E-commerce is a huge part of the economy and is vital to businesses that sell their products or services online. E-commerce gives **businesses the ability to reach more customers than traditional retail**. With so many people making their purchases online, it is the fastest-growing retail market.

With eCommerce analytics, **businesses can better manage all phases of inventory**, from vendor management and manufacturing to pricing and delivery. It also makes it possible to detect fraud, enhance marketing, and deeply understand customer expectations.

IBM Cognos Analytics is a **set of business intelligence tools** available on cloud or on-premise. The primary focus is in the area of Descriptive Analytics, to help users see the information in your data through dashboards, professional reporting and self-service data exploration.

The dataset used in our project is about the customer, their details and their respective product details. "US Superstore data.xls" is the name our table data set.

The various fields in our tablest are : Row ID, OrderID, OrderDate, Ship Date, Ship Mode, Customer ID, Customer Name, Segment, Country, City, State, Postal Code, Region, Product ID, Ctegory, Sub-Category, Product Name, Sales, Quantity, Discount, Profit.

After making the dashboard of various queries, the following are the conclusions that we have come up with:

Profit by Category:

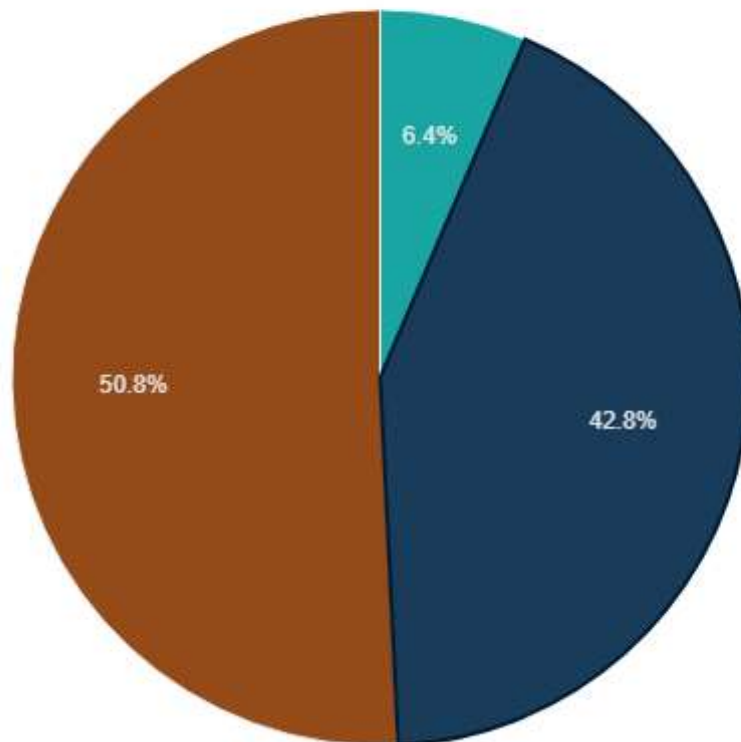The sum of Profit for all values of Category is 286,397.

For Profit, Technology and Office Supplies are the most important categories of Category with a total value of 267,946 (93.6 % of the total).

The summed values of Profit range from a minimum of 18,451 (when Category is Furniture) to a maximum of 145,455 (when Category is Technology).

The value of Profit is unusually low when Category is Furniture.

Profit by Category

Category
● Furniture   ● Office Supplies   ● Technology

6.4%

50.8%

42.8%

Sales by Category colored by State

For Sales, California is the most important category of State with a total value of 457,688 (28.8 % of the total).

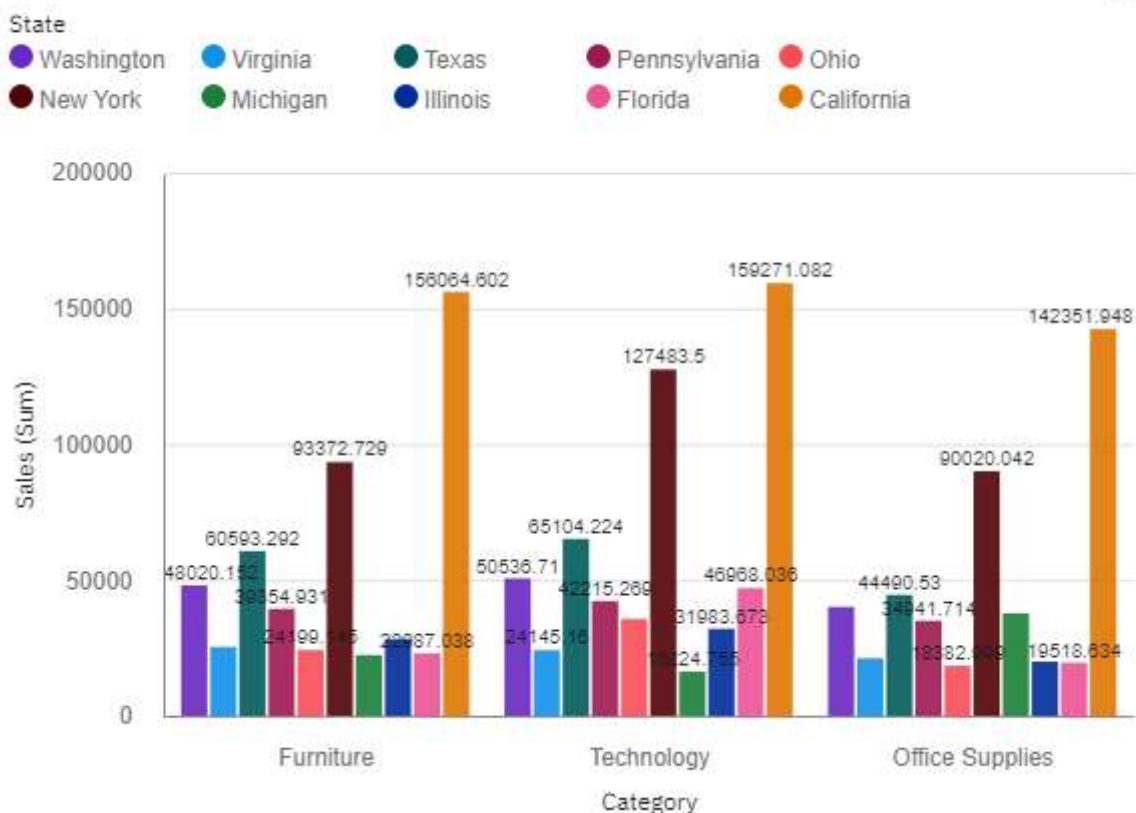The value of Sales is unusually high when State is California.

For Sales, Technology is the most important category of Category with a total value of 599,608 (37.7 % of the total).

The sum of Sales for all values of Category and State is 1,588,709.

The summed values of Sales over all combinations of the inputs range from a minimum of 16,225 to a maximum of 159,271.

The value of Sales is unusually high when the combinations of Category and State are Technology + California, Furniture + California, Office Supplies + California and Technology + New York.
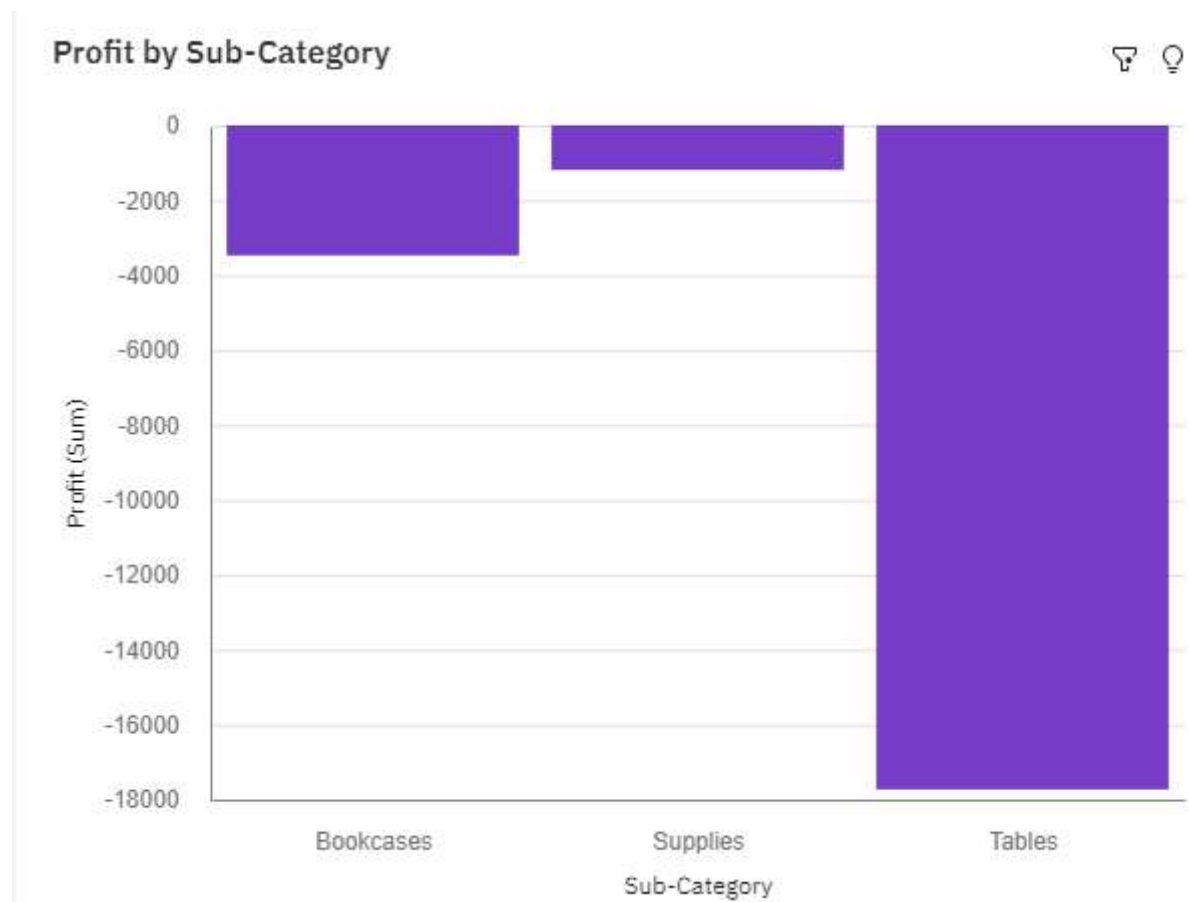

Sales by Category colored by State

PRODUCTS THAT INCURRED LOSSES:

The sum of Profit for all values of Sub-Category is -22,387.
The summed values of Profit range from a minimum of -17,725 (when Sub-Category is Tables) to a maximum of -1189 (when Sub-Category is Supplies).
The value of Profit is unusually low when Sub-Category is Tables.
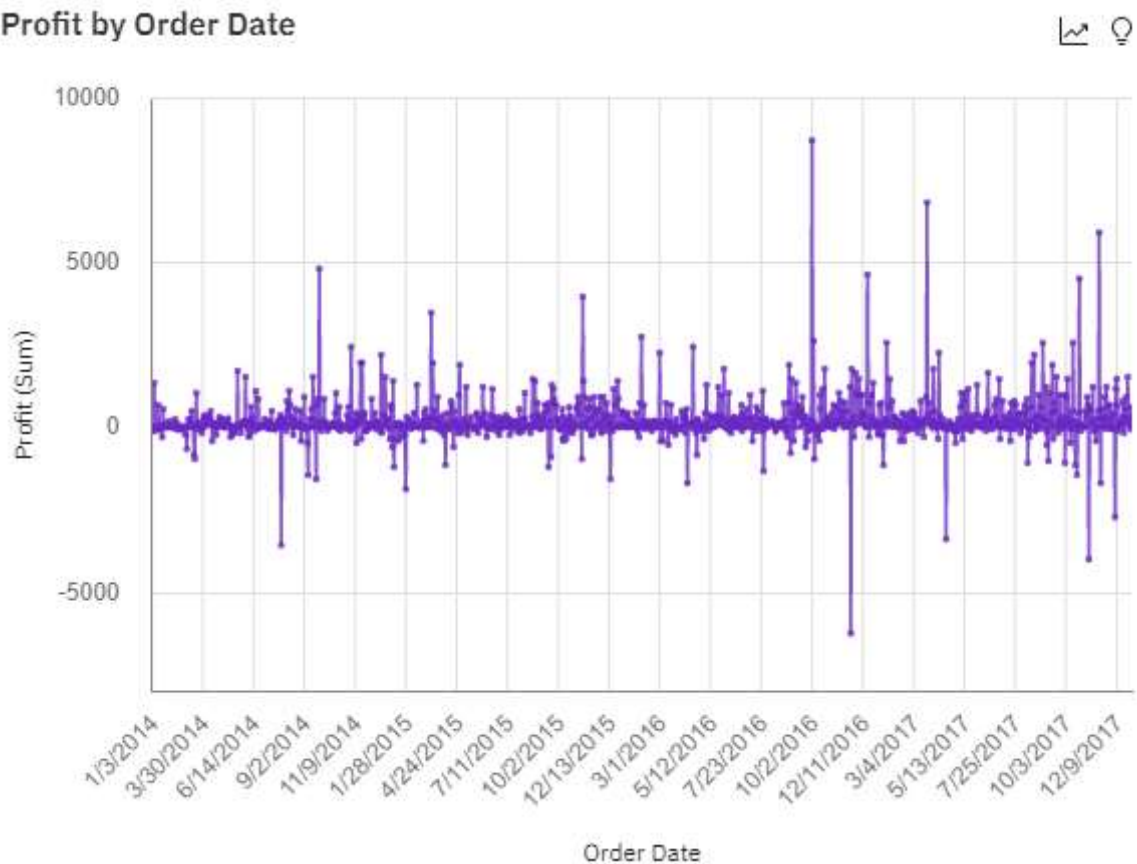
Profit by Order Date:

The sum of Profit for all values of Order Date is 286,397.The summed values of Profit range from a minimum of -6247 (when Order Date is 2016-11-25) to a maximum of 8739 (when Order Date is 2016-10-02).
The value of Profit is unusually high when Order Date is 2016-10-02.
The values of Profit have a moderate upward trend.
When analyzed as a time series, the value of Profit is most unusual for 23 time points. The most unusual points are 2016-10-02, 2017-03-23, 2016-11-25, 2017-11-17, and 2014-09-23.

Profit and Sales by Ship Date:

The summed values of Profit range from a minimum of 3114 (when Ship Date is 2017-01-18) to a maximum of 8801 (when Ship Date is 2016-10-09).
The summed values of Sales range from a minimum of 7538 (when Ship Date is

2015-03-22) to a maximum of 19,414 (when Ship Date is 2016-10-09).

The total number of results for Profit for all values of Ship Date is 140.

The average of Profit for all values of Ship Date is 341.4.

2017-10-24 (15 %), 2014-12-21 (14.3 %), and 2017-01-18 (12.9 %) are the most frequently occurring categories of Ship Date with a combined count of 59 items (42.1 % of the total).
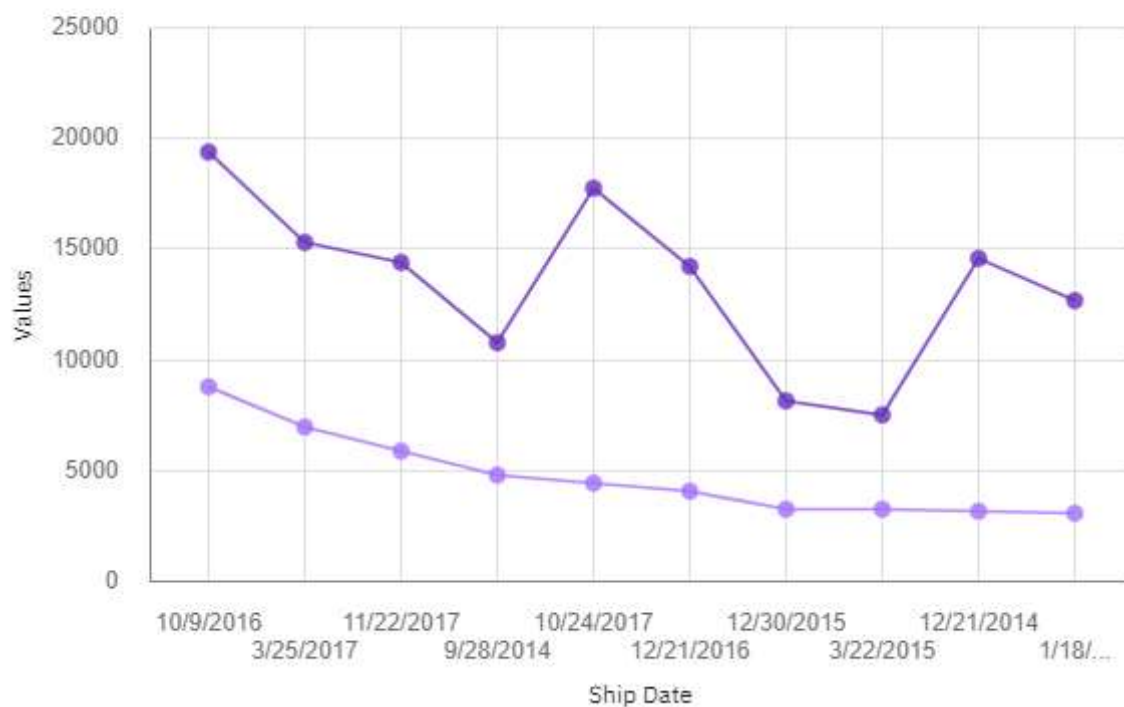
The total number of results for Sales for all values of Ship Date is 140.

The average of Sales for all values of Ship Date is 963.9.

Profit and Sales by Ship Date

Sales by Ship Date:

The sum of Sales for all values of Ship Date is 1,347,082.

For Sales, 2016-10-09 and 2017-10-24 are the most important categories of Ship Date with a total value of 37,167 (2.8 % of the total).

The summed values of Sales range from a minimum of 1.81 (when Ship Date is 2017-04-28) to a maximum of 19,414 (when Ship Date is 2016-10-09).

The value of Sales is unusually high when the values of Ship Date are 2016-10-09, 2017-10-24, 2017-03-25, 2017-09-26, 2017-11-22 and more.

The values of Sales have a weak upward trend.

When analyzed as a time series, the value of Sales is unusually high for 15 time points. The most unusual points are 2016-10-09, 2017-10-24, 2017-03-25, 2017-09-26, and 2016-12-21.