(Bachelor of Computer Application)

A Project Report on

Sales Dashboard
Using Microsoft Excel

Submitted by:

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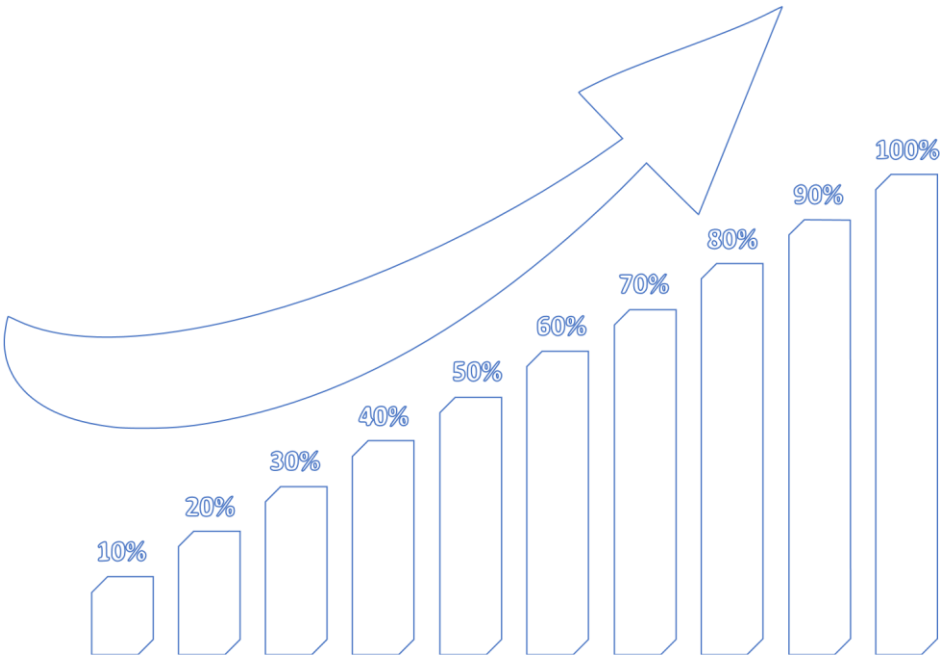


Abstract of the Project

This project focuses on developing an interactive and comprehensive sales dashboard using Microsoft Excel to analyze and visualize key sales data. The dashboard will provide insights into critical performance metrics, including total sales, sales trends, category-wise sales distribution, customer count, regional performance, profit gained, monthly sales and top-performing sales representatives. By leveraging Excel features such as pivot tables, charts, and conditional formatting, the dashboard will allow users to easily interpret and track sales performance over time.

The goal of the project is to facilitate data-driven decision-making by offering a clear and concise view of sales trends, enabling stakeholders to identify growth opportunities, potential risks, and areas for improvement.

S.NO	Index	
1.	Introduction a. About the project idea b. About tools in use	
2.	Purpose/scope/Objective of the Dashboard	
3.	Requirements for the project a. Hardware used b. Software used c. Technology used	
4.	Methodology a. introduction b. general description c. specific requirements, functions and formulas d. Analysis Results	
5.	Data Cleaning, Transformation and Pivot Tables	
6.	Dashboard Visualization	
7.	Future scope of project	
8.	Conclusion	

1. Introduction

a. About the project idea:

The project idea is to develop a **Sales Dashboard** in MS Excel to provide a clear, visual representation of sales performance data. The dashboard will consolidate various sales metrics, such as total revenue, sales trends, product-wise performance, and regional sales, into a single, easy-to-navigate interface. By utilizing Excel tools like pivot tables, charts, and slicers, the dashboard will allow users to quickly access critical insights and monitor sales performance in real time, facilitating better data-driven decision-making. The aim is to simplify the analysis of complex sales data and improve business reporting efficiency.

b. About tools in use:

The project uses **Microsoft Excel** to create a dynamic and interactive dashboard, with data cleaning and preparation handled through **Pivot tables**. These tools together enable effective visualization and analysis of sales data, providing clear insights for decision making

Resources Required:

Sales order dataset

MS Excel

Access to computational resources for model training (e.g., CPU/GPU)

2. Purpose/Scope/Objective of the Analysis

Purpose: The purpose of this project is to create a Sales Dashboard in MS Excel to simplify tracking and analyzing key sales metrics. It will transform raw data into clear insights, helping users monitor sales trends, product performance, and regional results. This dashboard will support quick, data-driven decisions, improving business efficiency and strategic planning.

Scope: The scope of this project includes designing an interactive Sales Dashboard in MS Excel to track key performance indicators such as total sales, sales trends, product and regional performance. It will involve data import, cleaning, analysis using formulas and pivot tables, and creating visualizations with charts and slicers. The dashboard will be user-friendly, allowing for easy updates and customization to accommodate new data or changing business needs. Additionally, it will provide automated reporting for efficient sales monitoring.

Objectives:

- Develop an interactive **Sales Dashboard** in MS Excel to visualize key sales metrics.
- Automate data import, cleaning, and analysis using Excel formulas and pivot tables.
- Display insights like total sales, product performance, and regional sales trends through charts and graphs.
- Enable quick, data-driven decision-making by providing a user-friendly interface.
- Ensure the dashboard is easily customizable and updatable with new data for ongoing use.

3. Requirements for the Project

a. **Hardware used:**.

While the hardware requirements are not overly demanding, a computer with sufficient processing power and RAM (depending on dataset size) will ensure smooth workflow. Processor: Intel core i5

RAM: 12 GB

Storage : 512 GB SSD

b. **Software used:** Microsoft Excel

c. **Technology used:**

Access to the Sales order dataset (ideally in a well-structured format like CSV).Data science methodologies, including data preprocessing, exploratory data analysis (EDA).

4. Methodology

a. Introduction:

The methodology outlines the approach for developing a Sales dashboard using MS Excel. It details the steps taken from data collection to visualization and analysis, ensuring a structured process for delivering actionable insights.

b. General Description:

The process begins with gathering relevant data on Sales , including growth metrics, demographic information, plan details, and regional performance. Data is then cleaned and transformed using MS Excel. By using cleaned data create interactive dashboards and reports are created to visualize key metrics and trends.

c. Specific Requirements, Functions, and Formulas:

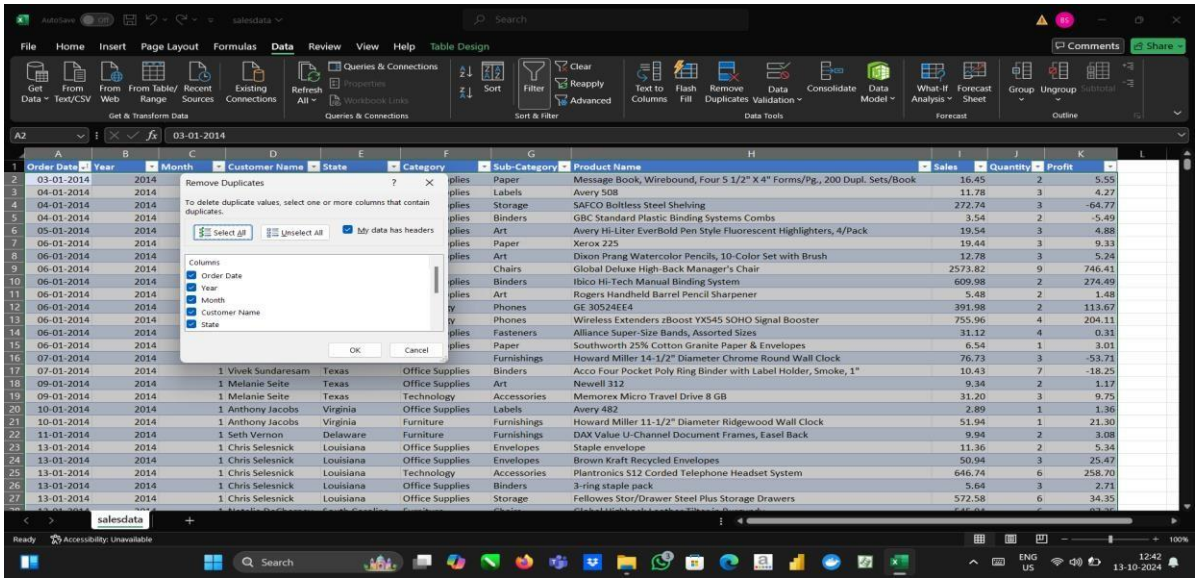
1.) Data Sources: demographic data, plan details, regional statistics.

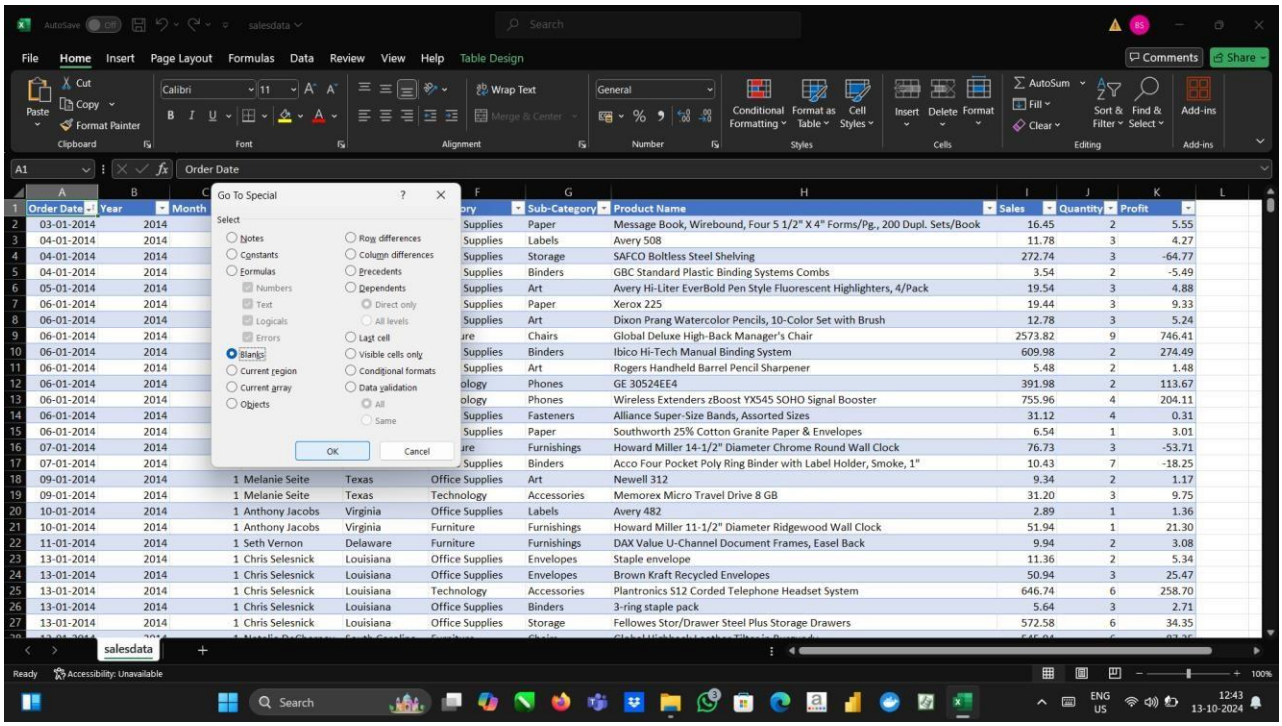
2.) Functions: Use DAX (Data Analysis Expressions) for calculations and aggregations.

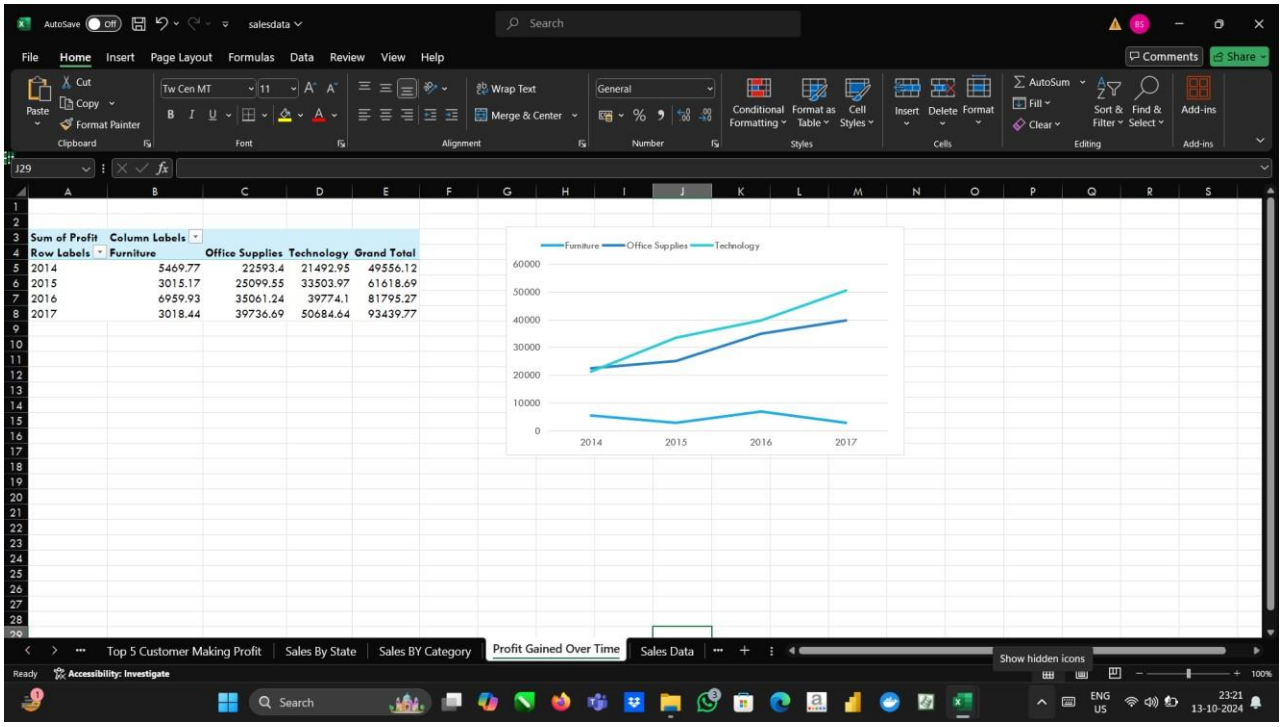
d. Analysis Results:

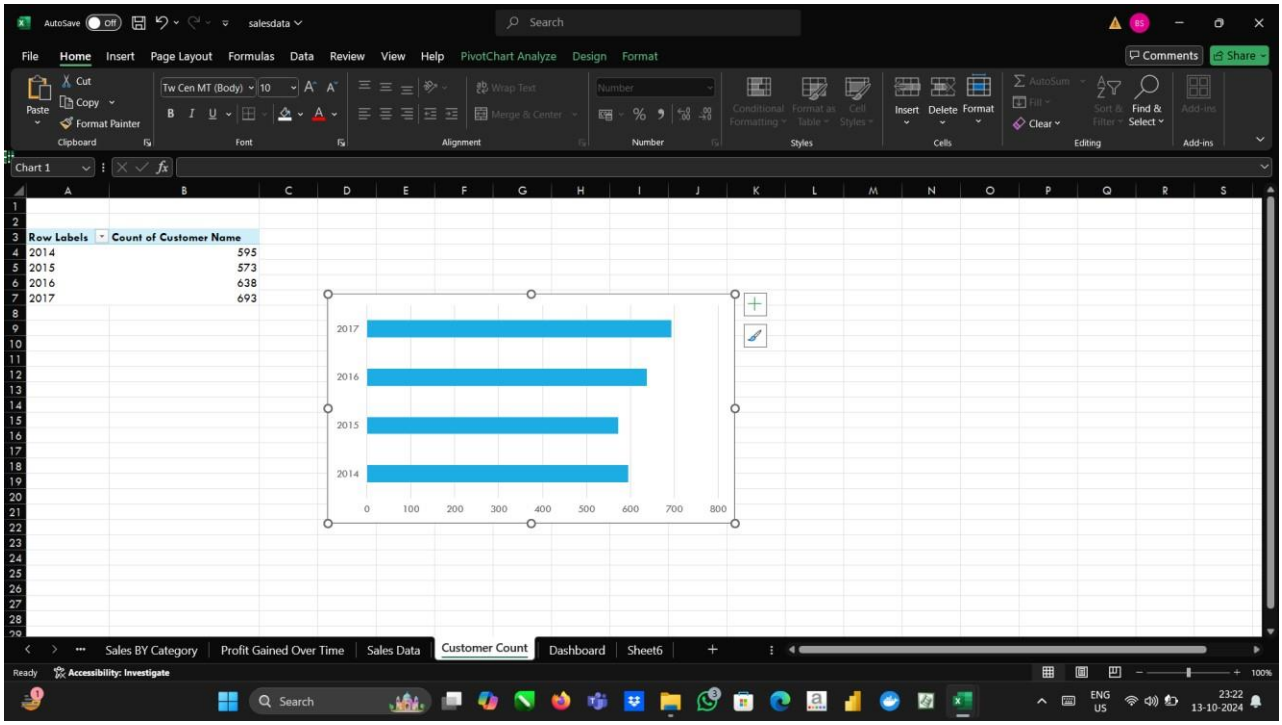
The analysis results from the **Sales Dashboard** project in Microsoft Excel reveal crucial insights into sales performance, including total sales trends over time, product performance, and regional sales breakdowns. The dashboard highlights top-selling products, identifies underperformers, and provides a clear view of sales by region, enabling targeted strategies for growth. Additionally, it offers insights into individual sales representative performance and customer segmentation, facilitating recognition of high performers and identifying training needs. Overall, these findings empower stakeholders to make informed decisions and develop actionable recommendations to enhance sales strategies and drive business growth

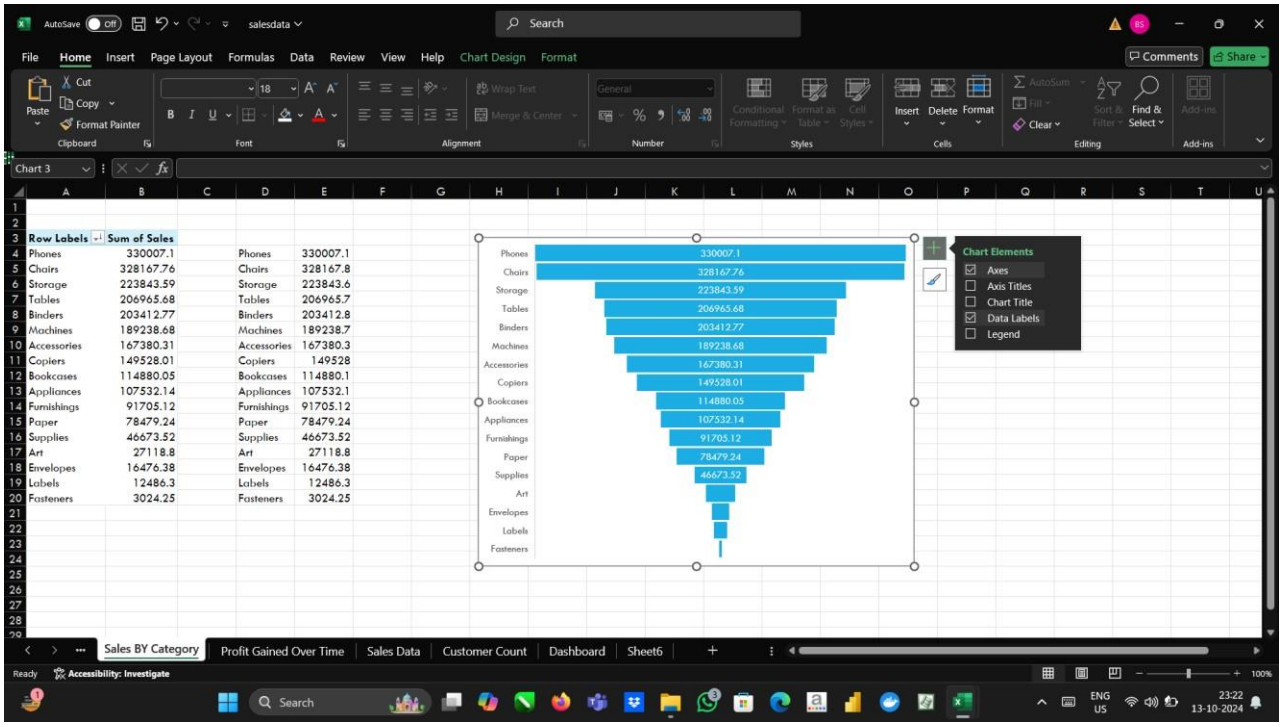
5. Data Cleaning ,Transformation and Pivot Tables

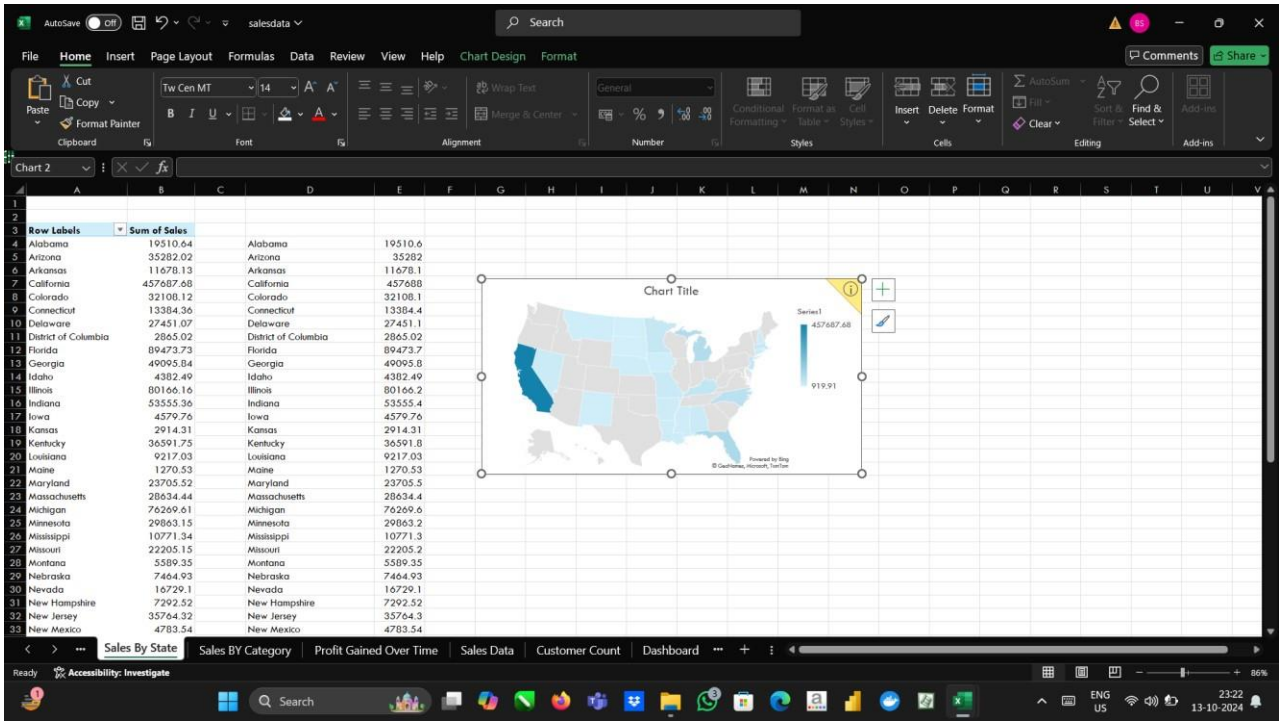


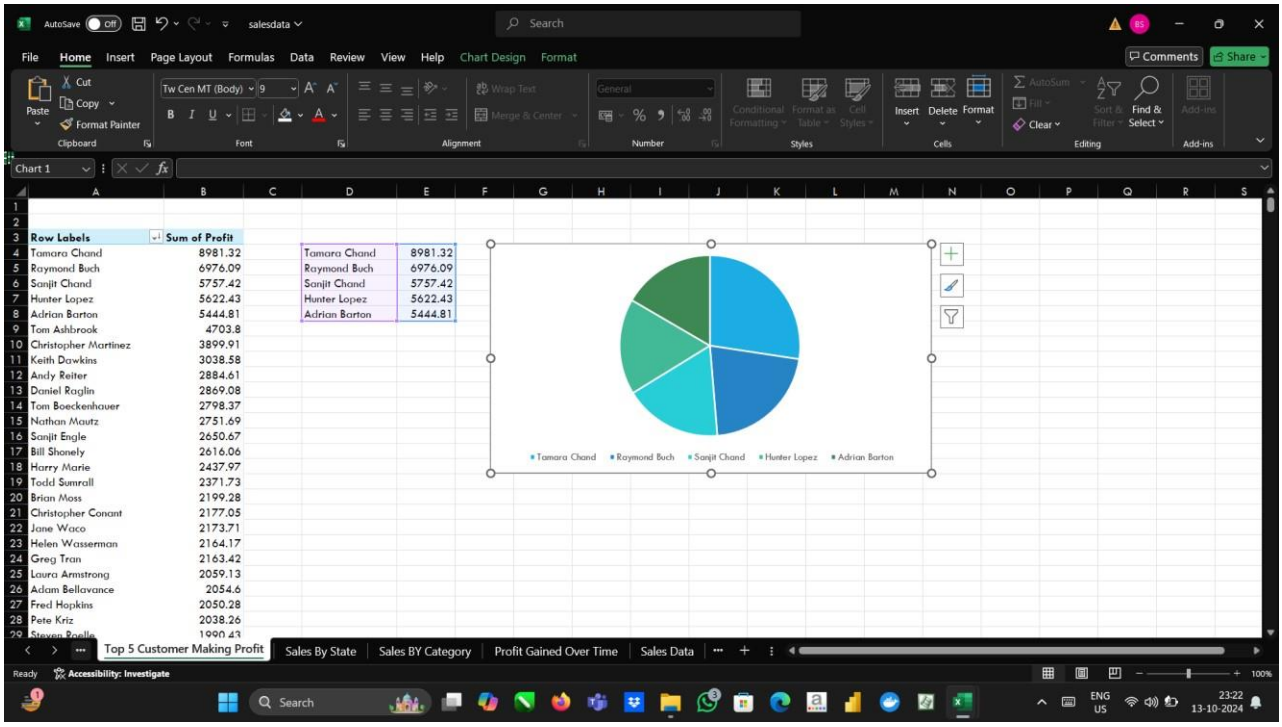


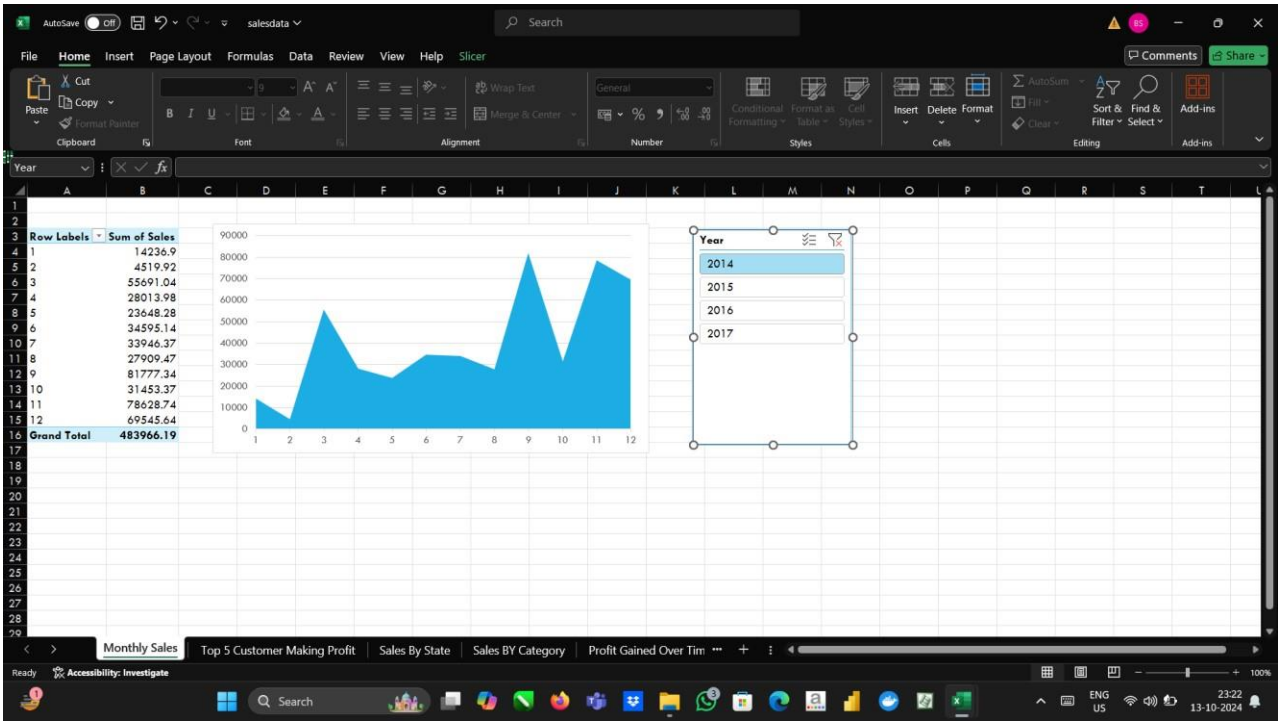

Sum of Profit | Column Labels
Row Labels | Furniture | Office Supplies | Technology | Grand Total
2014 | 5469.77 | 22593.4 | 21492.95 | 49556.12
2015 | 3015.17 | 25099.55 | 33503.97 | 61618.69
2016 | 6959.93 | 35061.24 | 39774.1 | 81795.27
2017 | 3018.44 | 39736.69 | 50684.64 | 93439.77
Furniture
Office Supplies
Technology
60000
50000
40000
30000
20000
10000
0
2014
2015
2016
2017
Top 5 Customer Making Profit
Sales By State
Sales BY Category
Profit Gained Over Time
Sales Data
Show hidden icons
Ready
Accessibility: Investigate


Row Labels | Count of Customer Name
2014 | 595
2015 | 573
2016 | 638
2017 | 693
2017
2016
2015
2014
0
100
200
300
400
500
600
700
800
Sales BY Category
Profit Gained Over Time
Sales Data
Customer Count
Dashboard
Sheet6
Ready
Accessibility: Investigate

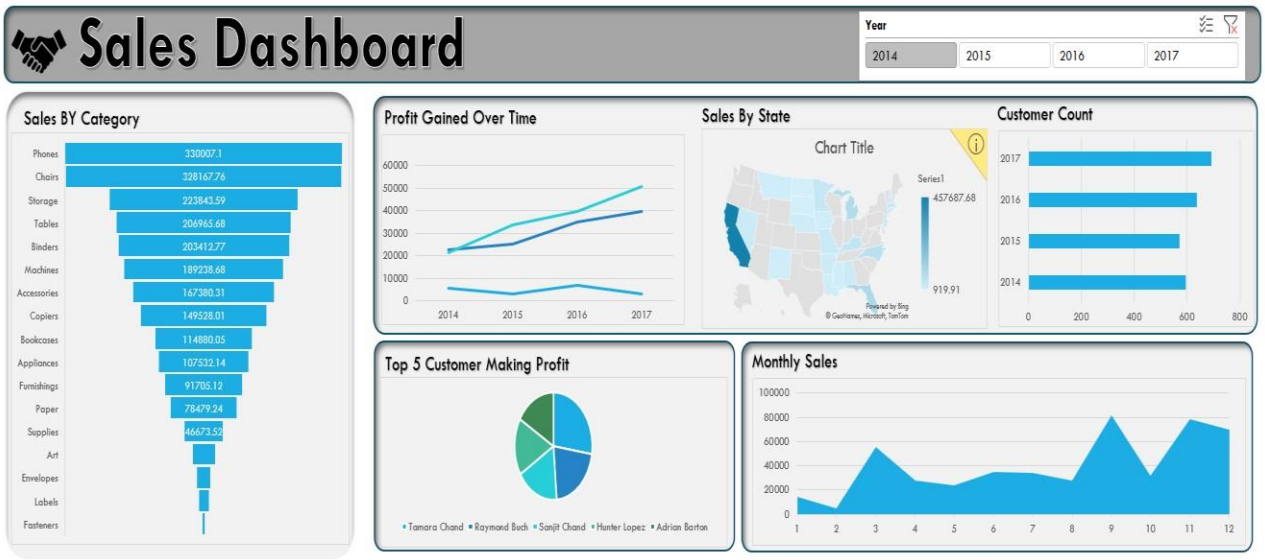

salesdata
Search
Chart 3
Row Labels
Sum of Sales
Phones 330007.1
Chairs 328167.76
Storage 223843.59
Tables 206965.68
Binders 203412.77
Machines 189238.68
Accessories 167380.31
Copiers 149528.01
Bookcases 114880.05
Appliances 107532.14
Furnishings 91705.12
Paper 78479.24
Supplies 46673.52
Art 27118.8
Envelopes 16476.38
Labels 12486.3
Fasteners 3024.25
Chart Elements
Axes
Axis Titles
Chart Title
Data Labels
Legend
Sales BY Category
Profit Gained Over Time
Sales Data
Customer Count
Dashboard
Sheet6
Ready
Accessibility: Investigate


salesdata
Search
Chart 2
Row Labels
Sum of Sales
Alabama 19510.64
Arizona 35282.02
Arkansas 11678.13
California 457687.68
Colorado 32108.12
Connecticut 13384.36
Delaware 27451.07
District of Columbia 2865.02
Florida 89473.73
Georgia 49095.84
Idaho 4382.49
Illinois 80166.16
Indiana 53555.36
Iowa 4579.76
Kansas 2914.31
Kentucky 36591.75
Louisiana 9217.03
Maine 1270.53
Maryland 23705.52
Massachusetts 28634.44
Michigan 76269.61
Minnesota 29863.15
Mississippi 10771.34
Missouri 22205.15
Montana 5589.35
Nebraska 7464.93
Nevada 16729.1
New Hampshire 7292.52
New Jersey 35764.32
New Mexico 4783.54
Chart Title
Series1
457687.68
919.91
Sales By State
Sales BY Category
Profit Gained Over Time
Sales Data
Customer Count
Dashboard
Ready
Accessibility: Investigate


salesdata
Search
File Home Insert Page Layout Formulas Data Review View Help Chart Design Format
Comments Share
Chart 1
Row Labels Sum of Profit
Tamara Chand 8981.32
Raymond Buch 6976.09
Sanjit Chand 5757.42
Hunter Lopez 5622.43
Adrian Barton 5444.81
Tom Ashbrook 4703.8
Christopher Martinez 3899.91
Keith Dawkins 3038.58
Andy Reiter 2884.61
Daniel Raglin 2869.08
Tom Boeckenhauer 2798.37
Nathan Mautz 2751.69
Sanjit Engle 2650.67
Bill Shonely 2616.06
Harry Marie 2437.97
Todd Sumrall 2371.73
Brian Moss 2199.28
Christopher Conant 2177.05
Jane Waco 2173.71
Helen Wasserman 2164.17
Greg Tran 2163.42
Laura Armstrong 2059.13
Adam Bellavance 2054.6
Fred Hopkins 2050.28
Pete Kriz 2038.26
Tamara Chand 8981.32
Raymond Buch 6976.09
Sanjit Chand 5757.42
Hunter Lopez 5622.43
Adrian Barton 5444.81
Tamara Chand Raymond Buch Sanjit Chand Hunter Lopez Adrian Barton
Top 5 Customer Making Profit
Sales By State
Sales BY Category
Profit Gained Over Time
Sales Data
Ready
Accessibility: Investigate
ENG US
23:22
13-10-2024


salesdata
Search
File Home Insert Page Layout Formulas Data Review View Help Slicer
Comments Share
Year
Row Labels Sum of Sales
1 14236.9
2 4519.92
3 55691.04
4 28013.98
5 23648.28
6 34595.14
7 33946.37
8 27909.47
9 81777.34
10 31453.37
11 78628.74
12 69545.64
Grand Total 483966.19
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
1 2 3 4 5 6 7 8 9 10 11 12
Year
2014
2015
2016
2017
Monthly Sales
Top 5 Customer Making Profit
Sales By State
Sales BY Category
Profit Gained Over Tim
Ready
Accessibility: Investigate
ENG US
23:22
13-10-2024

6.Dashboard Visualization



7. Future Scope of Project:

The future scope of the **Sales Dashboard** project includes integrating real-time data for dynamic updates, implementing predictive analytics for forecasting future sales trends, and expanding the dashboard to track additional metrics such as customer satisfaction and inventory levels. Enhancements could also include cross-platform access through cloud integration, automating reporting processes, and offering more customization features for user-specific insights. These improvements would increase the dashboard's functionality, making it a more powerful tool for ongoing business analysis and decision-making.

8. Conclusion:

The **Sales Dashboard** project in Microsoft Excel successfully provides a comprehensive and user-friendly platform for analyzing key sales metrics. By transforming raw data into meaningful insights through the use of pivot tables, charts, and filters, the dashboard enables stakeholders to monitor sales performance, identify trends, and make data-driven decisions. The ability to track product and regional performance, as well as individual sales representative contributions, helps businesses optimize strategies and improve overall efficiency. With future enhancements like real-time data integration and advanced analytics, the dashboard can continue to evolve into an even more valuable tool for strategic business management.