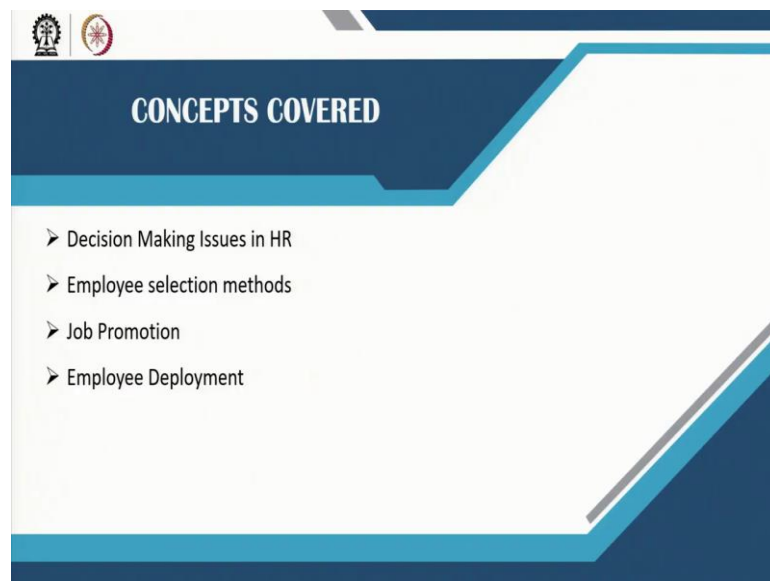


Decision Support System for Managers
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Module – 05
Lecture – 04
Employee Selection, Promotion and Deployment Methods – BCG

Hello and welcome to “Decision Support Systems for Managers”! We are into module 5, ‘decision support system for HR managers’ and today, we are in the last lecture of this module 5 that is ‘employee selection, promotion and deployment methods’; and we will learn how to use a matrix similar to BCG matrix for employee selection and promotion. Ok; clear? Same methods can be used for selection, promotion, deployment; ok.

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These are the concepts covered.

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BCG

- Consider the following situation:
- Following are the contribution towards sales for the marketing personnel:

Employee Acronym	% Contribution to Sales
A	19
B	12
C	25
D	9
E	14
F	20
Others	1

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Now, is BCG let me just give you a brief orientation first about BCG matrix, many of you may be aware, but many of you may not be aware; ok.

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BCG

Growth of Mkt

Hi

Lo

Mkt Share

Hi

Lo

Cash Cow

Dog

E1, E2, E3, E4, E5, E6

Now, this BCG for Boston Consultancy Group, basically it tells us that now this is the basic concept of BCG. What BCG says is that what BCG says is if your market share is high if your market share is high and your growth of the market is also high. Your market share is high growth of the market is also high then you are a star then you are a star.

That means what? The market is growing and your share in that growing market is also high that is also growing or high; that means, you are a great person, there is other extreme. Market share is low market share is low and your share in the market is also low then no point in staying in this market anymore ok. So, you are a dog you are a dog no point in staying in this market; ok.

Now, let us take another one. Market share is high, but the market is not growing. Market share is high, but the market is not growing; that means, saturated market – you have 100 percent market share, but the market is not growing. If the market is not growing, then why do you invest money there? You have the market share milk it. So, it is cash cow ok. So, milk the cash cow; ok.

Now, and then question mark your market share is low, but the market is growing. So, you adopt enough thought about marketing strategies and then try to increase it, try to bring it to this segment; ok; clear. What is the idea? The idea is you can put your entire you can put your entire employee patterns, employee selection, deployment, promotion everything in this type of a matrix and you can just put in which employee E is here which employee E is here. Ok; clear?

So, in this way you can put and this helps the organization. Employees, if you share this data this information in a pictorial form with this employees, they also are pretty much assured and they accept what you have done.

So, this is a problem consider the following situation following are the contribution towards sales for the marketing personnel that is an organization has six employees who are and this is their percentage contribution to their sales to the sales ok. These employees the maximum contributors to sale and this is the percentage contribution to the sales; ok.

(Refer Slide Time: 05:22)

Details about the EMPLOYEES:

- A is always on time, helps his team members and never puts others' sales effort in his log book

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Details about the employees just a second somewhere this has created a problem. Details about the employees; ok.

Now, A is always how we look at it the employee acronyms are A, B, C, D, E, F ok. Now, A is always on time helps his team members and never puts other sales efforts in his logbook ok. A is always on time helps his team members and never puts others sales efforts in his logbook.

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Details about the EMPLOYEES:

- B is late and only works towards the end of the month and meets his target. He is not popular among his team members

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Let B, these are descriptions now. So, you can easily understand that this model is used when there is no numbers to prove your point ok. This model is used when there is no numbers to prove your point. B is late and only works towards the end of the month and meets his target.

B is late and only works towards the end of the month and meets his target. He is not popular among his team members.

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• *C needs to be told to do things, but when told he does his work properly*

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C needs to be told to do things, but when told he does his work properly. So, he will not think on his own, but if he is told he will work; ok.

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• *D is sincere and always tries to do better*

The slide features a central graphic of a tree with various icons (gears, a smartphone, a laptop, a lightbulb, a magnifying glass, a gear with a checkmark, a gear with a cross, a gear with a plus, a gear with a minus, a gear with a dollar sign, a gear with a percent sign, a gear with a hash, a gear with an ampersand, a gear with an asterisk, a gear with a tilde, a gear with a caret, a gear with a backslash, a gear with a pipe, a gear with a less-than sign, a gear with a greater-than sign, a gear with an equals sign, a gear with a plus-minus sign, a gear with a plus-times sign, a gear with a plus-divide sign, a gear with a plus-remainder sign) on its branches. The background is white with a blue border at the top and bottom. The NPTEL logo is in the bottom left, and the text 'NPTEL Online Certification Courses IIT Kharagpur' is in the bottom right. A small video inset of a man in a blue shirt is in the bottom right corner.

D is sincere and always tries to do better.

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• *E listens to his boss but does what he thinks is best. So have converted some no-sales to sales; and have dampened some*

The slide features a central graphic of a tree with various icons (gears, a smartphone, a laptop, a lightbulb, a magnifying glass, a gear with a checkmark, a gear with a cross, a gear with a plus, a gear with a minus, a gear with a dollar sign, a gear with a percent sign, a gear with a hash, a gear with an ampersand, a gear with an asterisk, a gear with a tilde, a gear with a caret, a gear with a backslash, a gear with a pipe, a gear with a less-than sign, a gear with a greater-than sign, a gear with an equals sign, a gear with a plus-minus sign, a gear with a plus-times sign, a gear with a plus-divide sign, a gear with a plus-remainder sign) on its branches. The background is white with a blue border at the top and bottom. The NPTEL logo is in the bottom left, and the text 'NPTEL Online Certification Courses IIT Kharagpur' is in the bottom right. A small video inset of a man in a blue shirt is in the bottom right corner.

E listens to his boss, but does what he thinks is best. So, he has converted some no-sales to sales; and have dampened some also because he does not listen ok. Sometimes it hits, sometimes it misses.

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• *F is a real friend to the people whom he meets. He gets his work done through this pseudo friendship.*

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F is a real friend to the people whom he meets. He gets his work done through this pseudo friendship.

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• How to prepare a employees preference matrix?

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How to prepare an employee preference matrix? Ok. So, we got some information and we will try now; ok. So, let us see how to do it; ok.

(Refer Slide Time: 07:36)

	On-time	Helping	Honest	Family	Popularity	Target	Sincere
A	5	5	5	-	-	-	5
B	-4	-	-	2	4	5	5
C	-	-	-	-	-	-	5
D	-	-	-	8	-	-	3
E	-	-	-	-	-	-	1
F	-	-	-	5	-	-	-
9 5 5 7 4 5 9							

We have these six employees and what we now need is information may be there or not it depends on what information you collect or what information is available with you. See there will be many such information that is there for each of these employees ok. So, let us see what we are doing.

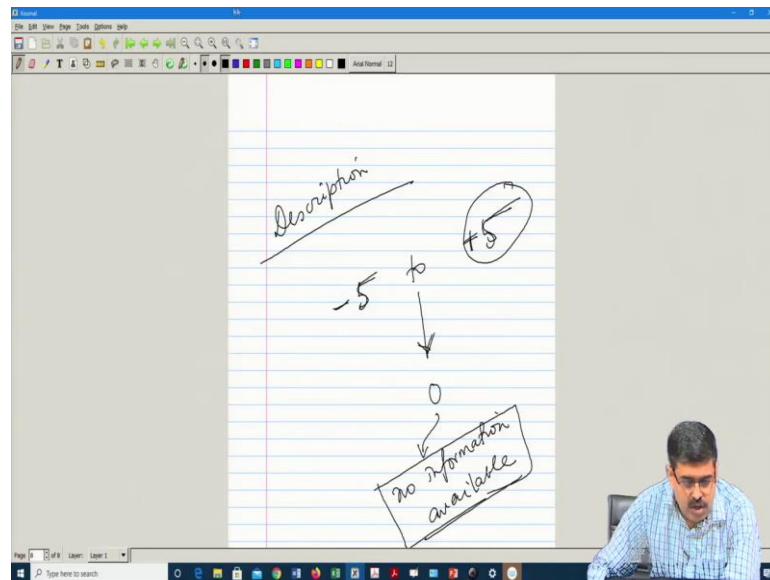
A is always on time, helps his team members and never put others' sales efforts in his logs ok. A is always on time helps his team members and never puts other sales efforts in his logbook. So, three things are emerging for A on time, helping and honest sincere honest, on time, helping and honest ok. So, let us put this criteria on time, helping, honest.

Let us go to B. B is late only works towards the end of the month and meets his target. He is not popular ok. So, this on time helping honest popularity we got one additional criteria ok, popularity. Let us go to C. C needs to be told to do things, but when told he does his work properly ok. So, honest helping some sort of sincere. So, we are listing down.

D is sincere, always try to do better. So, D is already covered. E listens to his boss, but what he does is thinks best ok. So, let us see where to put E. I would say is not a level headed person, but what criteria to give. I will say that he is a person who is of his own; who is on his own; ok. So, we can add one more column here; right. So, we can add one more column here – on his own.

What about F? F is a real friend he gets his work done ok. So, he somehow will meet his target ok; man who tactical tactics ok. So, we got something. Now, what you do is now listen very carefully ok. So, we first write down the descriptions that are there first write down the descriptions that are there.

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Now, what you do is for every such description for every such description we have a scale of minus 5 to plus 5. This minus 5 to plus 5 0 is in the middle; 0 stands for no information available. 0 stands for no information available minus 5 to plus 5.

Now, this minus 5 to plus 5 is for whom it is for from your organization standpoint if it benefits you it is plus 5 for your organization standpoint. If it does not benefit you it is minus 5 and the rest is in between; ok. So, let us go back. So, let us go back to the descriptions.

A is on time, helps his team members and never puts others' sales efforts in his logbook ok. A is on time nothing is mentioned 5 helps his team members 5 honesty 5 ok, clear? B is late only works towards end of the month, he is not popular, but he meets his target huh. He meets his target. So, on time – no, B is late; extremely late either you give a minus 5 or you can give a minus 4.

So, as to maintain the extremities, we let us give it a minus 4. He meets his target that we have not mentioned anywhere here, but you can add one more point, meets target; ok.

But, he meets his target, I think it is better to put a target he meets his target, works towards the end of the month only ok. So, tactics meets his target. So, A also meets his target we do not know not mentioned ok. Now, B meets his target by tactics. So, positive 2.

[FL] B is not popular; one more point, B is not popular ok. So, popularity B is not popular ok. Let us go to C. C needs to be told to do things, but when told he does his work properly. So, on time, helping, honesty, tactics, hopefully target sincere, own I think I wrote something there. C needs to be told, but he will work on his. Let us put this as let us put this as C for C it is only one C needs to be told. So, for C it is 5; ok.

For D; D is sincere and always tries to do better very good D is sincere. So, always his sincere is 5, always tries to do better ok. So, always tries to do better maybe another 3 here ok. Let us go to E. E is listens to his boss, but he will do only what he likes ok. He listens to his boss, but only do whatever he likes on his own. I think this is here, but that may be detrimental; right.

So, let us put it as only plus 1 ok; that means, if he wins he wins, if he loses it creates problem for your organization. So, that is not a very good this thing. F is real friend he gets his work done, so, this pseudo friendship tactics; ok.

So, now, what we do is we need to add this course 9, 5, 5, minus 4 9, 5, 5, 7 minus 4, 5, 5, 9. This is the score; ok. We will keep this sheet and we will go back to our ppt; ok.

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The slide contains five bullet points:

- Step 1: List the characteristics of the employees that are provided
- Step 2: For each of these characteristics, give a score on a scale of -5 to +5. When no information is available, the score is 0
- Step 3: Get the employee scores (score for a supplier can be negative also)
- Step 4: Get the Relative Market Share (RMS); Do a natural log
- Step 5: Plot the employees score and RMS

The slide also features the NPTEL logo and the text "NPTEL Online Certification Courses IIT Kharagpur" at the bottom.

Now, so, we have done this. So, step 1, step 2, step 3 we have got. Now, get the relative market share, do a natural log, plot the employee score and market share. What was the market share? Market share is this one because percentage does contribution to sales, their share. Now, take this market share do a relative market share and do a natural log. Now, just remember just remember these three 19, 12, 25, 9 9 19, 12, 25, 9 19, 12, 25, 9; sorry; 19, 12, 25, 9 19, 12, 25, 9.

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The handwritten notes show the following calculations:

Employee	Score	RMS
A	19	$19/25 =$
B	12	$12/25 =$
C	25	$25/25 = 1$
D	9	$9/25 =$
E	14	$14/25 =$
F	20	$20/25 =$

The number 25 is circled in red, and the calculation $25/25 = 1$ is circled in blue.

Let us write it down – 19, 12, 25, 9. These are the market shares for these employees. We have another two, but we are not just four is enough ok. What is the relative market share for A? Relative market share means relative market share means your share with respect to the best in the league ok. So, 19 by 25 whatever, 12 by 25, 9 by 25; ok.

Now, let us go back to the table quickly. 14, 20 – E and F is 14 and 20; ok. So, sorry E and F is 14 and 20. So, E's market share is 14 by 25, Fs share is 20 by 25 F's share 20 by 25; ok. Now, only thing remains is what is the market share of C? Some of you will say C is 25 by 25; that means, 1 no ok. So, this is ruled out.

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The whiteboard shows the following calculations:

Employee	Market Share	Relative Market Share (RMS)
A	19	$19/25 =$
B	12	$12/25 =$
C	25	$25/20 =$
D	9	$9/25 =$
E	14	$14/25 =$
F	20	$20/25 =$

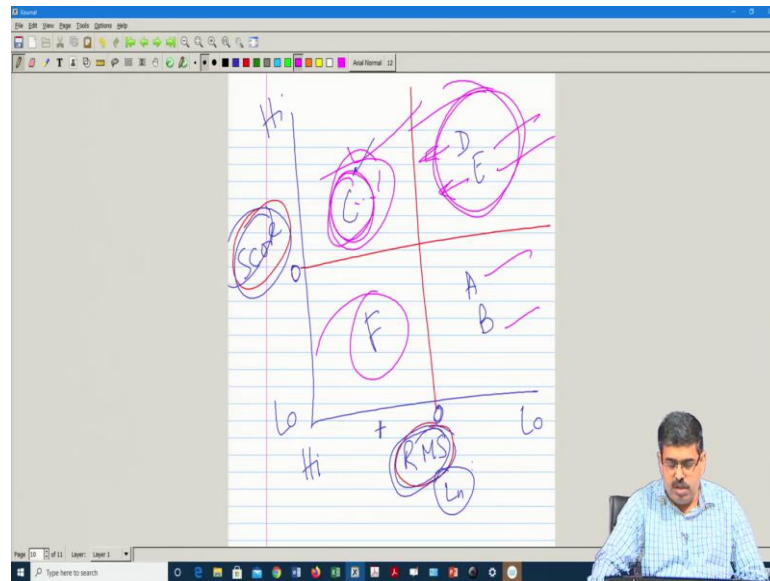
At the bottom, the natural log function is written as \ln .

Basically, here C's market share will be C's market share will be 25 by 20 that is the next best player that is the next best player clear, 25 by 20 that is the next best player.

So, this is your table. So, we have got the relative market share. So, what we mentioned? Get the relative market share, then do a natural log. Let us go back whatever we get whatever values we get whatever values we get we do a natural log. Why natural log? Natural log basically takes care of both the extremities and brings it towards a common platform; ok; that is natural log; ok; clear!

So, now, basically what are we having? We are basically having let us go back on one side we are having 9 A, B 9, 5, 5, 7, 4. So, one side you have these scores of these people and on the other sides you have the relative market share; ok.

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So, now let us draw a matrix on one side you have the relative market share and on the other side you have a score ok. One side you have the relative market share other side you have the score, right. So, low, high; low, high; and now clear.

Now, let us go back now let us go back. What did you do? You had the relative market share only this one was positive right this one was positive. Now, this one is basically this point is a 0 point. This point is a 0 point ok. Now, only one of them one only if you look at this table, only this one can have a value greater than 1, all others will be fraction; ok.

So, if you take this only one party only this is positive only one party can come here only one can come in this segment. So, you take this. So, for A, B, C, D; sorry.

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	Score	RMS Ln
A	15	
B	15	
C	5	
D	8	
E	1	
F	5	

So, now, you have let us again go A, B, C, D, E, F. We have we now have two things – one is score and the other is relative market share ok. So, now let us very quickly go back. So, your score was 9, 5, 5, 7, 4 double 5, 9, 9, 5, 5, 7, 4 double 5, 9, 9, 5, 5, 9, 5, 5, 7. No, I am so sorry, I missed it; sorry.

A score is 15 sorry A score is 15 that is what I was confused did it the other way around; B score is 15 B score is also 15, C score is only 5, D score is 8, E score is only 1 and F score is 5. So, 15, 15, 5, 8, 1, 5, 15, 15, 5, 8, 1, 5 15, 15, 5, 8, 1, 5, 15, 15. So, 15, 15, 5, 8, 1, 5. This is the score that we just now got; ok.

Now, just by doing a; just by doing a natural log just by doing a natural log of these values we will get some values. So, you put the natural log values here you put the natural log values here you put the natural log values here ok. So, now, you get two axes of the BCG matrix. The score sheet that we just now gave you 15, 15, 5, 8 etcetera and the natural log natural log value.

Now, you plot the graph and then after plotting the graph what you will see is that maybe candidate 3 is here to meet designators S 3 ok, but maybe candidate 3 is here ok. So, which here we mentioned as C maybe D and E is here, maybe F is here, maybe A, B is here just after plotting the graph you will get something like this.

Now, what do you mean by this? That means, that C is your most outstanding performance employee, D and E needs to be nurtured, F he has worked for so many years in the company. So, there are organizations who also exploit their people. So, F is a candidate who can be exploited should not be, this is very bad. Nobody should exploit others. Remember all are humans. We all will land in the same shoe one day; ok. So, humans.

A and B you will have to ask them to leave the organization ok. So, this type of BCG matrix you can use for employee selection also. This candidate should definitely be selected; these two should be selected, but should be nurtured and the others not applicable here. Promotion same thing ok, employee after joining; probation – how much should be the probation period? Whether probation should be renewed or not? Here ok; employee deployment – who should go abroad this one; ok.

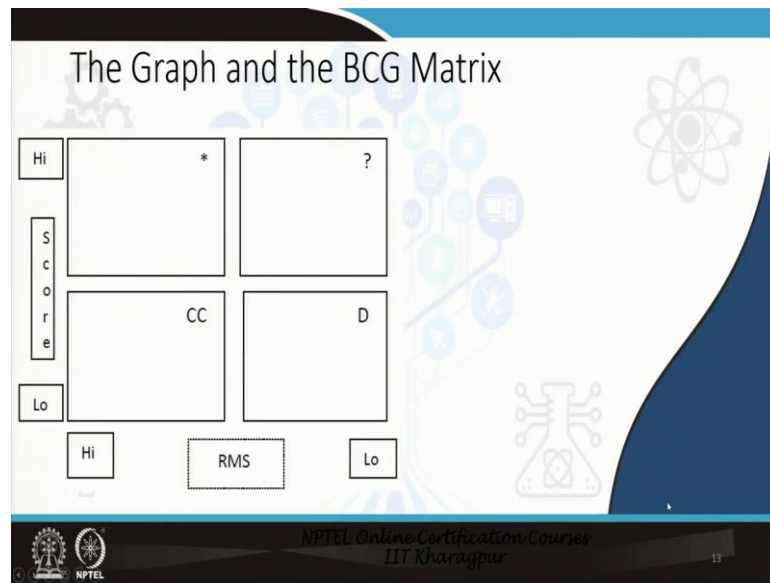
So, this BCG matrix is a very beautiful way to find out your answers to all these questions ok. So, BCG matrix is a very beautiful way to find out answers to all your questions ok. So, we will close today and with this BCG matrix.

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Employee	% Supply	RMS %	Ln	Employee Score (Assumed)	Employee
A	19	0.76	-0.27	20	A
B	12	0.48	-0.73	10	B
C	25	1.25	0.22	24	C
D	9	0.36	-1.02	20	D
E	14	0.56	-0.58	15	E
F	20	0.8	-0.22	21	F

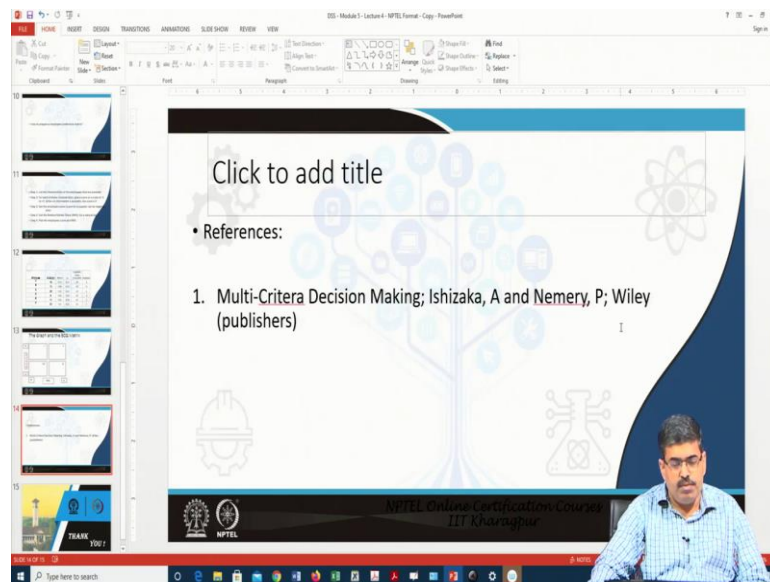
This is basically the log values that we mentioned and we have assumed some employee's course they just given and the employee names.

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So, basically you can plot them. This whatever I explained in the answer sheet let that remain that the graphs of the BCG matrix this is the cash cow, star, question mark and dog; ok.

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These are the references. Now, we end this module on HR. Through this module, we have given you very different ways to approach employee selection, employee deployment and employee promotion. We have given you very different ways and we hope that you will be able to apply many of them in your organization setting.

This will help you to a great extent to become numeric and your employees will not ask you a question. Everything is mathematically proved, numerically proved; ok.

So, with this we end the HR module; ok. In the next module, we will take over some models that you will need for strategizing; ok.

So, thank you!