

## **HR Analytics**

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Dear participants, in this session, we will learn about employee development analytics, how we can make a decision about the employee development activities, in the organization based on certain numbers. So, what kind of data that we need to collect, how that data we need to organize and how we can design these developmental activities for employees within the organization. So, these are the questions that we will try to answer through the numbers. So, before this session, you must have learned about the process of employee development in the organization, how employees are being developed inside the organization. In addition to that, you must have learned about the challenges and issues that are there related to the employee development. Because these two, if you have understood these two things, then only you will be able to understand this development analytics.

So, my request is please all of you complete previous sessions before going to in-depth in employee development analytics. So, I hope you would have completed this. And how these managerial challenges at a workplace can be solved through the employee development right employee development analytics. That is what we will learn and discuss in this session.

So let us start with the questions which a manager ask at a workplace. What are the questions are there for which he is always searching for the answers. So let us start with the few questions. You might be having more questions, but for a sample, just to make you understand what type of questions a manager need to answer at a workplace. So we will start our session with that.

So, this is the content for our session. So, first thing that we will discuss, we will discuss the important managerial questions that a manager need to answer at a workplace related to the employee development and second one, second thing that we will discuss the various employee error matrix through which we can develop the employee development plan. So, what are the important questions that you will see? So, questions like how learning and development department should make the developmental plan for the each for each employee because those days are gone when employee used to be developed together So, now you have, if you want to increase the retention rate inside the organization, if you want to reduce the attrition rate of the employee, then you have to develop the individualized employee development program. So, for that so that is the one question that each manager wants to know how the individual development plan should be developed within the organization. Second question that you might be looking for the answer how the impact of learning and development activities should be measured.

right if you are conducting the learning and development activities at your workplace then how the impact of that learning and development activities should be measured at a workplace so that that is what also we will discuss which type of matrix what are the things that you can do in order to measure the impact of learning and developmental activities at the workplace for how many hours employees should be engaged in the developmental activities, right. So, this is the question that I always say for how many hours employees should be engaged in the developmental activities because at a workplace not only developmental activities are there, training is there, meeting is there, job for which you have hired the employee that also employee is supposed to do, So, an employee has to achieve the goals which employee has for which employee has been hired inside the organization. So, if you will engage employee more in developmental activities, more in training activities, then the focus time may be impacted, right. In the same way, how much time you should be given an employee to achieve the goal may not, you may not be able to give and that will increase the dissatisfaction in the employees. So, you may say that I am giving training, I am developing the employee, but still employees are dissatisfied, right.

So, because reason could be they are not getting enough time to do the job for which they have been hired and for which their performance is being measured. So, for how many hours? So, here you have to identify the ideal number of hours for which that employee has to be developed in various organizations. So, here you can think about various aspects that is what we will discuss in the detail. Next important thing that you can, for whom developmental activities should be planned, right, for which type of employees, for which department, priority should be given to which employee, which type of department and how these activities should be planned, that is the question that you may be asking, from where to start, right, what kind of activities has to be started and how to align developmental activity with the employee need. because most of the time employee

complain about the training programs and developmental activities, they were not able to fulfill my requirement at a workplace.

So, what you should do, how you should align these developmental activity with the employees need at a workplace and who is the effective coach and who is the effective mentor who can coach who can give a direction, who can give a coaching to the employees and who can do the mentoring for the employees. So, these are the few questions that I have collected in order to make you understand how and what kind of challenges a manager is facing at a workplace. So, manager if you are working in the learning and development department then you might be asking yourself such kind of answer of such kind of questions. So, these are not just only these number of questions. If you are facing more problems at a workplace, I would request you to make a list of all those questions which you want to, for which you want to know the answer.

You can make a list and then you can develop the matrix. So, whatever matrix that I am going to discuss So, some questions may be addressed through these matrix and some may not be. So, for, but if you know how to develop the matrix, then you will be able to develop the matrix for those questions also. So, focus on the development of these matrices, how these matrices are developed, how they can be used, so that in future you can develop the matrix for your questions also, right. So, let us start with this action error.

there is no workplace in this world where errors are not taking place because this is our belief all human being make a mistake right. So, when you are working at a workplace you are also making a mistake as a team you make a mistake as an organization you make a mistake So, you have to identify all those errors. So, I would suggest you to identify the action error. So, what do you mean by action error? Non-attainment of defined goal. So, whatever goal that you have set for your individual, right, for a team, for a organization, right, whatever goal that you are saying, so for the you might have seen this organizations are setting the goal, this much revenue they have to earn this year, these many products they have to produce by this particular year, this much if you are working in the power generation organization, then megawatt electricity, what is the capacity of, how many cap is, how many megawatt capacity that you have to develop inside the organization.

So, such kind of organizational goal may be there. If you are working in the various teams, so for a team you might be having various goals like if you are working in the HR department then it may be possible you might be having a goal of hiring 20,000 people. So, this is your quantitative goal. So, the 20,000 people that you have to hire in one particular year for your organization. So, whether you are as a team you are able to achieve or not and then individual goals.

So, first aspect of this in action error is you have to identify the list of non attainment of defined goals. So, whatever goal that you had defined during the goal setting process, you

have to identify all those goals which were not attained or which were not achieved or one in a one more way, I can say that based on the percentage of achievement of goal, right, to what extent that has been achieved, in detail we will discuss during the performance analytics. So, that is what you need to understand, that is the action error. Second aspect of this action error is non-conformity to some plan. So, conformity to some plan is not there, so that also you can put under the action error.

So, I request you to identify such kind of errors at a workplace. So, the moment you have identified the such kind of errors at a workplace, now you can do the analysis of these errors and based on that analysis you can develop the developmental plan for the department, you can make a developmental plan for the individual, right. So, as we were discussing how to make the individual development plan. So, by analysing such kind of errors we can make a customized individual developmental plan. So, when we started this training analytics, in that analytics we clearly discussed, we clearly discussed, again I am repeating, we clearly discussed this developmental activities are designed for the long term, right.

So, here the plan that you are going to make for the individual, it is going to be the long term, right, in order to achieve the long term goals. So, here so by doing this analysis you can make a long term plan how the current workforce can be developed in such a way so that such kind of errors will not be repeated. So, such kind of errors means non-attainment of defined goals. So, why we were not able to achieve those goals or accepted limit like for some of the organization keep we expect employee to expect to achieve the 80 percent of the goal, but in few goals achievement rated just 40 percent or in a similar way I can say that below average percentage of achievement. So those cases that you can identify and you can put in one category.

So according to the department wise and we are going to that matrix now. So let us move to the next matrix. So here first you need to understand the action error cycle in the organization. So, in a organization action like each person is supposed to do some activities in order to achieve the achieve the goal, right? So, that action will take place and after that that error will be highlighted and then each error will have a consequence, right? So, if goal achievement is not there then it will have a consequence it may impact the performance level of the team, it may impact the performance level of the organization. So that error consequence is there.

So each error that is taking place at a workplace it will have a consequence. So this is the cycle that you need to understand. Each action whatever action that you are taking, so related to that you might be having some error. Error, I already defined non-attainment of goal and that non-attainment of goal will have certain consequences at an individual level, at a team level, at an organizational level. So, you can make a list of those consequences to understand the impact of error inside the organization.

So, this is the action error cycle in the organization. This is important to develop it is important to understand the cycle to develop some important matrices related to the action error in the organization, right. So, first matrix that I suggest you to develop. So, this error detection, so I hope the definition of error you have already understood. So, when this error was identified? This error was identified during the action, before the action and after the action.

So, this go non attainment of goal employee realized when they will not be able to during the action when that process is going on during that or before the action like during in a organization during the goal setting process employees are not comfortable. but supervisor keep on putting pressure on him, no, no, no, you have to achieve this, right. So, at that time only it was identified or after the action, right, when this year is over and then we are discussing on that particular plan. So, when this error was detected, so now you can categorize the all errors. Let us assume you have identified the 1000 errors, any 1000 goals, right.

department wise, individual wise. So, those errors that you can identify, so that I already said for few basic demographic that you can use employee age, work experience, gender and education, job category, job category and department. So, based on these demographic variable or categorical variable, you can visualize these errors like this thousand error that you identify they are facing, they are most of the errors are there in which department, for which job category. top management, middle management, lower management, gender wise for which gender they are making the maximum number of the error, age level that you can do the analysis for which age category people are not able to achieve their targets and for which age category non-conformity of the plan is there more. So, that is what you can analyse and that will help you to develop.

In addition to that you can identify organization phenomena also, where when this error is detected during the action, before the action and after the action. So, after the action. So, this is the matrix which will help you to analyze the errors in detail. So, in this is the first matrix that you can develop in order to understand the errors which are taking action errors which are taking place in your organization.

So, let us move to the next. So, this error detection pattern also you can understand. So, this internal versus external. So, whatever error that is detected that is communicated by that individual himself or the by department itself or somebody else has identified that particular error. So, if external people are telling you, you have not achieved this goal, then we can say that if this error is detected by the external person, Then we can say that this is the external, this error is detected by the external person or if it is detected by the internal. So, external does not mean that that person should be outside from the organization.

That person may be from different department also. right, some other department person also may tell you that you are not doing the right job by the observation, right. So, if that is how error is detected, right, then you can say this is the external error detection. If error is detected by the internal person, you yourself are able to tell. So, that is what you need to understand.

So, why this matrix is important? This matrix is important for the culture, culture development. So, first thing to improve the error is acceptance that we all know that. So, if you have to accept for, so if internally people are accepting their errors, it indicates that that open culture is there and healthy culture is there in the organization. right. So, that is that is the indication of if most of the people most of the errors are detected by the external right then you have to be very very cautious about your culture right.

It is very very important because in a organization politics is there, blame game is there, everything is there. So, very few people will come forward to accept that they have commit a mistake or they were not able to achieve the target so right. So, but you it will help you to develop the culture so right. So, let us assume that day one when you started this error analysis you found that 90 percent of the error detection comes through the external. So now you can do the analysis, right, 90 percents are detected externally.

So now you can set the target, you have to reduce by 60, 70, 80. year by year that is the target that you can take because if internally people are accepting their mistake, it indicates that that a healthy environment is there within the organization. So, that is the decision that you can make on the basis of this matrix. Next important matrix that you need to understand, right, high confidence error and low confidence error, basis of that you have to divide the sources of error. So, whatever that error definition I hope I had already discussed in before this.

So, you must be aware about what is error error error is. So, again and again I will not define the error what error is. So, here you can divide the errors into the three categories. Whatever error is taking place in the organization in the department it is because of what? It is because of the individual, it is because of the department, it is because of the organization. Because sometime organization may not, do not make the appropriate policy, because of that also organizations are not able to achieve their target.

Sometime the team, as a team that synergy is not there, individual performance is very high but synergy is not there, right? So, because of that as a collective goal we are not able to achieve, it may be possible right, because lack of alignment is there between individual and team goals, there is possibility individual goals are achieved but team goals are not achieved, there is a possibility is there. So, you need to understand where is the problem related to that and based on that we have divide, you can divide these errors into the three category, individual errors, right, collective errors and organisational errors. So, once you

have divided this source and then you can divide these errors into the two categories. One is the high confidence error and low confidence error. So, you need to understand the difference between high confidence error and low confidence error.

So, high confidence errors are those errors in which employee is confident about his answer. Although answer is wrong, but employee is confident my answer is right, right, whatever action. So, you in term of achieving the goal, whatever strategy, whatever action that he has taken according to him, those actions are the best action, whatever he has taken, there is no other alternative is there. So, if such kind of errors are there, they are known as the high confidence error. but in the case of low confidence error what happens? Employees are not sure about their actions.

They have taken action because they had to take the actions in order to achieve that goal, but they are not sure about whether that action is right or wrong. So, why it is important to categorize these errors into the two category? It is important because high confidence error it is very difficult to develop such kind of employees. In the case of high confidence error, it becomes very difficult to change the behaviour of employee. So, that is why it is important to understand before making any developmental plan for any individual, the individual is making which type of errors individual high confidence error or low confidence error and in the same way you need to understand which type of errors are more team wise and organization wise high confidence error or low confidence error and in the case of low confidence error you can modify the behaviour of an employee, right. So, for low confidence error, developmental activities would be different and for high confidence error, developmental activity would be different.

So, in for the high confidence error, I suggest job experience, right, job experience, job rotation, right and the job downward, transfer, promotion, right. So, job experiences right where employee is able to see what is working and what is not working right under the guidance of someone right so some mentor is there some coach is there and then on job that person is involved in any on job activity right during the job that person is getting the developed developing and then these high confidence error can be minimized or employee can realize their mistakes or their error quickly. But in the case of low confidence error you can suggest different type of developmental activities. So in coming matrix we will discuss some more developmental activities and then you can think how you can align the developmental activities for the high confidence error and low confidence error.

Now you have to develop the developmental plan. So situations, so in each department, department wise you have to, you can do the situation analysis. So what are the situations that comes where individual has to take a decision while doing any job. So, now you have to develop the employees. So, here you have to identify the situations for which situations you want to prepare the employee, right. So, you can make a situations department wise 1, 2, 3, 4, 5, 6, right.

And now you can categorize the situation into two categories, high stakes situation and low stakes situation. So, high stakes situations like where employee, where organization cannot expect employee to make a mistake. If employee makes a mistake, non-attainment of goal is there, then there will be a huge loss for the organization. So, loss is very high, stake is very high, such kind of situations will come under the high stake situation. and similarly where that if employee fail or they are not they are not able to achieve the organisational goal then it will not make much impact on the organisational progress.

So, such kind of things will come under the low stakes situation. So, you can divide all situations into two categories high stakes situation and low stakes situation and accordingly accordingly what you can do you can make a developmental plan so if employees are new they are not very experienced you can start giving them low stakes situations right so these are the low stakes situations right so now you can decide how many low low stakes situations are there so at a time how many people can be trained if five low stakes situations are there which are there for next one year so for next one year you can deploy 5 new employees under those situations and then you can train. So, that is how you can decide the number of people can be trained in one particular department, right. So, if you know the number of situations, right, based on the experience which is available, expertise is available, current level of skill level is there. So, after analysing these all things, you can develop the individual development plan for and for each employee.

In the same way, if you know the number of situations are available for a high stake, low stake, then you can, then you can calculate how many people can be developed in one particular department for a period of time. So, right, so that is what you can analyze and you can make this plan for the individuals. how you can measure the impact of developmental activities right. So, when somebody is undergoing this developmental plan in any organization.

So, how the impact of those activities can be measured. So, first thing that index that you need to develop that self efficacy. So, set number of questions are statements are there you can float a survey right and then you can see what is the average rating for that self-efficacy. So, between 1 to 6 scale is there if average is 5.1 right before the developmental it was 4 and it has increased to 5.

1. So, that is how you can present to your management 10 people were developed for last 2 years before development their self efficacy for these scales was this much and for these scales and after the developmental plan it has increased by 5 percent, it has increased by 10 percent. So, you can calculate the percentage of increase efficacy and that is how you can make a presentation in front of the management. Next thing that you can do based on



this, you can develop the feedback mechanism. If you are giving the feedback, you are using feedback as a developmental activity, right.

So, you cannot give a feedback to the all employees in same way. You have to give a feedback in different different way because if you are giving a feedback in same way to a 25 year old employee and 50 year old employee both are there in a organization in same way you are giving a feedback then it may be difficult right. So, the feedback process the way you have to give a feedback process you have to understand the learners characteristics and accordingly you have to design. So, the kind of error that individuals are making that analysis that you have already done it. So now you can design the customized feedback mechanism for each category. So it could be the outcome of error analysis And third mechanism, third thing that you can develop a mechanism for the action review mechanism.

Whatever action that individuals are taking inside the organization, so based on this error analysis you can develop this action review mechanism also. Another thing that you can, this analysis may help you as I already discussed earlier, the development of a culture. we already know that people do not accept the mistake very quickly right. If they are accepting the mistakes in the organization it indicates that yes that organization is having very good culture. So, it is indication of culture also if people are accepting mistakes internally more.

So, if it is not there then you can take it as a sign for the development of a culture. So, how you, what are the activities that you can initiate in the organization, so people will start accepting their mistakes more and more. And based on this error analysis that I already discussed, this customized developmental plan how you can make it right by doing department wise by analyzing the types of error which are taking place analyze department wise age wise job category wise and develop the in customized individual plan most important thing that i believe it may help you that is the emotion management right because when you fail certain types of emotion that you experience right. So, if you can make a list like error and type of emotions which individual experience during the error. So, you have categorized the error into 5 to 6 categories and then according to the type of error you can identify the emotions.

So, if you know whenever new employees are coming to your organization, you know if this or employee is making this type of mistake. then this type of emotion will be there. So, in this case you can develop the customized emotions management plan for the each type of errors also. If the this kind of error is there then you you should deal this many this type of emotions will come and in this case these emotions should be deal in such a way. So, that emotion categorization, so somebody is happy then what you should do if somebody is angry because of those errors, then what you should do if somebody is sad, then what

you should do if and then in which case this emotion becomes the mood, that is what you need to understand.

So, if you have this level of understanding, right, you are able to understand the type of error and which type of emotions are coming. If you can develop that matrix And with that help matrix you will be able to develop the better emotion management plan within the organization, right. So, these are the things that you can develop or you can make it better management of this action review, you can develop a better action review mechanism feedback mechanism, emotional management plan, customized development plan by analyzing the error. So, I hope you would have understood this error management and various matrix related to the error and how these error matrices can be used to develop the individualized customized development plan. So, thank you.