

## SALES INSIGHTS ANALYSIS

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#### **CONTENTS**

- About the project: A detailed description of the project.
- About the Data: Introduction to a dataset that is been used for the project.
- Insights to find: What are the objectives & insights that are to be found out?
- Steps for EDA & Cleaning Data: What are the various steps used for data cleaning & EDA process?

#### **CONTENTS**

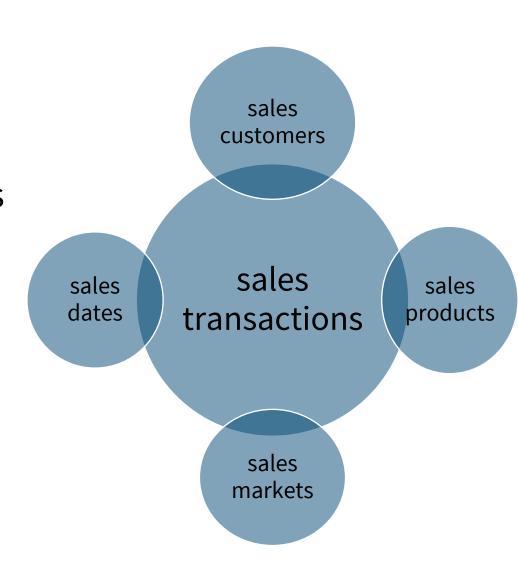
- Visual Analytics: Different visuals & summaries to understand data well.
- Key Findings: Insights we found out according to various questions.
- Dashboard View: The view of a dashboard that is been created.

## **ABOUT PROJECT**

- Every company has there sales insights in Atliq company which supplies computer hardware & peripherals to many clients now Sales director wants to know overall sales for tracking insights into his business.
- Here in this project we have a huge dataset from which we are going to extract insights & make a Dashboard that can be useful for the Sales director to work on and see how our business is doing? also he can make data-driven decisions & it will help him increase the sales for his company.
- We have extracted many different insights which we will observe further in the report.

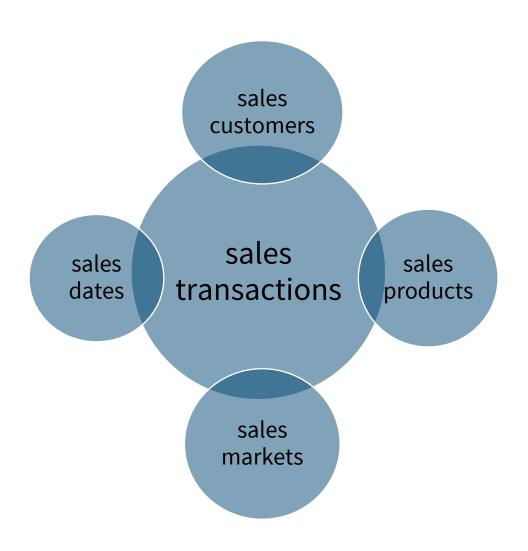
#### **ABOUT DATA SET**

- The companies in the dataset are hardware companies. This dataset consists of sales data.
- The data consists of 5 separate datasets like sales customers, sales date, sales markets, sales products and sales transactions.
- Dataset consists of various customers and their types like market's name, different zone etc.
- It is a huge dataset with many columns and other attributes.



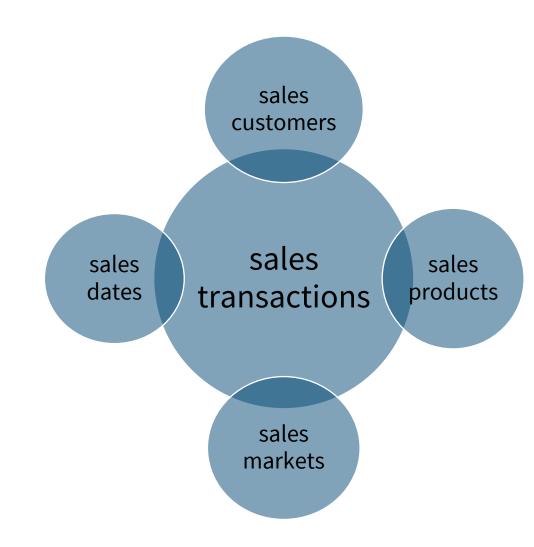
#### **DETAILS OF DATA SET**

- Sales transactions: Sales transactions table contains different columns like product code, customer code, market code, order date, sales quantity, profit margin, cost price etc.
- Sales customers: Sales customers table contains different columns like customer code, name and type.
- Sales date: Sales date table contains different columns like date, month and year.



#### **DETAILS OF DATA SET**

- Sales markets: Sales markets table contains different columns like market code, name and type.
- Sales products: Sales products table contains different columns like product code and type.



### INSIGHTS TO BE FOUND

- WHAT IS THE TOTAL AMOUNT OF REVENUE GENERATED?
- WHAT ARE SALES QUANTITIES?
- WHAT IS REVENUE BY THE MARKET?
- WHAT ARE SALES QUANTITIES BY THE MARKET?
- WHAT ARE REVENUE TRENDS BY DATE?
- WHICH ARE THE TOP 5 CUSTOMERS BY REVENUE?
- WHICH ARE THE TOP 5 PRODUCTS BY REVENUE?
- WHAT ARE REVENUE CONTRIBUTION PERCENTAGES BY MARKET?

### INSIGHTS TO BE FOUND

- WHAT ARE PROFIT CONTRIBUTION PERCENTAGES BY THE MARKET?
- WHAT ARE PROFIT PERCENTAGES BY THE MARKET?
- WHAT IS REVENUE BY CUSTOMER TYPE?
- WHAT ARE REVENUE CONTRIBUTION PERCENTAGES BY ZONE?
- WHAT ARE PROFIT MARGIN PERCENTAGES BY MARKET NAME AND ZONE?

#### STEPS FOR CLEANING DATA AND EDA

- Import data from MySQL into Power BI.
- Create or establish relationships between tables using the model tab section in Power BI.
- Remove blank rows, columns and unnecessary columns in all the tables and also remove 0, and 1 in the sales amount column using the Power Query tool.
- The date column Change data type to date format.
- Add a new column option in the ribbon section, then go to the Date option and then select the Year option. So Year column has been added.

#### STEPS FOR CLEANING DATA AND EDA

- Change the sales amount data type to decimal value & sales quantity data type to whole number format.
- Change date format to mmm yy. Also, change the market name data type to text format.
- There are various null values, errors and missing values in the columns which can be deleted using various options in Power BI.
- There are many columns whose values are not specified, which are of no use & can create problems while changing data types & other calculations. Hence, we have removed that values from the dataset.

# VISUAL ANALYTICS AND FINDINGS



Jan	Feb	Mar	April	May	June	
July	Aug	Sep	Oct	Nov	Dec	•

#### **SUMMARY OF DATA:**

- The Pie chart consists of Total Revenue, Total Sales Quantity & Total Profit Margin show.
- There are different revenue, sales quantity & Profit margin-wise MOM and YOY.
- Above Revenue, Sales Quantity & Profit Margin values are from Jan 2017 to Dec 2020.
- You can also check month-wise data like what is your revenue in Jan 2020 etc.

#### TOP 5 CUSTOMERS BY REVENUE



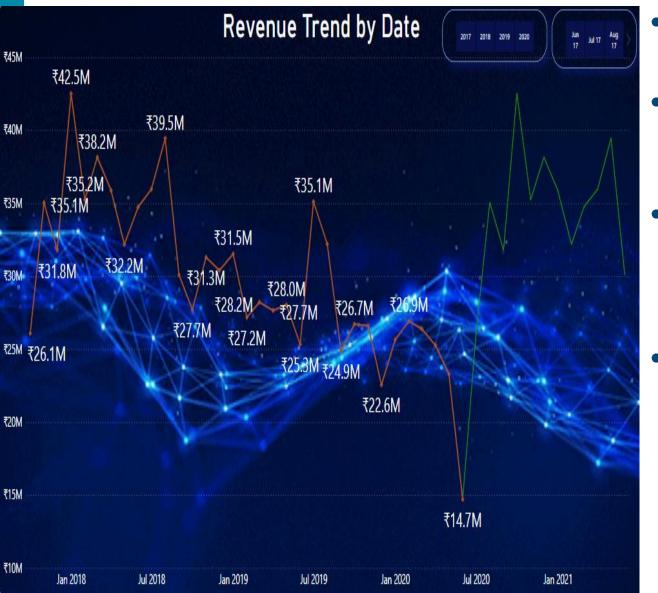
- From this graph we can observe that (Jan 2017 to Dec 2020 Month means overall data set) Electrical Sara Stores contribution of revenue ₹413.33M.
- Electricalslytical contribution of revenue was ₹49.64M.
- Excel Store's contribution of revenue was ₹49.12M.
- Premium Store's contribution of revenue was ₹44.96M.
- Nixon contribution of revenue was ₹43.89M.

#### TOP 5 PRODUCTS BY REVENUE



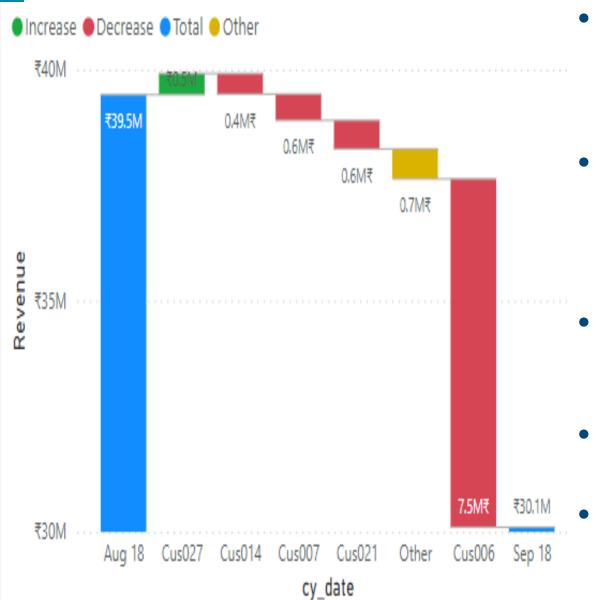
- From this graph we can observe that (Jan 2017 to Dec 2020 Month means the overall data set) Products code was blank. So in the data set, it is not specified. Hence, this blank product's contribution of revenue is ₹468.96M.
- Prod040 contribution of revenue was ₹23.58M.
- Prod159 contribution of revenue was ₹17.66M.
- Prod065 contribution of revenue was ₹16.26M & Prod018 contribution of revenue was ₹15.60M.

#### REVENUE TREND BY DATE



- It is the line chart that shows the trend of your revenue by date.
- Revenue trended down, resulting in a 43.61% decrease between October 2017 and June 2020.
- It shows that Jan 2018 was the highest revenue month ₹42.5M. in Feb 2018, the revenue was ₹35.2M. Hence it suddenly decreases.
- Second most important key insight is your revenue in July 2019 which is ₹35.12M. But in June 2020 it was ₹14.7M. So MOM and YOY revenue trends show your revenue decreased and also we can see a future prediction of revenue trend.

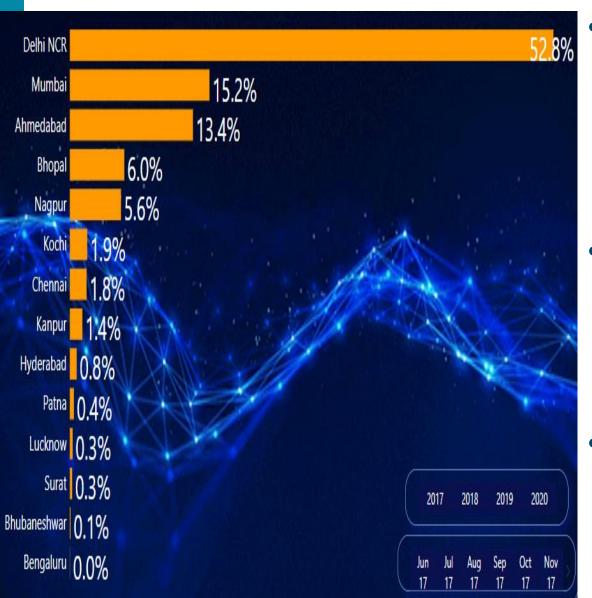
## REVENUE TREND BY DATE AND CUSTOMER CODE



- Here's a brief analysis of the revenue. We can see there is a 23.71% decrease in Revenue between Aug 2018 and Sep 2018.
- It shows that Cus006 accounted for a majority of the decrease among customer codes. Its Revenue change by -39.05%.
- Cus007 customer code Revenue change by -39.65%, Cus014 customer code Revenue change by -37.25%.
- Cus021 customer code Revenue changed by -62.51%.
  - Cus027 customer code Revenue changed by 53.54%.

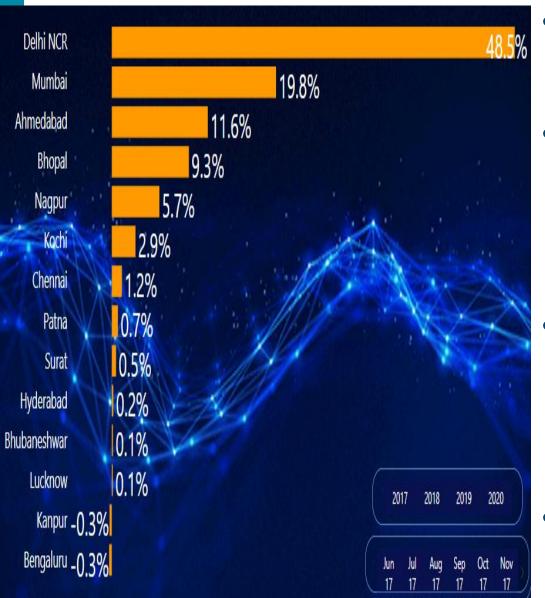
16

#### REVENUE CONTRIBUTION % BY MARKET



- Using a stacked bar chart we can see this revenue contribution % by market. So we can also see individual trend MOM and YOY of revenue contribution % by market.
- From this graph we can observe that (Jan 2017 to Dec 2020 Month means overall data set) Delhi NCR contribution of revenue is highest at 52.8%.
- Mumbai is 15.2%, Ahmedabad is 13.4%, Bhopal is 6%, Nagpur is 5.6%, Kochi is 1.9%, Kanpur is 1.4% and so on.

### PROFIT CONTRIBUTION % BY MARKET



- Using a stacked bar chart we can see Profit contribution % by market. Hence, we can also see individual trends in MOM and YOY.
- From this graph we can observe that (Jan 2017 to Dec 2020 Month means overall data set) Delhi NCR contribution of Profit is highest at 48.5%.
- Mumbai is 19.8%, Ahmedabad is 11.6%, Bhopal is 9.3%, Nagpur is 5.7%. Kochi is 2.9%, Chennai is 1.2%, Patna is 0.7% & so on.
- Most important thing is Kanpur & Bengaluru have -0.3% Negative contribution.

### PROFIT MARGIN % BY MARKET



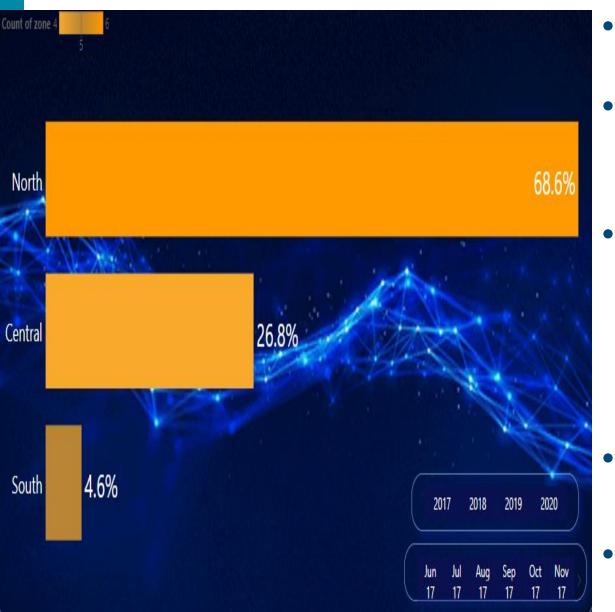
- Using a stacked bar chart we can see this Profit margin % by market.
- So we can also see individual trend MOM and YOY of Profit margin % by market. From this graph, we can observe that (Jan 2017 to Dec 2020 Month means overall data set) Surat contribution of Profit margin is highest at 4.9%.
- Patna is 4.1%, Bhubaneshwar is 4%, Bhopal 3.9%, Kochi is 3.7%, Mumbai is 3.2% and so on but the most important thing is Bengaluru has a -20.8% negative margin.

#### REVENUE BY CUSTOMER TYPE



- There are various customer types like brick & mortar and E-commerce.
- The visuals show the distribution of various customer types across revenue in the doughnut chart.
- Brick & mortar has ₹744.53M or 75.6% and E-commerce has ₹240.34M or 24.4% share.
- You can also see individual trend MOM and YOY of revenue by customer type.

#### REVENUE CONTRIBUTION % BY ZONE.



- The visuals show a stacked bar chart of the revenue contribution % by zone.
- We can see individual trends in MOM and YOY.
- From this graph we can observe that (Jan 2017 to Dec 2020 Month means overall data set) North zone contribution of revenue is highest at 68.6%.
- Central zone contribution was 26.8%.
- South zone contribution was only 4.6%.

#### INSIGHT TO BE FOUND

- From the overall graph we can observe that (Jan 2017 to Dec 2020 Month means overall data set) revenue contribution % by Delhi NCR market is the highest which is 52.8%.
- Profit contribution % by the Delhi NCR market is the highest which is 48.5%.
- But profit margin % by Surat market is highest which is 4.9%.
- So you should be more focused on the Surat market so that you can get more revenue because the profit margin % is the highest.
- Revenue contribution % by North zone is highest.
- Revenue by customer type brick & mortar contribution is highest.



