

**NPTEL**  
**NPTEL ONLINE CERTIFICATION COURSE**

**Course**  
**On**

**Human Resource Development**

**by**  
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**Lecture 38: Competency Mapping Approach to HRD**  
**(Contd.)**

Okay, so we are moving to the next part of this session on competency mapping. And in this third session basically we are going to discuss about some of the tools and techniques that is used for assessment and feedback and we will also discuss that how we collect data in order to identify various competencies which is required for effective performance.

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**Session 3**

**Tools and Methods of Competency  
Mapping**

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And in this context what we are going to discuss is some of the tools and techniques that could be used for higher performance.

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## Methods of Competency Mapping

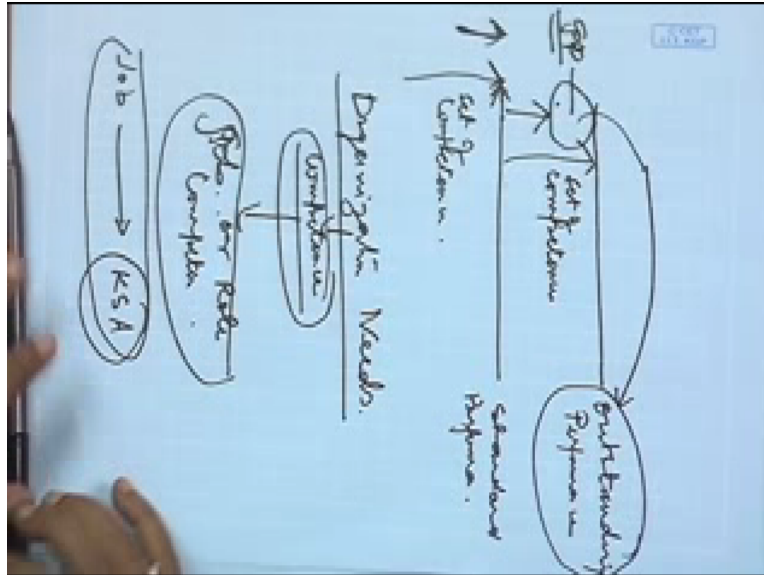
- Businesses use competency mapping to match the capabilities and talent of personnel with specific job tasks and organizational needs.



Now when we are talking about tools and techniques, so first of all we have to see what are the various methods of competency mapping, how do we go about mapping competencies of the people right. See why businesses are using competency mapping okay. So that they can match the capability of the people which the job are the requirement of the organization. So the idea of competency mapping here is to identify the capabilities and talent of the people on the one side, and also the tasks and the requirements of the organization.

So basically you try to match, you start with what you call the need of the organization. In terms of what kind of competencies organizations require right. And this competence is going through the job right, what kind of competence would be required by the people to go from the job right, job or role competence right.

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And what you are going to do next you are basically matching two things, the job that is going to perform by the individual and the knowledge, skill attitude that the individual has. So this has to remain at this level, so there is a compatibility in terms of competence to perform. And then you have to see that it is coming from here, the competence that is required by the organization, because the core competence of the organization depends upon the competence of the people okay, to perform the job effectively okay. So the competence associated with the job is nothing, but the knowledge skill attitude that people had.

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## Methods of Competency Mapping

- Businesses use competency mapping to match the capabilities and talent of personnel with specific job tasks and organizational needs.
- The technique involves conducting a job analysis to identify core skills and behaviors required to perform the role, drafting a job description based on the key competencies and aligning resources to best fulfill competency needs.

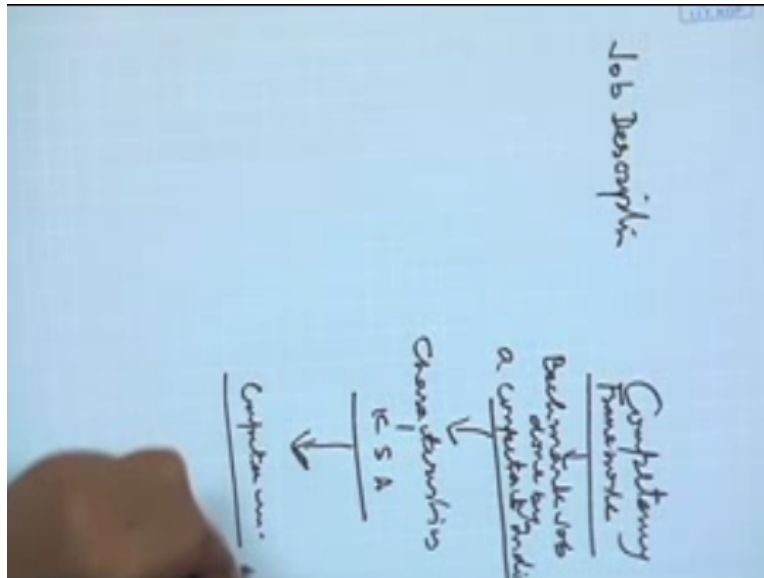


So when you are going to use this competency mapping framework, the idea is that you match this capabilities and the talent of the people with the task, the role that they want to go far, which is basically helping to see that this the needs and the objectives of the organization is achieved right. So with this we proceed further to discuss. So what are the various techniques through which we are going to analyze the core competence of the people, the behaviors of the people, to know that whether they are performing their job effectively or not okay.

So one approach that we have used is the job discussion approach to identify the competencies, and see that what the resources are required to fulfill their competency needs. And their approach is that to identify a benchmark shop, identify what the various characteristics in terms of competencies okay. And see that whether the people can be developed to that level of competencies to perform their job effectively or not.

And both these approaches are used when it comes to competency mapping right. So what we are going to discuss here, when I am talking about the competency mapping, that what are the various tools and techniques that we use for competency mapping, and in order to identify the characteristics.

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So if you remember, we talked about two things, two approaches that is the job analysis approach or the job description approach, and the competency framework now if you look at this competency frame work we identify a bench marked job right done by a competent people individual right.

So I have to identify a bench mark job when you are using this competency frame work to see that who is doing it so once you identity this competent individual who is performing the job then you look at his characteristics in terms of knowledge, skill, attitude and these kind of things and then what you are going to do next you are going to see that it is masked with the competencies of others doing similar jobs okay.

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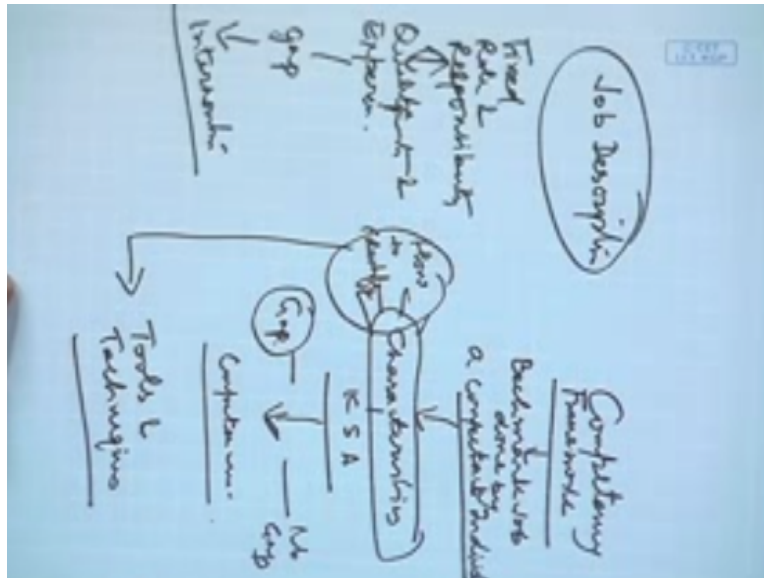
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## Methods of Competency Mapping

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I have if there is no gab then it is good if there is a gab then you need to bridge this gab through various interventions right.

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So this is basically the competency approaches so we are talking about this competency approach we have to identify a person who is doing a job and how is considered as the high competent individual performance job very well so we are going to look at his characteristics now the question here is that how to identify those characteristics and for that you are going to use certain tools and techniques in job description approach what happens you have fixed roles and responsibilities right.

You have fixed knowledge qualification experience okay and then you are going to match this the gap is identified and the you plane intervention HRD intervention right in terms of tanning development coaching mentoring whatever it is here also of the same kind of interest to bridge the gabs but how do you derive these competencies differences in this case this basically you compare that knowledge and the skill is actually under standard performance and then you identify the gab.

But in this case since we are using a competency approach you identify individual high performing individual and then through observation you are identify what are the various characteristics that he as because you are going to use these characteristics as a bench mark for comparing people doing similar job to identify the gab in the competencies okay, now the idea is that how are we are going to identify this these characteristics which leads to superior performance.

And that is where you are going to use a lot of tools techniques which I am going to discuss now right,

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## Methods of Competency Mapping

- Businesses use competency mapping to match the capabilities and talent of personnel with specific job tasks and organizational needs.
- The technique involves conducting a job analysis to identify core skills and behaviors required to perform the role, drafting a job description based on the key competencies and aligning resources to best fulfill competency needs.

So both the approaches are used but this is a relatively better approach because in this case this has come from the field this is based on observation this is something that has come from the literature academic literature management theory which is per conserve and this is actually more real right and that is how we are moving to this one.

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## Assessment Center

- The assessment center methodology involves situational observation to evaluate performance and growth potential of candidates relative to specified job attributes.
- The approach uses various types of discussion and simulation exercises to reflect real-life demands of the job. Candidates are asked to work through certain scenarios while a trained assessor observes their behavior.
- The situations are designed to reveal skills and aptitude that help identify which individuals are matches for the current and future requirements of the job.



Now one thing that can be done one tool that is used here is know has a assessment center okay some of the organizations I have their own assessment interest some of the organizations outsource it but the basic role of an assessment center is to identify people okay to know what are the various characteristics that he has for hypothesis so when you are using this assessment centre approach methodology so what actually happens you are going to say what this high performing individual is to me right.

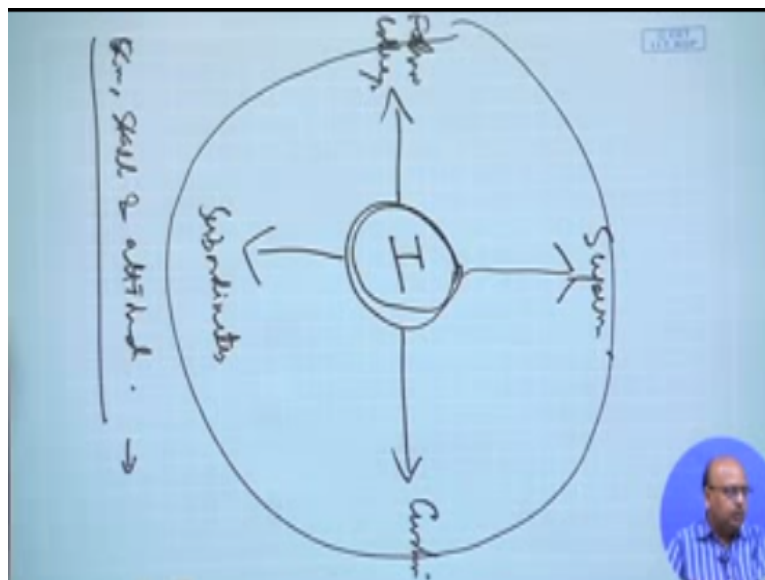
Correct which is related to fake job and based on this observations you when you evaluate his performance and find that yes he is a high performing individual okay then you are going to identify and then you also identify what various trade and characteristic that is displayed by that individual okay you can engage him discussion you can interact him you can go for some kind of exercise to find out from this okay.

So that is know that what are the various underlying characteristics which the individual has okay which leads to better performance okay what you need a person assessor who is going to observe the behavior of high performing individual or high competent individual but you are using this assessment center for training development intervention then you are going to see that whether the person is performing what is suppose to do right so that is why we differentiate it, so in assessment center when you are going to identify a high potential individual you are going to conduct certain structured exercise certain tests okay.

Which will help you to identify whether the person high is those competencies are not so the idea is to find out the skills and amplitude of the paper which could be related to high potential high competence right, so you can go for simulated the exercise you can go for role plays you can go for some kind of other exercises structured exercises okay so the scenario planning role plays gain simulated exercise the idea of use we using these kinds of methodology in a assessment center phase to see.

That in these context of situation people are coming out with their attitude and skill okay so you will be able to identify their attitude and skill and then you are going to match it with someone who is already performing very, very under here right and that is where assessments interest have being very, very useful to identify the worth potential of the paper right a perform assessment center there is either method that is used which is known as 360° feedback.

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Then in 360degree feedback what happens you try to get a feedback which is much more comprehensive and which involved a number of stake holders okay, because if you are going to use a normal feedback process we using as we are using only performance surprise you do not get a comprehensive feedback, okay you might get feedback from the seniors are you might get feedback from the person itself then and there could be certain quantities which is not revealed by the individual.

Or seniors are not able to observe their certain qualities which could be observed by the customers certain qualities by the PS or certain qualities may be by the subordinates okay, so what happens since the individual is going to interact with the set of people okay at different levels at the same level the higher level and the junior level okay, so when you are going to use this 360<sup>0</sup> feedback you get a better perception of the individual in terms of his competencies in terms of his performance.

Right and that is why 360<sup>0</sup> technique have also been used as a mechanism for evaluating performance of the people to okay now if you look at this 360<sup>0</sup> technique okay actually involves collection of data from a set of people, now in fact in 360<sup>0</sup> technique what happens here you have a individual here.

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### 360-Degree Feedback

- The 360-degree Feedback Process is being increasingly used in organizations for development, appraisal and compensation purposes.
- It involves a collection of perceptions about an individual's behaviour and its impact on bosses, colleagues, subordinates as well as internal and external customers.
- Competency Mapping help to ensure that such feedback relates specifically to the competencies crucial to individual or organizational success



Right so this individual is been evaluated in a 360<sup>0</sup> way okay this could be superiors they could be subordinates right here you can have customers and here you can have fellows colleagues and the individual self right, now if you see that in a 360<sup>0</sup> technique you are going to be evaluated in very comprehensive here okay and the criteria for evaluation also varies from one said to and the set of evaluators for which gives you more comprehensive data about not only the knowledge part but their skills and attitude part okay.

This is used to identify that in a much more competency okay so if you are using this kind of techniques for identifying the competencies you can use it provide it you are using the criteria which is related to higher performance what the extended performance that is the only different that you have, so basically you get a better perception about the individual behavior okay with respect to superiors, subordinates, colleagues internal and external customers right, and that is why the 360<sup>0</sup> feedback high in very often used.

And very common and sometimes what happens that when you try to make use it some kinds to find that some of them have not given their evaluations about the individual, so if you do not get complete evaluations then it is not possible for you to go for these kind of things interestingly in one case where we go for a 360<sup>0</sup> evaluation of all managers okay in a particular case in steel organization we found that in many cases some of them have thought given their evaluation sometimes it has in draw backs.

Because if you give evaluation about your seniors and it they come to know about it they would be vindictive to you, right so you need to adopt certain processes on mechanism to ensure that this kind of feedback process is fulfills, you are able to get a comprehensive picture with respect to all the stack holders in the process including yourself and that is how you get a better data, right about the individual, right.

And when you are going to go for competency mapping you have to see that these feedbacks are a specifically to the competencies which is related to his success as a superior performer or contributing to organizational performance, so you need to identify those key competencies and then you have to map them.

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## Critical Incidents Technique

- This technique uses data gathering and analysis to identify job-specific behaviors that influence the success or failure of an individual or collective business operation performing a certain job.
- Data about critical events -- exceptional examples of accomplishment or failure -- is collected through interviews or questionnaires as soon as possible after occurrence.
- The incidents are then categorized according to associated job behaviors to reveal patterns of performance gaps and strengths.



And then technique that is used is known as critical incident technique okay, here you are going to use and collect data by observations of his specific behaviors okay, which leads to either success or failures okay, so why we call it critical incident this is the reason because you are not going to observe those behavior could be normal and routine in nature which a person perform or which person does to in order to perform a job effectively right.

So we will leave out those standard average behavior or routine work related activities which is a person is doing okay, we focus more through observations and those critical incidents and why we call them critical incidents because they lead to either success or failures not average performance right, and that is why we call it critical incidents.

So what actually happens these critical incidents since they are identified you know that these incidents lead to better performance or worst performance okay, so you can say okay these are the critical activities or incidents which the person has done or performed which has relate to have performance. So the idea is to identify those critical incidents leading to better performance okay.

And then you have see that in order to perform those critical incidents what kind of competencies was observed by the individual, so basically it is a case of observation where you go and try to find out what people are doing and out of that how much is related to average and daily routine activities and how much are related to those activities or those incidents which relate to failure

okay, that need to be ruled out okay, and those incidents which have critically or significantly contributed to get a performance.

So you need to keep a record of those incidents which significantly lead to better performance and then you have to see that what competencies were required for that, and that is how you collect the data using this critical incident techniques, right. So you go for critical events, exceptional examples of a accomplishments or failures that is only collect okay, through observations, questionnaires and interviews okay, as an event when they are come so that you can relate them with competency right.


And then you are categorizing them, associate with various okay, whether they are related to performance or they related to strengths and then accordingly you can see whether people have those competency which leads to significant performance or not, right. So critical incident is also very common which is used in many organizations.

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**Methods of Data Collection**

- **Resource / Expert Panels**  
Structured process to get the participants (Job holders, managers HR / training staff) to think systematically about the job, skills and personal characteristics needed for success.
- **Critical Event Interviews**  
Structured interviews with superior performers which involves in-depth probing of a large number of events and experiences.



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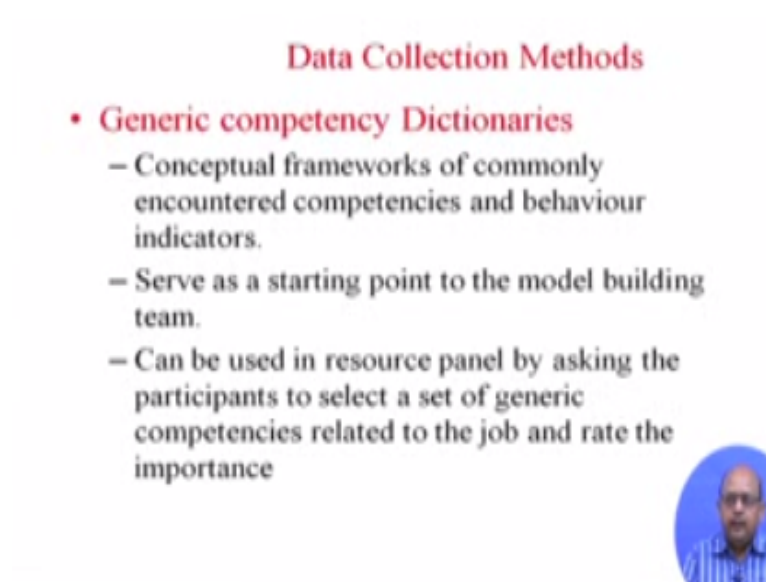
Now after discussing about these tools you see that how we go about collecting data to identify those characteristics will be required by for air performance. Now if you look at this you will find lot of methods some of them we have allowed already discussed earlier also but here I am giving a brief overview of these methods which are used for this purpose, okay. So one where to get data about competencies include using resource persons or expert panels right.

It is a very structured process with job holders, the managers and even the training staff aligns their activities in such a way so that they are able to see what are the various characteristics which could be required for the success of the individual in a given job. So basically this expert is going to identify those competencies across these three category generic, technical and managerial which leads to higher performance okay.

Since this is resource person expert no panels, know the job very well so they would be a position to classify those characteristics with respect to generic, technical and managerial competencies which would build leading to higher performance, okay. So that is why you are going to use resource persons are expert panels right, apart from that you can also use critical event interviews okay, structured interviews with superior performers okay.

And then you can poke them in depth okay, that through large number of events and experiences which they have related to their job and you can identify okay, what are the critical events which are very, very important okay and in idem to perform those critical events what kind of competencies are required by the individual key performer right apart from this critical interview event interview we move to some to the methods.

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**Data Collection Methods**

- **Generic competency Dictionaries**
  - Conceptual frameworks of commonly encountered competencies and behaviour indicators.
  - Serve as a starting point to the model building team.
  - Can be used in resource panel by asking the participants to select a set of generic competencies related to the job and rate the importance

Like having a dictionary of generic competencies okay see as was discussing about generic competency I told you that this generic competency is are requires across function and levels tight and this means these generic competencies required for all kind of jobs by all kind of

peoples right. So these are some of the competencies and behaviors which help you to achieve superior performance right.

So when you going to build a competency model so you start with identifying what are the generic competencies okay either you use a list of traders or characteristic which is already available okay and that is what we know as competency dictionaries. So these competency dictionaries provide you general trades and characteristic which are required for a performance in an effectively right.

But the only thing you here is that all the generic competency is mainly not required for all the jobs so you have to various specific identify what are the specific set of generic competencies which you can relate with the job right, for example at lower level you may not required leadership competencies right you do not required a statistic thinking competency at a lower level individual our manager right.

So you need to identify out of a list of competencies what are the competencies that could be apply for a given job right and that is where you can take help of resource panel or expert panel, so this resource panel or expert panel will go through this list he has the job at time and what are the things that is done for the job and then he is going to identifying okay these are the competency generic competencies which would be required for effective performance later on we take up model and discuss how it is done but here conceptually what I am trying to tell you that you are job to identify those generic competencies which is required for the job.

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## Data Collection Methods

- **Literature Review:** A preliminary approach for defining job content and identifying required competencies is to conduct a review of the literature to learn about previous studies of the job or similar jobs.
- **Focus Groups:** In focus groups, a facilitator works with a small group of job incumbents, their managers, supervisees, clients, or others to define the job content or to identify the competencies they believe are essential for performance



Apart from the using generic competencies dictionary you can also go for literature review okay. you can look at different kind of job descriptions that is available okay you can conduct a literature and you have to find out specially relate to job descriptions and job specification okay these are the characteristic that is require for the job okay and if it is matching with your job and then you make your job that.

Similarly you can go for some kind of quantitative approach like focus group discussions where a small number of people who are performing the job including their managers and supervisor including clients also, so they are going to discuss the content of the job and then they will identify what are the competencies that this job required to be performed effectively and here you are in this focus group you are going to use a number of a stake holders including external customers right may be suppliers may be clients then you have the managers okay the subordinates the supervisors.

So all of them come together and discuss the require as specific competencies which is important looking at the job content to perform the job effectively okay. And that is how you are going to use focus group discussions and this helps you to identify in crystal clear those competencies which is required for the performance.

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## Data Collection Methods

- **Structured Interviews:** In structured interviews, carefully planned questions are asked individually of job incumbents, their managers, or others familiar with the job.
- **Benchmarking interviews** with other organizations are especially useful in achieving a broader view of the job or determining which competencies are more universally deemed necessary for a particular job



Then apart from focus group we also go for structured interviews you know in interview is a face to face discussions we are going to ask certain questions okay could be structured or it could be unstructured, in unstructured question what happen you do not go prepared when you ask whatever question comes to our mind depending upon the requirement but you are prepared.

But in a structured interview what happens you come prepared you plan what are the questions that you are going to ask to the individual who is performing the job not only to the individuals but you are also going to ask these kinds of questions may be to his clients his managers or others who are part of the job or who are some are associated with the job.

So but the set of questions that you have planned for each category of people who are going to be interviewed is going to be different okay which is going to give very good data related to the competencies that would be required okay so may be from job interviews you can ask what kind of competencies required what kind of knowledge skills required from managers you can ask okay this is the job this person is doing job so what are the competencies that you expect them him to have.

Similar from the customers you can ask okay suppliers you can ask vendors you can ask okay since they are associated with this kinds of jobs depending upon the nature of the job right so structured interviews is good very and it has been used to identify this kinds of things moving further you have bench mark interviews they we will go for bench mark interviews with other organizations also okay.

That how they have been able to achieve a broader view of the job to determine what are the competencies which is universally deemed necessary for the given job especially these kind of things can be done to identify generic competencies to some extent and managerial competencies because if you are going to talk about technical functional competencies this is not going to be derive from this much because technical competencies are very, very job specific which is going to vary from one job to another job.

And that is why it is becomes very difficult to use structured interviews unless this interviews is specifically belonging to that particular job right but you can derive rich data using this kind of interviews when it comes to identifying more generic competencies.

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### Data Collection Methods

- **Behavioral Event Interviews:** In behavioral event interviews (BEI), top performers are interviewed individually about what they did, thought, said, and felt in challenging or difficult situations.
- The competencies that were instrumental in their success are extrapolated from their stories. Often, average and low performers are also interviewed to provide a comparison.



Then a part from that we also have some other methods for data collection like behavioral event interviews okay where top performers are introduced individually how they did thought and felt in challenging or difficult situations so whatever data is coming out of it as to be used for this purpose and then this is going to help to identify what are the things that high performing individuals too in order to perform the job effectively.

But here again you are going for a you can go for an interview based on the different levels that have been performed okay and then you tried to relate behavioral and competencies and then you go then you become more exploratory process okay where you are try to see that okay these are the things that is to be done these are the things in terms of competencies that is required to cope of these kind of situations and challenges right.

So behavioral event interviews is very popular and this could be used especially with top performers identify their perspective right so what they will do they will try to identify those competencies or you can identify those competencies which are instrumental in success of the individual and then, then you can extrapolated from their stories right they sell okay this is what I take and which is I can able to perform very well so you make the filter out the contained that is coming out from the discussions that goes on okay and that is going to see that if this obvious to do don by the average performer or poor performer what kind of contained is need to identify and then you can compare them to see that okay this is how we will relate to superior performers or other performers right.

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## Data Collection Methods

- **Surveys:** In surveys, job incumbents, their supervisors, and perhaps senior managers complete a questionnaire administered either in print or electronically. The survey content is based on previous data collection




Then other methods that could be used like survey methods that is very popular okay where you can send questionnaire structured questionnaires okay to the senior managers or other people who are stakeholders in the process okay and then you could collect the data and you can analyze the data and find out the contained and they you can use these are the competencies you can use certain strategically modeling also here to find out to factor analysis other things okay.

So these are the competencies and then you collect the data and find out the contend and then you can see the competency you can do it using the statically modeling and altogether you have to find out in factor analytic these are the competency so in same data high performance right apart from survey you can also go observation this is best in the work actually this data right you what you can do the research team can perform high data so it is some job which you are doing completion.

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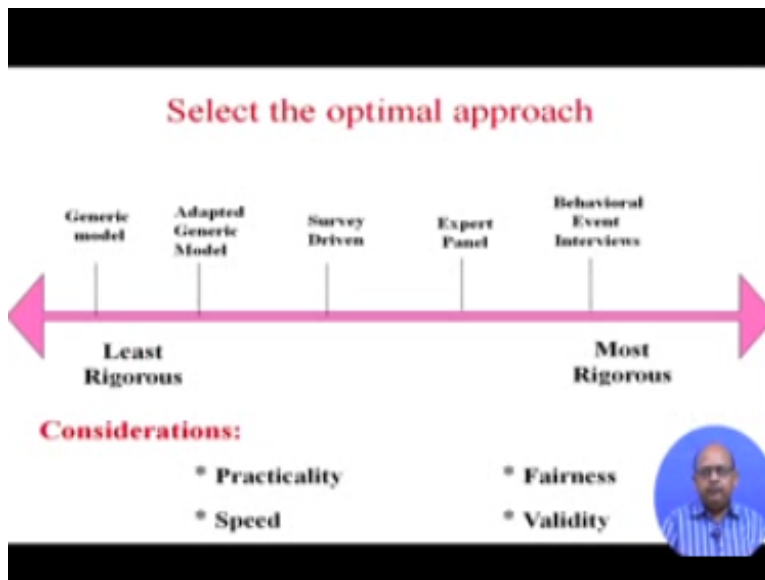
## Data Collection Methods

- **Surveys:** In surveys, job incumbents, their supervisors, and perhaps senior managers complete a questionnaire administered either in print or electronically. The survey content is based on previous data collection
- **Observations:** In this data collection method, the research team visits high-performing incumbents and observes them at work. The more complex the job and the greater the variety in job tasks, the more time is required for an observation.



So when you are going for observation because you cannot observe it and the person starts doing it and so the entire decision see that how it works what are the competencies it is been supplemented by behavioral to explore it for the jobs companies which is required right.

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So these are the methods that we have been using now which methods used right so now we will look at some of the techniques that is measured in model so you are actually trying to not to go for using those rigorous are using which are very rigorous and which is going to identify this competencies next to that and the certain competencies when you are going to collect data how practical is to get that data for example which is possible for to go.

Similarly which is taking too much time or taking less time how much time you have for this project and then finally look for evaluation are you really trying to measure those things these are really related to these kinds of competencies so these are some of consultations then you decide which method you are going to use for consideration as consult how this competencies.

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### Steps in Model Building

- Background information about the organization
- Decide on the Occupation / Job Position(s) that require competency Model(s)
- Discuss the application of the competency model
- Select a data collection method and plan the approach
- Organize Data collected
- Identify main themes or patterns
- Build the model - Defining specific behaviour Indicators
- Review the model

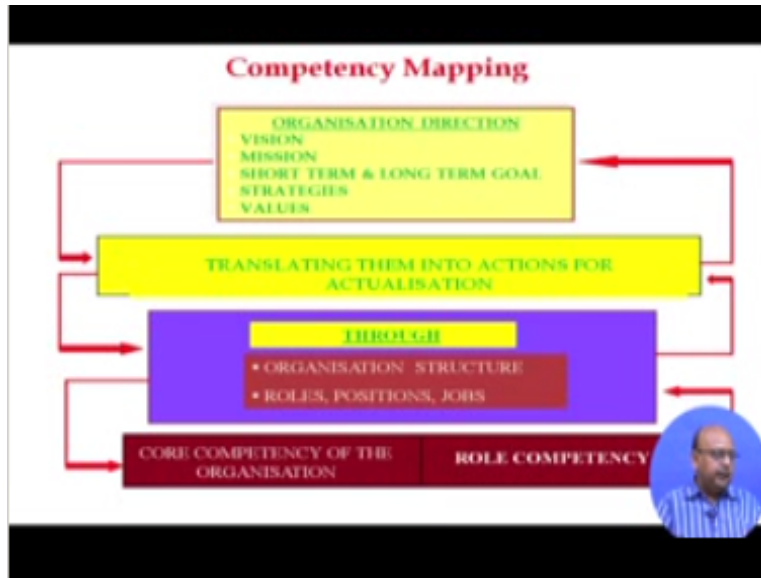


And finally these are the steps that we are going to use information about the organization then you look at the job that require for competency model then you find out why you are going to do it because it involves certain cause what are the applications that is very important then you select a data collection method for collecting a information ideal competencies you organize the data analysis the data.

And then identify main themes or patterns competencies and based on that you develop a competencies and that is how we start competencies for a given to building competency model okay and then you can do review this model periodically depending upon kind of models and then you go for recollecting the model process again and build the model.

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And that is what we have been discussion so far so first of all you are looking into goals and competency organization and transmitting them into actual plan and this organization structure roles and finally you identify the competencies that is required for the job and also required for the organization so what we have discussed how do we collect that carrying out this exercise using certain rules and techniques that you are able to build up and map the competency right thank you very much.