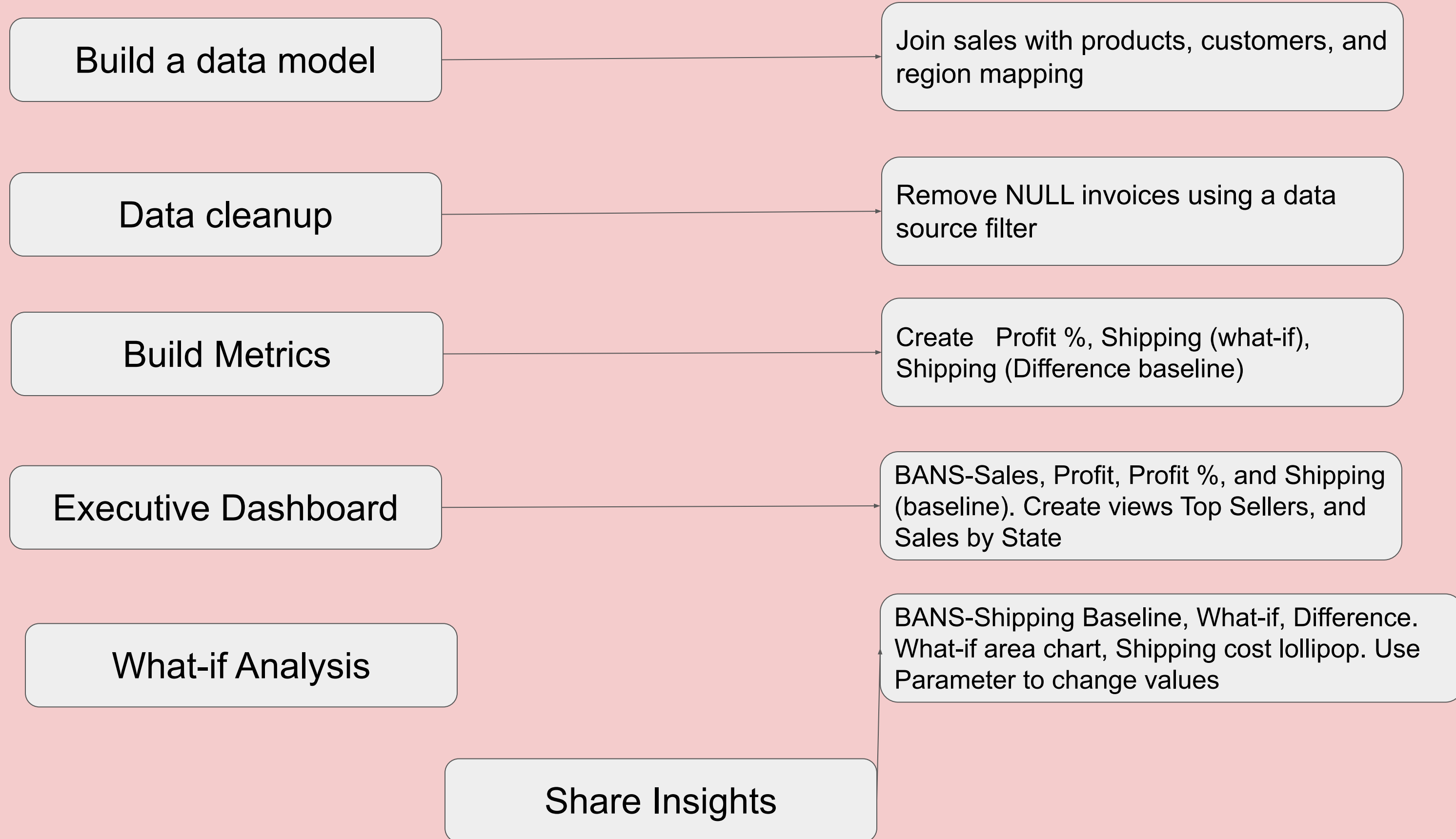
**Current Assumptions (baseline):** Each additional quantity in a shipment costs approximately 70% of the the cost of shipping that product individually.

**What-if Analysis:** In the what-if analysis, you will drill-down and build more fine-grained analysis

**Other Key Terms:** COGS (cost of goods sold). Landed Cost: COGS + freight costs till the product reaches manufacturer's warehouse in the US.



# What we will build?





# Interpreting Results

**Top sellers and profit:** Pet food and disposables make a majority of the sales for Munchy's. On the other hand electronics such as pet camera are the most profitable products:

**Where the customers are:** A large number of the customers are located in California, Florida, and Texas. These states are good candidates for marketing campaigns.

**Saving cost saving strategy:** Customer buying a single quantity can be targeted with quantity discount promotions. This will encourage them to buy more and save on shipping cost.

