

Practical Chart Creation in MS Excel

Objective

To understand the purpose of data visualization and learn the step-by-step process of creating and customizing charts in Microsoft Excel.

Why use Charts?

Raw data (numbers in rows and columns) can be hard to read quickly. Charts turn that data into a picture.

- **Comparison:** Easily see who got the highest marks or which month had the most rain.
- **Trends:** See if values are going up or down over time.
- **Proportions:** See parts of a whole (like a pizza slice).

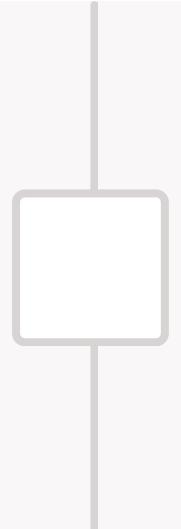
Common Types of Charts

Choosing the Right Chart

Before creating a chart, you must decide which type fits your data.

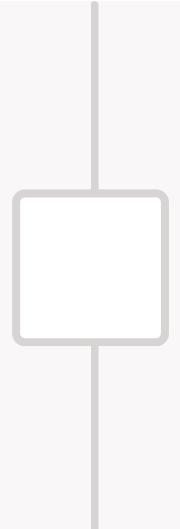
Column/Bar Chart

Best for **comparing** different items
(e.g., Student Marks: Ali vs. Sara vs.
Ahmed).



Line Chart

Best for showing **trends over time** (e.g., Temperature changes over a week).



Pie Chart

Best for showing **percentages** or parts of a whole (e.g., Votes for Class Monitor).

Creating a Chart (Step-by-Step)

Step 1: Prepare and Select Data

- Enter your data clearly with headers (e.g., Name, Marks).
- **Highlight** the data range you want to visualize, including the headers.

□ Example: Select cells A1 to B5.

Step 2: Insert the Chart

- Go to the **Insert** tab on the top ribbon.
- Look for the **Charts** group.
- Click on the icon for the chart you want (e.g., **Insert Column Chart**).
- Select the specific style (e.g., 2D Column).

Customising the Chart

Step 3: Add Chart Elements

A chart needs labels so people know what they are looking at. When you click the chart, a "+" button (Chart Elements) appears.

Chart Title:

Give your chart a name (e.g., "Student Final Marks").

Axis Titles:

Label the X-axis (bottom, e.g., "Student Names") and Y-axis (side, e.g., "Marks Obtained").

Data Labels:

(Optional) Show the exact numbers on top of the bars.

Practical Exercise

Student Task:

1. Open Microsoft Excel.

1. Enter the following data:

- Subject: English, Math, Urdu, Science
- Marks: 75, 90, 85, 80

1. Select the table.

1. Insert a Column Chart.

1. Change the Chart Title to "My Exam Result".

1. Change the color of the bars (Right-click a bar \rightarrow Fill).

Conclusion and Review

Conclusion

Charts are powerful tools for presentation. By selecting data and using the **Insert** tab, we can instantly visualize complex numbers. Customizing titles and labels ensures the chart is easy to understand.

Review Questions

1. Which tab in Excel do you click to create a chart?

You click the **Insert** tab.

2. Which chart type is best for showing trends over time (like temperature)?

A **Line Chart** is best for trends.

3. If you want to compare marks between 5 students, which chart should you use?

A **Column Chart** (or Bar Chart) is best for comparison.