HR Analytics Prof. Santosh Rangnekar, Professor Department of Management Studies Indian Institute of Technology, Roorkee Dr. Abhishek Singh, Assistant Professor, OB & HR Indian Institute of Management, Rohtak Week: 8 Lecture 41: Employee Development Analytics – 4

Dear participants, in first three sessions we learn few matrics related to the employee development, how to select the employee for which developmental activity, how to develop the individual developmental plan by using the total check score, right. So that is what we have learned in first three sessions. In this session also we will learn some more analytical tool and matrics related to the employee development, right. So, this is the content. So, in this content, first thing that we will understand, dashboard activities, right? What are the dashboard activities? So, on a dashboard, what are the things that you should have in the employee development dashboard? What are the variables that should be there, what information should be there, so that is what we will discuss. And that method for job experiences that is what we have already discussed, again in depth description of those methods, how many employees simultaneously being developed through the various job experiences method that is what we will discuss.

E-learning opportunity to develop the e-learning, what are the tools and technique that organization can use and how organizations should maintain the data related to that, that is what we will learn. And number of employees developed under the various activities, so under the various developmental activities that takes place inside the organization, so number of employees are developed. That is what we will discuss. And finally, we will discuss the impact of employee developmental activities on employee.

So, how developmental activities develops the employee, how it changes the behavior, how it changes the attitude of an employee within the organization. So, this is the content for this session. That is what we will learn. So, let us start, Dashboard for employee developmental activities right so you need to have a record on employee developmental activities so first thing that i suggest department right so department wise, job category wise. How many departments are there so you can write the name of all department like HR, marketing, operations right and job category managerial managerial job, technical job.

So that is how you can divide the various job employees into the various job categories and then for which developmental activity they have been developed and what was the budget for that particular activity. So again this budget for developmental activity will give you an idea, which developmental activity is being focused in this particular organization and whoever is receiving that employee developmental activity or being developed. So, what is the average work experience of those employees? So, here you can write the average work experience. Let us assume 10 employees are being trained for this job rotation. So, what is their average work experience? So, this why it is important so that you will be able to understand which developmental activity works for which type of

If people are having high work experience then which developmental activity that you need to use. If people are having low level of work experience, one low means below 10 year work experience, below 5 year work experience employees are having then which type of developmental activity you should use. So, but in order to make these all analysis, you need to develop a dashboard for the developmental activities. So, these are the few variables that I have written here. if you would like to add some more variables that also you can add like number of hours for how many hours that employee is getting the developmental activity in order to calculate the focus time for.

So, focus time is a very important if employees are not able to focus on his job because of the developmental activity. Earlier also I have discussed they will be dissatisfied then attrition will increase and you will not be able to understand you will say you are trying to develop the employee but still they are dissatisfied, right? You are thinking about their career but still they are dissatisfied. So, you will not be, you will not be able to understand what is the reason because due to the developmental activity if employee is not able to focus on the current job then current KRA, current KPIs will not be achieved, he will not be promoted, his performance rating will be, will suffered because of the developmental activities. So, his current incentives, current salary thing, incentives, promotion, everything will get suffer because of these developmental activities. So, that is why it is important to understand the number of hours, per hours that employee is being developed in a year, in a month, so that you can calculate the focus time for employee and cost per employee also shows the priority, how much priority this organization gives to the employees for developing.

So such kind of variables that you can identify and then you can develop the dashboard for the employee developmental activities. And after developing the dashboard you can think of various type of presentations that I already discussed in the data visualization session. If you are planning to develop the bar graph, pie chart. So, the moment you have these all variables with you, then by studying that particular variable, which type of visualization will be suitable, you can think of that particular visualization. In addition to that, if you would like to calculate some of the statistics, correlation and regression, ANOVA, something that you want to apply. So if you have this data, you can convert into the Excel format, collect the data and then you can apply these tests also. You can think which test will be appropriate and accordingly you can apply. And for the better presentation, better understanding, that kind of developmental dashboard for the employee developmental activities you can develop by adding some more relevant variable which you feel for your organization is more relevant. Whatever variable which are visible on your screen that I have taken just for example purpose it is not necessary you have to have only these variables for your dashboard. So, for dashboard you can do the brainstorming, some other variable that you feel are important or related, right.

So, in other sessions also we have discussed some other variables that also you can use to develop the dashboard for the employee developmental activities. So, for example, such kind of data that you can present in a dashboard if you are using Power BI Tableau. Number of employees getting developed through the internal developmental program. So, what is the percentage of the employee or how many employees are there out of total? So, we had taken the example in the previous session, 2000 employees are there. So, out of 2000, how many employees are being developed or getting developed getting developed right through internal developmental program.

So, let us assume 500 employee and then how many number of employees are getting developed through the external development program. So, let us assume again 500 employees are there and for remaining currently they are not being developed. So, you can see so total employees so what is the so 1000. Divided by 2000 multiply by 100. So, you can say that 50 percent employees are being getting development right now right out of 50 percent then you can divide a percentage internal 25 and external also 25 right.

So, that is how you can tell to the management this is the description and after that for the self efficacy and some other outcome you can do the comparison. In order to understand which type of developmental programs are better external development program or internal development program. So, if self-efficacy is very high in the internal developmental program as compared to external then you can say that internally we should develop the employee more as compared to external. In the case of external selfefficacy is high, then you can think of outsourcing the developmental program for the employee, right, by keeping the budget of your organization in the mind and then you can think. And one more problem that that we see in all organization is after getting the relevant skill through the employee development or through the training, most of the employee leave the organization.

This is the, so attrition, attrition after the completion of employee developmental

program, right. So, attrition like out of 1000 people who have been developed who have left the job right. So, I hope you can understand. So, this data you can analyze in depth because this is the very very important data. So, for which skill people are getting development and they got that particular skill and they leaving the organization.

So, that shows that for which scale demand is very high that will tell you. So, then you have to double make some other plan career strong career plan in order to reduce the attrition. So, the in order to understand the attrition because of the developmental opportunities which are given in the organization right. So, this sometime this developmental activities may lead to the high attrition in the organization. Because the moment employee have been developed in the inside the organization then they look for the another opportunity, another skill that they should acquire.

So, now the career development that the pattern of the career development has been changed. Now people do not want higher position, they are interested in getting the number of skills that they have because the persons who is the most valuable person in the organization, whoever is having the diversity of the skills. So, a person is having more skills and equipped and he can use it, then that person is the more valuable. So, in current organization you got certain skill through the employee development, so now your value has gone up. So, if you are not having the career planning for that particular employee in the organization, then that person may leave and he may go to your competitor, that is what may happen.

And whoever is working in the IT industry, they might have experienced such kind of situation, right. So, this data also very, very important. You have developed 1000 employees in one particular year. And how many of them have left the organization. So, if very few people have left the organization then you can say yes, your developmental activities are good, your organization culture is good, you are able to give the value to the organization and they are staying.

If they are leaving then you need to think whether what you have to do with this developmental activities if you are keep on having this good developmental activities for the employees their skill will be high and they will go and join your competitors. So you need to think if it is happening if this phenomena is there but in some of the organization this phenomena is there after the employee development attrition rate goes up. So, whoever is getting developed they go for and because it is obvious they get better opportunity, they earn more money and then they get opportunity to work to learn some other skills also. So, this data may be very very useful for any organization. That's why i request you all organizations to have this data after training or after attrition how many people after employee development program one year or two year how many people are

So this data also you can mention and then you can think how you can reduce the attrition within the organization. Now you can have the dashboard for the how many people are being developed through the job rotation, promotion, transfer, downward move, temporary assignment right. So, these are the job experience methods right in addition to that you can add interpersonal relation, coaching and mentoring right and you can use this formal right. In that also you can divide into the two categories, long term education or you can say full time education. Some people go for MBA, some people go for PhD, right and short term education and fourth category that is the assessment.

So, how many employees are being developed through the assessment? So, assessment, so first some test will be done, it could be skill test, ability test and personality test and then constructive feedback is being given to the employees. So, this data will tell you what is the diversity of developmental activities that are taking place in your organization or only one type of developmental activities are taking place in your organization, right. So, that is the that if you are having the number related to all type of developmental activities. So, this number analysis will help you to understand the diversity of employee developmental activities and then you can compare the outcome of one developmental activity with the another. So, for because you are selecting this developmental activities would like to based on the skill that you give to the employee.

So, for that particular skill you can check the self-efficacy of that person. So, if that person self-efficacy is high in whichever method through formal education, through assessment, through internal interpersonal relation or through job experiences right and accordingly you can customize these activities and these development plan for all other employees in your organization. But if you are having these numbers then you can understand the diversity of employee developmental plan in your organization now question comes which developmental activity is most useful for you. So, it may be possible when this question is being asked to you in order to check and which developmental plan that you would like to take. So, in this case I have written the all four right.

So, through the assessment that I already said ability test, personality test, sometime employees are being assessed through the assessment centre, feedback, job experience. So, here employee has to identify. So, either the way we collect the way we collect the information about the skill for which skill that person wants to be trained. So, in the same way we are asking for which developmental activity he would like to select right. So, this number will help you if you are collecting this number. If you are collecting this number 2000 employees that for example that I have taken and then you can take this number like out of 2000 how many people want formal education for their development. How many people want this education through online, offline, in campus, out campus, through assessment, any particular type of assessment that they want to do it. Right let us assume for communication somebody wants to do the assessment for the communication. So, they do not want to improve they they want first assessment they want to understand if there is a need for the improvement then only they want to go for the developmental plan. So, first thing that they can select in this case assessment for that particular skill.

So, the moment you will ask this which developmental activity is most useful for you, right, then person will be able to tell for which skill they want to be trained and which method they would like to use. Right so in this method so the moment you will get in this through this if you will collect this data you will analyze it and then you can propose based on your budget and based on that person's requirement your assessment. What's your assessment says about that person so how to assess the individual needs for the developmental plan that assessment that thing i have already discussed in the previous session right so as of now you can develop this form And then you can ask from individual for which developmental plan that person would like to be developed and for how many days and which particular skill that person wants to develop through that developmental plan. Right in how many days developmental plan and how many employees and then you can club these all employees according to the skills right and then you can develop the developmental plan that then you can do the annual planning for the developmental activities for the all employees also.

So, then reverse way also you can do it. So, earlier I had told how the feedback you can take the check score, total check score that you can calculate and then you can develop the individual developmental plan. And by doing this exercise you will be able to develop the employee developmental programfor the all employees who are working in the organization. So, at organization level planning also you can do it and through this method you will be able to increase the level of alignment employees need and the program which is being given to them because most of the organizations are facing the problem with their mismatch. Right that a mismatch that is what mismatch between the requirement and that developmental plan which is given to them. So, that is what the one thing that you can do it and this number of days why I am asking for how many number of days this person because that person after the goal setting that person will be able to assess.

Whatever goal that person has set for himself or herself then within how in how many days that person will complete it and whatever days are remaining those remaining he can

use for the developmental activity. Right, whatever days are remaining then he can use. So, that is how you will be able to manage the focus time also, right. Why I am keep saying this focus time? Because if you will keep giving the developmental activities to the employees, you will not manage their focus time then what will happen? I already said that people will be dissatisfied at a workplace and then they will start leaving the organization. You will say culture is good pay structure is good everything is good but still why people are leaving right you are giving everything you are giving development you are giving salary you are giving job everything but still people are leaving the job but why they are leaving because you are not managing their focus time.

And if you are not managing the focus time then one more thing will happen your productivity your organizational goal will also suffer. Because when employees are dissatisfied they will be it is a reflection of their demotivation so when employees are demotivated then their performance may not be up to the mark. When their performance is not up to the mark, then what will happen? They will not be able to achieve their defined goals and they are not able to achieve defined goal, then organizational goals also will suffer. So, sometime whatever that organization has decided for that one particular year, I had given you the example of this power organization. If they have said these many megawatt electricity they have to generate in this particular year, they will not be able to achieve because all people are dissatisfied because of the developmental activities, although people say it it increase it increases the satisfaction.

So, it increases the satisfaction only when when that focus time is managed, right? So, you need to think about this focus time. So, that is why I am asking this number of days also. For how many days you want to take a particular developmental activity, right? So, that is why this number of days are very very important. I hope you would have understood the importance of this number of days, right? And second thing you can understand by seeing this number of days, what how confident this person is in order to acquire X, Y, Z skill in these number of days. So, that also shows the motivation to learn and learning orientation of that particular person.

If that person is taking more than average time to learn then you can think of why this person is taking more than average time, right. So, few things how quickly that person can learn. So, that shows the learning motivation to learn and learning orientation of that person. So, that is what also you can check how many days you are required for which skill that you are required and where you will use if you can add one more thing the use of skill where you will use that particular skill in the organization. Because most of the time what happen employees have developed the skill but they do not get opportunity to use that particular skill oparticular skill.

So, if you know exactly where that skill will be used then accordingly you can do the goal setting also for these employees. So, that is how you can use this seat. Two important data that you can get it you can divide this 2000 employees that for example in any organization 2000 employees are working then how many people wants which type of developmental program. That is what you can decide and for how many days so that you will be able to manage their job effectively at a workplace. Hr planning that you will be able to do better right now you can see that young generation is coming right young people are coming so sometime they are not interested in offline sessions they are interested only in some e-learning Right you can see that use of mobile use of laptop sitting at home work from home such kind of things are keep on increasing right.

So in this case what you can do if people don't want to attend this offline sessions then you can arrange some live sessions for them right. So how many live sessions that you have arranged for them to develop so leadership forum leadership sessions live sessions recorded sessions these are the things that you can share with them so that will be able to see so what is the number right that you are currently you are doing right and in future what is your plan so that is what you can think of how you will increase and how you can manage your cost also very some popular MOOCs are available free of cost on various online platform. So, you can ask one of the platform that on which we are recording our course this NPTEL. So, this gives you the certificate. So, if you want to train somebody in particular program or particular knowledge that you want to give then you can ask that person to do the training, online course from this NPTEL program.

So, if some you wants to give a basic knowledge to somebody related to the HR analytics then you can ask that person to do this particular course right. In the same way you can develop some of the games which will improve the personality of the people right to assess. What kind of person that is and how and then by participating in a games you can assess the personality of that person and then you can give a constructive feedback online Similarly you can use some of the simulations so many simulations are available nowadays you can give simulations you can understand their personality decision making right And you can improve these skills also and then you can give a constructive feedback so e-learning developmental opportunity so you can make a dashboard how many opportunity that is given to the employees. And what is their response rate right whether this engagement in e-learning opportunities is increasing or decreasing so that is what you can compare. And one more thing that i always suggest to the organization so these are the some of the developmental activities that i have written.

Right so number of employees the 2000 employees how they have been developed so some of the method which are not used or more used. So what is the reason for that right do they do do they have relevance or not so relevance of these methods for your

organization that is what you can see. If some methods are relevant but not being used then you can think which type of employees will be more appropriate should you should you have those employees. In order to develop your organization or not and in future you may be having such kind of employees then how these methods will be implemented in our organization so that is what the plan that plan that you can make about it right. Finally, how you can calculate the impact of employee developmental activity? So, these are the just four things, four scores that I will ask you to calculate, right.

So, after participating this commitment, so whether the commitment of employees has increased or not. Trust in organization that organization trust score. So, these all scales are available you need to take the help from the academician they will give you the scales and then you can calculate the score for the commitment, organization trust, and engagement that workplace engagement and workplace happiness. If these all things are going positive and score having the high score then you can say your developmental activities working and if commitment is high organization trust is high employees are engaged. And they are feeling happy at a workplace after participating in a developmental activity that one thing that I was discussing attrition.

So, that attrition at a workplace also you may predict at a workplace if these things are very high scores are very high then attrition rate also may not be very high at a workplace right. So, right after the employee developmental activity you can calculate these all scores in order to predict the attrition also. So, if these scores are high then possibility is very high that attrition rate should be low among the all those employees whoever has developed under the developmental program of the organization, right. I hope you would have learned the various matrices related to the employee development and use of those matrices in your organization. So, I hope you all managers will use these matrices at your workplace in order to make a decision. Thank you.