

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 table are : Row ID, OrderID, OrderDate, Ship Date, Ship Mode, Customer ID, Customer Name, Segment, Country, City, State, Postal Code, Region, Product ID, Category, 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).

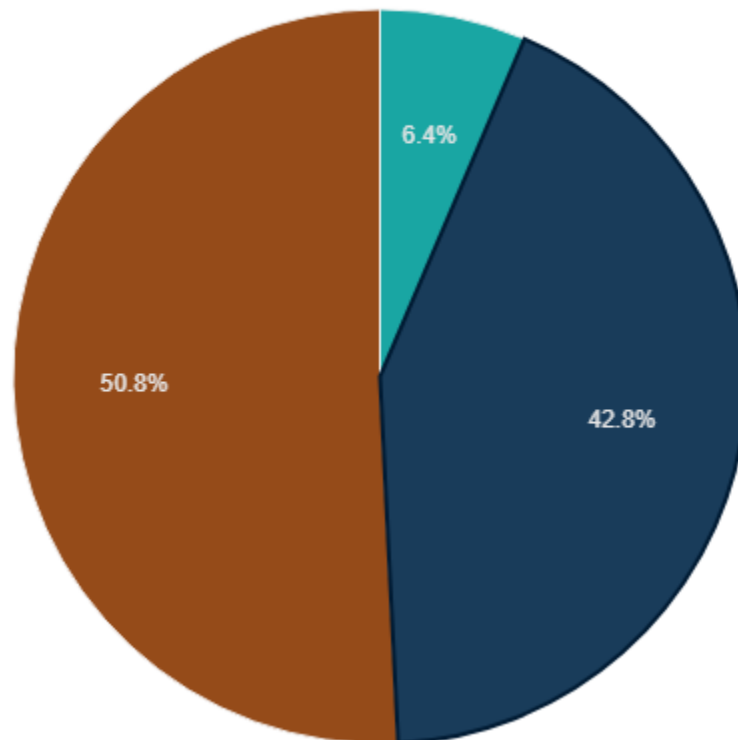
The summed values of **Profit** range from a minimum of 18,451 (when **Category** is Furniture) to a maximum of 145,455 (when **Category** is Technology).

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

### Profit by Category

Category  
● Furniture

● Office Supplies ● Technology



## 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.

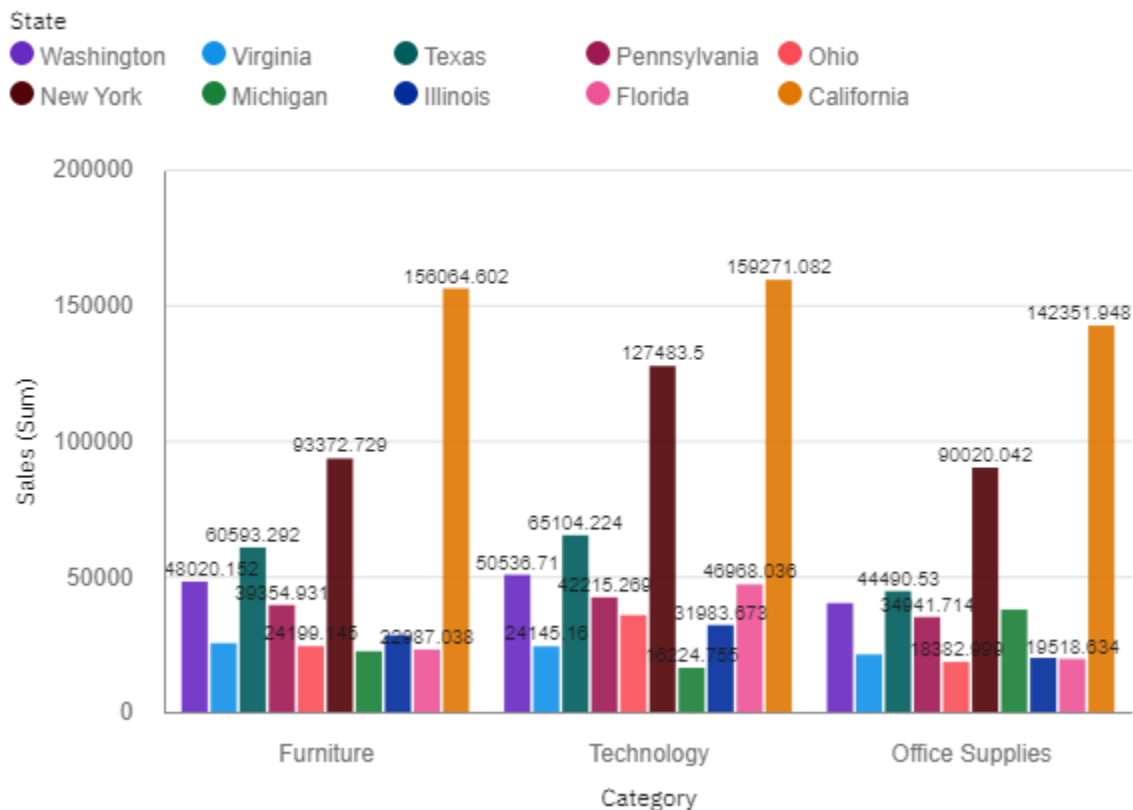
For **Sales**, Technology is the most important category of **Category** with a total value of 599,608 (37.7 % of the total).

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

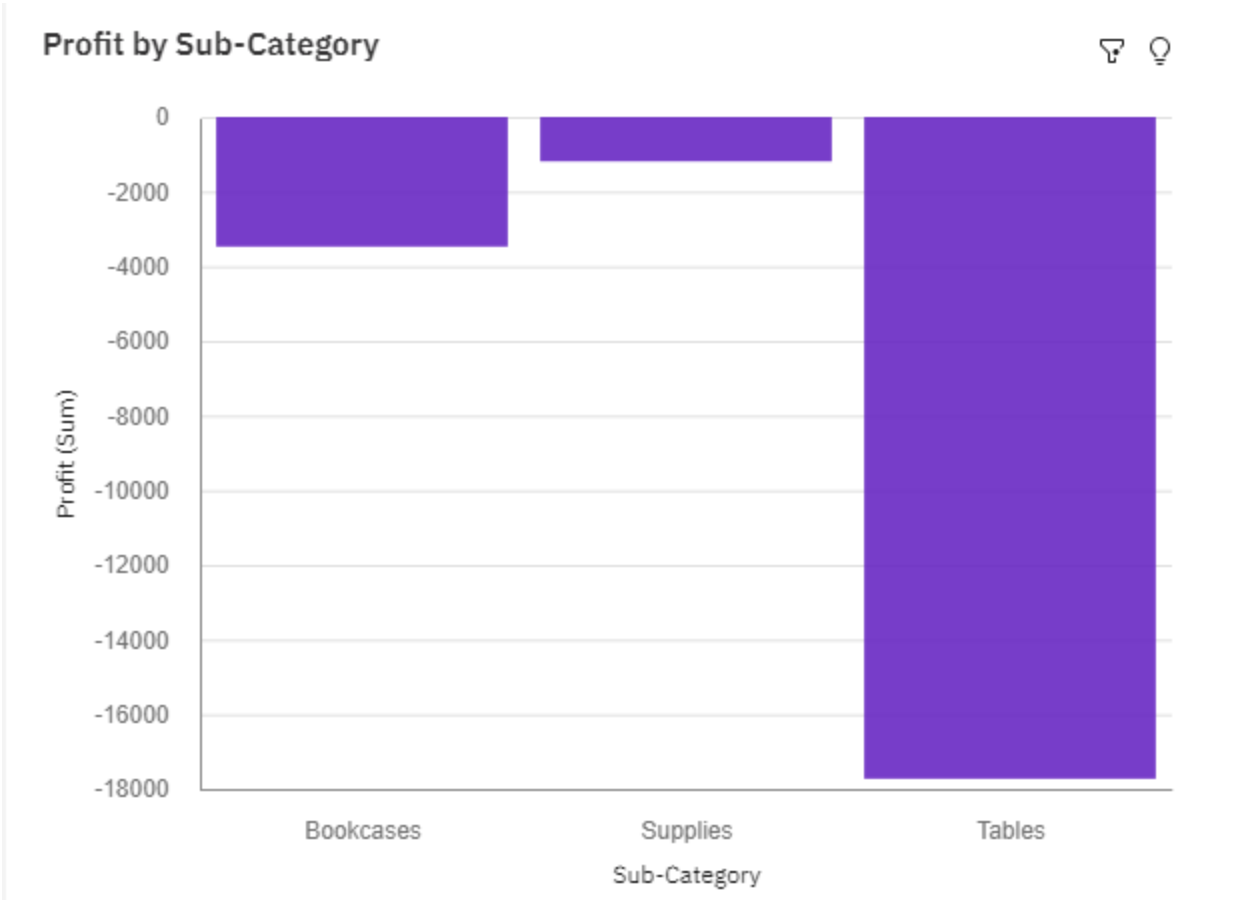


**PRODUCTS THAT INCURRED LOSSES:**

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:

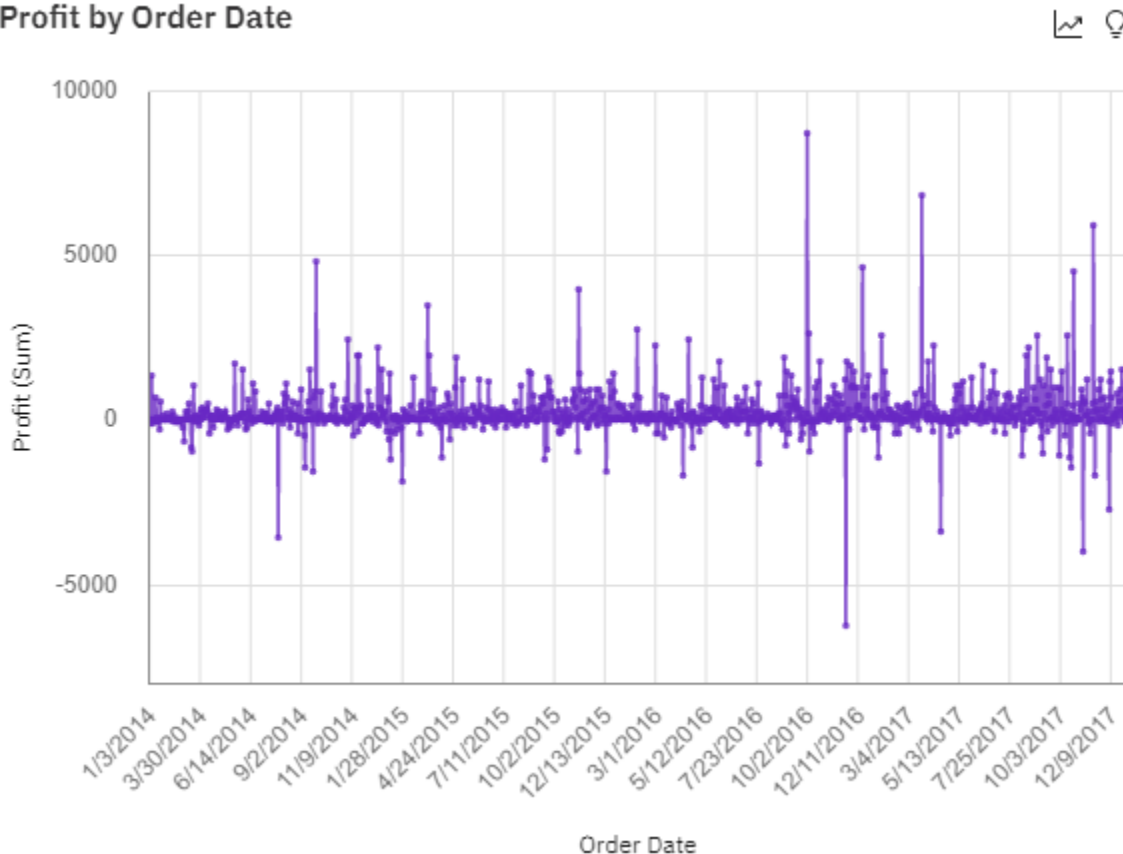
The sum of **Profit** for all values of **Order Date** is 286,397. The summed values of **Profit** range from a minimum of -6247 (when **Order Date** is 2016-11-25) to a maximum of 8739 (when **Order Date** is 2016-10-02).

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 by Order Date



### 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).

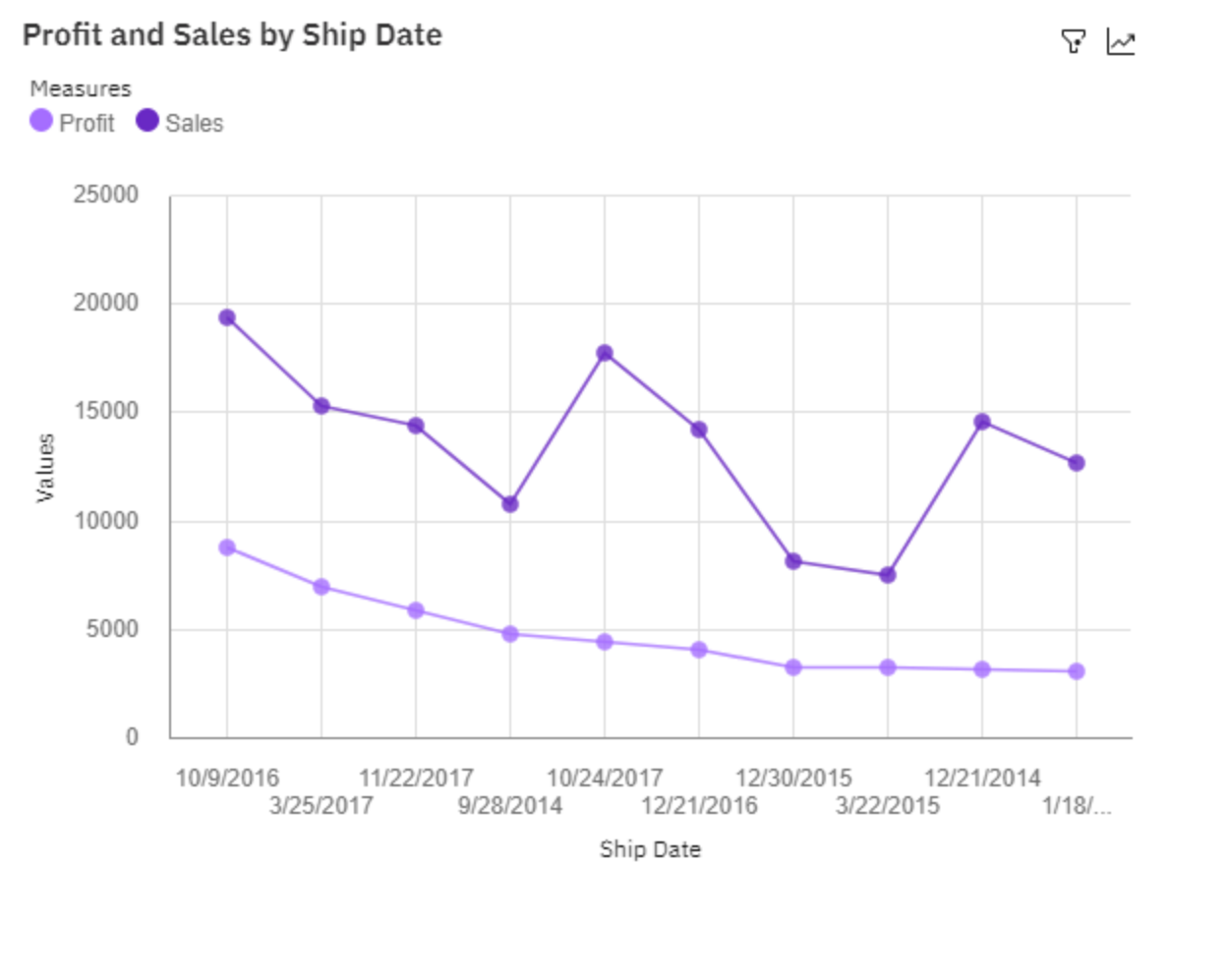
The total number of results for **Profit** for all values of **Ship Date** is 140.

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.



**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.

