

**Training and Development**  
**Prof. S. Srinivasan**  
**Vinod Gupta School of Management**  
**Indian Institute of Technology, Kharagpur**

**Module - 03**  
**Lecture - 13**  
**When to Conduct a TNA**

Welcome to lecture 13 this is the 3rd lecture of module 3. In the previous lecture we discussed about training need assessment and we discussed about you know task analysis organizational analysis and also a person characteristic analysis and today we are going to discuss about When to Conduct this Training Need Assessment ok.

(Refer Slide Time: 00:46)



In this lecture we will be primarily discussing on when to conduct a training need assessment.

(Refer Slide Time: 00:50)

**Introduction**

Training may be needed when there is a gap between the desired performance, and the current performance, and the reason for that gap is lack of skill or knowledge.

Training may only be able to resolve part of the problem. Thus, we need to analyze the problem and find out whether training will be able to resolve it

A  
 1000 Units/Day  
 800 Units/Day  
 -200  
 → Power Failures  
 → Machine Breakdowns

NPTEL

Let us look at now when we are already looking at that yes training is needed when there is a gap between the desired performance and the current performance. We are looking at yes that act as an indicator or a precursor or a reason for there is a when there is a gap. So, when there is a gap or a deficiency on the performance in their desired state against the current performance then we say there is a need and we also understand does the gap is attributed towards a skill or a knowledge.

See it is very important I cannot you know fit every gap through a training let us say as let us talk about there is a deficiency which are occurred let us say A is a deficiency which are occurred.

So, the deficiency which you are talking about is a productivity let us say 1000 units per day has to be produced what I have seen it is 800 units which similar example which I have given in one of the lectures ok. Now, let us say there is a deficiency which it is a 200 units or less right minus 200. Now, there is a less of 200 units which are produced in a day.

Now, let us say I understand that you know this is because of external factor which I refer to the external factor I refer to let us say power failure which are not because of your employees or not because of your organizational process itself may be attributed towards the other aspect which are external to you or probably machine breakdown.

Now, let us say I cannot fix this problem through a training you should understand the gap which are arising the performance deficiency which are attributed towards a skill or a knowledge or a competency of the employee.

When this performance deficiency is primarily due to the knowledge gap or probably a skill gap or a competency gap then there is a potential opportunity that you will be able to improve the skill level of the employees or a knowledge or a competency of the employees through training programmes.

Unless otherwise there is this performance deficiency which are not a resultant of a because of the knowledge or skill level of an employee then I cannot do anything about it maybe because of the external factors, maybe because of the general business environment, maybe other attributes then I cannot address this performance gap.

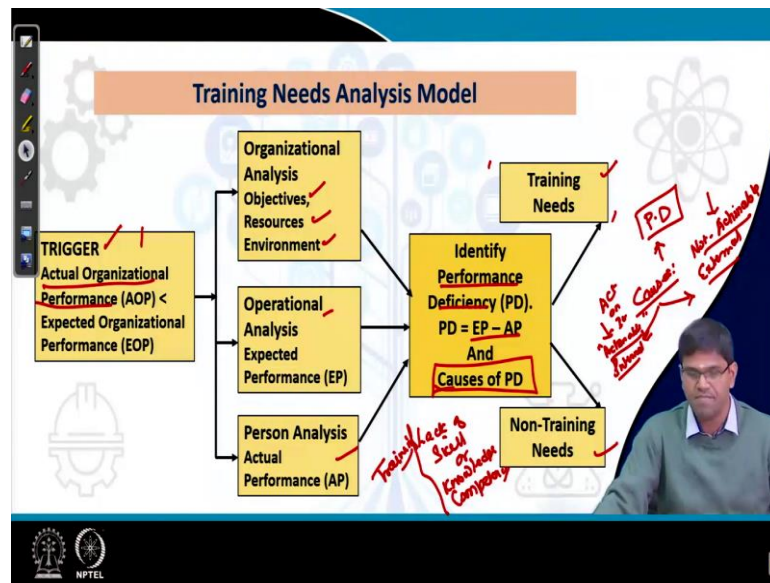
So, meaning that not all problems can be addressed through training, but which are can be addressed through training is when it is specifically on knowledge or a skill level of an employee then it is addressable.

Because you need to understand training may be able to resolve some part of the problem. So, we need to analyze the problem and find out whether training will be able to resolve it that is also one of the primary purposes of you know conducting training need assessment. I cannot attribute everything can be fixed through a training not necessarily and it cannot be the case at all the time.

So, maybe, but maybe some section of the training can be for example, let us say even this external factor I talked about a power failure. Let us say the power failure occurred due to you know mishandling of a missionary ok, then probably yes. Similarly, machine breakdown is again because of a proper not a proper maintenance of the machinery, then if I look at the cause, what is the cause I am talking about?

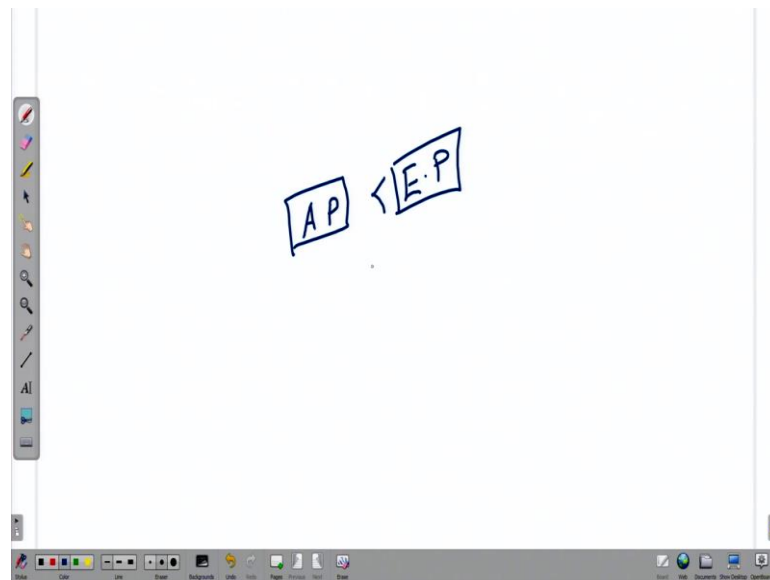
The employee or a person who is responsible for this maintenance of the electricity or maybe maintenance of the machinery is not properly trained to you know conduct or assess or maybe you know do the regular overhauling of the machine. So, now yes, some part of the you know deficiency can be addressed through a training that is what we are looking at yes, it is possible then you need to find out what portion can be addressed through a training programme ok.

(Refer Slide Time: 04:59)



Now, let us look at the training need analysis model see for any training the trigger is here, so what is the trigger? So, trigger essentially comes the actual performance.

(Refer Slide Time: 05:12)



Let us say actual performance which we are referring to AP is lesser than the expected performance, what we are looking at? So, when the actual performance is lower than the expected performance in this case which are very clearly triggering that yes something is not happening as expected that is the indication, so that becomes a trigger.

So, yes, my organization is observing that my employee performance is not to the level what I expect them to perform right. So, that becomes a trigger and you should also understand the trigger cannot be one of instant. When you are occupying a critical role in an organization you should understand, you cannot just jump into a training need assessment because you observed one incident.

You should see this is becoming a recurrent phenomenon or may be systematic in nature may be because of one error may be one time there is a deficiency you do not need to conduct a training programme or you do not need to spend your resources on conducting training need assessment.

But if the trigger is showing that the actual performance actual organization performance is continuous to be lower than the expected performance it clearly indicates that yes something wrong, we meaning that your performance is definitely lower than what is expected.

So, you are going to suffer in a long run. So, you need to address it how do you do it that you will be jumping into conducting the organizational analysis which are training need analysis you will be doing it on objectives what are the you know organizational objectives. Goals, then you will have to see the resources what do you have in an organization, you have to see the general environment in an organizational setup.

Then you will also see operational analysis we will be focusing on expected performance in a job role on a task then you will also see actual performance against the set of standards which are benchmark you are already benchmarked with your expected performance.

Then you will be able to identify the performance deficiency which you will be comparing the expected performance against the actual performance, when you will find out yes there is a deficiency then you need to identify the causes of the performance deficiency that is where we are coming into. So, it is a precursor this exercise is the precursor to initiate are we going to go and see the causes of the performance deficiency let us say we declare yes there is a performance deficiency.

Now, let us say performance deficiency is there now I need to go and understand the causes of it. So, what is actually causing this performance deficiency you need to

understand these causes of it the causes we see say you know external or internal or probably you can even classify into you know which is actionable not actionable ok.

So, when I say actionable meaning that you can act on it you will be able to make some changes some improvement on it. Whereas, non-actionable you do not have control over it where let us say you know government makes decision that resulted in performance deficiency or maybe price fluctuation the economy or probably general business environment then it is beyond your control that which is not actionable, but anything which are actionable causes that can be addressed through training ok.

Now, you need to understand some deficiency can be training needs some cannot be non training needs. So, that gap you know you cannot address it through a training rather, but you will be able to see some section of it you able to be addressed through a training need.

So, you should you know in a management role you should always understand you know you have to classify the causes, you cannot address all the causes through training you need to see can I classify the causes into actionable and non-actionable. Non-actionable which is beyond my effort to address it if I can control it yes it will combine the actionable.

Then in actionable can I you know act on it through a training programme can I improve and as I say the deficiencies which are arising because of lack of skill or knowledge of my employee's competency or a competency also these are all can be improved through training which I can you know do a targeted training. So, that I will be able to improve my employee who are lacking the skill or a knowledge or a competency then I can act upon it ok.

(Refer Slide Time: 10:09)

**Why to Conduct a TNA**

It is seen in the prepage diagram that 'Trigger' for doing a need analysis is an organizational performance discrepancy (actual or expected).

TNA is important because it helps to determine whether a deficiency can be corrected through training. Conducting TNA following things can be done:

- Increasing the chance that money and time spent on training are spent wisely.
- Determine the benchmark to evaluate the training
- Increase the motivation of employees
- Align training activities with the strategic plan

Q1 | Q2 | Q3 | Q4  
80% | 75% | 70% | 80%  
↑  
100%  
Revision..

NPTEL

So, now you see that you know in the you know the diagram which you have shown the trigger for training need assessment always comes from the observing a performance deficiency which meaning that you are continue to see your company is or your actual organizational performance is lower than what you are expected do.

For example, let us say you are keeping quarter 1 to quarter 4 every quarter no every you know organization will have a quarter 2 quarter 3 quarter 4 targets. Let us say every quarter you are only able to achieve 80 percent let us say 75 percent then 70 percent then 80 percent. You are observing that whatever the target you are fixed which is 100 percent I am talking, but this is the maximum you are up to 80 percent or 75 percent 70 percent 80 percent

So, then you are continuously seeing that there is a performance deficiency because we always set a goal which are realistic in nature organization sets a goal which are achievable, but despite the fact we are not able to do it then there is a performance deficiency.

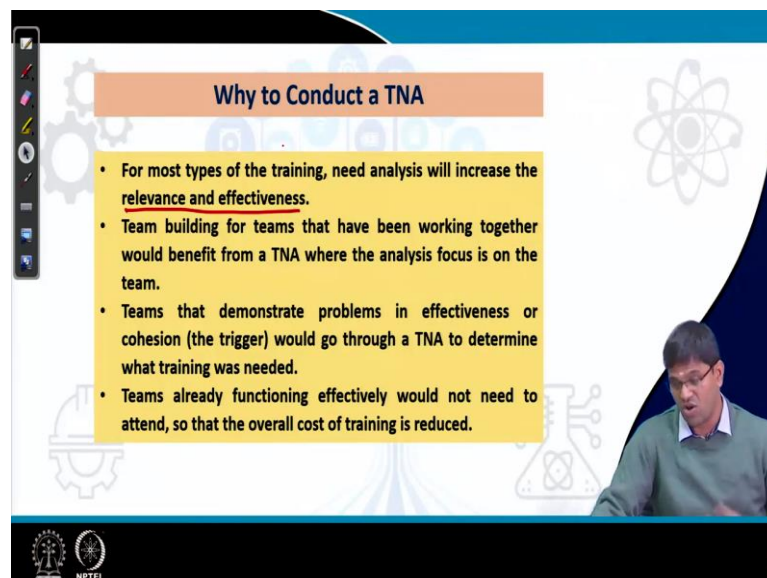
So, now, training need assessment becomes important because it helps in determining whether a deficiency can be corrected through a training as we already discussed can we use a training as a mechanism to you know achieve for example, if I prove a proper training to my employees, I can achieve 100 percent then yes you should provide a conduct a training need assessment to improve this.

So, conducting training need assessment it can help you to increase the chance that money and time spent on training are spent wisely because you do not want to conduct a training programme which are not actually required right. So, you have to have a very targeted specific training programme. So, that whatever you spend which are wisely spent it is a you know well calculated training which you are doing.

And you know you can also determine the benchmark to evaluate the training when you do a training need assessment you are identifying there is a gap that is becoming a benchmark you wanted to achieve this benchmark through your training programme. So, that becomes a benchmark to evaluate your training programme yes through my training I want to see that required change it can be behavioral or it can be performance related that has to you know happen post my training ok.

Then it will also increase the motivation of the employee yes it will improve yes; my company is providing training to improve on where I am lacking it will you know improve the motivation of the employees and it will also align with the strategic plan of a company. So, the training needs assessment always helps you to see that can you design a training programme to align with the strategic plan of a company ok.

(Refer Slide Time: 12:41)



**Why to Conduct a TNA**

- For most types of the training, need analysis will increase the **relevance and effectiveness**.
- Team building for teams that have been working together would benefit from a TNA where the analysis focus is on the team.
- Teams that demonstrate problems in effectiveness or cohesion (the trigger) would go through a TNA to determine what training was needed.
- Teams already functioning effectively would not need to attend, so that the overall cost of training is reduced.

NPTEL

So, for most type of a training need analysis will increase the relevance and effectiveness as we say you know it will always you know add to the fact that yes whatever the training, we are delivering which are relevant for my company which are relevant for my



organization and to my employees and it will definitely improve the performance the effectiveness we are referring to.

And you know team building for teams that will be who is going to work together and they will also you know teams that demonstrate problems in effectiveness and cohesion would go through training need assessment to you know what type of training they need you know. When they are having some problem on the you know team cohesion what type of training is required and teams already functioning effectively would need not to attend the training.

So, that the training cost can be reduced. So, when we do a training need assessment it will be able to identify who requires training who does not require training it is not only talking about what training to be provided.

It will also tell you out of this pool of employees who require training who does not require training because in order to put everybody on a training programme then you are again unnecessarily you know you using the resources or wasting your time of your employees or resources on it.

And sometimes those who already have the skill they feel demotivated why should I go through the training because I already have a knowledge or a skill which I required for this. So, it is important this training need assessment also helps you to determine who needs and who does not require a training in an organization setup and.

(Refer Slide Time: 14:11)

**When to Conduct a TNA**

The diagram shown at the beginning indicates. A needs analysis is conducted when triggering event occurs.

- A triggering event occurs when one or more key decision makers communicate that a performance problem exists and it needs to be corrected.
- It may be formal, thorough or informal and cursory but in any case the purpose of TNA is to find whether performance problem actually exists.
- The triggering event will determine which of two approaches to need analysis will be taken. The approaches are Proactive TNA and reactive TNA.

The slide features a blue header, a yellow text box, and a small video inset of a man in a green sweater speaking. The background includes silhouettes of business people and a world map.

If you look at you know the you know framework which we discussed which indicates that yes training need analysis is conducted when there is a trigger happens trigger, we are referring to performance deficiency. And trigger event occurs when one or more key decision makers in an organization they communicate that yes there is a performance problem exist and it needs to be corrected that needs to be felt.

When they feel that yes there is a performance problem exist and it has to be corrected and maybe through a formal or informal it may be any case the purpose of training need assessment is to find whether the performance problem actually exist. Is it actually existing or is it we are feeling that you know performance deficiency is there and again you know you need to understand this you know we have to conduct this analysis to true approaches training redundancy.


It will be either through proactive or a reactive training need assessment. So, training need assessment can be done in two ways, one is a proactive and another is reactive we will be discussing in detail what is this proactive training need assessment what is this reactive training need assessment.


(Refer Slide Time: 15:20)

**When to Conduct TNA**

**Proactive Approach of TNA**

- It focuses on an anticipated performance problem in the future.
- In this approach, an organization decides as a part of its strategic plan to implement statistical process control to improve the quality of its widgets.
- Potential for a future discrepancy exists if the employees do not have knowledge, skills and abilities.
- This potential gap triggers a proactive TNA to determine whether employees will be able to perform as expected.





From the word proactive a itself we are able to understand that you know in anticipating we are you know in ahead of time we are looking at to you know understand the training need assessment. So, we are anticipating performance problem in a future.

So, meaning that let us say in next 2 years we are seeing new tool or a technology is going to come up, then we are anticipating in future that yes, we might run into a problem that you know some of my employees do not know how to operate this particular technology or particular missionary because this will have an advanced technology.

So, keeping that in mind if you are conducting training need assessment which is the proactive training need assessment which you will have to you know conduct training programmes some set of employees. So, that they are prepared for what new things are going to come up for example, training your employees on an artificial intelligence block chain.

These are some of the you know advanced technology which are coming up and you are anticipating that this is going to come into all spheres of my organizations that I should train my employees right. So, in this approach organization also decides as a part of a strategic plan to implement the process to con improve the quality and better prospects for a company and it also provides potential for you know identifying the discrepancy future discrepancy to come up if your employee do not have the specific knowledge.

For example as I said same you know if somebody cannot work on the artificial intelligence if a company is privately working on a knowledge industries or a technology industry, but you do not have a proper employee who have knowledge on working on these tools and techniques then you become you will run into a problem as an organization you will turn into a problem that is where you know it is actually identifying a future problem which may arise because they may it lack these particular knowledge and skills.

So, the potential gap triggers the proactive training need assessment to determine whether the employee will be able to perform as we expecting in the future course of action. So, this is a proactive training need assessment which are important for an organization who are working in any industry we are talking about yes you are always see change is becoming permanent and it is becoming very rapid that is the concern here.

So, it is not at the you know permanent change is a permanent it is not about that only, but it is seeing that you know the pace at which it is happening it is very frequent and it is very rapid.

So, proactive training need assessment will always help you to become have an advantage over other competitors in your business market where you will have a completely advantage that you will become a you know pioneer in exploring or maybe you have a core strength in operating in the particular market because you conduct a proactive training need assessment ok.

(Refer Slide Time: 18:10)

The slide is titled "When to Conduct TNA" in an orange header. Below it, a yellow box contains the text "Reactive Approach of TNA". The slide features a background with faint icons of gears, a lightbulb, and a brain. In the bottom right corner, there is a video inset showing a man in a green sweater speaking. The NPTEL logo is visible in the bottom left corner of the slide.

**When to Conduct TNA**

**Reactive Approach of TNA**

- It is triggered by a current discrepancy. For example, the number of widgets expected to be produced per week is 5000 units. The actual performance of the employees to produce widgets per week is 4200 units. This discrepancy needs to be investigated.
- Both the types of TNA maintain the same procedures and the orientation is having a slight difference.

Now, reactive approach, so reactive is most often many companies we generally see it in your day-to-day life or maybe the current organization you work for even as a student you will be seeing the you know most often when we hit with a performance deficiency we will react.

So, it is very reactive where there is a discrepancy you are seeing that there is a you know performance being very poor and you are training trying to do the training need assessment which is a very reactive in this.

You know for example, you know per week you need to produce 5000 units, but the actual performance is only 4200 which is lower than what is expected, then you are investigating why and what is the reason that there is a deficiency it is a very reactive approach because it has happened it is already occurred. On the event of the deficiency on the event of failure you are trying to act upon it that is a reactive training need assessment.

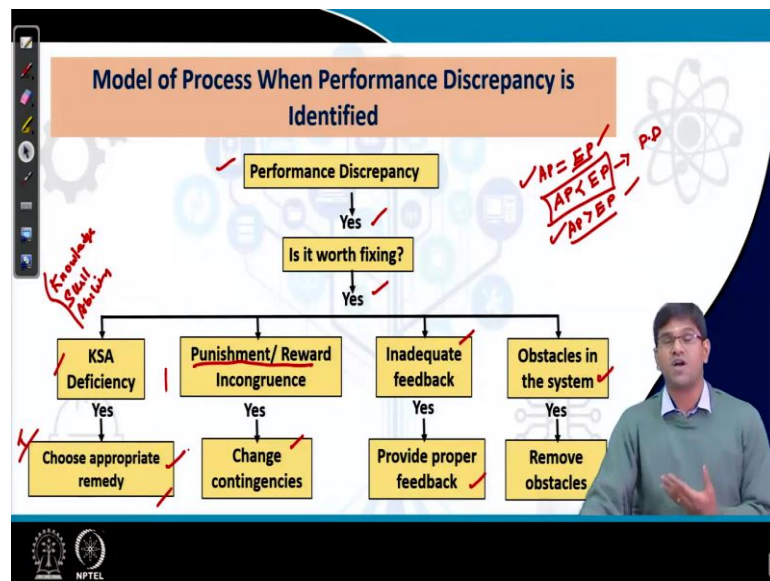
So, as long as you are sensing that and then conducting training need assessment is always appreciated, but despite the fact if you know organization is not doing this training need assessment will be a cause for a long run of an organizations ok.

So, both the proactive and also a reactive training need assessment will maintain a same procedures and orientations in maybe some slight differences on the orientation because

you do not have this specific you know performance already seen that deficiency, but you anticipating something to occur in (Refer Time: 19:36).

So, some differences will happen in the orientation, but the procedure will remain more or less same for both proactive training need assessment as well as very reactive training need assessments ok.

(Refer Slide Time: 19:48)



Now, so we are looking at the model of process when performance deficiency is identified ok. So, let us say we are identifying looking at is there a performance deficiency at a workplace. So, what are we doing?

Actual performance comparing the actual performance against the expected performance, when the actual performance is lower than the expected performance, we say there is a performance deficiency if this our actual performance is greater than this, we are happy as an organization we are happy we are meeting the expected performance yes or we are exceeding the expected performance we are all though very happy.

But if there is lesser than we see there is a performance deficiency ok. Now, comes yes there is a performance deficiency, what do you do? Is it worth fixing you have to ask these questions is it worth fixing is the performance deficiency is going to cost the company is it going to be impacted a company in a long way a financially or maybe in a

brand image on valuation in all perspective then if it is yes then you need to go in detail now.

What is that? Is it a KSA? KSA, we refer to knowledge, skill ok ability, Is it because of the KSA? Yes, then you need to choose appropriate remedy how do you address this through a training programme yes you will be able to improve the knowledge skill ability of employees.

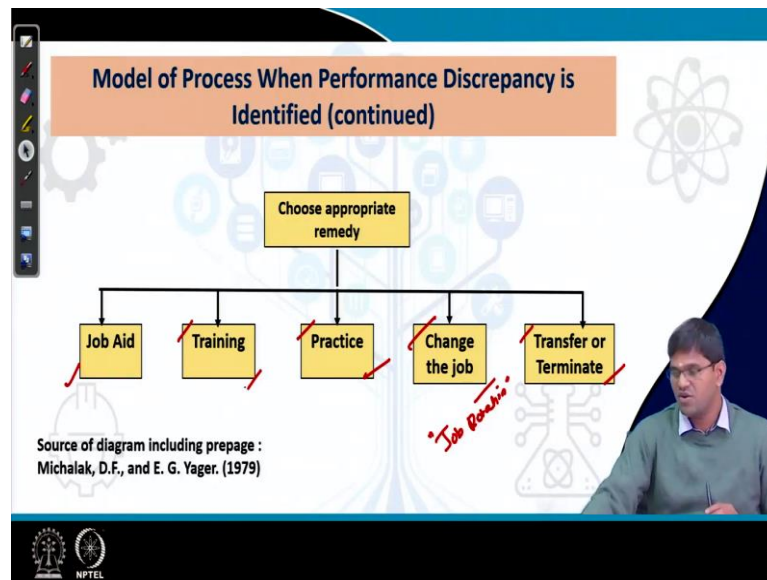
Then is there a punishment reward incongruence because of that you know by through a punishment or a reward incongruence then you will be able to do yes change the contingencies or is it because of the inadequate feedback then provide feedback provide a proper feedback we need to understand because rather you know when the reward or incentive was not there they there were that is the reason that is the performance deficiency then you change the reward system maybe provide better incentives then it will be addressed right.

And if there is feedback is not provided maybe you know there is no timely feedback system which says let us talk about a situation where you know quality QC department in a software or a production or a packaging section. And you know the people who are in the QC is not trained properly on identifying the defects in the product you produce there or maybe the services you offer then that feedback you are not providing properly or maybe you know you are giving feedback very later point in time that is.

So, maybe that is an attribute then you provide proper feedback. So, that they can improve upon or is it an obstacle in the system because of the structural perspective or because of the process perspective there is an abstract obstacle in the system then yes remove that obstacle.

So, that you know it can be fixed. Now, comes we have looking at all different spheres why this deficiency. So, what are the reasons for the deficiency and we are also possibly looking at what are the ways which it can be addressed ok.

(Refer Slide Time: 22:52)



Now comes so we have to choose an appropriate remedy right we are talking about you know knowledge skill and you know ability we have to come up with the appropriate remedy for the deficiency ok. So, now there are multiple ways this deficiency can be addressed ok one is about job aid providing additional support on the job yes it can be fixed possible.

And let me come to the training little later maybe you know transferring people or terminating maybe somebody is not doing well you have to transfer people to a different department and move people to here. So, that they will perform maybe the you identify the person the current skill is not matching this particular product or service rather he or she should be in a different place.

Then it is better that you transfer or maybe you terminate an employee then it is ok. Then change the job yes job rotation job rotation is a possible option you move people to a different job role then you do maybe have a better practice at the workplace then comes you have a training; through training you can address the particular performance deficiency.

So, you have to always look at all the possible remedies because if the other remedies are actionable will be beneficial it can you know improve the better performance, then organization should opt for the alternatives available. You do not need to always you



know drive towards the training programme unless otherwise the deficiency itself demands a training ok.

So, it is very important if you have to always weigh the alternatives and see that yes, it is through a training we will have a better outcome we the performance diffusion can be fixed then you should only sort for the training not always you know training is a requirement ok.

(Refer Slide Time: 24:40)

**Model of Process When Performance Discrepancy is Identified**

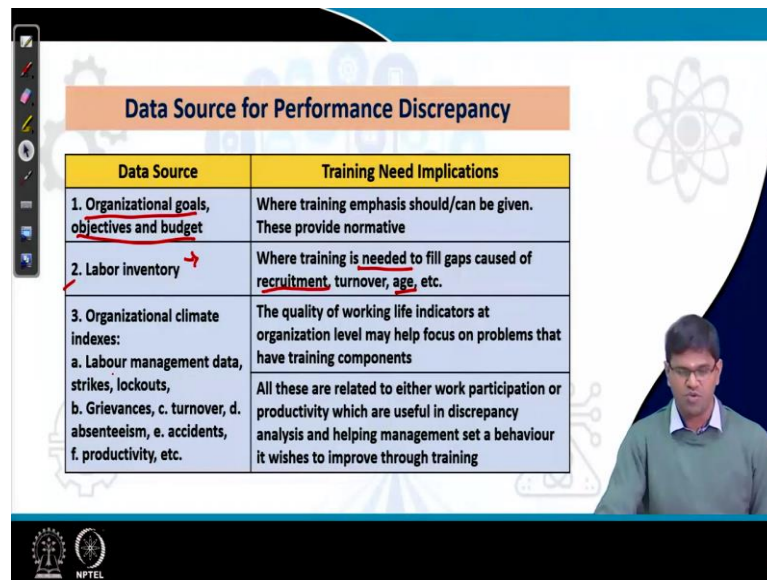
The diagram on prepage shows that TNA is conducted because a performance deficiency (PD) may occur for many reasons but only one is a lack of KSA (knowledge, skills and abilities).

Number of possible causes of PD are listed. Some non-training solutions are required if the cause is not KSA deficiency.

So, we always you know with the diagram we have seen that you know training need assessment is conducted. Because of the performance deficiency may be because of the knowledge skill abilities then we need to understand the causes or more and if you look at knowledge skill deficiency where training is required.

As I said if it is because of the reward practice you do not need a training if it is because of the you know feedback reasons you do not need a training when it is because of the you know knowledge skill abilities then you need a training programme to fix the performance deficiency ok.

(Refer Slide Time: 25:18)



The slide features a table with two columns: 'Data Source' and 'Training Need Implications'. The table is divided into three rows. The first row discusses organizational goals, objectives, and budget. The second row discusses labor inventory. The third row discusses organizational climate indexes, including labor management data, strikes, lockouts, grievances, turnover, absenteeism, accidents, and productivity. A presenter's video feed is visible in the bottom right corner of the slide.

Data Source	Training Need Implications
1. Organizational goals, objectives and budget	Where training emphasis should/can be given. These provide normative
2. Labor inventory →	Where training is <u>needed</u> to fill gaps caused of <u>recruitment, turnover, age, etc.</u>
3. Organizational climate indexes: a. Labour management data, strikes, lockouts, b. Grievances, c. turnover, d. absenteeism, e. accidents, f. productivity, etc.	The quality of working life indicators at organization level may help focus on problems that have training components  All these are related to either work participation or productivity which are useful in discrepancy analysis and helping management set a behaviour it wishes to improve through training

So, what are the data sources for a performance discrepancy to happen or deficiency to occur in workplace data sources let us look at organizational goals objectives or a budget when what does the implication it is going to offer ok.

So, whether training emphasis should be given or not based on the organizational goals objective and a financial condition ok. Then labor inventory labor inventory will talk about what is the current employee positions how many I have what are the current requirement is it a sufficient number of employees I already have.

This will provide some implication which is talking about whether training is needed to fill gaps cost because of the recruitment meaning that I hired people. So, I need to train my new employees or there are many employees who left. So, I need to train the existing employees on the other skills which are required.

So, that you know they will be able to fill up the position which are become vacant because somebody left the company or because of the age factor or you know somebody who are you know aging and they cannot perform the particular role I am going to train a people.

So, you know labor inventory will also provide implication for what type of a training need is arising in an organization, either because of a new employment employee maybe

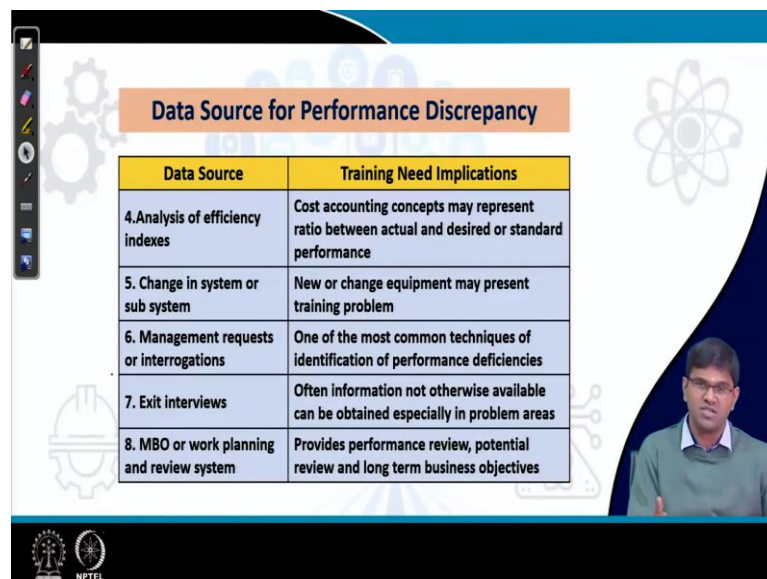
I need to give you know induction training or on-the-job training or probably somebody left I need to fill the vacancy then I might have to provide additional training.

Then organization level climate indexes, which is talking about labor management data which talks about strikes or lockout, grievances any problems or you know complaints, turnover, absenteeism, accident and product. So, many indexes are available it will also provide some implication for training need.

So, this is either with respect to a work participation or a productivity. So, this will also provide some indication about ok what type of a training need is required based on the claim you know is there a strike or maybe you know my employees need to be trained or given orientation on the workplace practices or a worker participation practices the policy related training need to be provided.

So, that you know I can avoid employees going on a strike or a lockout or probably any grievance system. Let us say how do you use the grievance management system. So, maybe that will also provide me what type of a training I need to provide ok.

(Refer Slide Time: 27:41)



Data Source	Training Need Implications
4. Analysis of efficiency indexes	Cost accounting concepts may represent ratio between actual and desired or standard performance
5. Change in system or sub system	New or change equipment may present training problem
6. Management requests or interrogations	One of the most common techniques of identification of performance deficiencies
7. Exit interviews	Often information not otherwise available can be obtained especially in problem areas
8. MBO or work planning and review system	Provides performance review, potential review and long term business objectives

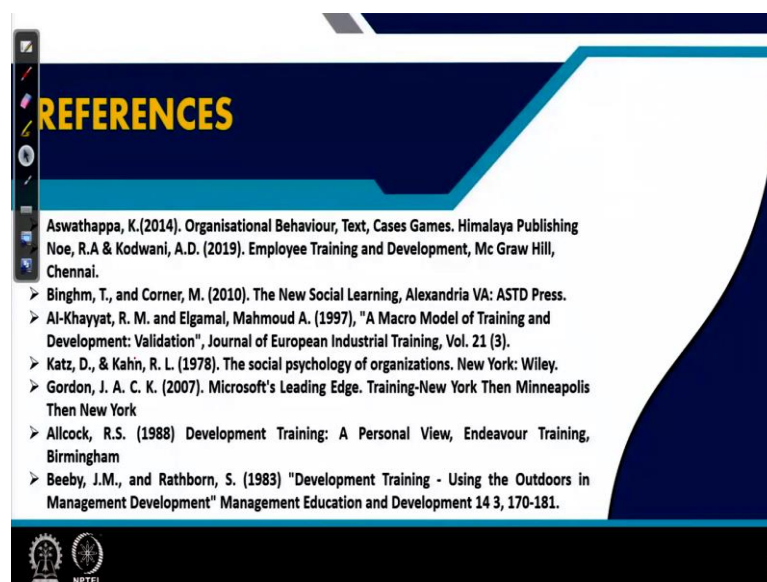
Then analysis of efficiency indexes, so efficiency indexes will be able to provide you know a ratio between actual and decide what is the standard performance what is the deficiency in the efficiency of my employees and change in system or subsystem a that will also indicate ok.

New or a change equipment may be present training problem because you are changing a new tool or a machinery that will indicate that yes you need to train people to handle a new machinery or a new equipment or a new tool right management request or interrogations.

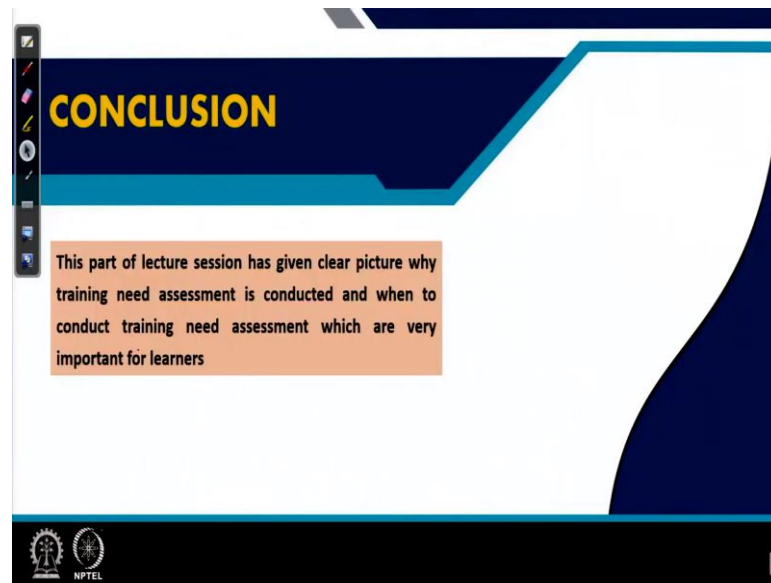
So, one of the most common techniques of identification of performance deficiencies through you know management request. And the another one is about important source for training need is that yes exit interviews, this information always provide you a focus on some of the problem areas, why my employees are living? What are the things they have encountered? Can we use that as an information to come up with identifying some needs for conducting training programmes.

Can we it can be an awareness training or probably on improving the skill set of the employees and management by objective or work planning or review system. It will provide you know a performance review system or a potential review or long-term business objectives can be those information's will act as an implication for scheduling a training or you know focusing on a training ok.

(Refer Slide Time: 29:02)



(Refer Slide Time: 29:06)



So, these are the references today we discussed about you know conducting you know when to conduct this training need assessment and now what are the ways we have to see we are always looked at identifying the performance deficiency, what are the causes of performance efficiency is? Is it worth conducting and training to address the cost of the particular performance deficiency?

And you always find there can be potential lot of alternatives available for the performance deficiency to be addressed and if you feel that training is becomes the one of the important components to fix the performance efficiency and especially if the deficiency is attributed towards knowledge skill or ability of the employees then it indicates that, yes there is a really a need to have a training programme.

So, this was provided a very broader understanding about how do you conduct this training need assessment and what are the alternates to be consider when you are going to you know fix on the training need assessment. So, we will be seeing the method of conducting the training need assessment in the following lectures.

Thank you.