

HR Analytics

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dear participants, in the first session of Tableau, we had learned how to develop the excel sheet and how to upload it and then make some of how to use this sheet of the tableau to make some graphs some pie chart or something how to visualize the data few things that we had discussed right so in this session we will use the excel that we had developed in the last session the same excel that we will use and specifically we will make some we will do some visualization. So, if you remember in a first session what we had done I had asked you to do some exploration like take some variable put into the columns and rows then see what kind of graph is coming. Are you getting the answer whatever question that you want to you are having, are you getting the answer of the same question in a perfect way? If not, then again change it and see whether change the graph, change the dimensions, change the variables, some change it and just do the exploration right and try to get the answer. If you are getting it, it is good. If not, then just keep making the change and keep doing the experiment. Sometime make a table, sometime make a pie chart, sometime make a bar graph, sometime make a this line graph.

So, it is up to you which graph that you want to make to visualize your data. So, we will do little bit more hands on with the same excel sheet that we had used in the first session. So let us use the Excel sheet. So in last session if you remember we had started this Tableau, this Tableau public that is what we are using.

So in this session also we will use this Tableau public. So if you remember in the last session I have said from where to download, upload this Excel sheet. So here you can see on a left hand side it is written Microsoft Excel. So you can click on this and So this is

the new Power BI, this is the file that I had uploaded. So in that first session that you can see all variable description is there.

So in this session, we will make some of the charts and then we will try to make some of the interpretation. In the third session of the Tableau, we will make the dashboard by making the same chart only. So, here you can see go to the work sheet, the sheet number 1. So, we will move to the sheet number 1. So, here you can see the all variables are there.

So, the line that above the age that you can see one line is there that divides the variable into two category above and below. Above you can see all categorical variables are there and below all variables which are having the numbers that is there. So, in this session with the help of these charts, we will make some of the charts here, some of the data that we will visualize it. As I already said in the first session, before using these variables, the moment you see the name of these all variables, think about your matrix. So, that matrix you will learn in the upcoming sessions.

So, recruitment related matrix, selection related matrix, development, training, performance, compensation, all matrix that we have discussed in the upcoming session. So, related to that you have uploaded the data. Now you need to think about your matrix and then you think which type of visualization that you can use. So for example, let us start with the simple one. You want to know how many male and female are coming for the interview.

So here you can see, so first that below the line if you remember I said all numerical variables are here. So sheet 1 that you can see the count. So how many people are there? That will give you the number. So that number you can see. So you can put it into the rows number right and see like gender put it into the right.

So here you can see how many male and how many female are coming that is what you can see here right. So here you can see that count is there and at the y x axis you can see male and female is there right. So if you want to give a name to this chart what you can do just double click on this seat 1 and then just give a name right. So, you can give a name. So, you can say applicant gender wise applicant.

So, you can write here gender wise applicant this is the title of the chart that is what you can see right and second that name that you can give in the sheet 1. So, sheet 1 you can click write and then you can rename. So, sheet 1 is written the way we do in a excel sheet in the same way you can do here also. So, seat 1 is written so you are doing the analysis related to the gender so write gender. So, here you can write, so now seat is their gender

and that is what you have done.

Now you can see above the gender this standard, entire view, fit, height, fit width, so standard. If you want to spread this chart into the entire seat, then you just you click on this. you can see here, it is spread into the entire sheet. If you want, if you do not like this, then just you can click on the standard one. So, you can see that is how it is presented.

So, that is what you can see, a bar graph is there. But if you want to read, do not want to read from top to bottom, you want to read left to right, right. So, what you need to do, on the top just you can see this ascending on the top that you can see one option is there. So where you can change from top to bottom to left to right that is what you can change it. And now if you want to arrange into the ascending order or descending order.

So you can see next to that one option is there just you need to click on that. So you can see if males are more then you will see male. if females are more then you will see the females. So ascending or descending order whichever order that you want. So that is how you can give the name, you can change the visualizations, whichever visualizations.

So nobody will tell you whether you have to make a graph from left to right or you have to make it straight. So this decision that you will have to take. So whichever graph looks to you good, that graph you can take it. So gender wise applicants that we have understood. So now let us move to the next sheet.

So we will do the next analysis. So next sheet that we have taken, now we would like to know how many people are coming department wise. So department wise if we want to know, so what we can do? We can, again we can write count into the rows right and then department that is what we can write it here right. So here you can see department wise applications are there. So it is from top to bottom if you want left to right just click on this next to this ascending and descending order click on this.

So now you will get this. So now you can see finance, HR, marketing, operations and services. So how many numbers are there. So now you can check for which department highest number of the applications are there and for which department lowest number of the applications are there. If you want to arrange into the ascending order, so that is how you can click on this.

Next to, you can click on this and then you can see it is arrange into the ascending. If you want to arrange into the descending, you want to arrange into the descending you can arrange, if you want to the arrange in the ascending that is how you can arrange. So, it is up to you. So, if you want, so now here you can see on services how many people are

coming, 57 are coming. So, again here you can give a title if you want to give.

So, what title that you can do, we are doing the analysis related to the department. So, you can write department here. I hope it is clear. So department wise analysis that is what you have written here. So department and next sheet that you can give the title again you can give the title.

So what is the title? That is the department. So here you can write department wise. It is clear. So now we know gender wise how many people are coming. We know department wise how many people are coming.

If we want to know how many people are coming and what is their education level. So let us click again on new sheet the way we do in excel. So let us click. the again we will put it this rows into the count and then education into the column right. So now ug, pg and phd you can see again.

So here you can give a title to this chart is education, right, education. So if you do not like this chart, you decided you want to make a table, so just click on this table, right, so here you get, you can get a number. You decided you need a pie chart, right, you can do that. You need bar graph, you can take bar graph, if you need only table you can take a table right. So, here you can give the next analysis like if you want to make this table.

So, you can make a table and you can give the name that is the education right. So, education that you have given education related analysis that you have done. If you want to do any other analysis, so now let us understand about this work experience right. So, how many any like what whoever has applied to various department what is their work experience right. So, we want to know For example, somebody, one of the managers said to you, tell me for which department highest level of work experience is there, right, whoever has applied for the various jobs in our organization.

And that is what you want to visualize. So, what you can do, the way we put the count into the rows, so in the same way we can put this work experience into the rows. And we want department wise, so departments we can put into the column. So now you can see what is there, sum is there. But do you think sum makes any sense for the work experience? So sum may not be the relevant thing.

So what do you do? Just click on this work experience, you will get this dialogue box in front of you. In this just see this major. So what thing that you will see in major, this sum by default you will get it. Now you see what you want.

You want count, click on count. you will get it count, how many people are there, that is what you will get. But count also not relevant in the case of the work experience. So what is the relevant? So relevant is the average. So we want to know how much average work experience is there for the various positions in different departments.

So just click on this average. So, you will get this average work experience. So, now you can tell highest work experience that average work experience who is having this marketing people like whoever has applied for the marketing positions in their organization. So, that is what you can see here. work experience that is what you can see here. Again you want to change the presentation form of this graph, so you can click here and then you can change it.

If you want to increase into the ascending or descending order, you can also do that. So automatically you will know marketing, services, finance, HR, operations. If you want to convert into the table, table also you can do that. So, just you have to click and then ascending and descending and you can arrange into the ascending or descending order. So, here seat number 4, what you can do? Again you can rename this seat and you can write work experience.

because you are doing the analysis related to the work experience. So, just you write work experience and here you write in a sheet you want to give a title, double click on this and this dialogue box will be open. Now, you write a title. So, what is the title? Work experience department wise.

So, this is the title of work experience. this chart. So, now you have clicked on the work experience department wise, if you want to give a specific colour just you click on that, that is also possible. So, whichever colour that you want to give. So, whichever color that you like it is not necessary it has to be blue only. So, whichever color that you want just you can select from here.

If you want to give particular label by clicking on this you can and if you want to increase the size that is also you can do it. If you want to see check the details, you can click on the details and you can check it. Standard view is there. If you want to spread it entire seat that is also you can do that. If you want to fit this width and height that also you can do it.

So that is these are the changes that you can do it by exploring this tableau. So many things that you can do it but you need to explore it but So I'm focusing on this analysis, how you can keep on adding the new sheets and how you can give the title and you can draw some meaning from these charts, right? So here you, if you want to know, so what

is the answer that you can get from this chart? People who have applied for a marketing department, they are having the highest work experience for services followed by services, finance, HR and operations. So that is how you can make a presentation in your department, right? Now third thing that in which we are interested, we are interested in age. What is the average age of the applicants according to the source of their application, from which source they are applying. So in recruitment you must have heard the sources of the recruitment, internal sources, external sources.

So in external sources what are the sources. So what are the average age of the applicant from the various sources. So age that is what you can see here because it is a numerical, so below the line that you will see. So we can put it into the rows. Now we want to check the sources of application, so sources of application. So if you remember I said the moment you will put numerical variable into the column or in rows you will get automatically sum.

But sum is not going to give any kind of inference. So, in this case again you what do you have to do you have to change. So, the moment you will click on this you will get this dialog box. So, in this dialog box now you see what is the most appropriate for the age. Still sum is appropriate, average is appropriate, median is appropriate, count is appropriate, maximum or minimum is appropriate, percentile is appropriate, standard deviation, variance. So, what is appropriate? So, here our interest in average, knowing the average.

So, from the average age that is what we can see in the case of NAUKRI. that you already know I have created this dummy data but dummy data also that nokri.com averages is very high that is the 53.05, 035. This is the average age So now if you want to give a title the same thing that you can do.

you can do the same thing you can give a title, so source of recruitment, source of recruitment that is the title of this chart graph and again here you can change it source of recruitment that I have given. So, making these charts, making these graphs and table is not that difficult because if you have the data just you have to use the software, put some variable into the columns and rows, automatically these charts will be prepared and you will be able to draw some inferences. But question comes which chart that you have to prepare. which table that you have to make.

So that answer you will get from the various matrixes. So which matrix that you will use and what data that has to be collected so that you can understand. So if you know the matrix, dependent variable, understand that matrix and then make a list and collect the data related to it and after that you can make a graph of your choice whichever graph that

you want to make it here. So source of recruitment, so next year that you can add, next year that you can add it here and let us see the, this date of interview. So date of interview just click on this.

describe and check whether it is valid or not. So here you can see the domain for this field has not been loaded. So click load to retrieve. So if you want to make some changes here, so you can click on this.

So domain is 1 to 3 then valid. So now 1 to 3. So, dates are 1 to 3, 1 to 30. So, months is having. So, that is the now we have made it, it is valid. So, that is how if you are not able to make some of the graphs, because in some variables are not valid. So, what do you have to do? You have to click on that, go to the describe, check what is written over there.

If it is written, it is not valid, click on load, make it valid and then make the chart. So, now we want to understand how many people are coming on which particular date. So count that we put into the rows, count that we have put twice, so just I will remove from here and then interview date. So it is sum is coming, sum is not required. So just simple count is required, count of interview date that is also will not make a sense right.

So interview date that is what we need to check count distinct yes. So distinct of count so 1 to 5 so that you can see count of interview date is 4 and 556 right. So 4 dates are there and 556 will be giving the interview. So if you want to see so So on this chart you can click, right click and then you can show toolbar and from here you can increase the size or decrease the size. These are the things that you can do it.

remove right count of the interview date. So, distinct that distinct count that I have done it. So, simple just here I can write count and then let me check by gender wise right. So, here what you need to do you need to make some changes in the interview date format because it is written in 1, 2, 3, 4, 5. So, and but you need to convert into the date month and year format and then you will be able to make the graph.

So that are the changes that you need to make it here. Then only you will be able to make the graph with this. So now if we want to know these cities are there. So what are the cities are there? So again let us click on this, go to the describe and then we can see 4 cities are there. 4 to 5 cities are there, Bangalore, Chennai, Delhi, Hyderabad, Kolkata and Mumbai. If we want to present these cities into the map, so what you can see next to the city that you can see globe is there.

just double click on this. So here you can see this geographical role that you can just you

click right click on this city is there right string default city wise that is what we need to click and change none now it is showing the ABC. So some mistake has happened here just I need to convert into the city yes now you can see globe is there yes yes. So that is what I was talking about the moment you will see convert these things and you will click on city. So now you can see this city wise it is there.

So which data that you want to put it here. So now you want to check it city wise work experience, just put it here. So here you can see that city wise that you can check it. Just remove this.

So these cities are there if you want to give a color. So you can give a color. You can change the color. here right now you want to check from which city how many people are coming right. So, here you can write this city wise analysis the title that is what you can give it city wise analysis right. So, this is the title that you have given here. right and now you can this map is coming this India map is coming in front of you all cities names are there right.

So, now you can see which city is not mentioned. So, Mumbai, Hyderabad and Chennai these are the three cities are mentioned, but how many cities that we have that we can check you know describe. So, we can see here Delhi, and Kolkata is not there. So some problem is there with this. So we need to check what is the status but these cities also will be reflected here.

So that you can see in the dot form that is there. So these are the cities. So now if you want to make some present presentation related to their work experience, related to their gender, just click and check. So, gender wise that is what you can see that is coming. So, that is how you can see and remove. So, what you can do? That is how you can put, you can put these variables and check, you can increase your presentation city wise from which city, how many people are coming, right, by using the map that also you can do it. right so what how many seats that we have created in this we have created the gender department education work experience source of recruitment and this map city map by using this we will make the dashboard in the next session.

So dear participant, till now we have learned how to analyze the data in Tableau. So these graphs that we are making, so these graphs are the matrix. So one of the graph that you can see, so if you want to do the planning for interview, So, these graphs may help you. How they may help you? Because you know how many people are coming, from which city they are coming, whether they are coming or not, what is their expectation in term of their salary that is also there. And then you can see next thing that is there the work experience that is required.

So for each analysis you have seen in this session we have created some worksheet. So some analysis that we have done it. So in the next session we will learn how to make the dashboard by doing this analysis. Thank you.