## **Process details**

## **Prepare process**

- 1. Skim the overall data
  - a. Check missing and duplicated data => There is no missing and duplicated
- 2. Change field name
  - a. Change "Ship date" to "Delivery date".

We have 2 date field; "Order date" and "Ship date"

"Order date" should refer to the customer's order date and the started date of shipment because the shipment should start at the same day as order date

So "Ship date" should refer to the delivery date

b. Change "Cost (US dollar)" to "Revenue"The shipping cost charge to the customer so the shipping cost will be company's revenue

- 3. Clean date field
  - a. Change format [mm/dd/yyyy] to [dd/mm/yyyy]
- 4. Create unique value and its index to create "Order ID"
- 5. Transform data
  - a. Extract weekday
  - b. Create field "Order date\_Weekday", "Delivery date\_Weekday", "Days", "Revenue per unit"

## Additional Field detail

Field	Detail
Order ID	The order which send by the same customer in the same day and city (branch) will be count as <b>one shipping order</b>
	Order ID = [ Year + Month + Day + Ship mode ID + Customer ID + State code + City code ]
Order Date_Weekday no./	Ordinal in weekday
Delivery Date_Weekday no.	1=Monday, 2=Tuesday, and so on
Days	Delivery time = [ Delivery date - Order date]
Revenue	Cost charge to customer
Revenue per unit	Revenue per quantity = [ Revenue/Quantity ]

## Reference

US state code

https://developers.google.com/public-data/docs/canonical/states\_csv