## Project and Production Management Prof. Arun Kanda Department of Mechanical Engineering Indian Institute of Technology, Delhi

## Lecture – 18 Organizational and Behavioral Issues

Today we are going to be talking about some organizational and behavioral issues in project management. You would recall that in our last lecture we had initiated the topic of team building and leadership in projects and as we all know projects are to be managed by people and therefore the management of people and getting work done from people is the key factor in successful project management and whenever there are a large number of people involved it's imperative that we have a proper system of organizing these people into a group and therefore the importance of a proper organizational structure for a project. In order to manage a traditional organization we typically have a functional type of organizational structure but by the very nature of the project which is essentially a temporary thing which brings together a group people for a limited period of time together to accomplish a particular job, this kind of an organizational structure might not be the right kind of organizational structure. Therefore we would investigate into alternative organizational structures and in fact the so called matrix organizational structure which is considered to be one of the best prevailing organizational structures for organizations dealing with projects, we will see the pros and cons of that organizational structure.

Apart from the organizational issues the other behavioral issues that we would be talking about in this particular lecture are issues which impinge upon the human individuals interacting with each other producing conflict, producing together an effective team. There are a large number of factors which are responsible for the efficiency of the team which come about directly from the manner in which human beings interact in the project together. These are very important issues and quite often there are no scientific well laid out procedures for specifying exactly how people should behave. This human behavior is something that comes with training, with culture, with the kind of environment that the people are placed in. But nevertheless there are certain things that we can control, certain things that we can specify so that the project achieves its desired objective. That's going to be the very focus of today's deliberations.

Let's try to identify some of the key issues which we are going to be debating today. The first issue which is very, very important and which we have already emphasized is the issue of the right kind of organizational structure. Then we shall be talking about not directly but at least obliquely about this issue of the selection of the project manager. This is a very major issue because it's the project manager who is actually controlling the planning and also the implementation of the project and therefore if you land up with a wrong project manager it means that you are going to have trouble right through the life cycle of the project and therefore it's of utmost importance that consideration should be given to this single factor of choosing the right project manager. We will try to identify

some of the key characteristics that a good project manager ought to possess so that when the selection is being made the right project manager for the project can be identified. This is extremely important.

Issues of leadership and motivation we have already referred to some of these issues in the team building and leadership lecture of last time but leadership and motivation becomes very important and these are primarily the major roles that a project manager has to perform. He has to provide the right kind of leadership. He has to make sure that all his people are properly motivated and in fact these are some of the key roles of the project manager. In doing this he has also to make sure that all interpersonal conflicts is managed. Whenever there are people and whenever there are intelligent people who have their own points of view it is natural to expect them to express their points of view and it is quite natural that there will be some conflict. In all projects there is always some conflict and he should be able to predict when that conflict will take place what will be the issues on which the conflict will take place. Conflict is not to be eliminated but it's to be managed. Whenever there are people, there is going to be conflict and the project manager must be able to manage the conflict if the project is to be a successful one. So these become very important behavioral issues that are imperative for the success of the organization.

Communication is again a very vital issue because in communication the fundamental thing to recognize is that there are two parties. There is a communicator and there is the receiver and then there could be different ways in which the message could be sent from the communicator to the receiver. It could be a written memo. It could be a personal talk. It could be a fax. It could be an email. It could be anything else. So choosing the right kind of medium for communicating and choosing the right tone for communication, the right moment for communication is also very important. Communication doesn't necessarily take place through language. It can take place through gestures. You can show an employee your angry eyes and he understands that you are angry and the message is communicated. In that sense we have to understand the nuances of communication and a good project manager is one who can communicate effectively with his group and tell them exactly what is to be done and at the same time he can receive feed back from the group to find out exactly any problems that the group is facing so that may be the original targets could be modified and so on. This aspect of communication therefore is very, very crucial in the successful implementation of a project and for keeping good cordial human relations within the team.

The important thing again is that the project is something in which the participants face a variety and nature of practical problems. That means the degree of unpredictability of the problems is much higher in a project than it is in a routine production shop and therefore the project manager and also his team member should be prepared for this unforseenness and should be capable of handling this by making ad hoc, on the spot improvisations as long as possible. This is in fact another feature which comes up with the project and because of these exacting requirements of the project this can have an impact on the emotional needs and the moods of the individual people and you need a sympathetic and an understanding person who knows that people are working under such and such

exacting circumstances, who is firm but nevertheless understanding and therefore these are some of the issues which are extremely important when one is talking about these various things.

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Let's begin with the first issue of the organizational structure. A classical functional organizational structure for a firm is something like this. There is a chief executive at the top and this chief executive has under him a number of different departments. These departments could be the engineering department, the operations department, the finance department, the marketing department and so on in a conventional organization which is not engaged in projects but which is doing may a conventional manufacturing organization. These are the major divisions, engineering operations, finance and marketing. Each of these divisions could be divided into a number of different departments. So you would have different departments under engineering. You could have different departments like a production department 1, production department 2. You could have finance, accounts, audit, various kinds of departments. Even under marketing you could have sales and you could have some other kind of department pertaining to the various of these and then each of these individual departments would be divided into various sections and these sections would be carrying out very specialized jobs pertaining to that particular department. This particular organization is called a functional organization because it's the functions which are segregated and each one is now doing his specialized function in the organization.

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Let's see some of the major advantages and disadvantages of this kind of an organizational structure. Major advantage is the flexibility in the use of man power. This is an advantage because within a particular department you have specialist in the same area. You have developed a pool of specialists in a particular area and you have this flexibility in the use of manpower at various levels. If a project is to be used as a part of a functional organization what are the implications? The implications are that many projects can share functional expertise so this would be desirable thing.

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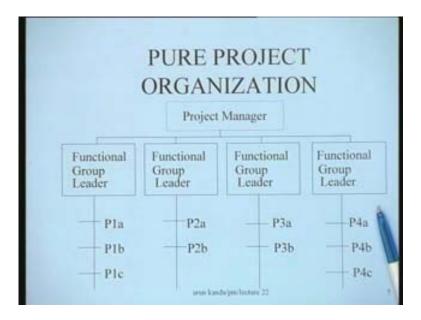


It will be desirable to have a project being done as a part of a functional organization. There would be continuity of technical expertise. That means one person could work on one project and once that is over the same person could work on a similar extension or a related project and you could have a continuity of technical expertise and the functional divisions provide normal path for career growth. That's the advantage. These are some of the advantages.

The major disadvantages are that if this kind of organization structure is to be used for projects there is very low priority being given to projects. Why is there a low priority to projects in this case because the project as an entity would require the contribution from a large number of different functional groups and in this kind of an organizational structure we recognize only the functional heads and therefore a project when it requires the participation of a large number of functional groups it would be like going a begging from one particular department to another for doing the various tasks. It would get a low priority because these functional managers would be busy with other tasks also and they would not really give that kind of top priority to the project. This is not a problem oriented structure. It may overemphasize a particular function. If an organization for instance develops in a particular area and develops strength in R&D, then a particular project would tend to emphasize R& D in almost everything. That is really not the kind of focus that we will require on a project depending upon its need it should get that kind of emphasis. There is no direct touch with the client in this particular case and no single person may be responsible for the project because the project is sort of floating around between the various functional groups and therefore it's really not a good way to organize a project from that point.

Probably the best thing that could be done for a single project would be to give it a pure project organization. What is a pure project organization? Here the organization structure is dictated by the project. You have a project manager at the helm of affairs and this project manager for his needs under him are the functional group heads who are going to contribute to the implementation and planning of this particular project. Depending upon a particular project each functional group leader would pick up individuals. This is the individual with specialization P1; first member a, second member b, third member c and so on. You picked up 3 people with this functional group, 2 people with this functional specialization and 3 people with this functional specialization and 3 people with the project to their individual bosses and these are all under the project manager. This is a pure project organization.

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The organization is conceived only for the particular project and you have something like this. This would be fine as far as the project is concerned but the major problem with this kind of organizational structure would be the fact that projects are temporary entities. A project would be done in 6 months or 1 year as the case may be and then again you cannot have a permanent organizational structure in an organization when the entity that you are dealing with is basically a temporary entity and for each project you will have to again define a new organization. It would create problems from that point of view. Let us see what are the advantages and disadvantages of this. In the pure organization structure the major advantage is that there is complete line authority over project. That's one thing.

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The project is under complete control and you have defined a person who is responsible for it and he controls everything. There is a strong communication between the team members because they are all communicating to the same boss. The personnel demonstrate loyalty to the project unlike the functional organization where the project was a kind of a floating around entity. Here it is the major entity and therefore the personnel will demonstrate loyalty to the project. There is a rapid reaction time here, the time to implement a decision, the time to do something here would be much smaller and it has flexibility. It is good thing for the project implementation from that point of view. The major disadvantage of this particular organization is that it's cost prohibitive for multiple projects.

As we indicated an organization or a firm would be engaged in not one project but number of projects at the same time. So if you were to set up a separate organization for each project it would become cost prohibitive. There is a tendency in this organization to retain personnel on project after they are needed because the project manager has his team of functional specialists. Even when the job of the functional specialist is over, the project manager may not want to get rid of his men because either natural affiliations develop or you would like to carry on his sort of so called empire, something of that kind. There could be these kinds of problems and another problem with this kind of pure project organizational structure is that the technology suffers without strong functional groups. In this particular organization, by virtue of the functional organizations, the individuals could grow and develop technology because they were all there in that sense but here that opportunity is not very strong. Considering these two extremes, it has been found generally that perhaps the matrix organization is considered to be the best.

Now let us see what a matrix organization is? When you talk about a matrix organizational structure, if you forget this portion it is something like a functional organization. There is a general manager and there are different functional managers and each of the functional manager has under him different levels of people reporting and through this he gets the information pertaining to a particular function. If there are a number of multiple projects to be carried out by the organization then for each project you define a project manager and a project manager is given an entity, a special entity. He is shown here and depending upon the needs of this project, this project manager will pick up one person from this particular functional manager if he needs him. He doesn't require this specialty but he requires a person with this kind of specialty. So he has put these 2 people or people from these two departments as member of his team. Similarly the second functional manager identifies that he has to take people from these two different specializations and similarly the third project manager takes up people from individual specializations. Ultimately what happens is that at particular point of time an organization is doing a number of projects for whom these project managers are responsible. These individual people actually belong to these functional departments but you can say that as long as the project is going on they are loaned to the project manager. So the project manager's team is actually operating in this fashion.

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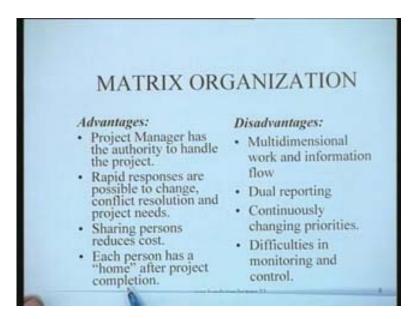


There is a direct line of authority along the solid lines and there is an indirect line of authority along the dotted lines and in fact it's called a matrix organization because the whole structure resembles a matrix in that sense. The major advantage of this is that the organization can do a number of projects together and can retain the functional structure of the organization but depending upon the needs of the project certain individuals could be picked up and you could form a project team and once the project is over these people go back to their parent departments as they are and then they could be picked up for the next project and so on. This gives you this kind of flexibility.

One of the major disadvantages of this kind of a scheme is this kind of dual reporting. This individual here for instance has this gentleman as his boss, the functional manager. But he also has the project manager as his boss. It is a situation where an individual has two bosses though what is really happening is that as long as the project is going on he is answerable only to this particular gentleman, the project manager. But he knows that he has to come back ultimately to the department. So he cannot afford to ignore his original boss in the functional department and this kind of dual reporting can produce some kind of conflicts and this is one of the major disadvantages of the functional layout.

Let us try to see what are the major pros and cons of the matrix organization. The major advantage is that the project manager has the authority to handle the project. That's one thing. In each project there is a project manager defined and he has the authority to handle the project. Another thing is that rapid responses are possible to change conflict resolution and project needs in this case. We are trying to get some of the advantages of the pure project organization in this particular framework. Sharing persons reduces the costs because to share a person means a particular person in a functional organization could be a member of more than two project teams. For instance if you take a large organization like Engineers India limited which is handling may be hundreds of projects at the same time one particular individual could be participating in more than one project and this kind of flexibility is permitted in the matrix organizational structure. Each person has a home after project completion.

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One of the disadvantages of pure project organization is that people don't want to finish the project because they don't know where they will go after finishing the project in a pure project organization. They would like to keep on extending it, extending it. They would like to stay on in that particular organization but here the home is defined.

You start from your parent department. You are on loan to the particular project and once you have done it you go back to your parent department and are available for doing other projects. Now the major disadvantage is multidimensional work and information flow; it is multidimensional. What does this multidimensional work mean? Take the example of Engineers India limited again. An engineer who is working on a particular project is working simultaneously on 2 or 3 projects. He has to work on this project half the time, on that project half the time. It is multidimensional work rather than working exclusively on one project and also the information flow is complicated because one information flow comes from project manager 1. The second comes from project manager 2 and there are demands on his time and on the resources which are limited.

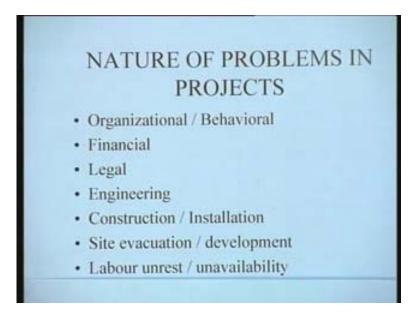
There is dual reporting in a matrix organization structure. This can create problems. It is always good to design an organization where you have a single boss. Here by definition you have 2 bosses. That's not a good thing because two individuals will never agree and you will always create problems. Continuously changing priorities is another thing in the matrix organization. Why will there be continuously changing priorities? Project is a dynamic thing. It would be moving from the first stage of its lifecycle over implementation to final completion. At different stages of the life cycle there would be different priorities in the project that's one thing and then you are handling not only one project. You are handling many projects. It is like trying to say that you are in a situation where there are babies being born and old men dying simultaneously and you are dealing with both these problems together. You are dealing with new projects. You are dealing with young projects and you are dealing with projects which you have finished, all of them together. When you are handling all these problems and that is what leads to these problems of changing priorities and there are also difficulties in monitoring and control in this particular situation. But by and large if an organization has to do a large number of projects this becomes the best way of accommodating all of them together and doing projects together in the same fashion. Depending upon the needs we can see that no organizational structure is actually an ideal one but by and large considering the fact that if you are in a particular environment where you have to handle multiple projects probably the matrix organization structure would be the best answer.

Let us now look at some of the major problems that one faces in projects and looking at these problems we will try to see what are the demands on the individuals for handling projects? Many of the problems in projects are essentially organizational or behavioral problems; problems stemming from people not getting along well or people having some kind of conflict over allocations of resources or budgets or costs or whatever it might be. These kinds of problems are typical when you are talking of problems in projects. Another range of problems in projects could be financial problems. These are very common problems. Financial problems in a project are generally ..... at the stage where the project is formulated because at that stage the project manager has to fight for the budget, fight for the share of project. May be the management has set aside some of the money for the project and the project manager after consultations with his team might find that, that is inadequate. So he has to convince the management that more money is required and get the money from them. It would mean lot of financial wrangles. There could be legal problems. I mean lots of legal problems occur. Even before you start a project you have to probably obtain legal clearances from a variety of agencies. There could be those kinds of problems and there could be some cases of litigation going on. You bought a site and the site has yet not been cleared and you have problems. You bought the site so you got to get it cleared. So .... enter into all kinds of problems. These are real problems which the project managers face.

Engineering problems are not very severe problems because they have solutions. If you have to move a big piece of equipment from here to here you know what horse power you need for the vehicle or what kind of crane with what capacity you need. You need it. There could be some problems with actual implementation on site or in erection of a particular structure you might have some kinds of problems. Those are also problems that project engineers face. There are problems of construction and installation. These are again problems which project managers will face and these are problems which would be varied and compounded by the environmental conditions. Site evacuation and development is a major problem. Site evacuation and development means that the company has purchased a huge area of land and may be there are hutments on it. There are villagers who are not ready to vacate that land although legally you have obtained the papers for the land and it is registered in your name but you will get into these problems.

How do you evacuate these people? I am aware of a factory situation where for instance the company is a group of Modi's where they were setting up the project and they were facing this problem of the settlers who created all kinds of problems for them. They use to throw stones at all the vehicles which used to come. They used to block the roads at night so that the company materials could not be transported and there was a settlement with these people after a great deal of difficulty. Their original demand was at least one member from every family should be employed in the factory that is going to be set up whatever it was in the project. The management could not give in to this demand. They had to use all kinds of tactics to get rid of these people. These are problems which are real life problems which a project manager would face on the job.

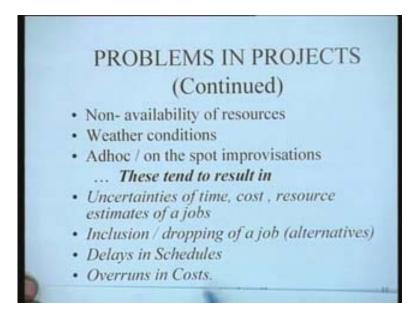
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Labor unrest and unavailability both; you need labor for construction. So this labor could be restive. It could be very sensitive to its rights and therefore there could be problems of that kind or labor might not be available at all in that locality where you want to set up. It is a backward area, no labor available. These kinds of problems would be there. This gives you an idea of the diversity of problems that a project manager can face. Nonavailability of resources; you require certain types of transportation facilities. It is not available. He has only a limited amount of facilities available. The weather conditions could play a lot of havoc for the project manager. You want to, for instance, transport a particular kind of equipment by road from some institution nearby and it is on the critical path and that means it will delay the project if it doesn't reach in time, that is may be by tomorrow and you suddenly find there are floods on the way. It cannot be transported and there is problem. You have to then take a decision as to what is to be done. You can either decide to airlift it to the nearby place and then bring it here which would involve tremendous costs, increase in cost and so on or think of some other alternatives or decide to delay the project as the case may be. These are again some of the problems that could be triggered by the weather.

One key quality that the project manager should have is that he should be able to take decisions, ad hoc decisions, on the spot improvisations. If you have a problem right now immediately think of what can be done and do something rather than complain. Many people tend to complain when they can't do anything. Instead what is really required in a good project manager is that he should have this capacity for on the spot improvisations and should have this quick decision making capability and doing these kinds of jobs. All these problems that we just talked about incidentally they tend to result in uncertainties of time, cost and the resource estimates of jobs. They can result even in inclusion or dropping of a job when there are alternatives available. They can result in delays in schedules and they can result in overruns in cost.

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The various problems which are actually multidimensional as far as the project manager is concerned these tend to create complications and tend to in fact delay the project resulting in both cost overruns and time overruns. Incidentally by looking at the various problems which is the job scope for the project manager and his team what should be a good project manager like? What are the qualities that he should have? What should he be able to do? Some of the attributes of a good project manager are honesty and integrity. This is fundamental. Honesty and integrity is in fact like a pre requisite. Understanding of personnel problems; this is a very key thing in a project manager. He should be able to understand the problems that his team faces. What are the human issues involved? He should be able to understand human beings, understand their inherent desires, their motivations, their expectation levels and things of this kind and without that he would not be a successful project manager.

Then another key thing is that he should be able to understand the project technology. Each project has associated with it a kind of technology. He should understand that project technology. What is the key project technology? What is being done? He need not be a specialist in that area but he should understand that this particular project if it's a project in fiber optics and making some new telephone connection lines for fiber optics that kind of thing he should understand that this is the technology. These are the major components and this is what is involved in all this. Then he should have business management competence. What does business management competence mean? It means he should first have knowledge of management principles. How to manage people? Management basically consists of the managerial functions of planning, organizing, leading and control and what all is involved in this exercise? He should have some idea of management principles. At the same time he should be good at communications, very good at communications. Both these things are very necessary. That is what we mean primarily by business management competence here.

He should be alert and quick. For handling a project decisions have to be taken on the spot we say, quickly. He cannot afford to defer a decision, make a committee which will take 6 months to meet and then decide what is to be done? By that time the project is going to be over. He cannot afford to do that. You require these kinds of people who are alert and quick to respond. Alertness is very important too. What is alertness? Alertness means that he is active to what is happening in the environment around him. He should have his ears and eyes open. He should see what is happening in the social, political world. He should be open to that and he should plan out his strategy for doing his project by keeping those things in mind and he should be quick also at the same time.

Versatility is another feature, desirable feature of a project manager. He should be a versatile person. He should not necessarily be a functional specialist. He should not be operating as a functional specialist. He should be capable of doing various jobs. When a particular individual doesn't come he should be capable of handling that man's job also because on the site where the project is going on it's not necessary that all the kinds of facilities would be provided. He should not simply say that oh I didn't get the project report or the report from my boss today. What to do? If he didn't get it he should ring up and find out from the boss. This is as simple as that. You should have that kind of versatility. He should not be passive he should be active. He should have energy and toughness. He should have this decision making ability.

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These are some of the attributes of a good project manager, what is expected of a good project manager. A project manager is basically heading a team. He is inspiring his people. He is getting the task done from people. As we said the other day management of a project or project management is more of people management and not of task management because it's the people who have to actually do the jobs. So unless you manage those people well you will not be able to .....

What are the qualities of a good project team? The project is operating in a team. Normally it is said that in a project team, every team member should have these qualities.

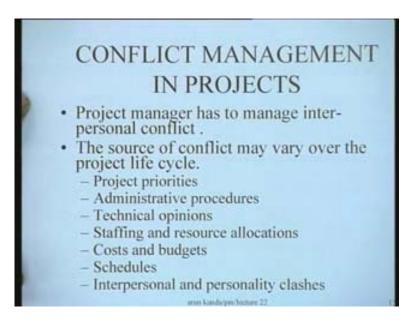
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If he does not have these qualities the efficiency of the team would suffer. The central quality is trust. Each member should be able to trust the other person. That's the key thing and then the integrity and competence; competence in the field. If he's an electrician he should be competent. He should be able to able to do that particular job. Consistency, loyalty and openness are some of the qualities of a good team working together. It is the job of the project manager to make sure that he encourages the development of these kinds of attributes in his individual members.

In doing projects lot of conflicts can arise. Conflict management in project becomes a very major issue for the project manager because there are conflicts. There will always be conflicts because people are involved. One of the important tasks of a project manager is management of conflicts. Project manager has to manage interpersonal conflict. This is an important thing. The source of conflict may vary over the project life cycle. This is understood. We will talk about different sources of conflict and the sources could be the priorities to the project, administrative procedures, technical opinions, staffing and resource allocations, costs and budgets, schedules, interpersonal and personality clashes.

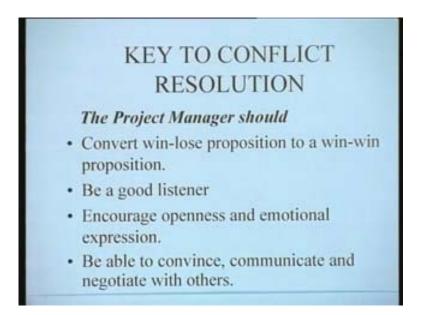
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These could be some of the areas in which there could be conflicts between people and these have to be resolved and what is the key to conflict resolution? What is it that the project manager has to do? A project manager should convert a win lose proposition to a win-win proposition. When is there a conflict between people? If individual A and individual B have a conflict over something generally the source of the conflict is that probably one of the participant sees that by doing this activity he is being harmed in some way or he is not getting his due and the other person is grabbing the due. He feels that it is a win lose situation. However if task could be so converted to show that by doing this project both of you stand to gain that's a win-win situation. May be trying to convince the people that doing this would be beneficial for both is a good way of going about things.

Be a good listener; the project manager should be a good listener. He should listen to the problems of others; that actually resolve half the conflict. If a man, your boss, just listens to you sympathetically you feel that half the problem is over. Then people go back and go back to work. Encourage openness and emotional expression; you should allow people to come up with their problems and be able to convince, communicate and negotiate with others. This is a very important thing.

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By adopting these kinds of strategies the project manager could lead to resolution of the conflict. Now let's try to see how, why and how much conflict there is. There could be various sources of conflict and this is the project life cycle starting from the formation of the project, to the build up, to the main and to the phase out. The overall conflict graph is like this. Studies have shown that it's there in the beginning, the overall conflict. It rises, a the build up stage it's maximum, it remains more or less constant till the main phase and then in the phase out, the total conflict is in this particular manner. The reason for the conflict or the source of conflict is over schedules. In the beginning, in the formation there is less conflict on schedules. It gradually increases. It reaches its peak here and then typically it remains mostly throughout the project.

As far as priorities are concerned initially there is less conflict, then gradually it rises. There is most conflict during this period and during this period again it drops down during the phase out stage and similar behavior is true about technical issues because in the beginning technical issues are not really that prominent. It is only when you build up and start the project that these issues become very dominant and then during the last phase it's a drop out here, gradual progression. Issues shown about conflict over administrative procedures are generally high in the beginning because people don't know the system. They have some fights. They understand the system and generally by build out it remains more or less constant and then it tends to drop. People know each other very well and during this phase there is no conflict over administrative procedures.

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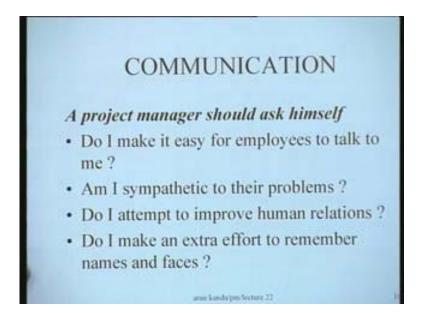
		VFLICT OVER THE
	Sources	Program Stages
-	Overall Conflict Schedules Priorities Technical Issues Administrative Procedures Cost Personality	Formation Build Up Main Phase out

Normally conflicts over cost remains to some extent more or less constant through out the project little bit and personality clashes are always there. People are there so there is always some kind of personality clash. These are some of the major sources of conflict and this graph gives you an idea of when to expect which type of conflict. It is like trying to say that at this particular point you can expect most of the conflict. You have to really be prepared for handling that kind of conflict at this stage. This is an important aspect of the whole. If you are prepared for conflict then handling conflict will not upset you. You know that people will fight. If there is a fight it will not be disturbing you in a very significant way. You are prepared for it. The idea here is that the project manager should be prepared for some amount of conflict and he should also know how to manage it, how to deal with people because this is something like the noise in an electrical system. Some amount of it will be there. If you design a system properly there will be lesser noise. You can control the conflict to some extent by keeping people happy but it will be there still.

One of the ways to reduce conflict in a real life situation could be to provide proper communication between people. Much of the conflict between people could be out of sheer ignorance. People don't know something and they are fighting about it. That's one thing or expressing certain points of view. But a positive attitude to conflict should be taken. A positive attitude to conflict means that conflict should not be taken as a negative thing. Conflict should be taken as an expression of the people's involvement in the project. If I express a point of view and somebody else expresses a point of view, it means that we have both taken the trouble of expressing a point of view because we are interested in the welfare of the project. It should be viewed in that spirit and the resolution should be then provided by either judiciously trying to argue what the real life situation is or that both points of view are important and some amount of accommodation is necessary to get the best in life or some such thing. Conflict resolution is therefore very, very important.

Let's now talk about communication. When it comes to communication the project manager should ask himself these questions.

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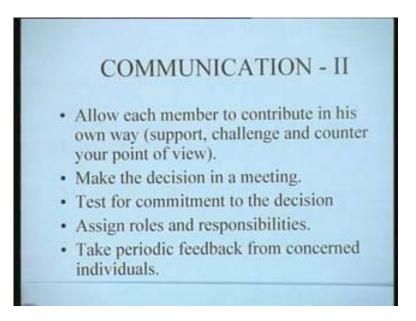
What should the project manager ask himself? 1) Do I make it easy for employees to talk to me? Some people have an aura of fear they create around them and anybody is dreadful. You want to avoid the door of the person, his boss and go the other way round just in case you see him. That's not the kind of thing for a project manager to do. The project manager should ask if I make it easy for employees to talk to me. Only then communication can be there. Am I sympathetic to their problems? Because a project has to be done in a small team, people have to interact with each other like they do in a family. Just as my son can come and talk to me freely, hopefully and there are some fathers probably to whom the son would have difficulty in talking. That would alienate the son from the father ultimately. So am I sympathetic to their problems? Do I attempt to improve human relations? Do I means he should ask himself have I done something to improve human relations? There are various ways of improving human relations and that can be done by providing a common canteen, giving an opportunity for people to discuss their problems while they are at lunch, providing a common dress. For instance in Maruti Udyog limited everyone from the managing director down wears the same dress. They get a feeling that they belong to the same family. That's the kind of trick that is being used to imbibe these kinds of values.

Do I make an extra effort to remember names and faces? This is an important thing. Do I remember people's names and faces? Can I call him by his first name and find out occasionally how your family is doing. Your wife gave birth to a son 3 weeks back. How is he? That sort of thing would bring you closer with your people. Communication; how can it be done? Allow each member of the team to contribute in his own way and remember that the contribution could be either by supporting or challenging or countering your point of view. This is important. All these people are then making contributions.

Make the decision in a meeting. Whatever decisions you have to take that this will be done or that will be done it should be done in a meeting preferably and in the meeting you can also test for the commitment to the decision. Are people really committed? You can get an idea that this particular individual was strongly in favor of this decision. This was not so strongly in favor. So the person who is not so strongly in favor either should be convinced or you know that he will get along or gradually he will have to. So you can test for the commitment of the decision.

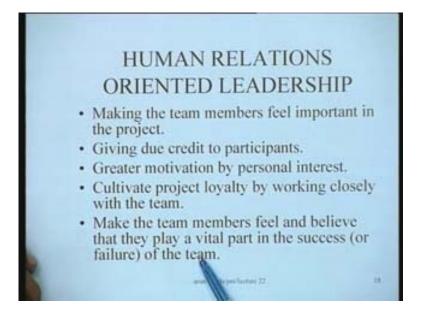
Then you should assign roles and responsibilities. Knowing that the decision has been made your job is to get the material. Your job is to get this and your job is to get this. Whatever job allocation is to be done, it should be done there and take periodic feedback from concerned individuals.

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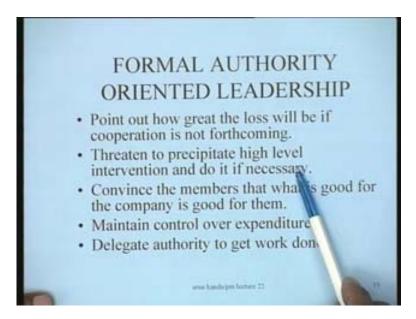
As it is communication is a two way process as we said. You communicate what you want to get done and then they will tell you any difficulties or problems that they have. Both are important in the chain.

Let's now talk about some of the leadership issues that are relevant here. Human relations oriented leadership means making the team members feel important in the project. That's what it is important. Giving due credit to participants, greater motivation by personal interest, cultivate project loyalty by working closely with the team, make the team members feel and believe that they play a vital part in the success or failure of the team. (Refer Slide Time: 53:34)



These are human relations that means depending upon the kind of human relations you have. The other leadership that you can exercise is through formal authority that you are the boss. There also you can do a number of things; formal authority oriented leadership. Point out how great the loss will be if the cooperation is not forthcoming. That is if this project is not completed it would mean a loss of so many crores of rupees. Threaten to precipitate high level intervention and do it if necessary.

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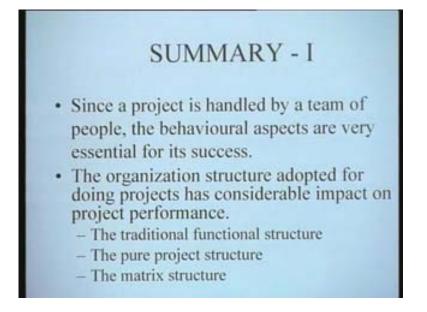
If you are not doing the job we can throw you out. You can use that as a threat and occasionally once in 2, 3 years even if you throw out one person out that will be a good

reminder to everyone else that he has the authority. Convince the members that what is good for the company is good for them. Maintain control over expenditures. That's one important way of showing your leadership, financial control. Give him only that much money. Delegate authority to get work done. These are some of the issues pertaining to leadership that the project manager should actually exhibit during that particular team and leadership issues we have tried to classify into two categories: one is the category of human relations, as a person to person talking kind of behavior; courtesy, genuine interest in the person concerned. These kinds of factors can build up a good leader and a good rapport with the team.

The second kind of factor is the formal authority oriented leadership which you should not try to exercise to that great an extent all the time. This is more of a threat and it should not be used. You can say I can sack you. But you do not keep sacking everyone because if you do that you will have nobody to work with, but yes you have the power to sack somebody. It is used more as a deterrent. It is a nuclear deterrent as India says. We are not going to use our missile. It is a nuclear deterrent. In the same way this particular leadership style is more of a deterrent and you should try to manage or have leadership through human personal relations primarily.

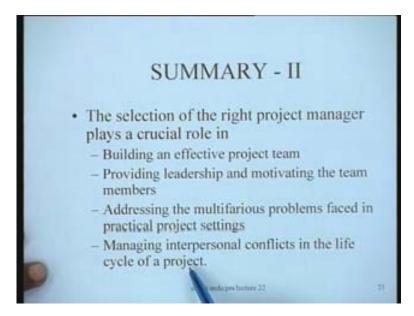
Let us summarize what we have tried to do in this particular lecture. First message which is very important is that since a project is handled by a team of people, the behavioral aspects are very essential for its success. You are dealing with a group of people and transporting people is not the same thing as transporting goods. When 5 people are to be transported it is not like transporting 5 trucks; I mean any truck of something else, inanimate matter. The reason is that people will develop interactions. They will talk with each other and therefore all these factors will become important when you are talking of a team. This aspect must not be forgotten. Unfortunately the trouble with fresh engineers is that they tend to over emphasize the technical aspects in project management and they think that the entire project is a success only because of technical aspects. That's not so. In fact it's the behavioral aspects, the people if they do the job well, only then projects get done. This must not be forgotten.

We saw that the organizational structure adopted for doing projects has considerable impact on project performance. We looked at the traditional functional structure, the pure project structure and the matrix structure and we saw the pros and cons of each of these. (Refer Slide Time: 57:33)



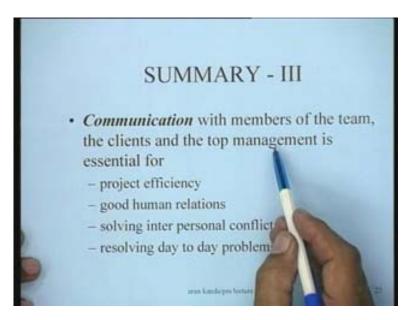
The selection of the right project manager plays a crucial role in all these things. That is building an effective project team, in providing the leadership and motivating the team members, in addressing the multifarious problems faced in the practical project settings we saw that there were a variety of problems in the practical project settings and a good project manager is very, very important and also in managing interpersonal conflicts in the life cycle of a project.

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Finally we saw about communication with members of the team, the clients and the top management.

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Communication is important with everyone; with the team, with the clients for whom the project is being done and with the top management is essential for project efficiency, good human relations, solving interpersonal conflicts and also resolving day-to-day problems and therefore we have seen that the organizational structure of a project as well as the behavioral aspects of project management are in fact very crucial in the successful implementation of a project. Thank you!