HR Analytics

Prof. Santosh Rangnekar

Department of Human Resource Management

Indian Institute of Technology, Roorkee

Dr. Abhishek Singh, Assistant Professor

Department of Human Resource Management

Indian Institute of Management, Rohtak

Week:11

Lecture: 55

Dear participants, in this session we will learn few more matrix related to the compensation management. As you know that this is in this in this analytics series or in this analytics program we are discussing more about the matrix through which you can make the decision related to the HR functions. So the function that we are discussing that is the compensation. So in first two sessions also we have discussed the matrix related to the compensation. In this session also we will discuss some of the matrix. So let us start with the content.

What is the content for this session? So in this session first thing that we will discuss that is the gender pay gap analysis that is what we will do and second focus that we are going to have on this market competitive compensation right how to give this competitive compensation right by doing the survey and what is the role of this compa ratio in determining the compensation right. So, these are the things that we will discuss in this session. In addition to this we will learn one more thing if you have to do the planning for the incentives that you are planning to give to your employee. So, how you can do that at individual level, at group level or at organization level.

So, if you have to give the incentives to your employee, so how you can determine what you can do. So, we will start the session with that and then we will move to the gender pay gap analysis, market competitive compensation and compa ratio. So, that this is the content for the today's session. So, let us start with incentive plan planning right, so that incentive plan that you have to give. So, for individual incentives right, so you can decide to give incentives individually.

So, if you have decided it, so first thing that you need to decide the qualifying criteria. right on what basis that you are going to decide the incentives, right. So, because in a performance management I hope you would have understood it is important to differentiate the employees from one category to another category, right. So, here you can say that best performer, right, average performer, right and poor performer, right. are the three category for example.

So, what is the criteria for the best performer? What is the criteria for the average performer? And what is the criteria for the poor performer? So, one of the base that you can take it could be the performance rating. So based on the performance rating if you are measuring the performance on 1 to 7 and 7 is the best and 1 is the worst. So you can say that somebody who is getting out of 7 averages 6.7 or 6.8 or above 6.

above 6 you will consider as a best one and then you can say that between 5 to 6 above or equal to 6 you will consider as a best and between 5 to 6 is a average performer and below 5 is a poor performer. So, this is the criteria that you have decided. So, after deciding this criteria you check how many employees are coming in best category, how many are coming in average category, how many are coming under the poor category. And then you can check how much amount that you have and how you will distribute this amount. So that is what you can see here.

Similarly, you can see some of the criteria that I have written. It is not necessary you have to take only a performance rating. So, some of other criteria that I have mentioned for example quantity of output. So, if you are working any manufacturing unit, so there could be the quantity if you are producing X number of quantity then you will get this much incentive. So, in order to increase the number of output you can have a such kind of criteria.

So, what you want to increase, right, what is the motive of this incentive, if you want to increase the performance, in want to increase the performance, right, then related to that you can take the criteria. So, the quality of output So, number of defective piece that are there. So, if you want to reduce the number of defective piece, then you can say that if you will reduce the number of defective piece, then quality, right. So, the quality that you can say, take the another criteria and monthly sales that you can take the another criteria. Work safety record that is that could be one of the criteria, work attendance could be the one of the criteria.

So, that is how you need to decide the criteria, what is the criteria for the incentive plan that you are trying to have and how you can select this criteria. One simple thing that you can think what is the vision and mission of your organization, what kind of behavior that

you want to promote. So, the what kind of behaviour that you want to promote based on by keeping that thing in your mind you can select one of the criteria. Now you can decide how many employees are there in the various criteria. So, various criteria number of employee that you can write here and then you can multiply with the reward that you have decided for the each category like 10 percentage of extra, 20 percentage of extra, 15 percentage of extra of your base rate whatever criteria whatever incentive that you have decided you multiply here and calculate the amount right.

If this amount comes within your budget you can think if not then you can do the calculation, put this calculation in front of the management and you can try to convince, right. If budget is available, then according to the budget you can make the incentive plan. So, that is the planning that you can do right after the, right after the performance appraisal process because then only you will be able to tell the exact number of the amount, how much amount that you required in order to give the incentive to the all employee right and second criteria that you second thing that you can do from the planning point of view you can decide the amount how much how much amount so if everyone is the best employee then how much amount you need to pay If everyone is the poor performer, then how much amount that you need to pay? So, maximum to minimum, maximum to minimum amount also you can identify by calculating this, by putting all employees into the best category, that number of employee data is already available with the department. right, base rate at what rate they are salary is being paid to them, what is their base rate that is also available. So, based on that you can make a calculation and you can identify if all employees comes under the best category then how much amount you need to pay, if all employee comes into the poor category then how much amount you need to pay.

That is how you can make a calculation from the maximum to minimum, right? So that is how you can plan the individual level of incentives for any employee within the organization, right? Now question comes, how you will make the plan for the group incentives? If you have to give a group incentives, like where five or 10 people are working in a team and you want to give a reward to the each team. that each team wise that you want to give, you do not want to give a reward to the specific person. So, in that case how you can decide the criteria? So, in this case you can decide the number of customer complaints could be one of the criteria, labour cost saving could be one of the criteria, service cost saving could be one of the criteria. So, the way you have selected the criteria for the individual incentive plan In the same way you have to select the criteria for group incentive plan also. The moment you have identified the criteria then you can multiply, then you can multiply with the number of employees and you can calculate the amount and accordingly you can distribute.

So, in some of the organization that you will see where teamwork is more important, then

what they do, they give less priority to the individual incentives, they give more priority to the group incentives. So, you can see the 30 percent contribution, the total increment or total benefits that is dependent on the performance. So, you can see in some cases where the group performance is more important. So, 30 percent is given to individual and 70 percent is given to the Group So that but in that case what you have to do you have to decide the criteria for both individual as well as the group and the moment you have decided the criteria then you can see how many people are going above that criteria and how many employees are below that criteria and then you can calculate the amount how much amount it is needed and here you can make the comparison if all people comes to the best category then what would be the amount, if all employees comes under the below average then what would be the amount. So that is how management will have an idea if all employees performs out gives the outstanding performance then how much we need to pay to the employees, right.

So maximum to minimum limit that you will be able to calculate for the all groups also, right. So that is how you can do the amount planning by doing such kind of analysis. Next thing if you have to decide the company wise criteria incentives like you want to give incentives to all employees like you want to bring the all employees together, you want to give a direction, you want to you want all employees should put the effort into the one direction, you want to decide the criteria for for entire company incentive plan. So, in that case that you need to decide criteria again. So, organizational level criteria what could be the. SO here one criteria could be the revenue.

If you will make this much revenue by the end of this particular year, then we will increase the salary of each individual by this percentage. So, how you can calculate? You can make the calculation of this revenue. right and how much cost it is going to take, what is the profit and from the profit how much amount that you can distribute, right. So that is how you can make the plan for the company wide statements, company wise incentive plan, right. But in that case what you need to do, again you have to decide the criteria.

So revenue could be one of the criteria, second could be operational efficiency. So, if you are saving the cost, if you are reducing the number of customers, if you are increasing the number of advertisement and more and more customers are coming right. So, earning per stock it this also could be one of the criteria. So, for a organizational level I can say that organizational level goal that you have decided for your organization. So, some of the goals that you feel is more important for the organization to achieve it or you want to increase the percentage of achievement for the organizational goal and you want to bring all people together.

right and this would put the effort into the one direction in that case you can take one of the organizational level criteria to decide the company wise incentives and again after deciding the criteria you can calculate I have already discussed for the individual as well as for the group. So similarly you can discuss the you can calculate the amount for the for the company wise incentives also if you have to give an incentive for the all com all employees who are working in the company then what if you earn this much revenue then what would be the limit for them how much amount you can give it to them right and how how this amount will be distributed what would be the base and based on that you can do this company wide incentive planning also right so that is how you can make the plan for the incentives by doing this small calculation for your organization right. So, next few ratios that you can maintain in your organization like the salary that you are drawing right and employee benefit. So, I consider the wages and salary that I say that core compensation right. and your employee benefit right.

So, that is what you can calculate position wise core compensation divided by the employee benefit. So, what is the ratio? Most of the time that you will see 1 is to 1 ratio is there most of the time right. like but but it it vary from job to job it vary from job position to job position right and like a frontline employees case you may find that core compensation is highest and employee benefits are not that much high same thing that you may find in the case of this contract employees and full time employees. Like full time employees, employee benefit may be higher than the contract employees but core compensation will be may be higher for the contract employees than the benefits. So that is the ratio that you can calculate and based on that, so based on the aim of the employee that what you want from the employees accordingly you can design the compensation that we have already discussed in the previous sessions, how to make a changes in the various component of the compensation, right.

So, this ratio may help you to understand where changes that you have to make, whether you have to make changes in the core compensation or in employee benefit. if ratio of employee benefit is more than the core compensation then you have to make changes some in core compensation right according to the aim of the organization or if core compensation is very high then you and then you have to make the changes in the employee benefits. So that is what you can analyze by seeing this particular ratio. Next thing that you can calculate the cost per employee right. So whatever cost is there so what is the cost per employee is there and what is the revenue per employee is there or profit per employee is there.

So that is comparison that you can do it right. So if you are adding some manpower to the organization. So, you will be able to tell if we add these many people in this particular organization, this particular department, then this much additional cost that we are going

to be a, right. So, whether in the similar proportion we are going to make a profit or not or how long it will take to make a profit. So, that calculation you can do it and by understanding this cost per employee, right.

So, average salary by position wise and job evaluation point. So, I so, here you can calculate the correlation right. So, correlation that is you can see. So, how you can see the correlation? So, job position. So, here you can see one side you can write average salary position wise right.

So, average salary that is what you can write on y axis, average salary right or position wise. So, what is the average salary and job evaluation point? So, this correlation that is how you can present it. So, if job evaluation points are high and but average salary is not that high. So, it indicates that there is a mismatch between the job worth and the salary. So, you need to think about how you can increase the match between the job evaluation point and the salary.

It may happen that I have already discussed what is the reason why this mismatch may happen. So, sometime you give the more hike during the first joining, right, employees who are coming from the outside, sometime you want to retain them, right. So, you are paying more salary to them, more hike to them. So, because of that this mismatch may happen. So, you can draw this correlation between job evaluation point and average salary.

So, and that is how you can understand where is the mismatch and accordingly you can make some plan to correct it, right. So, these are the some ratios and average that you can calculate and you can understand. Now, let us move to the gender pay gap. So this is the issue that recently you might have seen in Indian cricket team. Now same salary is being paid to male and female athletes in Indian cricket.

So gender pay is an issue. In business organization also one of the phenomena that you will see across the world top positions most of the top positions are occupied by the male right and if we will come down then you will see that female workforce increases in the organization right so you may find that most some of the organization more female are working but their average salary is not is not matching with the male average salary in the organization. So, if you give more importance to the women empowerment and you want to give the equal opportunity to men and women in the organization this is your internal branding proposition then you can do this gender pay gap analysis. So, in that case what you can do simply you can identify the job positions So, whatever job positions that you have general manager, senior manager right. So, all those job positions that you can write it and on each job position how many male candidates are there and how many female candidates are there and then you can calculate their average salary on that particular position. Then you the difference position can see wise.

So position wise that you can calculate as well as you can calculate department wise also. In one particular department how many males are there and how many females are there. So what is the average salary of the male and what is the average salary of the female. And now after doing this analysis, now you can think about the women empowerment, how you can increase the sum of the female employees within the organization, what you can do, how you can make some changes in the recruitment and selection strategy, how you can make the changes in employee training and developmental strategy.

So that is the decision that you can take. And if you want to promote the diversity within the organization, you want equal number of male and female on the same job position as well as in the department. So, related to that you can take a decision after doing this analysis. So, in this analysis what exactly that you are supposed to do? You are supposed to identify the job positions, what are the job positions that are available right so senior manager general manager operations right finance right managerial positions technical positions right so staff wise so nature of job that you can select you can select the job category right or according to the worth that worth of the job that you have divided the job into the various categories so that you can select and then category wise you can calculate on one particular position how many males are there and what is their average salary and how many females are there and what is their average salary right and then you can see the difference if you find a huge difference is there then you may take some of the corrective actions to bring it on a same level and that is how you can do this gender pay gap Similarly, I already said job position wise, department wise, job category wise and these are the decision that you can take related to the gender, right. Gender, it could be one of the analysis, second analysis that you can take region, region wise, country wise, right, country wise, region wise, right, if in India if you will see the huge country is there, so from which place people are getting the more salary, so that is what you can do and second thing.

education level right education level institute from which institute that you are passed out so from which institute people are getting the more salary why there is a difference so such kind of analysis that you can do it if you want to address the pay equity issues in your organization if you feel that it is the problem because if you remember when i started this analytics session in the initial sessions I clearly mentioned I have discussed so many matrix related to the each function it is not necessary you have to apply the all matrix you have to find out the relevance of these matrix if you want to make some modification into it you can make it and you can use in your analysis that is the one thing. Second thing you should have the problem. If you have understood the data science framework, in that first step is to define the goal. If your organization is not having this equity, pay equity issues in your organization, then no need to do this analysis. If you find it has to be there, it is the problem, then should this particular you focus on analysis, right.

Then you should focus on this particular So, similarly one more thing that I say if in your

organization full time employee and part time employees are there then you do the analysis cost per employee right for full time and part time male and female right. That analysis also you can do in order to understand right full time employees, part time employees, what is the cost for them right so that analysis also you can understand right and one more thing that i suggest like this part-time employees and full-time employees and you the cost per employee that is what you have calculated and identify the job evaluation point also and see the relationship like if job evaluation points are high for part-time employee or contract employee, but salary is being paid less. Do you think you will be able to retain or you will be able to keep motivated that employee in your organization? So, you need to think about it. So, when you are doing this cost per employee analysis, please mention the job evaluation point also for full-time and part-time and compare with the job evaluation point with the cost per employee right if you find it is appropriate it is okay if you find a difference then you can think about it what you can do in order to retain or get the best work from the part-time employees also because sometimes job worth is high and you are paying less to the part time employees, then you may not be able to attract the best candidate organization, right. to your

So, that is how you can compare related, you can compare the job evaluation point for the part time and full time employees also, right. So, thank you. In this session, I hope you would have learned about the incentive planning and few more formulas related to the compensation analytics. Thank you.