HR Analytics

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Dear participants, so we have covered three sessions on Tableau. So, this is the fourth session on Tableau. In this session, we will learn how to make the matrix and make the decision related to it. So, in this the dummy data that we are using in the previous session, in this session also we will use. So, three important variables are there age, work experience and count that number. These are the three variables are there and then we will see as a manager at a workplace when you are working at a workplace what kind of question that may be asked to you.

right, and this data is along with you how to make this data, how to make this, generate this data, how to make this table, how to upload on Tableau that we have already covered in the previous session. So by using this data, how we can make the decisions related to this HR, related functions that is what we will understand. So, this data is related to the recruitment. So, we will understand how to make the decision related to the recruitment and three important variables are there and then so that is what we will learn about it, how we will do it.

So, let us start the practice on Tableau and let us learn about these matrices. So dear participant, this is the fourth session on the Tableau as I already said. So in this session we will learn how to make the decision related to various variable. So first thing that you need to understand when you are selecting this matrix, so let us take, you can read these all variables carefully. So let us assume you are, this time you are interested in salary, which department people want more salary.

So that is the, that is the your interest variable here. So you have put salary here and if you want to know department wise, So, you have put it here, right. Let us check the department wise, yes. So, here you can see this graph and you can arrange into the ascending or descending order so that you can see marketing people that is the. So, here you can see salary in a sum format because sum is not required, average will be the useful, right.

So, here you can see average, now you can arrange into the ascending or descending order. So, here you can see this is the salary is there. So, which department people are asking the highest number of salary that is what you can see here. The services, services salary that is the highest followed by finance and HR. So, what you can interpret from this? So, average salary is there, department wise is there, for which department people are asking how much salary.

So, if you want to make a decision about how much if you will hire these many people then what would be the amount that organization need to pay extra like that the cost that cost per person that organization is going to bear. So that expected CTC that is what you can write here and that is how you can analyze. So, what is my point is here, first you need to identify your interest variable, interest variable that you need to identify. So, if it is your interest variable is salary. So, this is the one graph that you have made it.

Second, let us take now you can add another sheet and your interest variable is salary. Let us assume you want to know various salary according to the department wise sorry education wise right. So, here you can see education. So, sum is coming, sum is not required by default sum comes. So, we will go to the majors and select average and then we will get the average here.

So, average salary that is asked by the PhD candidate that is the highest one right right and followed by PG and then UG. So, that is how you can see if you do not want in graph form then you can make a table also. If you do not want in table you can make it in circle format also. So, whichever format that you like you can make it, whichever format that you write you can make it. So, that is how you can change vertical to horizontal.

So, salary education wise. Next sheet that you can open, let us assume you are interested education wise, department city wise, right? So, salary that you can put into the rows and then city wise, so that you have put into the columns. So city wise sum is there, sum is not useful. Again we will go to the majors, we will convert into the, we will convert into the average. So now the average salary is coming.

So which city? Mumbai people are asking the highest city. So such kind of questions that a manager has to answer at a workplace. So what you can do? So you can create these all sheets right that these all sheets that you can create right if you remember in the right that

is how you can keep creating the all sheets and finally you can go to the dashboard and then you can put all these variables on single dashboard that is what I have already discussed in the second session of the tableau. So, what is my point here? First you have selected one interest variable, right? Whichever variable is interesting for you, whichever variable. So, this very, I have taken the example of the salary.

So, salary related all questions that you ask, you ask the all questions that you have to answer to your manager, right? and then think whether you are able to get the answer of these questions through your data or not. So some of the simple questions that you can see which department people are asking for highest salary. So if we have this graph we can tell you how which department. So simply that you can see it is already arranged in the descending order. So services people are asking the highest one.

If you do not want this bar graph you can put it into the tables also. You can put it into the bubbles format also. So there you can see the services are asking highest and finance people are asking the lowest right followed by second finance right. So that is how you can make it this also. So keep asking the question.

So department wise that you have done the analysis, you have done the education level wise and next you have done the city wise. So let us do the one more analysis. So I have created the fourth seat and my variable is interest variable is salary And let us do this source of application. So, source of application according to the source of the application so that you can see that newspaper people are asking the highest salary. People who have applied through the newspaper, they are asking for the highest salary.

Indeed, right, LinkedIn and then Naukri and then we can see the website. So, website people are asking the lowest and people who have applied through the newspaper ad they are asking for the highest, right. So, one more sheet that we have created for this. Now, if we want to know this status of interview, people who are coming for the interview whether they are asking for the highest salary or is there any relation with this salary and status of interview, right? Let us see, let us see what it comes, let us explore. So, I have put this salary into the sum sum is there, so sum we do not use, we will go to the major and we will convert into the average.

And then we will see the status of interview. So here we can see people who are coming for interview, they are ask their average salary expect expectation is lower than the people who are not coming for the interview, right. So, this data indicates that there could be some of the relation. There may be relation, I am not saying this is the reason, salary is one of the reason But it could be one of the reason, right? It gives you the hint because people who are coming, their salary expectation is less and people who are not coming for the interview, their salary expectation is very high, right? So, such kind of questions, this is

how you can see the nature of variables and just keep asking the questions to yourself, right? So, now what you can do? like I have created here 5 sheets, 5 sheets that I have created here related to the salary. So, salary related questions you develop all those questions for which you want to give the answer.

for which you want to give the answer, you develop all those questions, see your data and then go to that data and make the graph and just keep adding your sheets. And once you have completed the all sheets then you can go to your dashboard, you can tag it salary and then you can put all graphs over there and then explain you can tell a story through about the salary right through these various graphs right that graphs that you have made right and how to give a name also to these all graphs so the to these all sheets. So, if you remember I had told just you have to click on write and go to this rename here you can write department, next you can go then you can write education, next you can go then you can write city, then you can go to the status of application, source of application and then you can go status for interview. So that is how you can tell a story through the data about the salary expectation of various application right and that is how you can make a presentation to your senior manager this is the thing right next so for example similarly i am going to take one more variable that is the work experience right so work experience so i want to know who is having the more work experience like according to the various city So work experience that I have put it here, right, and city that I have put into the, So, here sum of the work experience is coming. So, till now I hope you would have understood sum of work experience is not useful.

So, we will go to this average. So, here we have gone to the average. So, average work experience that we can see city wise, city wise that work experience that is what we can see here. So, Bangalore people are having the lowest work experience and Hyderabad people are having the highest work experience. The city wise work experience so we can go to this now we can you can add that male and female who is having the more work experience go to this rows put the gender into the columns right now you can see who is having the more work experience.

So, you can see male candidates are having the more work experience than the female candidate right. This is clearly visible here. Male candidates are having more work experience than the female candidate. If you want to put it into the bubble form that also you can do it here through the colours you can say. So, first thing that you understood that department wise now work experience male and female wise now let us see this work experience.

So, I will add one more work experience as per the which one you can you want to source of application. Let us go to the source of application. So, here you can see the source of application. So, indeed people are having this the sum of work experience is coming. So, let me convert into the average.

So, source of application, so you can see here website people. So, people who are applying through the through the website, giving the application through the website, these are the people who are having the highest work experience here. Let us create the next one, next sheet and then just let us education wise, let us understand education level and work experience, how they are related. So, work experience and then source of education, then education. So, the column that I have put into the, so here you can see the people who are undergraduate they are having the, this is the sum again I have to convert into the average.

So, here you can see this 9.68 is the average work experience here and PhD people are having 3.3. UG people are having 3.

3 and PG people are having 4.3. So, that is how you can see here the average work experience education wise. And same thing that we can create one more and then we can average experience that we can see for people who are coming for the interview and not coming for the interview. So, let us it is a sum. So, let me convert into the average. right So, average people who are coming, good news.

So, you can say that this is the good news. People who are coming for the interview, their average work experience is higher than the people who are not coming for the interview. So, you can see here, you have this data. The moment you identify one interest variable in which you are interested and then develop the all questions for which you want to get the answer. then see the data which is available with you, right, see that particular data, data which is available with you and check whether you will are, whether you are getting the answer or not, right.

So, if you are getting the straightforward answer through your Excel, right, it is good. If you are not getting the answer, then what you should do, right, then you should think, what kind of changes that you can make in your, in your data. In your data what kind of changes that you can make it, right, how you can make the changes, right, what you can do it. So two options are there for that. Once you can go to the analysis, right, you can go to the analysis and then you can create calculated field.

So you will get column like this, right. and this column that you will get it. So here you will see this all is written. Once you will click on this, then you will get these all types of the calculation that you can do, right. So if you have to do the calculations on number, then you can select the number. Then you will get these all functions related to the number.

So, click on each function, now you can read the example of the each function is here. Return the arc sign of a number, the result in the radiance, an example that is. So, whichever function that you want to use, so floor is there, deviance is there, experience is there, degrees is there. So, you will see the definition of this function also in the dialog box. The

definition is there, what this function mean, what is this function does, right? That is what you will get it.

So, you read these functions carefully, right? And then you can go to this string. So, once you go to this string then find, find net and with, right? here. So, what kind of calculations that you can do with your string data? So, string data is nothing but this ABC which is written here in front of the data that you can see, globe is there, ABC is there, right, hash is there. So, hash indicate that it is a numerical data and ABC indicates that it is a string data. So, what kind of calculations that you can do with the string data that is what you can see here, right.

Simply, you can see here these functions definition is there. I cannot explain each and every function here. Few examples that I will take and explain in the next session, but in this session just try to understand these all functions are there. You need to read the definition, you need to develop the formula. and then you have to create that particular variable.

This you have to do only when when your excel sheet is there you are not able to get the answer of some of your questions right and then what you can do you can make the calculation you can get the information available by multiplying some of the things by dividing some of the things you can get additional information right with your variable right and then you can use it this then you can develop the variable that particular variable and accordingly you can do the analysis till now we were keep doing that. right and here you can see a date function is there so date function is there so if you want to know for example we are using this recruitment data so date function is there so how we can use the date function so let us assume that you want to know how many people join the department on time and how many people join the department or organization after the their joining date right whatever joining date which was given to the employee after that how many people joined and on time how many people joined if you want to know or you want to understand that average delay right so for that you can use this date difference right difference between two date right where is the one is start date and one is end date. So you can see the definition what is return? Returns the difference between two dates where start date is subtracted from the end date. So start date is what? That date of joining.

and subtracted from the end date. So, end date that is what you can see. So, the joining date minus you can say joining date for example, your joining date is the 4th January. But you joined on 4th August. So, 4 August minus 4th July and then you will get the number of days. So, you want that the difference in term of the number of days, you want the difference in term of year, you want in term of months that you can mention, you can develop the formula and you can get that particular variable here.

So, this kind of calculation we will do in the next session. So, before the next session my

request is you have seen this function. So, I said you can go to this analysis and you can click on the analysis and go in analysis go to this create calculated field. right create calculated field go to this and then you will get the all. Once you will click on that and so here I had given the name by default it has come the calculation 1.

So whatever name that is what you will give that variable will be added here right here it it will be added and then you can do the similarly you can use this variable. So if this variable in nature number then it will come below the line, if it is in nature text then it will come above the line and then you can perform the all functions that we were put the way we were dealing these numeric and text variable. So similarly you can use this variable also that you have calculated and you have made it here. So in the next session that is what we will discuss how to use this calculated field and then we will finish with this tableau So, dear participant in this session we used three important variables age, salary and work experience. and discuss with you how you can use this information in order to make a decision at a workplace.

So, first thing that you need to do once the moment you have this list of variable, you need to select your interest variable any which is interest variable means related to which variable you have to make a decision. and then ask all those questions that you need to answer at a workplace and then just keep performing, keep making this table, graphs and see whether you are getting the answer of your questions or not. If you are getting the answer, it is okay. If not, then I have said you can go to the analysis, you can use this calculated field.

That is what we will discuss in detail in the next session. But I hope you would have learned how to select your interest variable and make the various types of graphs and tables in order to take a decision. Thank you.