**DATA MANAGEMENT PROJECT REPORT**

(Project Semester August-December 2020)

***US REGIONAL SALES***

Submitted by

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INT-217

Under the Guidance of

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**Discipline of CSE/IT**

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**Lovely Professional University, Phagwara**

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CERTIFICATE

This is to certify that Vipin Goriparthi bearing Registration no. 11914513 has completed INT-217 project titled, “US Regional Sales” under my guidance and supervision. To the best of my knowledge, the present work is the result of his/her original development, effort and study.

Sameeksha khare-26806

Designation of the Supervisor

School of Computer science and Engineering

Lovely Professional University

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Date:

DECLARATION

I, Vipin Goriparthi student of B.tech Information Technology under CSE/IT Discipline at, Lovely Professional University, Punjab, hereby declare that all the information furnished in this project report is based on my own intensive work and is genuine.

Date: 28/11/2021 Text, letter

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Registration No.11914513 Vipin Goriparthi

Acknowledgement

I'm extremely grateful to tell you that I have completed my project on data management using excel.

This project would not have been possible without our course teacher, Sameeksha Khare. I'd also like to express my gratitude to the excel online community.

During this project span time I learnt a lot of new things and I am grateful for the skills I have gained would be very much helpful for future career regardless of the path I choose.

Thank you.

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# 1. Introduction

Do you like working with data? Then excel will be a blessing for you! Microsoft Excel is a modern tool used in day to day life for data management in a very easy way. Excel has a vast variety of services that are used in regard of data management, representation, and presentation. An Excel spreadsheet can be understood as a collection of columns and rows that form a table. Alphabetical letters are usually assigned to columns, and numbers are usually assigned to rows. The point where a column and a row meet is called a cell. The address of a cell is given by the letter representing the column and the number representing a row. These are some basic things you need to know before starting out with excel.

The dataset used in the project will be completely transformed into a dashboard. The dashboard should differentiate the fields as slicers will be used for filtering the data. Making a dashboard to display the chosen dataset was the main objective of the project. The dashboard should firmly handle the data with the help of functions and operations provided within the software.

Each Field within the dataset provided should have a chart dedicated to itself in the dashboard. The dashboard which is being created should cover all aspects regarding the research conducted, whether it may be related to business, sales, health, or sports etc. It should not be specific about a single field. Before creating the dashboard, the data in the dataset should be well organized and well maintained as it would help in creating Pivot tables and charts. Pivot tables and charts should have names dedicated as it would be helpful too for the latter.

The dataset should be easily understandable in the sense of calculating the extra columns from the given data columns. The dataset should be understood first before working on it. The sales dataset used in the project had a wide variety of fields to work on. The fields include sales, dates, costs, price, and customer related etc. All these fields are important as they are the main content of the whole dataset. The dashboard should showcase its nature in the sense of attractiveness, user friendly design, and should not contain unnecessary data. The problems faced during creating a dashboard can be a little bit tiring. It includes what fields to choose for the chart, what chart to use, what filters should be applied etc.

The objectives of the project shall cover each aspect of the dashboard and shall make you familiar with the dataset’s main fields and goals.

# 2. Objectives

The final dashboard made from the data set should contain following objectives.

1.Creating Pivot Charts for every valuable category of the sales dataset.

Pivot charts are made from pivot tables itself. So, we must make pivot tables first and then go for charts.

Pivot tables can help us transform tables as our needs. In this project there are a total of 16 pivot tables.

Its important to have same copied data for the pivot tables as it would help us in creating connections easily in a hassle-free manner. Each valuable field has its own importance in the data representation process. So, it’s important to analyze the required fields once again before finalizing for pivot tables. In this dataset, which is related to business sales of products, we shall make sure that all aspects related to sales are put together in the final dashboard.

2.Displaying trends in profits and sales of each Sales Channel via Spark lines.

Sparklines are an important feature in excel as it can be used in many ways. An interesting feature of this is showing trends of a chunk of data. It can be profit or loss, sales, revenue, budget i.e, all fields which have a long data over a timeline, can be months or years or dates itself. These trends can show the user a packed visual data showcasing how the trends were changing. In this project they are used in profits sales quantity, revenue of warehouse and according to by months. Highlighting the maximum and minimum will a huge advantage for the presentation purpose as it can show and tell how, when it took place. So, its important that sparklines play a vital role for making dashboards.

3.Displaying Top Customers, Sales by Channel and Sales Team According to Profits, Sales via charts throughout the datasets.

Viewers will require top of a specific field if there are individuals from the sense of regions, sales, profits etc. So, applying filter and showing top 10 will give the viewers a broad idea about the fields and their top performers as top gainers are important as well.

4.Inserting Slicers for each possible category to Change Charts according to our needs.

Slicers are used to filter the data. With the help of slicers, we can apply multiple filters on the charts we create. When choosing fields for slicers we should check and think thoroughly as it is the part of the dashboard. It will be convenient for the dashboard have less slicers and more charts. In this project slicers are included in states, months, region and sales channel.

5.Creating relationships among tables in different sheets via data model and relationships option, showing sales via map, calculating profits using formulas.

As it is familiar for a table to have relationships with their neighboring sheet tables, it is the first step in creating the pivot tables. Relationships should be defined first, and these relationships will help us further in crating good and organized tables. As the dataset was predefined and it had sheets with common columns, making relationships is easy.

Insert Maps option is used to display map and in its smaller regions including states and city. In this project, the dataset had states and region so putting in maps is justified.

While the columns given in the main sheets were lacking some playable content, using formulas to calculate new columns is important. Calculating profits, budget, revenues, averages of some fields is required.

# 3. Source of dataset

The dataset used in this project is from “dataworld” website -<https://data.world/> , which is quite popular for data related works, free data sets and projects related to data science. The dataset <https://data.world/dataman-udit/us-regional-sales-data> is related to sales of Unites States Region.

The dataset consists of 6 tables. Each table have a common column which relates them to each individual table in their respective sheets.

\*Added columns are nothing but columns calculated from the readymade columns.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S.no | Table name | Rows | Columns | Added columns |
| 1 | Sales Order Sheet | 7991 | 16 | 5 |
| 2 | Customer Sheet | 50 | 2 | - |
| 3 | Store Locations Sheet | 367 | 15 | - |
| 4 | Regions Sheet | 48 | 3 | - |
| 5 | Products Sheet | 47 | 2 | - |
| 6 | Sales Team Sheet | 28 | 3 | - |

# 4.ETL Process (Extract... Transform... Load...)

This process focuses on how we should handle the data before creating the overall dashboard. The dataset is taken from a familiar website as stated in the source of dataset point. The dataset primarily had 6 sheets each had their tables in them.

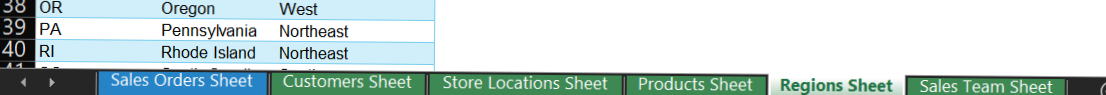


Figure 1 Sheet names

They all had a common column in the sense of relationship. Removing unnecessary columns is a prime task as they will become obstructions later. Changing the column names is required as they should be easily understandable.

Creating relationships among the table to it into a powerful dataset is important.

Diagram

Description automatically generated

Figure 2 Datamodel

As shown in the data model the relationship among tables is defined.

And the relationship for which the columns are looked are created via relationship option, and new for every common column.

Figure 3 Relationships

Graphical user interface, text, application

Description automatically generated

The main table is connected with all other tables as shown above.

After making these connections, refreshing the data model will let us use all the connections in the pivot table.

Adding columns in the main table sales order sheet

# 5.Analysis on dataset

\*This section may contain charts in the form figures and charts itself as all features of excel are not supported. So, before looking at the data please read captions which will tell if it’s a chart or figure.

## Formulas:

There are several formulas used to derive new columns in the main table Sales order sheet. We will see them one-by-one.

A total of 5 columns are added in the main table.Table

Description automatically generated

Figure 4 Added col2

Figure 5 Added Col

Table

Description automatically generated

All the columns calculated are used in the making of dashboard.

Revenue= (Unit Price\*Order Quantity)- (Unit Price\*Order Quantity\*Discount Applied)

Budget= (Unit Cost\*Order Quantity)

Profit=Revenue- (Order Quantity\*Unit Cost)

Profit%= (((Unit Price-(Discount Applied\*Unit Price))-Unit Cost)/Unit Cost) \*100 (or)

(Profit/ (Order Quantity\*Unit Cost)) \*100

Total Days taken to deliver= Delivery Date- Order Date

After calculating the required columns, we can continue to making the tables and charts required.

Chart1.

Figure 6 salesbymonth

## Sales By Month Analysis

Pivot table1

The line chart shows the sales quantity across all months.

The edges are made soft and markers are pointed where exactly the months meet.

In 2018 the months start from may i.e, the given starts from May 2018 itself.

Table Sales Table

|  |  |
| --- | --- |
| **Row Labels** | **Sum of Order Quantity** |
| **2018** |  |
| May | 39 |
| Jun | 1112 |
| Jul | 1211 |
| Aug | 1266 |
| Sep | 1228 |
| Oct | 1072 |
| Nov | 1167 |
| Dec | 1387 |
| **2019** |  |
| Jan | 1297 |
| Feb | 1014 |
| Mar | 944 |
| Apr | 1261 |
| May | 1289 |
| Jun | 1018 |
| Jul | 1096 |
| Aug | 1191 |
| Sep | 1065 |
| Oct | 1068 |
| Nov | 1222 |
| Dec | 1172 |
| **2020** |  |
| Jan | 1258 |
| Feb | 1244 |
| Mar | 1039 |
| Apr | 1126 |
| May | 1199 |
| Jun | 1033 |
| Jul | 1289 |
| Aug | 1092 |
| Sep | 1110 |
| Oct | 1258 |
| Nov | 1233 |
| Dec | 1162 |

Sparklines Trend Analysis

## Channel Trend

Pivot table2.

Table Sparkline sales

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sum of Order Quantity** | **Column Labels** |  |  |  |  |  |  |  |  |  |  |  |
| **Channels** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **Oct** | **Nov** | **Dec** |
| Distributor | 379 | 442 | 398 | 422 | 422 | 561 | 655 | 622 | 578 | 586 | 610 | 612 |
| In-Store | 1122 | 957 | 784 | 907 | 1036 | 1315 | 1455 | 1412 | 1417 | 1428 | 1555 | 1490 |
| Online | 757 | 608 | 596 | 778 | 765 | 997 | 1103 | 1059 | 1021 | 1080 | 996 | 1137 |
| Wholesale | 297 | 251 | 205 | 280 | 304 | 290 | 383 | 456 | 387 | 304 | 461 | 482 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

Table sparkline profit%

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Average of Profit-%** | **Column Labels** |  |  |  |  |  |  |  |  |  |  |  |
| **Channels** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **Oct** | **Nov** | **Dec** |
| Distributor | 50.37 | 53.49 | 41.19 | 46.53 | 56.45 | 51.71 | 50.78 | 48.89 | 46.26 | 43.01 | 48.28 | 46.39 |
| In-Store | 52.31 | 47.11 | 50.19 | 45.77 | 46.71 | 44.41 | 49.53 | 45.42 | 47.43 | 51.76 | 49.17 | 48.83 |
| Online | 45.16 | 49.88 | 46.75 | 50.88 | 55.82 | 46.09 | 49.82 | 48.23 | 44.93 | 44.59 | 48.58 | 45.72 |
| Wholesale | 57.65 | 48.28 | 53.26 | 40.78 | 48.76 | 50.02 | 45.16 | 54.56 | 48.31 | 47.57 | 53.97 | 45.60 |

Pivot table3.

Pivot table4. Figure6 is a combined trend of the above 3 pivot tables.

Table sparkline channel

|  |  |
| --- | --- |
| **Channels** | **Sum of Revenue** |
| Distributor | 13169147.65 |
| In-Store | 30102904.7 |
| Online | 21698558.86 |
| Wholesale | 8172768.54 |

Figure 7 Trend1

A screenshot of a computer

Description automatically generated with medium confidence

To make the connection to slicers we have to get the field address directly from the pivot table, so that filtering via slicer can show the results in sparklines as well.

The marker used in profits trend is for maximum and minimum part.

For the fields used if condition is used to display them.

=IF(Warehousetrends!B5="","",Warehousetrends!B5)

## Warehouse Trend

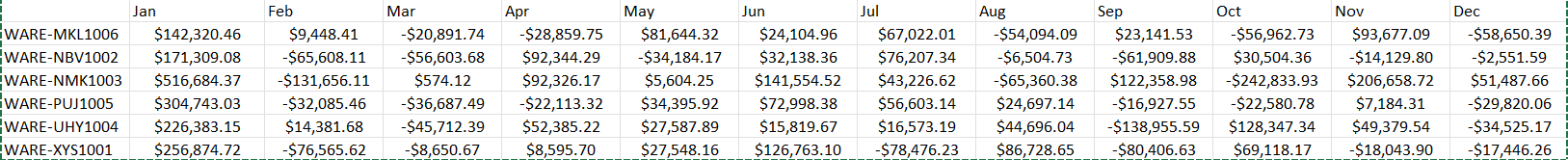
Pivot table5.

Table warehouse profits

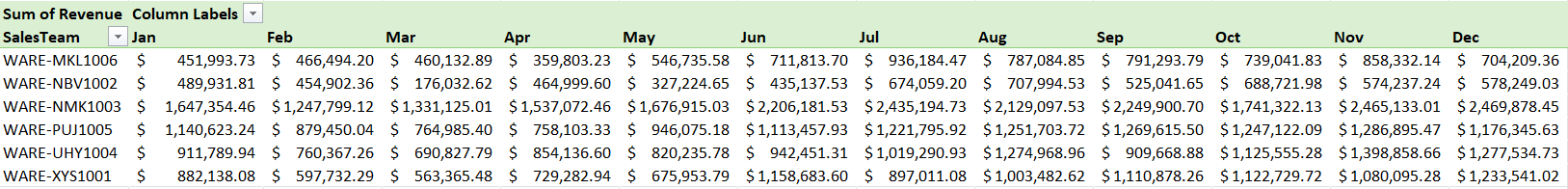
Pivot table6. This table is used for warehouse profits trend.

Table warehouse revenue

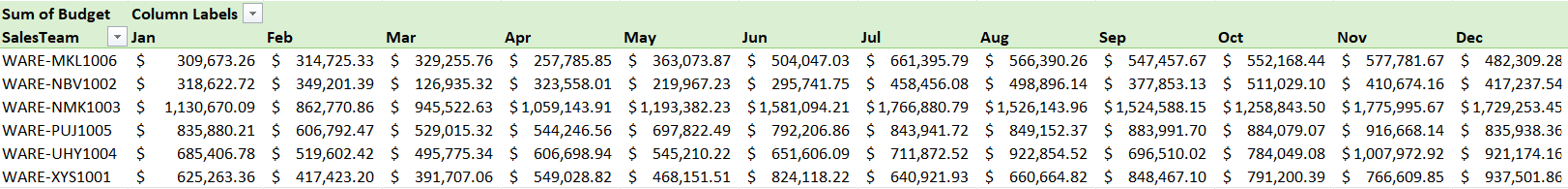
Pivot table7.

Table warehouse budget

The values in the first month Jan are calculated as (Revenue- Budget) and for the later months they are calculated as (previous month profit- current month profit)

The sparkline used here is win/loss as it has profits in negative.

The win part represent profit in positive and loss part shows negative profits.

Figure 8 Trend2

Text

Description automatically generated

## Map Analysis

Pivot table8. (Maps)

The map used in the project as shown above is created from pivot table5. We must make sure there are no errors in the names of the states as it will give error. After creating the table, we must copy the data as values in some other location as maps function does not take pivot table as input data. After copying the data simply select the data and go to map and put the map.

Figure 9 Map

A map of a city

Description automatically generated with low confidence

Table Map profit sales

|  |  |  |
| --- | --- | --- |
| **Province** | **Average of Profit-%** | **Sum of Order Quantity** |
| Alabama | 47.7 | 328 |
| Arizona | 44.0 | 865 |
| Arkansas | 45.8 | 74 |
| California | 47.0 | 7605 |
| Colorado | 52.6 | 1395 |
| Connecticut | 46.2 | 836 |
| District of Columbia | 56.8 | 80 |
| Florida | 49.8 | 2570 |
| Georgia | 47.4 | 636 |
| Hawaii | 54.0 | 96 |
| Idaho | 42.8 | 96 |
| Illinois | 49.3 | 2828 |
| Indiana | 46.0 | 1334 |
| Iowa | 49.9 | 333 |
| Kansas | 42.8 | 456 |
| Kentucky | 46.6 | 210 |
| Louisiana | 44.5 | 454 |
| Maryland | 50.3 | 268 |
| Massachusetts | 46.5 | 514 |
| Michigan | 47.8 | 615 |
| Minnesota | 45.2 | 300 |
| Mississippi | 35.8 | 76 |
| Missouri | 47.2 | 405 |
| Montana | 47.5 | 122 |
| Nebraska | 56.5 | 172 |
| Nevada | 50.0 | 672 |
| New Hampshire | 53.3 | 132 |
| New Jersey | 50.3 | 677 |
| New Mexico | 50.6 | 179 |
| New York | 48.0 | 1763 |
| North Carolina | 50.8 | 953 |
| North Dakota | 42.6 | 128 |
| Ohio | 53.1 | 617 |
| Oklahoma | 50.6 | 522 |
| Oregon | 51.9 | 474 |
| Pennsylvania | 52.8 | 277 |
| Rhode Island | 39.5 | 88 |
| South Carolina | 46.7 | 339 |
| South Dakota | 48.7 | 96 |
| Tennessee | 50.8 | 612 |
| Texas | 48.3 | 3717 |
| Utah | 45.5 | 354 |
| Virginia | 50.2 | 850 |
| Washington | 46.3 | 780 |
| Wisconsin | 52.8 | 264 |

## Channel Analysis

Pivot table9.

Pivot table11.

Table channel revenue

|  |  |
| --- | --- |
| **Row Labels** | **Sum of Revenue** |
| Distributor | 13169147.65 |
| In-Store | 30102904.7 |
| Online | 21698558.86 |
| Wholesale | 8172768.54 |

Pivot table10.

Table channel profit

|  |  |
| --- | --- |
| **Row Labels** | **Sum of Profits** |
| Distributor | 18.23% |
| In-Store | 41.26% |
| Online | 28.92% |
| Wholesale | 11.60% |

Table channel sales

|  |  |
| --- | --- |
| **Row Labels** | **Sum of Order Quantity** |
| Distributor | 17% |
| In-Store | 41% |
| Online | 30% |
| Wholesale | 11% |

This chart is combined from the above 3 pivot tables to make it more organized in the dashboard

Figure 10 Channel analysis

Chart, treemap chart

Description automatically generated

The charts used in the above figure are pie charts and treemap.

The labels are written on the top as all the charts comprise of same fields.

The percentage in the pie charts are made by custom formatting them to grand total percentage.

## Purchases and Sales team Analysis

The next tables are for customer and sales team as they play an important role in the dashboard. For filtering the top 10 of sales team sales and customer purchases we use filter.

Figure 11 Filtering

Graphical user interface, application

Description automatically generated

Pivot table12.

Pivot table13.

Table Sales Team sales

|  |  |
| --- | --- |
| **SalesTeam** | **Sum of Order Quantity** |
| Joshua Little | 1318 |
| Anthony Berry | 1337 |
| Adam Hernandez | 1366 |
| Jerry Green | 1371 |
| Samuel Fowler | 1388 |
| Donald Reynolds | 1391 |
| Carl Nguyen | 1393 |
| George Lewis | 1409 |
| Todd Roberts | 1474 |
| Shawn Wallace | 1476 |

Table Customer purchases

|  |  |
| --- | --- |
| **Customer** | **Sum of Order Quantity** |
| Eminence Corp | 785 |
| Qualitest | 787 |
| OUR Ltd | 796 |
| Apollo Ltd | 805 |
| Victory Ltd | 812 |
| Ei | 818 |
| OHTA'S Corp | 819 |
| Apotheca, Ltd | 828 |
| Elorac, Corp | 880 |
| Medline | 970 |

Figure Sales Team Chart

Chart2. Made from Pivot table9

Chart3. Made from Pivot table10

Figure Customer Chart

Note: When taking top performers, we must be aware that after using the slicers and clearing the filters in the slicers, the chart and pivot table it is connected will get refresh

And it will no longer show top 10. So, to avoid this we must avoid the fields which we are using to display the top performers

Table Warehouse Budget Revenue Profit

Pivot table14. Warehouse budget, revenue, and profits Analysis

|  |  |  |  |
| --- | --- | --- | --- |
| **SalesTeam** | **Sum of Budget** | **Sum of Revenue** | **Sum of Profits** |
| WARE-MKL1006 | $5,466,064.22 | $ 7,813,119.74 | $ 2,347,055.53 |
| WARE-NBV1002 | $4,308,172.56 | $ 6,096,532.17 | $ 1,788,359.61 |
| WARE-NMK1003 | $16,354,289.42 | $ 23,136,974.16 | $ 6,782,684.73 |
| WARE-PUJ1005 | $9,219,735.26 | $ 13,056,173.42 | $ 3,836,438.16 |
| WARE-UHY1004 | $8,548,733.01 | $ 11,985,686.11 | $ 3,436,953.10 |
| WARE-XYS1001 | $7,921,058.12 | $ 11,054,894.14 | $ 3,133,836.02 |

Chart4.

Figure Warehouse chart

This bar chart shows us the overall budget, revenue, and profits according to various warehouses. The warehouses are represented by individual codes given to them.

Table Region wise Quarterly trend

Pivot table15. Region wise Distribution of Profits Analysis

Pivot table15. Region wise Distribution of Profits Analysis

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sum of Profits** | **Column Labels** |  |  |  |  |
| **Row Labels** | **Midwest** | **Northeast** | **South** | **West** | **Grand Total** |
| Qtr1 | 827108.6015 | 479393.844 | 1424571.387 | 1391728.355 | 4122802.187 |
| Qtr2 | 1061775.666 | 602459.2095 | 1451758.948 | 1671386.121 | 4787379.944 |
| Qtr4 | 1294866.355 | 674223.8475 | 1937285.738 | 2300940.465 | 6207316.405 |
| Qtr3 | 1352791.339 | 671395.1075 | 2030459.254 | 2153182.92 | 6207828.619 |

Figure Profits by region Chart

Chart5.

Chart5.

## Quarterly Analysis of Revenue and Budget

\*The figures used are in Dollars.

Table Quarterly wise revenue budget

Pivot table16.

This table show the quarterly trends in various fields

Pivot table16.

This table show the quarterly trends in various fields

Chart6.

Area chart for quarterly trend

Chart6.

Area chart for quarterly trend

|  |  |  |
| --- | --- | --- |
| **Row Labels** | **Revenue** | **Budget** |
| **2018** |  |  |
| Qtr2 | 2249845.93 | 1602162.357 |
| Qtr3 | 7415845.42 | 5286165.732 |
| Qtr4 | 7436941.71 | 5267050.699 |
| **2019** |  |  |
| Qtr1 | 6589445.143 | 4637135.057 |
| Qtr2 | 7244569.803 | 5158806.437 |
| Qtr3 | 6718858.825 | 4705040.16 |
| Qtr4 | 7301421.815 | 5172737.479 |
| **2020** |  |  |
| Qtr1 | 7327600.558 | 5157108.456 |
| Qtr2 | 6769848.003 | 4715914.997 |
| Qtr3 | 7059563.038 | 4995232.771 |
| Qtr4 | 7029439.503 | 5120698.445 |

Figure Quarterly trend Chart

The chart shows the area for revenue and area for budget.

In the year 2018 the sales start form month may so the first quarter of the year 2018 is missing.

## Continuous Improvement with solid fill Product Analysis

Figure Product Chart

Chart 7.

In this chart the top 5 products of every year are displayed using filter finction.

Pivot table17.

Table Top Products

|  |  |
| --- | --- |
| **Row Labels** | **Sum of Order Quantity** |
| **2018** |  |
| Floor Lamps | 144 |
| Mirrors | 174 |
| Photo Frames | 211 |
| Stemware | 175 |
| Wine Storage | 167 |
| **2019** |  |
| Accessories | 362 |
| Bathroom Furniture | 272 |
| Ornaments | 296 |
| Outdoor Decor | 273 |
| Table Lamps | 310 |
| **2020** |  |
| Candles | 314 |
| Computers | 273 |
| Cookware | 243 |
| Floral | 332 |
| Furniture Cushions | 341 |

## Warehouse Sales Analysis

This table has warehouse codes and their sales in the particular year.

|  |  |  |  |
| --- | --- | --- | --- |
| **Warehouse** | **2018** | **2019** | **2020** |
| WARE-MKL1006 | 931 | 1418 | 1467 |
| WARE-NBV1002 | 684 | 1039 | 1378 |
| WARE-NMK1003 | 2911 | 4159 | 4281 |
| WARE-PUJ1005 | 1405 | 2647 | 2520 |
| WARE-UHY1004 | 1310 | 2256 | 2199 |
| WARE-XYS1001 | 1241 | 2118 | 2198 |

Pivot table18.

Chart8.

Figure Warehouse Sales Chart

The combo chart used in this has bar type for year 2019, line type for year 2018 and stacked area type for year 2020. Using this comparison can be made with each other.

It is important to use a normal table for a combinational chart because when using pivot table and when slicers are applied for filtering the rows which don’t have any data in that condition may display nothing and that may change the type of chart.

After careful analysis and research, we may conclude that using a normal table will be best for combinational charts. But there may be other advanced solutions for this instead of using normal tables. So, we cannot say only a single solution exist for the issue.

Figure 19 Slicers

## Slicers Analysis

Graphical user interface, text, application, table

Description automatically generated

Figure 12.

There are 4 slicers present in this project. As shown in figure11, the connections are applied for all of the slicers present.

Figure 20 Slicer Connections

A picture containing graphical user interface

Description automatically generated

## Final Dashboard

We put all the charts in the dashboard in an organized way.

The final sheet of dashboard looks like this. Background image is added to make it more look like business related.

Figure 21 Final Dashboard

Graphical user interface

Description automatically generated

A total of 12 charts are used in the dashboard.

3 sparkline trends are shown in the table format.

Total 4 slicers are used. Month, Sales Channel, State and Region. The whole will respond to the slicers once they are activated.

# 6.List of all analysis with result

1. Sales by month
2. Sparkline analysis A screenshot of a computer

   Description automatically generated with medium confidence Text

   Description automatically generated
3. Map analysis A map of a city

   Description automatically generated with low confidence
4. Channel analysisChart, treemap chart

   Description automatically generated
5. Purchases and sales team analysis Graphical user interface

   Description automatically generated with medium confidence
6. Warehouse budget, revenue and profits Analysis
7. Region wise distribution of profits analysisA picture containing chart

   Description automatically generated
8. Quarterly Analysis of Revenue and Budget
9. Product Analysis
10. Warehouse sales analysis
11. Slicer’s analysisGraphical user interface, text, application, table

    Description automatically generated

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