

HR Analytics

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Dear participants, in first session of the selection analytics, we had learned few metrics that may be useful for you to answer the today questions which you are facing at your workplace, right. So, in addition to that, in continuation to the first session, in today's session also we will learn about some more selection matrices. So, before this just I would like to tell you in first in this week first three sessions you would have learned what is the selection process in any organization and what are the challenges that one manager face. in the organization related to the selection. So, how these challenges can be solved through these matrices that is what we are learning in these sessions. So, I hope it is clear to you.

And few questions that I had already discussed in the first session of the selection analytics. So, if you are having more questions you can develop more questions. And try to identify the answers of those questions through these matrices and you can develop some more matrix also in order to identify the answers of the selection issues in the organization. So, in this session We will learn the about the four things that we will discuss in this session.

First thing that we will discuss the consequences of cut scores. So when you have to select any candidate you have to decide the cut score, right. of a interview, of a ability test, intellectual ability test, any test that you are conducting for that you need to decide the cut score. So, above that few participants will be selected and below that participants will be rejected. So, that is what you need to do being a being a manager.

Second thing that you need to decide whoever is selected, whoever is above the cut score. You have selected, you have made a job offer to them. Now you need to assess whether they are quality candidate or not. So that is what we will learn how to calculate the quality of hire. Third important thing that is what we will discuss the cost per joinee.

So what is the cost per joinee because it will tell you how much that amount that is increasing year by year in the selection process that one organization is spending. So, it is important to calculate the cost per journey. The next important thing is that we will discuss the outcome of the selection process. If somebody ask you, how was the selection process, whether it was good, bad, worst. So, how you will be able to give the answer through the numbers? So, what is the outcome of selection process? So, these are the four matrix that is what we will discuss in today's session.

I hope these matrices will be able to help you to answer the few questions at a workplace. So, let us start with this consequences of cut score. So, in order to understand the consequences of cut score, we can divide this we can develop this 2 by 2 matrix. So, one side we can write successful and unsuccessful, no higher and higher, right. So, let us take one example.

So, here let us take one example, the 100 marks are there and out of 100 we have kept the cutoff score is 50. But above above 50 only 5 participants are qualifying, but we need 10 participants. We need 10, but qualifying only 5 participant. So what we should do in this case? We should reduce the cut-off percentage or we should increase the cut-off percentage and then we should go for another recruitment and selection process. If we go for another recruitment and selection process, then you can understand again we have to start with the recruitment.

We have to give job advertisement, new people will come, selection, right, selection dates, interviews and then again we have to select the candidate. So, that is the one option is available and second option is available, we can reduce this cut-off score and then we can calculate, we can increase the number of candidate in order to fill the seat. So, what we should do? So, if we are reducing the cut-off date, then what will happen? it will go down right. So, currently, the candidates are unsuccessful. Currently, candidate is unsuccessful, but the moment we reduce it, then they will become successful, and they will qualify, but they will come under the false positive.

So, first category that you will get it here the false positive if you will reduce the cut score. So, 5 candidates that we had discussed who have scored above 50, so they will come under the, this category successful and higher as per the cutoff that which was decided, so 5 candidates will come here. right. In the same way we can see for this no higher, right. So, we can see this no higher and unsuccessful, right.

So, here we can see what happened people were not able to score above the cutoff store, right. So, that is why they are they are unsuccessful and we are saying the rejected candidate

will come under this true negatives, right. But what happens when we reduce the cut-off score? Then, we get this false negative. Similarly, if we discuss the another case, what is happening? We need only 5 candidates, but need only 5 candidates but cut off score whatever cut off that we had decided for the participant we have received the 10 candidates. So now what you have to do in order to reduce these 5 candidates you have to increase the cut score.

So the moment you will cut the score you will increase the cut score then what will happen? These few candidates will come under this category that is the false and they were successful but we could not hire. Why we could not hire them? Because we do not need them but more quality candidates have come here and they were able to qualify our cut off scores. So that is why in that case we will get the false negative. So before deciding this cut off score, we can do this analysis, we can do here analysis if we need 10 candidates, for a 10 candidates what should be the cut-off score. So, if we decide the cut-off score then how many people are above that and how many are below that, right, how many people will come under the false negative, false positive, true positive, true negative.

So, that is the calculation if we can do it before, at the time of this selection. Or based on the past data if we can do this analysis and then we can decide the cut-off score. Because if we are getting the more false positive, this, so that will not result into the good selection, good out, that will not result into the good selection outcome, right. If we, so what should be our target? Our target it should be to get more and more true positives, right. So, people who have score the above the cut-off score and we have taken a decision to hire them.

So, this should be our target. So, that is how we can analyze the consequences of cut scores and then finally we can decide what should be the cut-off score for any test that we are going to conduct in our organization. Whether it is ability test, whether it is interview. So, based on that we should decide the cut-off score, how many people are there, if we will keep this cut-off score then how many will qualify, how many people are required. So, that is how you can make a matrix and based on that you can finalize your cut-off scores in the organization for the final selection.

In addition to this, one more thing that I can say, you can prepare a composite analysis of scores, you can add the score of multiple test that you have conducted to select the candidate, right. So that is what you can do it right and then you can decide the cutoff scores. Next thing that we will learn that is the quality of hire right. So whatever the as many as people that you have finally selected or you have given the job offer so how these people are whether they are the good candidate for the organization or not. So, what is the process to calculate this quality of hire? So, first parameter is PR.

So, average performance review rating of new hire. So, let us take the example, we have hired the 100 salesperson in India. in marketing or sales department right in any organization. So, what is the average performance rating? So, let us assume the performance is measured on 1 to 7. So, somewhere close to 5, 5.

1 is the average performance rating of all 100 new sales hires. So, that is how you can calculate the first parameter for the quality of hire, average performance rating. Second parameter is their percentage of new hire reaching acceptable productivity level within the prescribed time period. So, here whatever standard that we have selected for these new people. So, let us assume we have decided they will achieve their target.

So, target so goal setting during the goal setting that is what we will learn in performance management. So, during the goal setting for each employee is given the goal. So, for each goal, we have decided new hires should be able to achieve 70 per cent of their goal; right, first-year minimums, they should be able to achieve 60, or 70 per cent of their goal. If so, whether they have reached this 70 per cent or not, if their sales target is 1 lakh, so at least they should be able to achieve 70,000 rupees. right in that one particular year.

So, if they are able to achieve that then we can say that they have reached to the prescribed level of productivity within the time period. So, what is the percentage? So, out of 100, how many of them? What is the percentage? So, 40 percentage people have reached. So, 5.1. So, for example, 40 percentage have reached.

So, 5.1 is the PR plus 40 is the HP and next one is percentage third one is HR percentage of new hire retained after 1 year. So, after 1 year, How many new hires are working with the organization? So, let us assume it is 80 percent, 80 percent of the people are working after one year also. So, now we can calculate these all three numbers and then we can divide by 3. So, whatever score comes, so 40 plus 80, 120, 125.

1. divided by 3. So, this will give you the quality of hire. So, every year you can check your quality of hire is increased by what percentage, whether it is increasing by 2 percentage, 3 percentage, 4 percentage. So, if it is showing the increasing trend then no need to be worry. if it is showing decreasing trend then you have to be worried. So you have to take some decision about how you can increase this quality of hire.

So now three components are there. So it suggests the way, so first thing, first two components are related to the performance, right, productivity and performance review. Related to the performance, so you need to check the whether their person job fit was poor or good or bad. That is what you can check during the interview. If it was good but still they are not performing, it means you need to rethink about the assessment test because it

indicates that your test is saying this candidate is good but still they are not able to perform, it means there is a question of validity of that test. So, you need to check whether that test is applicable for that particular, applicable to assess that particular test, particular skill or not.

If it is not, then you can think about changing the assessment method of these people. Second one is retain, whether that person is able to work for that particular organization more than one year or not. employee is not working for more than one year, it means that organization fail to assess the person environment fit. It could be team fit, it could be supervisor fit, it could be organization fit.

So, they fail to understand. So, because of that people are dissatisfied and then they are leaving the job. So, you need to think about some other fit also in order to improve the quality of hire. So, that is how you can calculate the quality of hire, you can make multiple predictions and in while making a report about your organization, when you are writing the selection report and which you need to submit to a top management in that you can use this statistics and you can say your quality of hire has increased by 10 percentage, 15 percentage from this particular year to that particular year. That is how you can quantify the success rate of your selection process, right. So now let us go to the next slide and let us understand the cost per joining.

So if you have to calculate this cost per joining, right, so here you can write year, like 2023, 2024, 2025, 2025 is not going but for example just I said just you write the year this side and this side you can write the number of joining. So, let us take 1000 people have joined and total cost was 72000 these all are imagery numbers hypothetical numbers right. So, just 72000 divided by number of 72000 divided by 1000. So, this is the total cost for hiring the 1000 employees.

So, here it is divided by 1000. So, it comes the 72 rupees or 72 rupees per candidate right. So, that is how you can analyze every year whether this cost per hiree is cost per joinee is going up or it is going down. So, if you want to decrease here and then you can make a decision about the technology whether you can use the technology to reduce the cost per joinee or not. So, if you believe you should reduce it then you can think about the use of technology and before using the technology you can assess the technology readiness of your organization and after that you can think whether you should implement the new technology in order to assess your candidate or not. And that is how you can make a decision about this cost per joinee.

If it is going high and high then you can think how you can reduce it and it can give you a measure why it is going up and up. So that is how you can think about this cost per

joining. Next important matrix is that is the outcome of selection process. outcome of selection process. If your manager is asking you, how was your selection process? It was good, it was bad, it was average, it was poor.

So, how you will decide that outcome of that selection process? So, what would be the parameter? So, here what you can do, you can make 2 by 2 matrix. So, here you can see, I have 4 categories. A category, B category, C and D. These are the four columns. So now we will understand how we will analyze the outcome of the selection process.

So this side that you can see good and poor is written, selected and not selected is written, right and here actual performance of potential candidate. So, actual performance. So, when actual performance will come? After joining the organization. Somebody has joined. So, if you remember during the recruitment we had discussed about the potential So, through the potential that we had measured whether this candidate is having the potential or not.

So, the moment you have understood this candidate is having the potential, then that person should be able to convert his potential into the performance. So, if so now we will check after joining whether that person is able to convert his potential into the performance or not. So, based on that only we will be able to identify we will be able to tell that what was the outcome of our selection process. So, in some organization you will see this performance appraisal takes place within 6 months, any half yearly that you will see, quarterly you will see and annually also you will see. So, two method that I suggest for this actual performance of potential candidate.

One method that I suggest you can take performance rating. So, in each organization performance appraisal is taking place. So, after this performance appraisal process performance rating, performance rating will be there with you. So, that is what the performance rating that you can take it. Second thing that I said the percentage of goal achievement.

So, goal achievement. So, whatever goal during the goal setting process, whatever goal that you have decided with the help of your manager. So, what is the percentage of that goal achievement after 6 months, after 1 year, after 3 months, so that is what that is the thing that you can use it. So, here you can see 2 categories are there, good and poor, right, selected and not selected, right. So, for not selected candidate you can see if you have not selected they are somewhere else. So, if you can get the information about them how they are performing.

So, that is what you can just think of whoever is there in your organization to whom you have selected. So, now you can check it. So, how you can check the number of candidates

are there. performance rating. So, let us assume your performance rating you are scoring 1 to 7.

Now, you have said if somebody who scores less than 3.5 that is a poor performer in a 50 per cent less than 50 per cent of rate 50 per cent rating is there that poor performer and somebody who scores above 50 per cent is that you can say a good performer, right? So, here you can decide like out of 100 how many people are coming under this category good performer. So, let us say 25 people are coming under the poor performer and 75 are coming under the good performer. So that is, that is the, that is how you can divide it. And people to whom you have reject, not selected, people who are not selected, so that also you can decide on the basis of this performance rating. But for that you need to check with the organization where they are working.

and if you can get the data and then you can write so that is what also you can understand that is how you can understand how many quality employees that you left out you could not select during the process what is the percentage of the employees that you could not select right they are performing good but not selected right poor performer okay we are not bothered because we do not want to select the poor candidate but so here you can see a people to whom you should not select that is the C category, poor performer but selected that is the organization do not want to select. So, now you can do the analysis of these students, these participants or these candidates who why they were selected, where your assessment method went wrong, and here you can do the analysis of why these candidates were not selected although they were good performers but they could not be selected in your organization. So these two analysis will be very very important if you can identify the candidate and you can do the analysis of these two these two categories. So, that is how what you can do? You can calculate the outcome of selection process. You can divide it into 4 categories, and you can calculate the total number.

after dividing it into 4 categories, you can analyze these two categories: why poor performers were selected and why good performers were left out during the selection process. So it will help you to categorize the candidate into the four categories, will help you to understand the selection process better. So, that is what will happen. So, I hope in this session you would have learned about these four matrices.

So, four things that you would have learned. First is consequences of cut scores. So, if you whenever you are deciding the cut score, so what will be the consequences. Second thing that you would have learned how to calculate the quality of hire. Third thing that you would have learn cost per joining. Fourth thing that you would have learnt outcome of selection process.

So, I hope you would have learnt these four concepts in this session. Thank you.