

Welcome

students. Today we'll be looking at the module creating business spreadsheets. That is for this unit and the module name is graphical representation of data frequency distribution and its statistical parameters.

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The outline of the presentation is graphical representation of data, different types of charts, frequency distribution and histogram.

The learning outcomes by the end of this module, the student will be able to study.

Graphical representation of data. Learn how to use graphical representation of data. Learn the types of charts and its applications. Learn the frequency distribution and learn how to plot a histogram.

Graphical representation of data. It is an effective way of projecting information in a visual form. It helps in the better communication of information, presentation and analysis of data.

It is a pictorial form of representing the relation

between data, ideas, information and concepts.

Types of graphical representation in Excel. We will be seeing some of the commonly used types of graphical representation which are also called as charts in Excel.

So first type is the pie chart.

A pie chart displays one series of data. And a data series is a row or a column of numbers used for charting. So we'll see now how to create a pie chart.

So this we will be seeing in Excel how to create the pie chart. So here I have a.

Table that has company names and their quarterly sales quarterly.

One Q1 sale, Q2 sale, Q3 sale and Q4 sale.

So now how do we make use of the pie chart so

First you have to select the data on which you will be.

Creating the pie chart.

Go to the insert tab.

The list of charts is given over here, so select on the.

Chart that is required so we will be selecting the pie chart.

And click on it so you get over here a pie chart.

Will give it represents the quarterly sales for the company.

Listed in the data that is

selected. So now you can do various formatting on this, like you can change the chart title. You can select the different form in which the regions are given, so you can go to the chart tools and select the data that is appropriate.

OK, next will be seeing the column chart. So column charts are typically used to compare several items in a specific range of values.

These are ideal if you need to compare a single category of data between individuals. Subitems, now column charts.

There are two types, the clustered column chart and the stacked column chart.

A clustered column chart can be used if you need to compare multiple categories of data within individual sub items as well as between sub items.

And stacked column chart is.

Used to compare items in a specific range of values as well as to show the relationship of the individual sub items with the whole. So we'll see how to create column charts.

So now again, the same data will be using for creating a column chart. So now select.

The day to go to insert an.

Click on the.

Column chart.

So if you click on the side arrow that is present, you will

get the various formats in which the column charts are made

available. So will select the first one that is the clustered

column chart. So now you can see that your clustered column chart

is ready and now you can see

that for. Each of the company the quarterly sales are given

over here so you can easily compare by looking at this chart

what is the sale or how much is the sale for a particular

company? Again, if you want to

compare. The company Wise quarterly sales again you can.

Play with the data that is given an.

Prepare a chart as per the requirements.

Again, here we can do a lot of.

Formatting so again the chart tools are there to design. There

again, formatting is there.

So you can use by making use of these tools you can.

Format the chart and.

Use it as per the requirements.

OK, we will see now the stacked column chart how to

demo how to make use of this tech column chart.

Again here select the data.

Go to insert.

Select the column chart and.

This represents the stacked column, so click on that so you

get the stacked column chart in this format so you can see that

this is how the stacked column chart is represented. So for a

particular company, the quarterly sales are given in a

single bar. So you can use it for the comparison

of their data.

next will see the line chart.

Again, line chart is one of the most frequently used chart types and

is typically used to show trends over a period of time.

These are used to represent continuous data overtime on an

evenly scaled axes.

And this line charts are mostly suited for displaying trends in

data writing equal intervals such as months, quarters or

years. So are there more of how to create a line

chart? So go to charts.

Select the data.

Go to insert.

Here. Select the line chart so this is how your line chart will appear. So again, here you can see that it is in the form of a continuous line, and if you look at this graph you can easily find the pattern that the graph is showing. So for that the line charts are useful. You can easily make out the pattern of data that is existing in your data set.

Another type which is commonly used is the bar chart.

Used to compare several categories of data.

And these are ideal for visualizing the distribution or proportion of data items when there are more than three categories. You can consider a bar chart like a column chart lying on its side.

So again select the data.

Go to insert.

And.

So this is the bar chart that is created.

Next, we'll see the what is meant by frequency distribution. So it is a summarized table in which raw data are arranged into classes

and frequencies. It focuses on classifying raw data into information.

It is a widely used data reduction technique in descriptive statistics.

So basically frequency distribution is.

Performed using the histograms and histogram is a snapshot of the frequency distribution.

So it is a graphical representation of the frequency distribution in which the X axis represents the class intervals and the Y axis represents the frequencies in bars.

It depicts the pattern of the distribution emerging from the characteristic being measured, so we'll see how to create a histogram by taking an example.

So this is. Dataset where I have a list of students with their marks scored. Now I want to find out how many students have scored marks in the range of zero to 200, 20, 40 and so on.

So I've created upper limit over here. I know to find out.

The frequency. Of the marks appearing in each of the Max range we will use.

I'm giving the heading for this column as frequency.

And we will be using a formula

for. Finding the frequency in each of the.

So equal to.

Frequency.

Select the data so data is the marks obtained.

Comma. We have to give the.

Being serious so that is this.

Close. Shift Control enter. So here you get the frequency of the marks

appearing in each of these marks range now to.

Create an histogram. What we do is we select this marks data.

And the frequency data.

And go to insert.

And select the column chart.

So this is how.

The.

Histogram is created.

So this again, the excess can be formatted based on

the requirement.

So this is about how to create the histogram.

So these are the references.

Thank you.