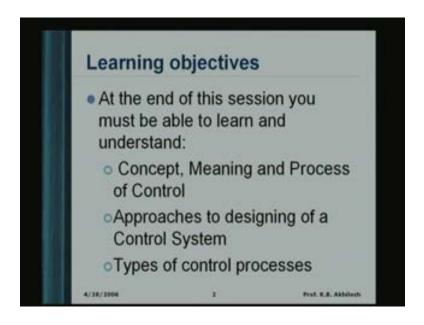
Concept of Management and Evolution of Management Thought Prof. K. B. Akhilesh Department of Management Studies Indian Institute of Science, Bangalore

Lecture - 10 Controlling

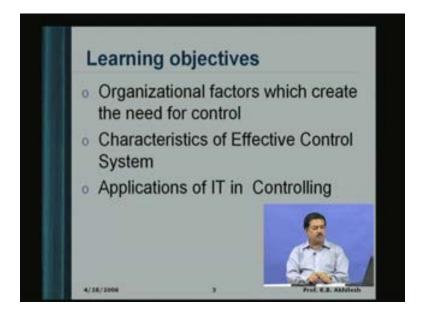
Hello, today we will discuss about another important aspect of managerial function called controlling. We started with the evaluation of management thoughts, how management has evolved as a function, we also looked at the importance of doing the planning creating an organization to achieve the plan we also looked at the management by objectives and then started seeing how to do the coordination and communication and leadership.

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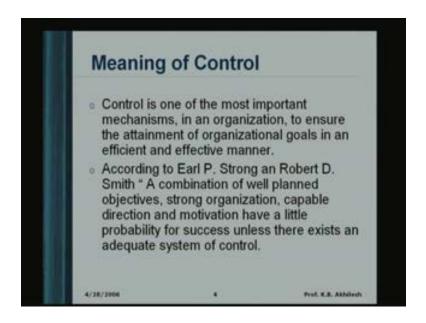


Today, we will focus on controlling. The objectives of today's session, we can state it as follows one at the end of the session, you should able to get the view of the control function in terms of the concept, meaning and processes and then you will understand approaches to designing of a control system and types of control processes. We have talked about control in number of ways but we also have to see the organizational factors which create the need for control characteristics of effective control system and as we are seeing organizations are becoming technology driven. So we must also see how to deploy IT in control functions.

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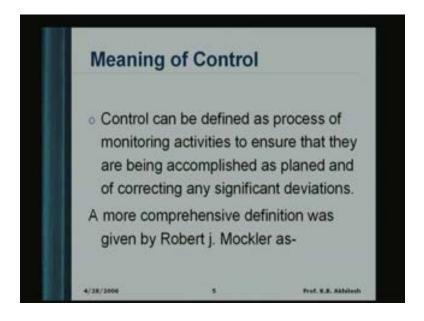
Let us look at the meaning of control, people have defined in different ways but I want you to look at some of these views and definitions, control is one of the most important mechanisms in an organization to ensure the attainment of organizational goals in an efficient and effective manner. We have talked about this effectiveness earlier, it is the performance plus satisfaction. So these efficient and effectiveness dimensions when it comes that means you are bothered about the input, you are bothered about the output and then you are making sure

that the use of resources are kept to the minimum or you keep the satisfaction as the maximum where you want to get the best out of every one and people would be happy about doing things.

So when you are prioritizing when you have desired different things normally the control functions will come into picture and unless we are talking about the goals and the goals with efficiency and effectiveness there is no scope for control function. So the control is that mechanism is that process through which organization ensures what it wants, look at the other one a combination of well planned objectives, strong organization, capable direction and motivation have a little probability for success unless there exists an adequate system of control.

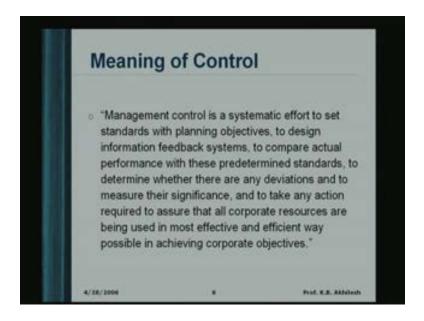
In other words, control is seen as a a necessity, it is not a desirable thing do have in an organization or as the part of the management you may have anything, you may have a good leadership, you have well stated objectives and then, you have people who are pretty good at coordination but if you do not design, if you do not create an effective control system management fails. The first, first principle of management could be that in management if you expect things will not happen, we have also stated in management, you will get things done if you inspect it. So there is a big difference between expectation and inspection, inspection talks about the role of the control function.

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Let us look at some more meanings control can be defined as process of monitoring activities to ensure that they are being accomplished as planned and of correcting any significant deviations. So in other words, what we are talking about is that you want to minimize deviations minimize surprises and it is a process of monitoring, monitoring that everything is happening at the right time at the right place and the way it was expected but if you take this is another comprehensive definition if you see the "Management control is a systematic effort to set standards with planning objectives to design information feedback systems to compare actual performance with these predetermined standards to determine whether there are any deviations and to measure their significance and to take any action required to assure that all corporate resources are being used in most effective and efficient way possible in achieving corporate objectives."

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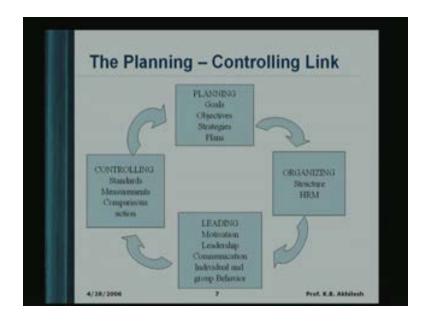


This is one of the fantastic view of the control function itself and you will see it cover all the things whatever we have discussed in past several lectures, all the keywords are important unless you have that, that have those function in place you cannot think of the control and without control all other functions not necessarily they could be performed to the best of the details, look at that. So the management controls is a systematic effort right to do what, to set standards. So you we are going to define a process you define a methodology, how to do it right.

So the job the methods of performing the job the task becomes the core of the organization, we have mentioned earlier then the planning objectives. So you are you know very clearly, what to achieve and you plan those things and then, you also create a feedback system. So there is unless you know the information, how for it is being done, how well it is being done you cannot take any action right. So that is you generate the required information call the feedback system then you have to compare, compare what actual performance versus the desired performance that gives the gap that gives the need deficiency that gives where things have gone right and where things have gone wrong.

So those understanding becomes important, so that is where you look at the all the deviations, so the comparisons give you know they will give deviations and then, you will see how significant the deviations are, some could be treated as a reminder, some could be considered as a disastrous. So when you look at control, you will see the impact of the deviations and then, then you take action, you take some immediate action and then, you take some actions which can take but we consider, as a long term kind of a thing and then what you do then, you take action required to assure that all corporate resources are being used right, you that is you have created, so there may be an infrastructure, you have bought some equipments, you have the machinery, you have the raw material, you have the inventory.

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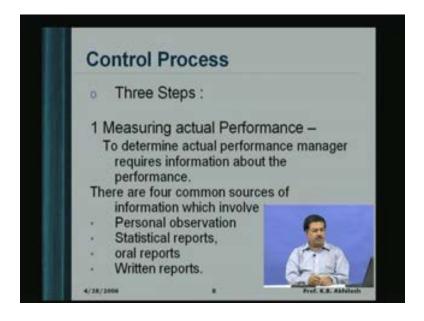


So many of these things all of it are used in an efficient and effective manner but the final thing is the corporate organizational objectives. So at the end of the day end of the period you need to achieve those corporate objectives and that is how this is one of the comprehensive views of the control function. So in other words, we have all the important things right, we have a planning, we have organizing, we have leading, we have finally the controlling.

So in the planning as we have discussed, we are talking about goals, we are talking about objectives then, we are talking about strategies then, we also have plans. The other side we are talking about organizing then we have the structure we have talked about departmentation, we talked about human resource. So the human resource the required structure helps in doing a good organization then we are talking about leading. So taking these people, so through motivation through leadership through communication and making sure that appropriate individual and group behaviors are ensured.

So that when you put all in this play then we are looking at controlling, controlling through standards, through measurements, through comparisons and also through taking corrective action. So that is how the planning to organizing to leading to controlling is one feeds to the other. So when would you complete the controlling thing the deviations will help you to see what further action do be done, how to do that and how to take you to the again organizing and that is how the it one action, one leads to the other.

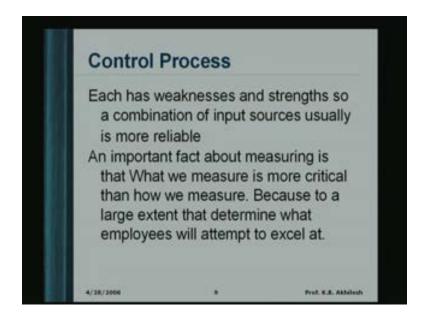
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We can also see the control process step by step. Basically, one can see the 3 steps one of the steps could be that measuring actual performance. So determining actual performance right the manager requires information about the performance. So it could be through various methods but typically the manager does these through personal observation or can get the reports, numbers, statistics then you can also understand get the reports from the people call the oral reports and then also the written reports where people give the descriptive view of what has happened and what should happen.

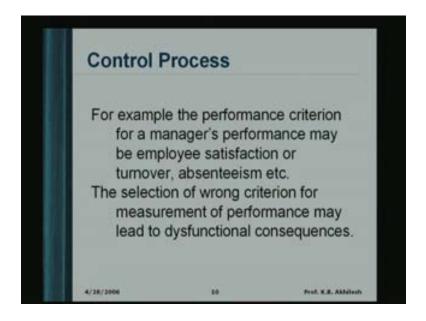
In other words, unless the manager has an opportunity to get the information of what is happening there is no function of control. So the controlling means that you must know the current state of affairs, the current state of affairs is the measuring this actual performance.

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So the question is that if you can follow any one method, a good manager would follow a combination of methods sometimes, you would watch personally, sometimes you would use the reports, sometimes he has to collaborate or corroborate the sources or the information whatever he whatever he or she has. So an important fact about measuring is that what we measure is more critical than how we measure because to a large extent that determine what employees will attempt to excel at, what point is that you have to use different methods and no one method is fool proof of the best but a combination of methods are important to assess, what is the actual current performance.

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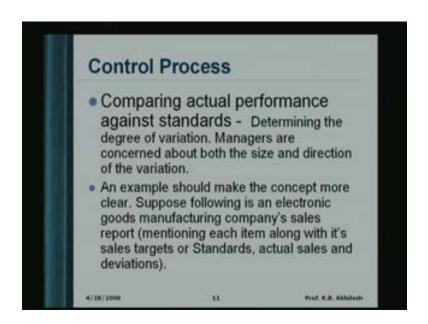
So for example, the performance criterion for managers, performance may be an employee satisfaction or the turnover, turnover means whether the people are staying in the organization or quitting the organizations, it is also called the attrition rate, the also the absenteeism. So these are all the things which could reflect on the managerial performance. So question is what is that you want to measure but when it comes to the how, you may go through the records, you may see the intentions of the people not necessarily their quitting where the final resignations comes but you can also see the quitting intentions of the people.

So look at the any of the other methods of measurement, the question is a combination of methods is useful but the manager is very clear, what is that he is looking at. So the selection of wrong criterion for measurement or performance may lead to dysfunctional consequences, sometimes you know the satisfaction of the employees are more determined by may be organizational the policies of particularly, the pay and in an inflationary economy the pay raise becomes a reason for lot dissatisfaction.

So the scope for the individual manager to influence where he or she has no reward or punishment action, it is not too clear whether the managerial behaviour is influencing satisfaction or the overall organizational policies. So it is important to decide, to decide on which measure to take in order to establish good control functions another is that right comparing actual performance that is the second step having got the actual performance

measurement, we are going to take these actual performance with respect to what with respect to the expectations or comparing actual performance against standards. So determining the degree of variation, I think that is what we are going to do as at the second step.

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	Control Process (Sales Performance Figures)			
ITEM	TARGET (STANDARD)	ACTUAL SALE	OVER(UNDER)	
Bubs	1075	913	(162)	
Ceiling Fans	630	634	4	
Table fans	800	958	158	
Mixer	620	622	2	
Heater	200	180	(20)	

So managers are concerned about both the size and direction of the variation, sometimes you expected, now it has exceeded your expectations, sometimes you expected but the actual is much much less than the expected. So deviations are very important in what way it has gone. so it is important to see right in an electronic goods manufacturing company look at the sales report right mentioning each item along with its sales targets or standards, actual sales and deviation.

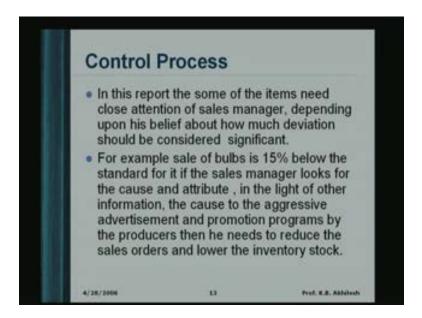
So if you see this example right, so there are many of the products one can think of, you have the bulbs you have the ceiling fans then you have the table fans, you have the mixer, heater. So many of these things are there which is given as a kind of a sales targets and there are sales performance. So then what is happening, so if you see bulb's target set is thousand seventy five but the actual sales is 913, then if you look at over or under it is less than to what was set.

So the shortage need to be explained, so this 1075 minus 913 to be explained what happened really so the third column gives you that over or under, if you look at ceiling fans 630, 634. So then it looks more or less very closer than what we expected and what has happened then, if you see it is about 800, what we are talking about the table fans but then actuals are about 958. So there is a surplus of over 158, mixers if you see it is 630, sorry 620 and then actuals are 622 great but it is about difference is about two then, the heaters if you see it is what is set or the expected standards are 200 and the actuals are 180 and then, you are talking about this minus 20. The purpose is that when you have the actual then, we can compare with the standards or the expectation then, you get that the kind of a deviation. So one can now start analyzing why this deviation, so one can try and explain the details of this.

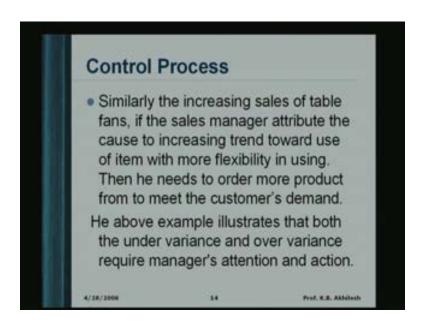
So it could be the seasonal, the seasonality of the areas the summer could be affecting the sales or it could be the power supply itself. So there could be many of the things can come into picture or may be the kind of preferences, what people have or it is the expect of disposable income before the people. So many of the these things can can influence, so some of the items need close attention of the sales manager because you will get worried that I have, I think looks like I have to spend more time with this particular group, another type it is okay right. So the sale of bulbs with below the standards you know he may try and see what caused what has caused this and then look for some reasons and he may collect some more information to explain, why these deviations or he can also see an opportunity which they did

not really make use of he may treat it as a managerial failure and then in his part of action planning he will see whatever I can do with our people to exploit the available opportunity.

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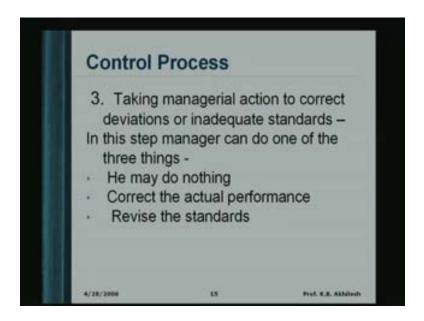
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So the increase in sales or the decrease in sales right this may be increase in sales of table fans, so the sales manager attribute the cause to the increasing trend toward use of the item or more flexibility in using. So the normally it requires for some more additional analysis,

additional data but the control information means it is the actuals versus the desired things. The third important thing is what is the first step we looked at actual performance, the second step is comparing the actual versus the desired performance and now we are focusing on taking managerial action to correct deviations or to deal with inadequate standards.

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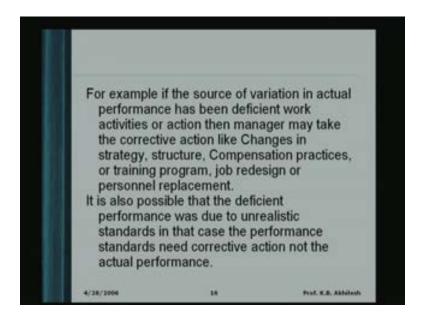


So in this step manger can do one of the three things he may do nothing that is he is prepared to wait for I think maybe easier looks like it is an aberration or maybe I cannot explain kind of a thing or okay, I would like to have some more data let me look for one more quarter, one more period, one more year, he may take any these views or he may focus on correcting the actual performance, I think something we expected and what we expected is right. So but why things did not happen, so he may focus on improving the performance or he may also think that we need to revise the standards, when we borrowed the technology many companies would like to see how much an Indian can do, how much an Indian worker can do compared to may be an European worker or a Japanese worker.

So then you will understand the standard maneuvers and then, correct these standard maneuvers itself, I think even if you do this much it is fine, you know that kind of an expression where you are try and reduce the standards and then may be expect that actual performance, we will meet those set revised standards, say it could be that the actual performance has been deficient work activities or action then manger may take the corrective

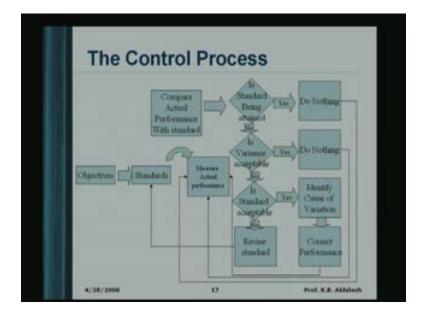
action like changes in strategy, structure maybe sometime the compensation practices or the doing with training program, job redesign itself or bringing about some transfers, you know making the existing persons to leave and then, join some other group and then, bringing some new people there. Many of these things you may do to correct the source of variation, it is also possible that deficient performance was due to unrealistic standards.

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So in that case the performance standards need corrective action but not necessarily the actual performance. So that means when the tasks are very new, so you cannot just expect the same standards. So that is what is known as a learning time, so have we allowed for the this learning and people also have to sometimes they develop few things because they have no complete picture of all the activities and all the task or in between some new technologies are available, they need to integrate the new technology and ensure the performance.

So performance gets altered the standard itself will get altered then the or it may be in some team the key people may leave. So the loss of key personnel can lead to a performance, actual performance because there could be new people who are struggling to meet the standards of the skilled people. So then you will see okay, I think I do not mind getting another 10 or 15 percent less but I do not want any mistakes or any quality problems. So you do compromise on little bit of quantity in order to meet the quality expectations.

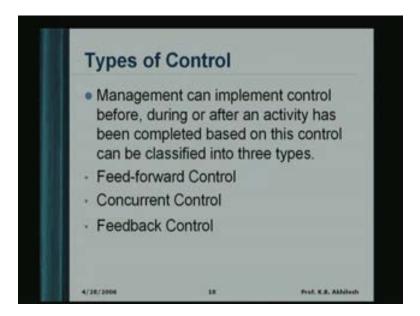


So these are all the issues when manager gets the actual versus the desired performance and makes a comparison to achieve the control process then one can simply follow this kind of a chart to move from one to the other right. So you start always start with the objectives then you have the standards then, you measure the actual performance and that actual performance you can see right leading to that do nothing to that identify causes of variation and then also leading to the corrective actions. So between you see the revising standards and if the standards are acceptable, you will also see the whether the variance is acceptable or whether you see the it can whether the standard can be attained.

So around that you make the appropriate decision that is why the control process helps you to guide your actions but the point is the objectives you require then you have a view of the actual performance then, you are in a position to compare the actual performance versus the expectation or the desired levels of performance and then the taking an appropriate action.

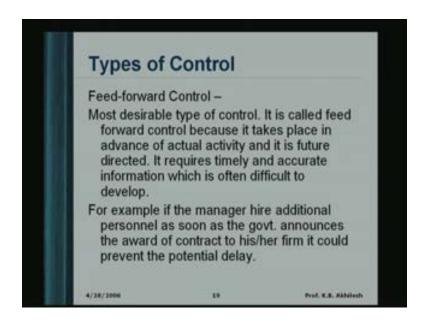
So when you look at the complete control function, we can move on to the next step of classification of the control function itself or it is the types of control. Management can implement control before during or after an activity has been completed based on this control can be classified into 3 types, one can be called as the feed-forward control, the other one could be the concurrent control and then, the third one could be the feedback control.

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We are also talking about today like continuous monitoring, otherwise you would have seen some examinations systems right in the examination system only at the end of one year, you would have asked the candidate to appear for an exam and go and no go but today, in many universities, in many places there is a point of or there is a practice of continuous assessment. So that means you just do not think of pass or fail or particular grade at the end of the period but you continuously monitor, what is happening.

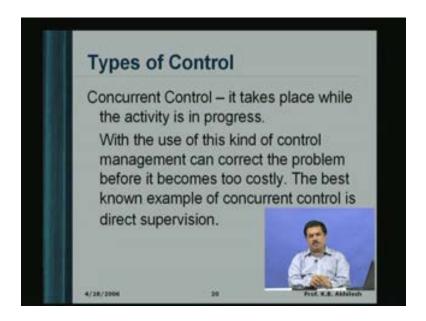
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Similarly, in the organization you can see different kinds of practices are coming, so when you see the feed-forward control, the most desirable type of controls it is called feed forward control because it takes place in advance of actual activity and it is future directed, it requires timely and accurate information which is often difficult to develop.

So the for example if the manager hire additional personnel as soon as the government announces the award of contract to his or her firm, it could prevent the potential delay in other words as the positions are being announced as people are told that he gets an advance information, the information he gets immediately to see where to look for talent and save that kind of a time and that could help in overall control of the delay itself. The concurrent control is it takes place while the activities in progress, so that means you know you have the reviews then you have a dialogue then you can also clarify the kind of expectation.

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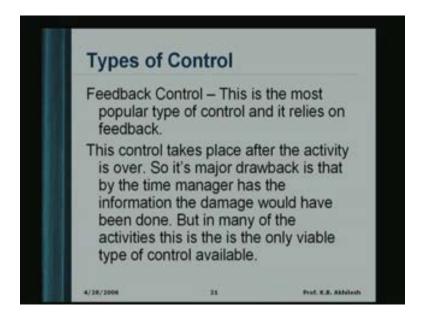


So with the use of this kind of a control management can correct the problem before it becomes too costly the best known example of concurrent control is the direct supervision. So managers are present when things are handling otherwise, okay give me some before you do certain things show me in paper. So then you will examine in the paper and then you allow the manufacturing to happen, so that is what design functions have become very very important.

Now not only that today you also review the designs and make sure the designs are fine. So you control the design function itself, so from then to design to manufacturing so while manufacturing you make sure that all the processes are in place and then, make sure you also the people also do those things through various checklist and then, it is not only you create checklist, you also put direct person who is making sure that all the things are happening at the right place. So you have people who are watching who would check who would observe who would also tell, so that well before the problem really becomes a kind of a crisis.

So you are avoiding crisis management, one by doing good planning and also making sure that you have the right people in the right place that is through organizing then, you have a person who is inspiring and making sure that at good things and also coordinating the activities of the individual with the others, it is leadership and coordination but also controlling to make sure that the expected things are happening according to the according to the details provided.

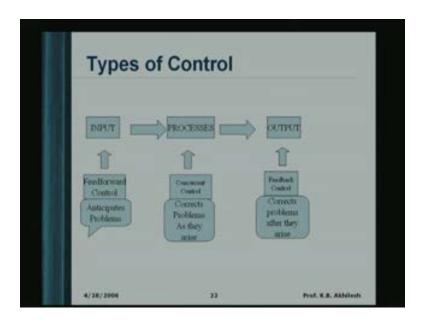
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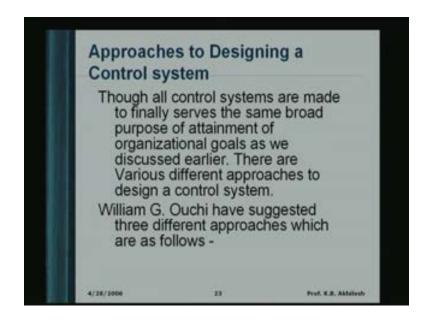
Let us run through the the feedback control, when you look at this feedback control this is the most popular type of control and it relies on feedback, you tell the person this control takes place after the activities over. So its major drawback is that by the time manager has the information the damage would have been done but in many of the activities, this is the is the only viable type of control available several of the service industry right.

So you deliver the services and then only you will know whether the person likes it or or not, you cannot recover that experience from the person but you can take that as the feedback. So that in the future, you can correct those things. So the feedback becomes an effective measurement effective methodology to take care of to the future. So you measure those as a kind of a customer feedback or satisfaction and then use that for the future action. So the feedback is to improve and to make sure that you do not repeat the mistakes.

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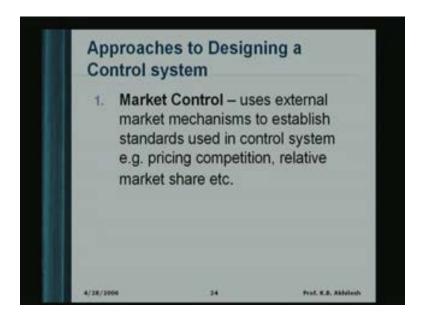
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So that is how you can do at the input level, you can focus at the processes level, you can also focus at the output level. So but you all the time you are seeing that how do you make sure that the problems are reduced. So you anticipate problems then you help people to understand very clearly in other situation, you correct the problem as they are arriving and sometimes you also see you correct the problems after they have surfaced. So then you it becomes a kind of a lessons or the lessons learnt and then, you store that and in the future you will use those lessons not to repeat the mistakes or to do things better.

So it is extremely important that good managers are able to design good control systems, good control systems to clarify the expectations help people to do the right things and then watching them they do their right things and then, making them to grow along with their experiences and ensuring that your all efforts are goal directed and people achieve the goals and also they are happy that they are the part of that goal achievements. So the all control systems are made to finally to serve the same broad purpose of attainment of organizational goals as we discussed earlier right.

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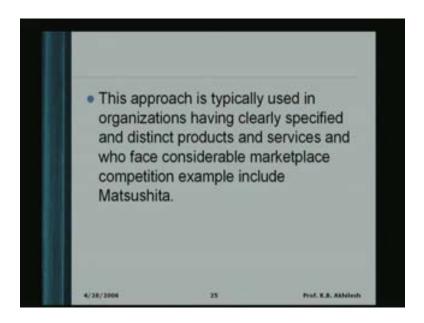


So there are various different approaches to design a control system. So I would like to spend sometimes on how do we look at these different control systems. Approaches to designing a control system again these are not very exhaustive but very illustrative, illustrative

methodologies if you see one from the market control, uses the external market mechanisms to establish standards used in control system particularly, the pricing.

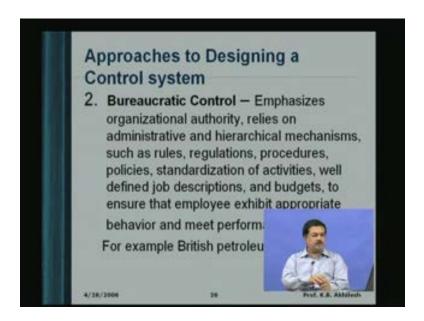
So you need to sell at some price compared to the others or you say that the your performance is to have that required market share or to introduce some of these new products and services to the marketplace. So that you get the business of someone or you reduced the market share or you create new awareness. So that you can create set of expectations based on the market behavior and convert that market behavior into your control systems or getting that required information.

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So this approach is typically used in organizations having clearly specified and distinct products and services and who face considerable market less competition it could be any of the consumer driven product or called the fast moving consumer goods call the FMCGs.

So the Matsushita or HLL any of these things you can see, so all the time how well they are performing or how well they are not performing is monitored through the market and how the markets are behaving.



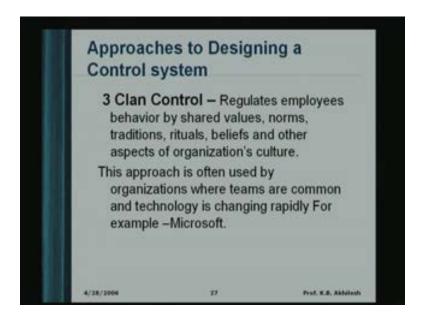
So if your products are in demand if you are able to send the products to the market place that itself will give the indication whether you are able to meet what you have started with. The other kind of a model is in terms of the bureaucratic control that means you create organizational procedures, systems and practices. So you create organizational authority, relies, administrative and hierarchical mechanisms. So we create rules regulations procedures policies the standardization of activities well defined job descriptions and budgets to ensure that the employees exhibit appropriate behavior and meet performance standards.

For example, at what time you should come to the organization, how many hours you must spend, how much time you have to take to set up the machines, where you must get the material who would authorize this material then, who will come and then inspect. So there are many of these things are very clearly stated, some time it is also linked to the machine performance. So the time availability of the machines and what that individual has done, can very clearly map the kind of outputs and then you also plot, how much happens in a in a day, first hour, second hour, third hour. So those some of the charts are also available, so that you will see how much the individual is doing in the first hour, second hour, third hour kind of a thing and then, you can you can always see and match with those things several of you would have seen cricket matches. So in the cricket matches if somebody scores or they like particular team score.

Let us say, if they scored 200 runs but they always try ensure okay first 50, they got in how many overs the second 50 in how many overs third 50. So when you have this, so you can the when the second team is playing you can always compare and see okay or they are at this over or at the end of the 18 th over they made the first 50 or the first 100 but now with how many wickets, they had at that point of time, how many wickets they have now. So you compare with some these inputs and then, how much it is to be done and then, now we will see start making that kind of comments what the team should do or what that the individuals should do.

So similarly, in the organizational things you create the past records and based on the past records you create expectations, you give the details to the individuals to see what more things to be done. Another important thing is the clan control, clan control regulates employee's behaviour by share values, norms, traditions, rituals, beliefs and other aspects of organizational culture. So it is very clear several of our behaviors are controlled by the people whom we have around us. So the norms control our behaviors adherence to quality or our own civics behaviours spitting on the floor or throwing some waste many of these things are very much controlled, how the whole group behaves and what the group values.

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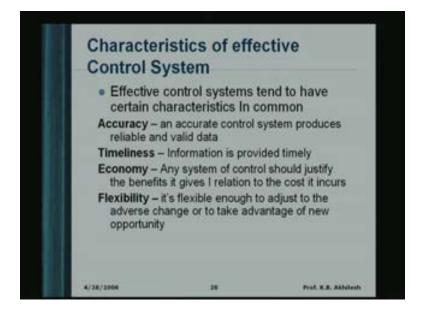
So the controlling of behaviour is also possible through creating a set of expectations and creating those unwritten rules in the group or in the organizational situation. So this is what is

called as the clan control so the group puts the pressure on the individual through written and unwritten rules most of the time these unwritten, unwritten rules are called as the norms and the internalized norms is also called as the values which helps individuals to see the do's and don'ts and the group can define some of the punishments for the don'ts, as well as do's and the rewards then you will see the the individuals adhere very strictly to the group expectations.

So this approach is often used by organizations where teams are common and technology is changing rapidly. So for example, you see the many the software companies, many of the software teams, why not in any manufacturing company, many of the things are very clearly created as a part of their bringing of the socialization. It is also called in several of the army and the navy and the services called the indoctrination the indoctrination in the negative way people also call it as a brainwashing.

So these are all the things where you create first the mental maps and then, there is a strong culture strong norms are developed for adhering to these developed to mental models and that generates the required or the appropriate behaviors. We are seeing the several of these characteristics of effective control system if you list the we can really think of few of the aspects one is the accuracy. So an accurate control system produces reliable and valid data.

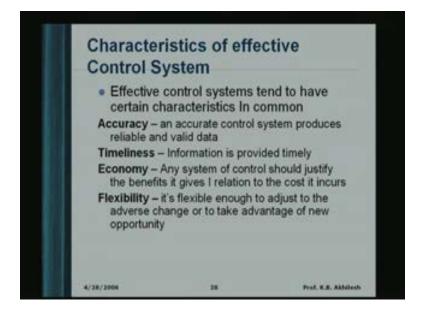
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So all the time because you depend upon information and we stated earlier that multiple methods of having data sources and the information is more important and more relevant to to look at examine your expectation versus the actual performance. So in a in that in that respect an accurate and reliable and valid data becomes very very critical for any control function also look at the timelines whether it is for the final correction or the intermediate correction or to make the things in a proper way to do a good planning, good feedback is very very important and good feedback also has to be timely like for example, if you want to control the behaviour of a person and you want to tell that person there is no point in telling at the end of the year look on such and such a date about 12 months back or 10 months back he should have behaved properly.

The immediate response of the subordinate could be sir, you could have told me on that day itself so it is important to think of giving this information which is timely and it could be as quickly and as effective as possible and another thing is economy. So many organizations as a part of the control function they collect tons and tons of information and there is also the statement called the analysis an analysis leads to paralysis. So it is very important to have the information and that information leading to appropriate and you are able to take the required corrective actions. So any system of control should justify the benefit it gives in relation to the cost it incurs.

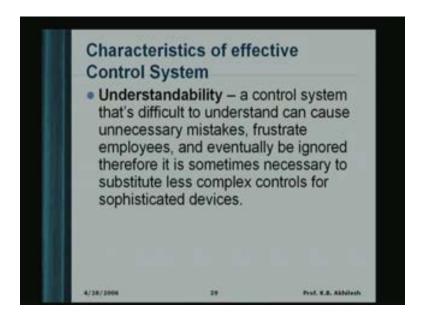
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So there is no point in collecting information or making people to to send several reports but it is called as the paper work jungle. So there is lot of paper work there is so much of reports but it is not useful because it is not leading to any specific or any definite action. So economy is another important thing and also the flexibility. The flexibility is to adjust the adverse change or to take advantage of new opportunity just because you have established a procedure. So many organizations are evaluated based on the process adherence, it is also called as in we know we know that it is 6 sigma.

In a six sigma methodology, the organization would establish various processes probably they decide that they will do 25 programs this year and they will also decide, what are all the things they will do but a new technology may come, new opportunities may arise but then if only go on that only we have we have decided already and we will have to implement and you go after that implementation means then the organization has become bureaucratic in a negative sense or you cannot question your own methodologies and you have no flexibility and that is what it is.

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So in a flexible organization people are able to change dynamically, their methods of assessment and also in case if the expectations need to be altered they are in a position to alter but they, they all work together towards those required corrections. So one need to be bothering all the time how can we ensure that control systems do not become an end in itself

but the control function is to ensure that overall organizational performance is met then, as well as that you use the resources in an efficient and effective manner.

So the characteristics of effective control system we can think of several but most important thing is it should be a simple and understandable, we can also call the understandability a control system that is difficult to understand can cause unnecessary mistakes, frustrate employees and eventually be ignored therefore, it is sometimes necessary to substitute less complex controls for sophisticated devices.

Let me give an example in many organizations, when people are not trained in some of the statistical quality control or the required procedures then, when they are not educated what they do is then that they start topic or they doing that the collection of information itself. It is not because of anything else but it is too complex for them and they do not understand and they, they do not understand why it, why of it and also how of those things and that is why try to do things in a blind manner because of the complexity or when too many information is given the person is not to sure how to prioritize.

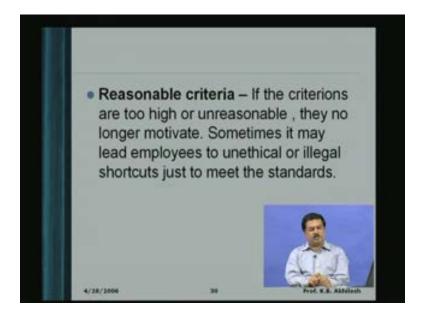
So it is important to see what is the procedure and why are you adapting the procedure and making sure that it gives the required results in one of the hotel industries, they were collecting too many information, may be about that training, how efficiently they are obeying and the the kind of rentals the number of services they were able to provide on the desk and many things but when they did a detailed analysis, they found that one of the critical things which makes a big difference for them is the room occupancy rate.

So then the whole effort was to monitor this room occupancy rate. So then they started seeing and collecting all the information which will help them to deal with that particular indicator whether the same person would ask for the same room boy, same room what or how can we build that kind of a commitment and they are also able to see there are many other activities or what is so called non-value-added, non-value-add activities.

So you should not spend time in collecting information, understanding actual performance, linking it to the desired performance everything on many of the non-value-added activities in the organizations. So you need to focus on and maximize, those activities will ensure revenue will ensure the sustainability of the organization, many of the IT companies they also focus

on what is known as billable hours so the focus will come because that, that is what customers would pay for.

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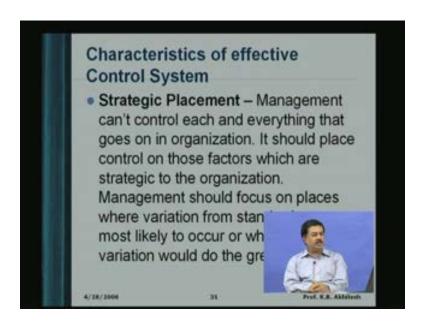


So the understanding what that customer would pay for and how would you watch those aspects which will contribute for that particular dimension will help everyone to align and do that required activities. The criteria also should be reasonable right if the criterions are too high or unreasonable, they no longer motivate sometimes it may lead employees to unethical or illegal shortcuts just to meet the standards. So in one of the companies they were always quoting they are counterparts in Malaysia okay. They do the this way they are so they you know using that kind of a methodology, they put a kind of a new standards new standards according to them according to the management was very reasonable but they was no belief system within the organization but also they felt that there are problems which management was not sensitive to.

So they always rejected the kind of standards which according to them at least about 2 times or one and half times more than what is exactly possible. So but when they got into the details they were facing two problems, one was on the kind of raw material what they were getting here and the second one was the frequent power breakdowns. So each breakdown would involve a kind of a set of type and the recorrection of many things.

So the when they were looking at the overall standards, they were not bothered about some of the local conditions. So when you set the standards you also have to see whether it is reasonable and achievable within the circumstances. Otherwise, you are expecting something impossible and then people also think it is impossible and they get demotivated.

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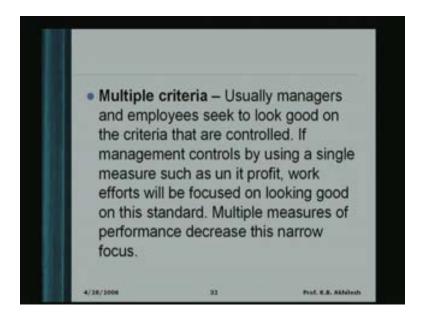


So it is important to look at the standards and keep that as reasonable and achievable also look at the the control system is where and how you measure. So the management cannot control each and everything that goes on in an organization. So it is always desirable to have direct supervision making sure everything goes according to your expectation but it is also desirable to link one activity to the another and see at what points you must take those critical measurements to understand the actual performance and also to compare. So it should place control on those factors which are strategic to the organization as I mentioned the occupancy rate in the hotel, a dentist could also can think of the chair occupancy occupy if not the room occupancy right.

So management should focus on places where variation from standards are most likely to occur or where a variation would do the greatest harm. So it is important to see where is the problem is it problems at the raw material level or is it the problems of the logistics where you finished but lot of damages are happening while the truck moves from your place to the customer site, if it is a very fragile items.

So where the problem is and then you must start monitoring those aspects that is particularly, where the variations are coming, variations can be coming because you may be sourcing material from different vendors and vendors themselves are not standardized some of their processes. So sometimes you may have to rethink about your vendors and see how do bring that variation to the lowest level the question is that you need to focus on those aspects in terms of the magnitude and also the impact. So the once you do that the control becomes much more easy simple and effective another thing is the multiple criteria usually managers and employees seek to look good on the criteria that are controlled.

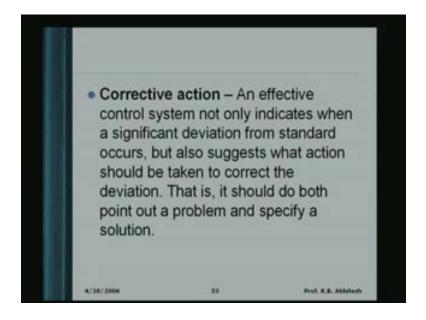
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So if management controls by using a single measure such as right the like the profit or the the in work efforts. So then they would like to good on this standard but always it is important to use the multiple measures for example, if you are thinking that how long you are going to spend time. So people spend lot of time in the organization because staying for long is considered as very desirable and they also know that managers only bothers about how long have you stayed if that is what your expectations. So people stay for a long and beyond the working hours but then there could also be a point where the first several hours, they may not be working at all they all become busy at the end of the day or if the shift is going to close around 4 clock. So they become very active few hours before and they spend next 2, 3, 4 hours in doing all whatever they should have done in the past 7 or 8 hours.

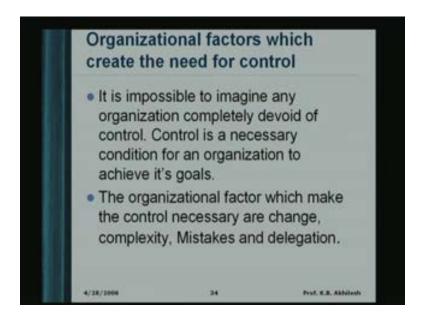
So the question is that people do prioritize and they do certain things what is wanted by the organization or they also know what the organization is watching. So if you are only depending upon one or two which does not represent the whole of their activities and which is not linked to the plans of the organization then, manager's control system may fail because you are bothered about how many hours they are spend but really what is that they have produced and which they have produced are useful to the organization, you may not be watching or controlling. Another thing is the corrective action, an effective control system not only indicates when a significant deviation from standard occurs but also suggest, what action should be taken to correct the deviation that is it should do both point out a problem and specify a solution.

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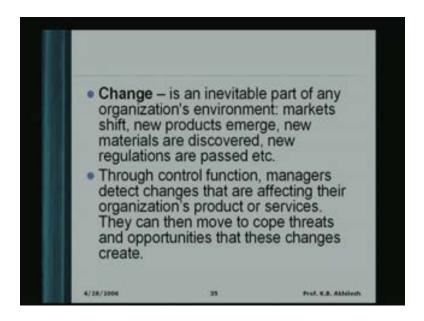


So as we are seeing that it is not only that you get the direction of the problem but you must also be able to see what is the impact of this problem, how much it is useful or not useful you must be able to quantify it and you should be able see that. So many organizations they would like to make sure that the control information guides people to take appropriate actions and they are able to see the consequence of their action as well organization factors which create the need for control is also equally important. You look at it is impossible to imagine any organization complexity divide of control, it is a necessary condition for an organization to achieve its goals, the organizational factor which make the control necessary are change complexity mistakes and delegation.

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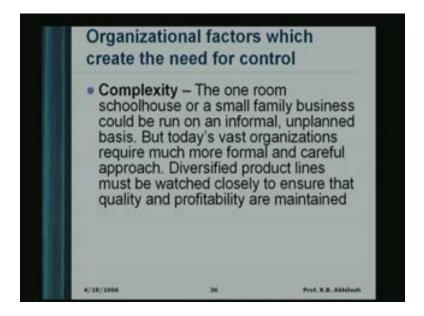


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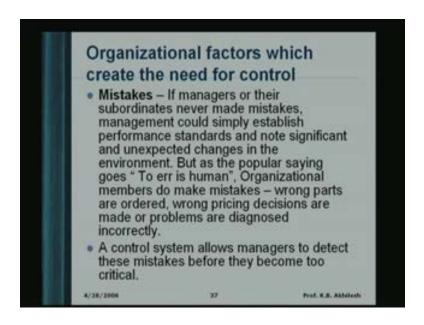


So when you look at quickly, change is an inevitable part of any organization environment markets shift, new products emerge, new materials are discovered, new regulations are passed. So the control function through that managers detect changes that are affecting their organization's product or services then, they can move to cope threats and opportunities that these changes create.

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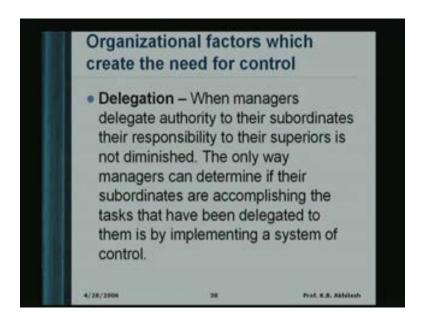


Similarly, the complexity then, so one room schoolhouse or a small family business could be run on an informal thing or an unplanned basis. But today's vast organizations require much more formal and careful approach. So diversified product lines must be watched closely to ensure that quality and profitability are maintained then similarly, the mistakes if managers or their subordinates never made mistakes, management could simply establish performance

standards and note significant and unexpected changes in the environment but as the popular saying goes to error is human.

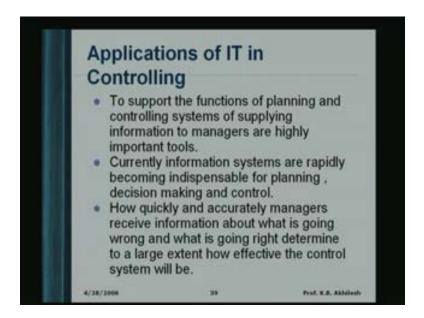
So organizational members do make mistakes wrong parts are ordered, wrong pricing decisions are made or problems are diagnosed incorrectly. So there are many of these things to happen. So the control system allows managers to detect these mistakes before they become too critical. So they can understand what is happening and where the errors are delegation is another important thing when managers delegate authority to their subordinates their responsibility to their superiors is not diminished.

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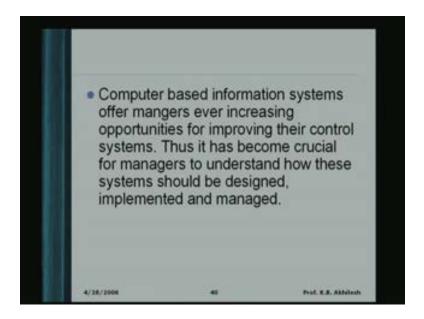


So they cannot delegate their responsibility the only way mangers can determine if their subordinates are accomplishing the tasks that have been delegated to them is by implementing a system of control. So the more and more delegation you have in the organizations, you need to make sure that things are happening, what is important is to also to see how can you deploy IT to achieve some of these things. An applications of IT in controlling itself is a is an important thing to support the functions of planning, today there are many tools are available. So currently IT is changing about it is helping and planning in decision making and control.

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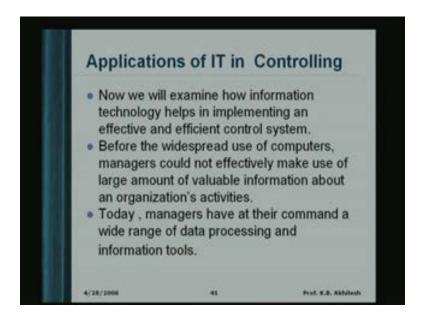


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So quickly in an efficient manner managers can receive information and check, what is going right and what is going wrong and to a large extent, they can, they can work on these things. Computer based information systems offer managers ever increasing opportunities for improving the control systems that even though it is always the the crucial function is to ensure that they are able perform they are able to take the required actions in an efficient and a better manner.

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So many of the applications are available today, so how information technology helps in implementing an effective and efficient control system itself is becoming the concern of the several of the managers. So use of computers, use of availability of the data across the organization makes instead of the command, kind of a regime, you can use lot of data processing and information tools help managers at all levels to perform their task better. So in our next lecture, we will see how the control systems are more efficient but the motivation of the individuals become equally important.

So while controlling, we should not lose the motivation of the individuals, we will examine in these details in my next lecture.