

HR Analytics
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Lecture 26: Selection analytics- 4

Dear participants, in this session we will learn something more about selection analytics. So, in this session we will use this bio data, how you can use this bio data in order to select the candidate and how you can develop the matrix in order to select the candidate based on the bio data. So, that is what we will understand. In addition to that one more thing that we will understand that is the use of technology in the assessment. So what are the parameters that you should consider before utilizing technology in the employee assessment. So that is what we will learn.

So let us start with the content of the presentation. So, first thing that we will discuss the use of bio data in the selection analytics, right. So, what is the use of the bio data in the selection? So, in the selection and the two type of data is there verifiable data and non-verifiable data in the bio data. So, that is what we will understand.

Next thing that accuracy of prediction, that accuracy of you can make a prediction about the candidate based on the bio data, whether this candidate will perform better in the interview or in the test or not. So that prediction that you can make based on the bio data. whether your, how accurate you are in term of predicting the candidate performance in the interview. So, that is the matrix, that is what we will understand, we will discuss. Next, the use of technology in the assessment.

So, whether we should use the technology in assessing the candidate or not and when we should use and what are the parameters that we should consider before utilizing the technology in the assessment. So, use of bio data, so bio data like this is the mandatory condition for all candidate in order to apply in any organization. When they are applying for the organization, they have to submit their bio data. So, in the sometime you will see in that form of the website. Website is there and on a website, candidate are expected to fill the entire detail on the website and then they will submit the form.

Second thing that might be organization if they are not having the website standard website then directly they ask candidate to submit the CV. They directly they ask candidate to submit the CV, in that complete demographic detail is there like what is the age of the candidate, from where he is passed out, how many companies he has worked,

right, so that information is there. So, this entire bio data that CV, that CV information you can divide into the two parts, one is a verifiable data, another one is non-verifiable data. Non-verifiable data like attitude, right, attitude towards the job, like you ask a candidate to write something about the preferences, right. So, that candidate has written, has aligned his personality trait, his preferences in order to get the job.

So, it, it may be difficult for a interviewer, for a organization to verify that particular data. Right, but some form of data like number of year that person has worked, what is the age, such kind of data that you can easily verify. So, first thing that you need to do whenever you get the bio data or CV of the candidate, you need to divide this data into two category, verifiable data and non-verifiable data. So, some of the example of the verifiable data that we will discuss. So, what are the verifiable data that you can verify in the CV that is there like age.

So, age whatever age that candidate has mentioned, date of birth has mentioned. So, based on that you can verify this data through the mark sheet right and work experience how many years of work experience that person is having number of jobs held in the next 5 years, time in one position, marital status, living arrangement whether that person is living on rent, home and living with the parents, personality test results right MBTI and big five factor. These are the two tests. So, what are the results of that test? Performance rating, if that employee is working in any organization. So, performance rating of that employee, education background and family background.

These are the, this is the information that you can very easily verify about any candidate. So, now question comes, what is the use of this information? Based on this information, you can make a prediction. About the candidate like that in a selection process that you already know that in a recruitment you have attracted the candidate who have applied in a selection in now you are rejecting the candidate right now you are rejecting based on certain criteria. So, this verifiable data that you have checked in the bio data and based on this you are trying to predict what you are trying to predict you are trying to predict whether this candidate will perform better in the organization or not or this how this candidate will perform in the test or interview right so based on this you can predict like the kind of work experience that person is having what kind of jobs this person has done like for example somebody has changed six jobs in last five year for example. So, this is that number that you have.

So, you know you can see every year this person is changing the job. So, you can predict if this person is selected also then also this person may not be staying in your organization more than one year because that is what this trend shows. Last five organization that he has changed very quickly and the time is spent on one particular

position, marital status, living arrangement, whether that person is living on rent, home, living with parents. So if somebody is living on rent, that person may switch the job very quickly. Somebody is having permanent home, living with the parent, that person may not switch the job.

So, such kind of things that on the basis of this verifiable data you can make a prediction about the candidate and then you can make a, then you can decide whether this person will perform better or not in the overall employee selection process. So, before starting the selection process, you can make this decision about the candidate based on this verifiable data. So, this is the data that we should use in order to make a prediction. Why? Because you can verify this data. So, reliability of this data or validity of this data is more than the non-verifiable data.

So, in the case of non-verifiable data, so like somebody you are asking the preferences. So, when somebody is applying for the job right somebody is applying for the job so that person may give a preference like which will suit to the job right and that person may not like some of the things, but still that person is saying why because that person wants that particular job like next self-description about the ability self-description about the ability so most of the time persons likely to Rate very high for their abilities at the time of interview because it is a self-reported data, self-description. So, most of the it is a tendency of the candidate to give a higher rating to their candidature to their abilities. Future expectations also they can as per the need of the job they can change it. So, these are the things that you cannot rely much on this data because this data is likely to may be correct or may not be correct, right.

Possibility of this data manipulating this data is very, very high because candidate want a job. So, in order to get a job this candidate may manipulate this data. But in the case of verifiable data, candidate cannot manipulate this data because age is there you can verify easily, work experience you can verify, this data cannot be manipulated. So that is how what you can do this entire data that you can divide into the two category verifiable data and non-verifiable data. And my suggestion is use this verifiable data in order to make a prediction.

Prediction about what? Prediction about the performance of a candidate in the interview, right. So, in the interview how this candidate is going to perform. So, now what you can do? So, now you are making the prediction about the candidate whether this candidate will perform better in the interview or not. So, use this verifiable data. So, now question comes how to select this verifiable data? So, according to your organization selection criteria according to the person environment fit that we have already discussed in the previous sessions.

So you can make a list of these all variables right and then you can make your matrix. Before calling somebody for interview you can make a prediction about that candidate based on this verifiable data whether this person will perform better or not. So, the moment you have made a prediction, so now you can check the accuracy of your prediction. Whatever prediction that you made based on this verifiable data, so how accurate your prediction is. So, again you can develop the 2 by 2 matrix, so actual performance and predicted performance.

2 by 2 matrix is there. So, actual performance is high and low and predicted performance is low and high right. So, actual performance means performance in interview and any assessment test that you have given. So, actual performance that is there, I am not talking about you have selected the candidate and then you are checking whether that person has performed based on the performance rating, no. I am talking about the performance that candidate has given in the selection process. So, interview, assessment method, written exam.

So, you can combine the all scores, put it together and give how where that person is standing. So, based on that, you can give an actual performance and the predicted performance based on that data, the data verifiable data that you have analyzed and based on that, you have predicted whether this candidate is going to perform better or not, right? So, now you will see these four quadrant is there based on this high and low. So, based on this you want to make, you want to identify who are having the high potential, predicted performance and actual performance. If you have put them here and all are coming here only then you can say that your projections were correct. If you have predicted their performance is going to be low and it is low right you have predicted the performance is low and actual performance is really low then also your prediction is correct.

But you have predicted high performance but actual performance is low, actual performance is low this is the quadrant. So in this case you will see this is error in prediction because you predicted this person will perform better but could not perform in the selection process. Similarly, you predicted person will not perform based on this data that verifiable data, but that person has performed very well in the selection process. So, that is that also will be considered as the error in the prediction, right. So, now you can make a formula.

How you can make a formula? For example, 100 employee have applied for the job. For example, 100 employees have applied for the job, and you have made an excel, or you have developed software, based on that you have collected this verifiable information

about these 100 candidates and you found that, you found 50 people will perform better, right, that is what you have predicted, 50 people will have a high performance. And you identified 50 people will not perform right, 50 people will perform and 50 will not perform right. Now what you have done, but after the selection process, before the selection process you have predicted 50 will perform and 50 will not perform based on verifiable data. But after the selection process what happened you found that only 30 people have performed better and 30 did not perform.

So, now remaining 20 you predicted high performance but could not perform right and 20 here you predicted low performance, but they performed here. So what is what is the score before the selection it was 50 50 50 were you predicted 50 will perform better and 50 will not perform. But after the selection process you found that out of 50 30 people to whom you predicted will not perform better they did not perform better and out of 50 to whom you predicted they will perform better, but only 30 could predict better right. So, now what will happen? So, your correct predictions are A and C. So, A plus C right your correct correct predictions and what are the total predictions? A plus B plus C plus D right.

So, So, here you can see, so after the selection process 30 plus 30, so 60 here multiply by 100, so A plus C equal to 30 plus 30 is 60 and A, B, C, D is equal to 100. So your accuracy of prediction is 60%. So this is your accuracy of percentage. So now, if your accuracy of prediction is very high based on this bio-data that you have collected, based on this bio-data, verifiable data that you have collected, you found that your accuracy of prediction is very high, then you can use and based on this you can develop the selection criteria. and you can use that selection criteria in order to select the candidate.

If you are accuracy of prediction is not that high then what you can do you have to rely on your actual performance right on your actual performance if your accuracy of prediction is not very high right. So, that is how you can calculate the accuracy of prediction in the selection process right by using the bio data. Bio data is very very important or CV is a information that you get in a CV about the candidate is a very important source of information about the candidate. So, that is how 2 by 2 matrix that you can make predicted information and actual performance, right. And now you can, after the selection process, you can see what you had predicted and what is the actual performance.

Then you can calculate the accuracy of the prediction. So, based on that you can develop the selection criteria in your organization, right. Next thing is you need to assess whether you should use the technology in the assessment process or in the selection process or not, right. So, what are the factors that I would suggest you to consider? So, first is speed

of hire. is your technology is increasing the speed of fire.

So, again you can have a number without technology how many candidates are able to give the interview. So, that number that you can put here right and with technology and without technology. So, with technology right and without technology, One more important thing that I always say is please check the applicant's reaction because this applicant's reaction about the use of technology, right, whether applicants are interested in using technology in the selection process or not. because if young people are there, they may use the technology, and they may want to use the technology, but older people may not be interested during their selection process because they are not that comfortable while using the technology.

So, always check the applicant's reaction. If older people are also interested please go ahead and do the use the technology in the assessment. this use of technology in the assessment process if applicants are not liking then it may impact your employer brand so that is why it is important to assess the employee reaction right next whether you should use the technology in the selection process or not next criteria you can see the size diversity and applicants pool you have checked the speed of hire size, diversity and applicants pool. So, diverse nature of people are there, different, different countries are involved from where application you have received, size is very high, the applicant pool is very high. So, now you are facing difficulty to conduct the in-person selection process. So, for that you can use the technology, right, you can develop the technology based assessment and you can use.

So, that size, diversity and application pool is very very important to assess. First you assess and then you take a decision about it right and then accuracy of hiring decision. If you use the technology how accurate decision you are able to make about the candidate without technology and with technology right. So how you will check performance rating. After one year or quality of hire that I already discussed in the previous session quality of hire, performance rating.

So these are the things that you can check. The next important parameter is that you can take the cost of hire. So what is the cost of hiring without technology per candidate, and what is the cost of hiring per candidate with technology? So that is what you can check. Next thing that you can check the employer brand that I already said that employee reaction how employees are reacting towards the use of technology in the selection process. Next is a cheating. So, nowadays candidates are very smart, lot of technologies are available.

So, can they use this technology, other technology in order to cheat in the selection

process? If that possibility is there, my suggestion is do not use the technology in the selection process or make a technology in such a way, use a technology in such a way so that each candidate is getting an equal opportunity to be selected for your organisation because if this transparency this fairness in the selection process increases your employer brand and image of the organisation next important criteria that is the privacy concern so if candidates are using The technology then definitely you may be correct in collecting some of the data. So, privacy concerns that data is very important that an organization is getting through these software are related to the selection test that the organization is conducting. So, online test that organization is conducting. So, candidates are expected to give biodata. So, privacy concerns whether the candidate wants to share that information or not.

So, what are the parameters that you can suggest? I suggest first thing that you can take the speed of hire. So, the number of candidates without technology with technology. Second criteria that you can take the cost of per hire. The third criterion that you can take the size and size of the selection process, like how many candidates are coming and what their diversity is from where these people are coming. So, these are the that is how you can develop the one matrix and that matrix you can use to make a decision about the use of technology in the selection process, right? So, speed of hire that number that you can say cost of hire.

right and size and diversity of application of pool, right. So, these are the three important thing that I suggest you to analyze before utilizing the technology in the assessment process. So, I hope you would have learned the accuracy of prediction and use of biodata in the selection process and how to select, how to make a decision about the technology, and whether you should use the technology in the selection process or not. Thank you.