

HR Analytics
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Week: 2
Lecture 12: Data Visualization Excel - 2

Dear participants, welcome to the lecture number 25. So, in last session, as you are aware, we have learnt about Excel pivot tables, right. So, we had learnt how to make the tables. In this session, we will be learning about pivot chart. So how to make a chart so that we can visualize the data related to any function of the HR. I have already told you that whatever problem is there in your organization at your hand or whatever basic question that is being asked to a manager day-to-day work at a workplace, you can list them, and then you can make a list of variables.

You can collect the data and then you can use this visualize tool and you can visualize the things right for a visualization. So one important thing is the table. So you have, I hope you would have learned how to make the tables at the pivot. So in this session we will be learning about the pivot chart.

So in last session we had learned about this pivot tables. In this session we will be learning about pivot chart. So, as I said, I have prepared this dummy data. So, same data that I am, I have used for the pivot table, the same data that I will be using for the pivot chart. So, objective of this session is not to make you learn or make you understand some of the decisions that are being taken related to this applicant analysis.

Objective is to make you learn how to make the table and how to make the chart. So, in previous sessions you must have learnt we need to draw some meaningful insight or meaningful insight from these tables and from the chart. So, we will make the chart and table related to only those variables which will give us the meaningful information so that we can take a decision at the workplace related to our problem. So, here do not focus on a problem, what do you need to do? You need to focus on how we are making the chart. So, in my previous session, I already said that whichever chart you are going to make whether it is a histogram, whether it is a pie chart, whether it is a bar graph, line graph.

You need to learn about these charts first and then you need to make a chart in the visualization tool. So, it could be Power BI, it could be Tableau, it could be Excel. So, in

today's session we are learning about the Excel how to make the chart. So, as we had learned in the previous session recommended pivot tables. So, in this we will see recommended charts.

So, here you can see these are the recommended charts which is already recommended based on the data. So, you can go to 1 by 1 and then you can see which one is useful for you, right. If you find some useful chart, the same chart that you can follow or you can make it with this data. So you can check this recommended chart the way you had checked the recommended pivot tables. Now we will go to this pivot chart.

I hope it is visible to you. So here you can see the moment I clicked on pivot chart you can see two things have come up one is pivot chart and pivot chart and table. So if both things that you want to make it simultaneously pivot chart and table then you can click on second option. If you want to make it only pivot chart then you can click on this pivot chart. So this, the moment you will click on this, you will get this dialogue box.

In this you can see, this dialogue box is asking whether you have to make this pivot chart in the existing one or you have to develop the, you have to open the new worksheet. So it is always better to open the new worksheet. So here you can click on this. So you will see the new worksheet here. So the way you had seen in the pivot tables in the similar way you will see here right side all variables are there right.

So all variables that you can see here and below the variables you can see filters legend, axis, values. So these are the four things are there. So axis at which axis you need to put which data. So if you remember in my previous session I clearly said whichever graph that you want to make you should know at which axis which variable that you will put right. So let me start with this count 1 only.

So this through the serial number we just start the count. So here you can see the sum is coming. So we had already discussed the sum of a serial number does not give any meaning. So there is no need. So we can click on this and we can click to this value field settings.

And the moment you will go to this value field settings, you will find so many functions are there. Whichever function you want, whether you want to count, average, maximum, minimum, or product, according to your variable, you can select. So, in this case which one will be useful? Useful will be count. So, that is why we are selecting the count here. So, that is the value.

We want to know how many male and female candidates are coming for the interview.

So, here you can see the count is there. So, count is 516, right. So, this tells us 516 candidates have applied for the various positions in our organization, right. Now we want to know how many males are there and how many females are there, right.

So, the moment you will click on this, you will bring to this rows this gender one. So, you can see here almost 245 females are there and close to 171 or 172 males are there, right. That is what you can see in this chart. Now if you want to beautify this chart, so what you can see here, two dialog box are there. So if you want to add some of the title, right, just click on this.

So you can add the title, access title, you can add data labels. So here you can click on this data labels. So data labels will come. So here exactly you can see the numbers. Data tables so if you want to add the table below the chart so that you can do it right and trending lines if you want to add so basically you can beautify this diagram or this chart so these are the options that you can use it as well As if you want to change the style so you can click on this next paint one right so here you can change the style so here if you let us say you like this style so you can take this one this color one that you can take this one right So, whichever style you want so accordingly you can visualize your data or whichever you are comfortable with right.

And now if you want to change the color, so now from here you can select the color, right. So that is how you can beautify any graph that you are making in this, right. So these are the things that you can see. So which will increase the beauty of your chart right. So these are the minor changes that you can do it.

Now similarly if you want to know department wise like how many people are coming to different departments. If you want to know that just click on department right you will see the number. In finance department only one person is there right. In finance 97 persons are there in HR 118 are there, in marketing 103 are there, in operations 140 are there, and in services 57 are there, right. So, that is how you can see department wise in which department maximum number people are coming for the interview, in which lowest number of the persons are coming, right.

So, that is what you can see here. According to interview date, So, here it may not be relevant. So, you can take according to the city. From which city how many people are coming? So now here you can see highest number of people are coming from Chennai and lowest number of people are coming from Bangalore. Only two people are there and 10 are coming from Delhi and 37 are coming from Hyderabad.

So similarly you can see the number of people are coming from which city. In the same

way you can go to the status of interview. So, how many people have confirmed they will be coming for the interview and how many will not. So, here you can see the number of people 182 people have confirmed and 334 people said they will not appear into the interview and that is what you can do it in order to make these bar graphs right. Now if you want to make some pie chart, so what you can do? You can click on these pie charts right.

So here you can see this is the pie chart. right the same table is converted into the pie chart here you can see 334 people are not coming 182 people are coming. So for the same thing you can make a pie chart and for the same thing you can make some other graph also. So whoever is the manager that person has to take a decision whether graph is visualizing better or table is visualizing better the data or bar chart, histogram, pie chart, line graph, which visualization thing is visualizing the data better, the decision that you have to take and accordingly you have to select your visualization tool. So, here you can see this histograms are there, bar graphs are there.

So, 3D, 2D these all things are there. So, just you need to click and you need to select. I already said first thing that you need to do before making the graphs in the Excel or Tableau or Power BI, you need to go through the list of the variable, understand which chart, which diagram is going to be better, useful in order to give a presentation, in order to give an explanation. So that is what you can do. The moment you feel this diagram is complete, you can copy and paste to this Word document also.

So, you can copy and paste to this word document and here if you want to do some modification into it. So, here you can do it by here also you can do it after making the chart. From here you can select and so from here you can copy this visualized data to the presentation, right? PowerPoint presentation you can use it or if you want to use in report writing. So in report writing also you can use this visualized data. And after making this visualization you can write a wonderful report also on these decisions, analytical report that is what you can do it.

As well as you can use this visualized data in the PowerPoint presentation also right. So, let us see some other graphs also in the excel. So, here I was checking the status of and let us check the another one important area is the source of application. So now you can see the various source of the application. Indeed, whether people have applied to the Indeed, LinkedIn, Naukri, Newspaper, Website.

So that is what you can see here. So now it is a pie chart. So whichever graph that you like accordingly you can make it. So now let us go to the Next one, like if you want to know the work experience, the way I discuss in a pivot table, the work experience. So, in

the case of work experience, average work experience may be useful.

So, average work experience may be useful. So, now it is showing the sum. So, as I had told you earlier, you have selected the variable work experience. Some may not be the useful. You need average work experience of these all applicants. So, that is why I am selecting the average, right.

So, average one that you can see, right, average work experience. Now, you can select the style which one you want. So, average work experience that we have selected now if we have to check right. So, I am starting from just again I hope you would have gone to this pivot chart right new work sheet right. So, here I was talking about work experience So you can take here, so it is coming sum, sum is not required.

So we will go to this average, we will click on this, so now it is average. Now let us see in education wise, undergraduate people what is the work average experience they are having and what is the average for the PG, what is the average for PhD. And total average work experience of all participants is 6.3. So, it indicates us what kind of people are applying for a particular job in the organization.

So, here we can see the average for the undergraduate, postgraduate and PhD program. So, that is what we can see here, undergraduate people are having the highest level of work experience right. So that is how you can make some graphs and let me take the city wise from which city people are having the highest number. So I have taken this city. So now you can see highest number of work experience Hyderabad people are having.

So in table also simultaneously you can see in Hyderabad people are having 7.81 year work experience, right. So that is how you can divide, you can make this various type of chart, table, right bar graph to understand the data better. So what is my suggestion is, my suggestion is Just first make a list of all those questions which your manager is asking you at a workplace every day. If your manager asks what is the total, what is the average work experience of all applicants who have applied, right? So if he is asking, then you can calculate in this way.

If he is asking who is having more work experience, male or female? So let me check. For example, he is asking in a who is having more work experience male or female. So, here you can see male are having the more work experience 7.4 year right and female candidates are having 4.

9 year right. So, that is how you can see and if some your manager is asking the question related to the department wise, which department people are having the more experience.

That is what also you can see here. The marketing people are having the highest years of experience who are applying for the marketing department.

So, that experience is 9.941. So, what I am trying to tell you in nutshell, this pivot chart that you have seen, pivot table that you have seen. So, what you need to do on your workplace, whatever questions that your manager is asking, in day-to-day work. You make a list of all those questions, then identify the variables, collect the data in excel format and then go to this pivot table, pivot chart and that is how you can visualize this data. You can make your quarterly report, you can make annually report and every day on daily basis also you can present this data to your manager in the report format. Right so here, if you want to know, according to the source of the application right, what is the status of the source of the application Who is applying from a different source, so who has more experience so the source of the application? Let's take so here you can see some people who are applying through the website they are having the highest level of a work experience right so why i am taking these all example So here objective is not to make you understand this data.

Objective is to make you learn how to select the variable on which axis you should select which variable, right? So that is what. Now if you want to put a filter with the city, right? So now here you can see city 1. So, here you can see these all sources are there right. So, here you can see all are there if I want to select only for Bangalore right. So, only for let us take I want to select only for I want to do the analysis only for Chennai right.

So, Chennai you can see here in Chennai this is the analysis like Chennai in from the Chennai So, that is how you can use this filter right if you want to do the analysis within the analysis right. So, source of application that you have decided are now within the city you want to know from which city, from which source people are having the maximum work experience. So, that is what you can do by applying this filter right. So, in the same way you can apply the next filter here that could be the gender.

Let us take this gender one. Now we want to know that in the case of female candidate from different sources what is the average experience. So here you can see from website female are having the highest level of work experience. Right, and in the same way, you can calculate the for the male also right.

So here you can calculate the male it is the 7.40. So what so I hope you would have understood how the role of these chart. So here filter, rows, column. So these all options what I would suggest the excel sheet that you have prepared, the data that you have collected, just keep playing with your data on excel, keep making these all charts. I hope you have learned this pivot tables, pivot chart.

You are keep doing the practice. And keep asking the questions how I will be able to answer these questions. Right. Whatever questions that your manager is asking at a workplace. If I give you the example, if your manager is asking in mail from which source are having the highest years of work experience, Right.

So that is how you can put a filter into the. Gender you can put in a into the filter and source of application and then you can give this answer. So these are the things that you need to visualize. So you have to go in a systematic way. What is that systematic way? First you have to identify the questions which your manager is asking at a workplace. Second thing that you need to do you need to develop the list of variables and after developing the list of variables you have to collect the data from various sources in your organization After collecting the data, you have to prepare an Excel sheet and the moment you have prepared the Excel sheet, then you can go to the insert and in an insert, you will find pivot tables, recommended tables, pivot chart, recommended pivot charts and then you can go through it and then you can understand your data better and this you will learn only when you will play with your data in an Excel.

So, thank you. Wish you all the best. I hope you would have learnt about the pivot chart. Thank you.