Students Details	
Module Name:	Data Warehousing and Business Intelligence
Module Lecturer/ Course Coordinator:	Mr.Rukshan Manchanayaka
Department:	School of Computing & Engineering
Submission Due on:	2025/01/22
Type of Coursework:	Individual
Title of the Coursework:	Yearly Sales Data Analysis

Students Details:

	Student No.	Student Name
01	COHNDSE241F-103	M.I.M SAJID

NATIONAL INSTITUTE OF BUSINESS MANAGEMENT
HIGHER NATIONAL DIPLOMA IN SOFTWARE ENGINEERING

COURSEWORK

Data Warehousing and Business Intelligence

Yearly Sales Data

CONTENTS

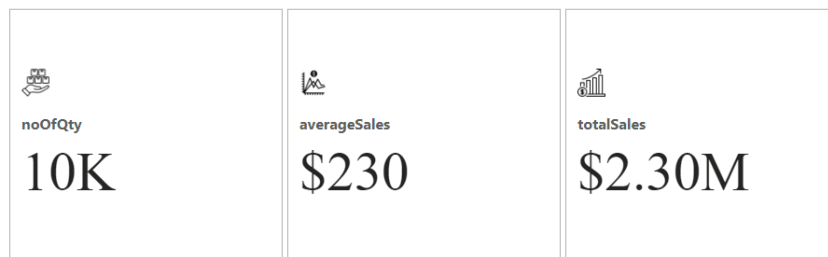## 1.1   Introduction to Data Analysis

Data Analysis is the process of understanding the business requirements of a client that is provided to give an output as the better solutions with business intelligence tools used to make any predicted decision based on the data of past and present.

1.2 ETL Process and Changes

The File contains no errors or empty but there are some areas like discount column had 0 I changed to 0.1 and plus I changed some columns like discount and profit to have percentage.
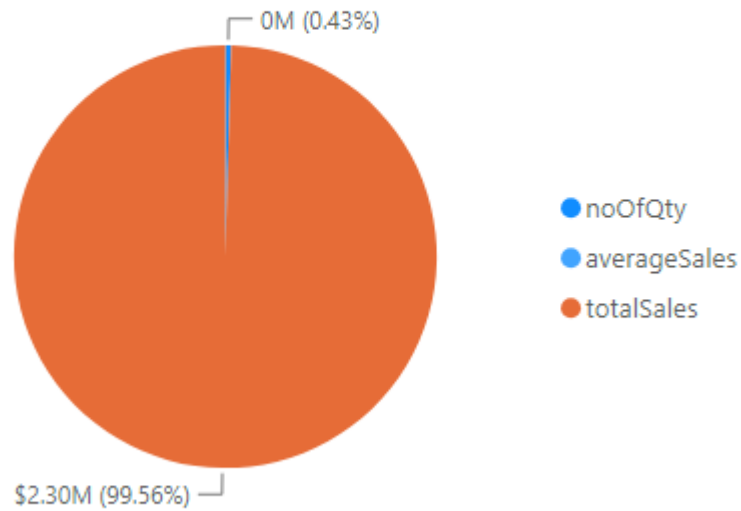
1.3 Data Analysis Stage with Observations

noOfQty, averageSales, totalSales

noOfQty	averageSales	totalSales
10K	$230	$2.30M

The above diagram represents how many quantities have been sold during the year. In the year, how much average and total sales were finalized.
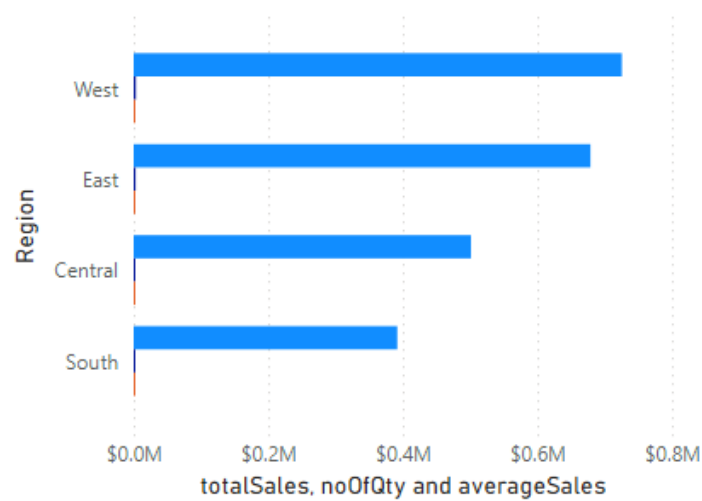
Orders

0M (0.43%)

- noOfQty
- averageSales
- totalSales

$2.30M (99.56%)

The above pie chart represents quantities, average sales, and total sales per year. Since there is a lot highlighted towards Total Sales has $2.30M has a sale while average sales are less than 230K based on 10k quantities. Using metrics can predict the changes to the pie and Clustered Bar Chart.
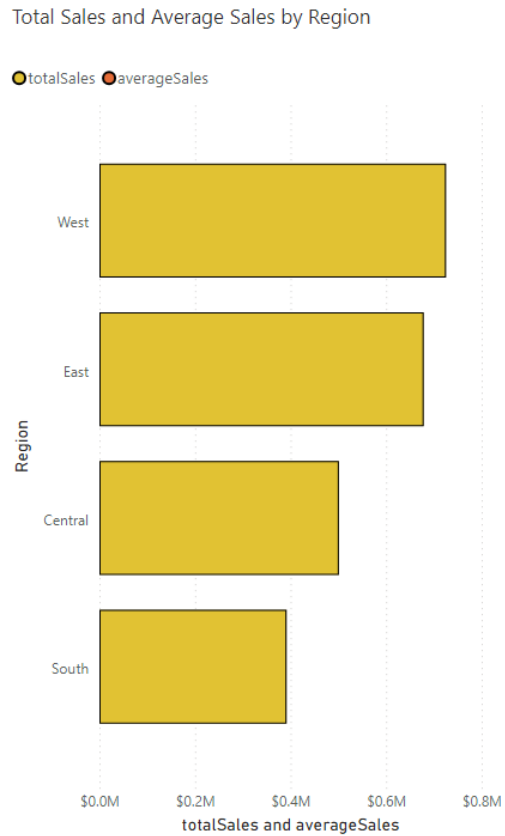
totalSales, noOfQty, averageSales
BY REGION
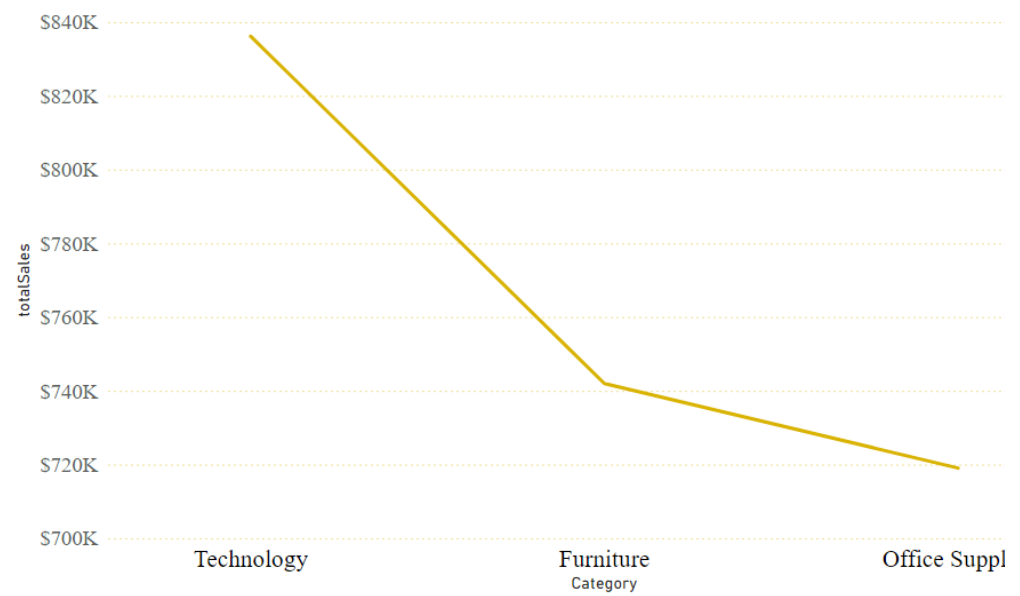
- totalSales
- noOfQty
- averageSales

Region

West
East
Central
South

$0.0M $0.2M $0.4M $0.6M $0.8M

totalSales, noOfQty and averageSales

The Clustered Bar Chart provides data how total sales has been raised by each region.

Total Sales and Average Sales by Region
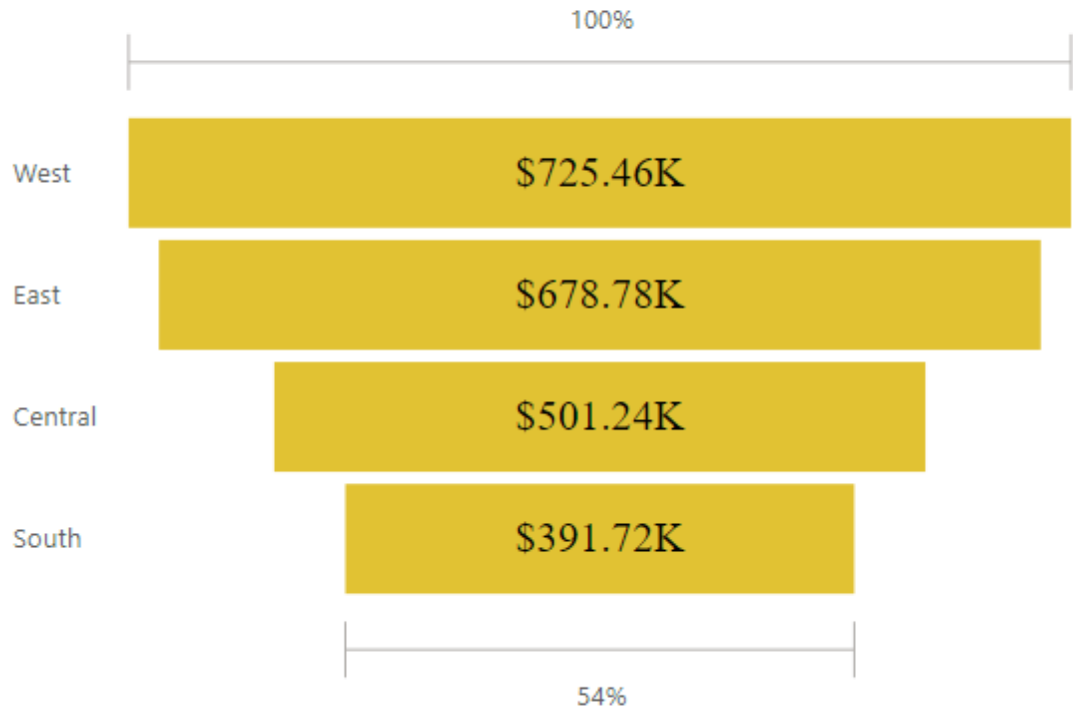
● totalSales ● averageSales

The stack Bar chart represents the data with total sales that is based on several regions has different amount in different regions. When I click on of the stack it will display all other details including pie chart, donut chart etc.…

Total Sales by Category

Line Graph states that each category of the products has some total sales received yearly.

Total Sales and Quantities by Region

100%

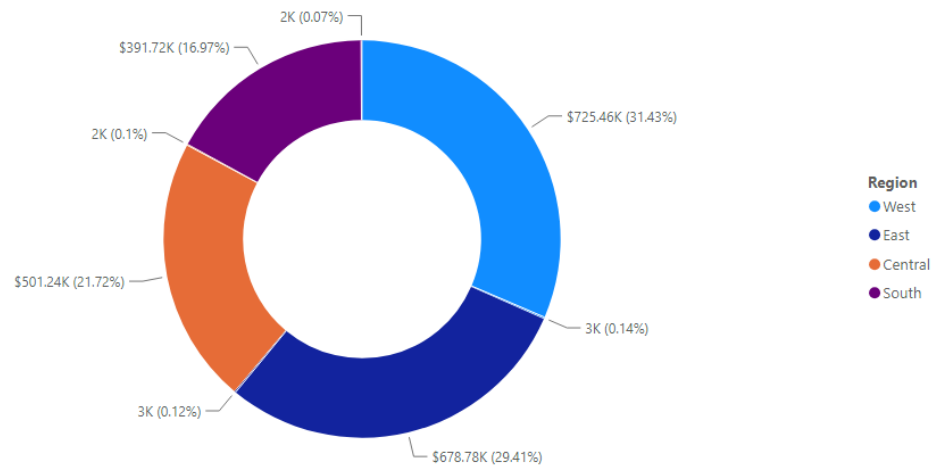|	
West	$725.46K
East	$678.78K
Central	$501.24K
South	$391.72K

54%

Funnel has total sales and quantities for the year that has been spent.

Total Sales,Quantities and Average Sales by Region

This chart shows different regions has different total sales, average sales for the year. This explains all the simple rather than other charts to get understand more user-friendly.

noOfQty, averageSales, totalSales
BY REGION

Region	noOfQty	averageSales	totalSales
Central	2323	$216	$501,239.89
East	2848	$238	$678,781.24
South	1620	$242	$391,721.91
West	3203	$226	$725,457.82
Total	**9994**	**$230**	**$2,297,200.86**

This matrix table provides more summary than a donut chart to provide a clear outstanding about each region having all required measures in a summary.

1.4   Conclusion

In conclusion, we can state that all the charts were used to demonstrate our business decisions based on data analysis to predict a decision for the client to make any decisions on their company.