HR Analytics

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Dear participants, in first two sessions of Tableau, we had learned, in first session we learned how to open the Tableau, what are the functions which are there in the Tableau, right. In second session, we learned how to make various types of graphs by using this Tableau. In this session, we will learn about how to use various types of matrix in order to make a decision. If our interest variable is age or salary or work experience, so if you remember the excel sheet that I used or I had explained in the first session, the same excel sheet I will be using in this session also. to make some graphs, some tables in order to make the decisions. So that is what we will discuss in this session.

So dear participants, if you remember in first session we had used one excel sheet. So in that excel sheet some of the variables were there that I had explained clearly. So in this session we will use these variables. So, this data as you remember I had already said this is the dummy data that I have developed only for the use of this Tableau purpose.

So, in this thing, so let us start. So, in the previous session you have learnt how to make some of the graphs by using this Tableau. In this session, first thing that I would like to make you understand is, let us take this one variable that you can say abc is return this department that I have put into the rows. and I want to know how many members are there in a each department who have applied. So, by if I will put into the column into the counts that is how you can get it.

Second thing that you can do you can put it here and then you can move that is what you can do it. So, that is but these things are not making much sense in this case. So, what you can do in this case just remove this and remove this. Again just check department and if you want to know how many people are there in the each department. So, just check.

So, this sum is coming. So, you can click here and then you can just count So, what is the count? That number that is what you can see how many numbers are there. So, simply if you will put into this table, if you will click on this table, so you will get this table, right. Now, if you want to know in this table how many males are there and how many females are there, right. So, how you will understand? So, what you can do? You can see the gender and that also you can put into the rows column.

So, what you can see now? Now you can see in finance department, male is there, right? In another finance department is male is there and so here you can see there is no female in the finance department, right? So, spelling mistake is there. So, that is why two finance departments are coming. But in each of them there is no female candidate is there. And now if you want to know one more thing, what is their education status? You can add here. What you can see here? Department, gender and education status.

So, the table that you can see how this table is getting more organized. So, what you are doing? You are putting all these demographic variables or categorical variables into the rows. But what is the important thing here? Nobody will tell you, you have to put department, gender, education together. Nobody will tell you this thing. this logic that you have to develop because you are working in the HR department, you know what information that is required, right.

Then accordingly you have to make this table, right. So, accordingly you have to make this table. So, you decided you want to know department wise how many male and female have applied. right. So, you first thing that you selected, you selected the department.

Second thing that you selected, you selected the gender. Now, you are interested to know what is their highest education level, right, whether they have completed the undergraduate, whether they have completed the postgraduate, whether they have completed the PhD. So, what is their status? So, if you want to know this, so you have added education, right. Now, if you want to know along with this what is their source of application, right? So you can put the source of application also. So now what is happening? Now you can see department is there, gender is there, education is there and source of application also there.

If PhD people are there, so that is what you can see here from finance department, most of the people who has PhD they have applied through LinkedIn and Naukri. Undergraduate that is you can see most of them are through LinkedIn and newspaper and you can see the numbers also. So, Naukri, only two PhD people are there and 53 people are through LinkedIn. And in UG, 33 people are through LinkedIn and 9 people are through newspaper. And one more thing that you can see here, all are male.

So, which variable that you have to put into the columns that nobody will tell you, nobody will give you this information. So, what do you have to do? Whatever information that you required, you have to decide and then you have to make a table. So for example these are the three variables that you had put. Now if you want to understand department and then city, you are interested in city, city wise from which city. So now you can see in finance department Chennai, Kolkata and Mumbai and respective numbers are there.

right maximum people applied for the finance department they are from kolkata in hr department you can see maximum people have applied from mumbai followed by hyderabad in marketing 102 people are from chennai right that is what you can see here next thing that you can see here this colour is there right. So if you want to change the colour, you want to give us some that colours highlight something. So what you can do here? So left hand side you can see that colour is there right. Just click on this colour right and click on this add it. Now you can do whatever you want.

So now you can just check this colour is coming automatic. So now you had to select. So, now you can see multiple options are coming, so whichever option that you want to select. So, for example you have put one criteria, minimum these many people should apply from this particular city right so red and green that is the criteria that you have selected and reverse right and just you have to advance so if you will put the center and then you have to put the number so for example you are saying 70 people should be there right from each category and then so i have put a center here just click on this you will see numbers are changed So, here you can see 139 is having the dark red. So, although I should have reversed this because that more than 70 only we needed.

So, only two numbers are coming where it is a red although it should be green. I hope you understand what I am saying. So, again I will go, just let me reverse. Now you can see. These are the, so Chennai people who have applied for marketing 102.

and another Chennai or for a operation. So, it is a dummy data. So, you can see that green colour is coming. So, the red colour, so we had put this if people are less than 70, then we will not conduct the interview in that particular city. So, which city is qualifying that Chennai that you can see in a for a marketing area and for operations area because for both cities the number is more than 70, right.

So, that number is not important that I hope you would have learned this table that you have made make it more presentable how you can add the colour into it. So that is what you would have learnt. So that city that I have put. Now you are in, you want to know whether these people wants to come for interview or not.

So source of application. So one second. let me remove this, so status of interview. So here you can see coming, not coming, how many people are coming and how many are not coming, so that is what you can see it. So what is my suggestion is by using these demographic variables, so if you remember this line is there, above the line you can see all categorical variable is there, all numerical variables you will see below the line. So, simple one numeric variable that is what we have used that is the count, number in which department, which number is there.

Now, you have to decide the combination of these demographic variable in order to make these tables and what information that you are needed. So, you can see department, city, status of interview, gender, education, source of application. So, simply if you want to do the analysis of the source of application, right? From which source how many people are coming, right? So, now just you put a source of application, right? So, source of application you can see LinkedIn, indeed by its highest LinkedIn, newspaper, these are the sources. So, in color if you say again added And if you say go to this advance and advance just go to reset, so it is automatic, no you need to select here. So you can select one of the, so I have this red and green, this is the color that I have selected.

go to this advance and in a advance centre and this number that I have I am putting let us say I am putting this number 60, right? I have applied. So, now you can see this number. So, that how this table graph that the colour of this various number that has been changed. So, if you want to highlight particular number and want to give cut off like 60 is a number, so you can see a NAUKRI, next time we will not invest in NAUKRI because from the NAUKRI we receive 57 and our minimum criteria was there has to be at least 60 application from the each source, right. So, from NAUKRI we are not getting.

So, that is how you can represent the ineffectiveness of the recruitment source, right. Now you want to know gender wise from which source how many people you are receiving, right. So, now you can see the source of application is there and gender is there. Now, if you want to check it with the education also, so now you can add the education and then you can see how it is keep on changing and keep on adding. So, that is how you can see how I have selected only one variable, that one count that I have selected and based on this count how it is changing.

I hope you can understand and what are the decisions that you can make related to the source of application in the same way related to the gender, education, department, city. So, what are the decisions that we can take related to it? This is the one of the way that you can see. Next important thing that you might have heard about the, you might have heard about the word cloud. Now if you want to know like this is the one of the way of presenting into the table format. Now if you want to put it into the word cloud format.

So how you can do that? Have you ever thought? If no, then let us understand how you can do that. Right? So let us understand the source of application. Right? So that I have selected and I have put into the level. Right? I hope you can see next to the colour, right? Level that I have put.

Now, next is their color label size. So, in size I am going to put this count. So, in size that I have put a count here. So, what you are able to see here? The source of application indeed is there. So, here same color is coming, same color is coming. So, just let me go to same color is coming here.

So now if I want to check, did you get it? What happened? So if I want to present into this circle format. So what I did on right hand side you can see various graphs will come. So one of the graph that is coming this circle format. So just you have to click on this and then you will get this. Now can you see this various different types of colours are coming and different size of circle is there.

So big circle indicates that the huge number of application, right? So here you can see indeed the inner blue colour, right? And here you can see newspaper 132 and this NAUKRI you can see 57. So circle size is small, it indicates that less number of application we have received. So, in this we can give the color coding also, we can give a color coding which color that you want to present how. So, that is the color coding also you can do it by clicking on the color and which is the qualifying color if you are putting this limit 60, 70, 80 and then you will see other these remaining circles will get that color and other will get a red or whatever color that you are putting into it.

So, that is how you can make this. If you do not want, you want to put it into the just text format. So you can see above this color the one marks is there, marks are there and below the mark there is a drop down is there. So once you will click on this and then you will see lot, so many options will come here. So what do you have to do? Just click on this text. So now it is converted into the text, Now, you can see NAUKRI is a red colour, right? Newspaper is this, website is this, Indeed is this, LinkedIn is this.

So, here one more thing that you can see, the size, the size of word how it is written, right? So, Indeed is having the maximum number. So, you can see here it is bold, right? And here newspaper is little bit less. So, you can see it is lesser than the indeed one, in term of the breadth. So, that is also, that is how you can convert into the sources also. Similarly, so what I have done here, that is what you can see, that is how I have created this word cloud.

Similarly, you can create the word cloud by using the number. So, I hope you would have

learnt this word cloud and this tables by using this count. Similarly, you can make the tables for other variables also. So, let us make the table for this age. Let us say we want to understand the age related thing.

Till now what we were talking, we were just thinking, so one variable that we had taken, we had taken the count. Now, we are, we want to understand related to the age. So, what we can do? We have taken this age, it is a numeric variable. So, that I put into the column. Of city wise age that let, that I have put into the rows.

So, here sum is coming. So, I will click on this, go to the major and then average. So, averages has come. So, I have converted into the table. So, here you can see the average age people who have applied from various cities that is there. So, here you can see the highest average age is from Mumbai 47.

25, no, no, it is from Chennai 47.28, right, from Mumbai 47.25, right, then 43, 41 and 24. So, the Bangalore people who have applied from the Bangalore, they are the youngest one, right, that is what you can see from this table. Now, if I want to know from the department wise also, so what I can do, just I can remove this.

So, department wise averages is there. Now, I want to know department and gender, in which department, which gender have, is having the highest averages or not. So, that is, that is how what you can do, you can make the various types of table. So, I hope you would have learned how to make the table. So, simple my suggestion is before making a table is what do you have to do? You have to decide what are the demographic variable is available with you and what information that you want to know.

Simply if you want to know what is the average age. of female candidate who are applying to marketing department, right. So, that graph that I had shown to you. If you want to know from which city highest averages is there, that is what I have shown to you. Department wise that I have shown, education wise, right, if you want to know education wise, right, so then you can do that also education wise. So, just put into the column and put education into the rows and sum is there.

So, just make it average right click on this table, so you will get this table. So, UG people who are are applying, they are their average age is 46, PhD people is 44 and PG people is 46.2 and UG people 46.6. So, here you can see this is the answer that we are getting it by just making these small tables.

If I want to know the gender, so you can add gender wise also. So, if I, you are interested in source of application, so you can add this source of application also here, from which

source. So, that is how, what do you have to do? Nobody will tell you which table that you have to create. So, which information that you are required, these all variables are available with you, you need to think about these all variables. and then just get the answer by making these tables. The table that you can make it, bar graph that you can make it, and other graphs also that you can make it.

And I have discussed how to make this word cloud also. So, word cloud how you can, so that number is there, so number is there, so that age is there, this age is there. So, we were talking about this age, so if you remember I said just age put into the level. let me numeric we will put into the size and the source of application that we will put into the level and age we will put into the, so here you can see sum is coming. So, first we need to change into the average. So now this is the average age is there right and just click on this you will get according to the average.

So here you can see the average is from the knockery is highest. Earlier we had discussed the number that count that we had discussed. So in the case of Naukri it was the lowest but in the case of age. It is a, in the case of average age, Naukri is having the highest average age. So, that is the 53. The colour that you can change by clicking on this colour, added colours and that is how you can change the colour, right.

So, thank you participants. I hope you would have learnt how to make, use the tables to get the appropriate information and how to make the word cloud by using this tableau. so in the next session we will learn some more tables, some more graphs and how to make the matrix related to some other variables. Thank you.