Contents

[1. Introduction: 1](#_Toc179139450)

[2. Data Collection: 1](#_Toc179139451)

[3. Process: 2](#_Toc179139452)

[4. Methodology: 2](#_Toc179139453)

[5. Experiment: 2](#_Toc179139454)

[5.1. Product Category vs Profit: 3](#_Toc179139455)

[5.2. Ship mode vs Order Quantity: 3](#_Toc179139456)

[5.3. Customer segment vs Order Quantity: 3](#_Toc179139457)

[5.4. Customer Segment Vs Sales: 3](#_Toc179139458)

[5.5. Product category vs Profit: 3](#_Toc179139459)

[5.6. Customer Segment vs Unit Price: 3](#_Toc179139460)

[6. Discussion: 4](#_Toc179139461)

[7. Conclusion: 4](#_Toc179139462)

# Introduction:

Data analysis, the process of systematically collecting, cleaning, transforming, describing, modeling, and interpreting data, generally employing statistical techniques. Data analysis is an important part of both scientific research and business, where demand has grown in recent years for data-driven decision making.

# 2. Data Collection:

Datasheets are collections of information. Generally, data and datasets are themselves collected to help answer questions, make decisions, or otherwise inform reasoning. The rise of information technology, has lead to the generation of vast amount of data of many kinds, such as text, picture, videos, personal information, account data, and metadata, the last of which provide information about other data. It is common for apps and wedsites to collect data about how their product are used or about the people using their platform.

# 3. Process:

For data to be analyzed, it must first be collected and stored. Raw data must be processed into a format that can be used for analysis and be cleaned to that errors and inconsistencies are minimized. Data can be stored in many ways, but one of the most useful is in a database. The most familiar kind of database is the relational database, which stores data in tables with rows that represent records and columns that represent fields.

# 4. Methodology:

There are various method for data analysis content analysis, regression analysis, cluster analysis, discourse analysis, factor analysis, grounded theory, statistics, and so on. Among them we can use any type of method for our data to be analysis.

# 5. Experiment:

For data analysis, we use a datasheet which is taken from a website. In this datasheet there show the order record from year 2010 to year 2013. In the column there are different fields, they are order id, order date, month, order quantity, sales, profit, customer name, customer segment, ship mode, unit price, product category and in the row have the value of these fields. For analysis this datasheet we make chart for acknowledge and represent data.

## 5.1. Product Category vs Profit:

A type of chart which is make with the help of the data of product category and sum of the profit data.

## 5.2. Ship mode vs Order Quantity:

It is a chart making with the ship mode data and count of the order quantity data of the datasheet.

## 5.3. Customer segment vs Order Quantity:

A pie chart is made with the help of customer segment data and count of the order quantity.

## 5.4. Customer Segment Vs Sales:

A type of chart which show the connection between customer segment and count of product category sales.

## 5.5. Product category vs Profit:

This is a bar chart make with product category and maximum profit of customer segment.

## 5.6. Customer Segment vs Unit Price:

A type of line chart are drawn with the help of customer segment data and sum of the unit price data which ia available in the datasheet.

# 6. Discussion:

Now we can easily find value of different field which we want to check in this datasheet. So, finding data in this datasheet become easier through connection of chart with one another.

# 7. Conclusion:

Data analysis helps companies evaluate their competitors’ performance, price point, marketing methods, social media reach and so on. It makes it easier to extract information from unstructured data, assisting companies in process optimization, opportunity identification.