Lecture 10 : Negotiation

Dear students. In the previous lecture, we have discussed about conflicts. In this lecture, we are going to discuss about negotiation. This is the phase 1 in the project initiation stage. This is to recollect you that currently, last class we discussed about the conflict. Now we are discussing about negotiation.

The agenda for this lecture is nature of negotiation, then lateral relations. Some requirement for negotiation, then what is called the principled negotiation, then very important aspect ethics in negotiation, then partnering, chartering and scope change. These

are the agenda for this lecture. First, we will discuss about nature of negotiation.

Agenda

- The Nature of Negotiation
- Lateral Relations
- Some requirements of negotiation
- Principled Negotiation
- Ethics in negotiation
- Partnering, Chartering, and Scope Change

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

The Nature of Negotiation

- There are a variety of approaches for dealing with conflict, generally speaking the favoured technique for resolving conflict is negotiation.

  – Negotiation is a field of knowledge and endeavor that focuses on gaining the favor of people from whom we want things

- "mediate," "make peace," "bring to agreement," "settle differences," "moderate," "arbitrate," "compromise," "bargain"

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

There are a variety of approaches for dealing with conflict. Generally speaking, the favored technique for resolving conflict is negotiation. This lecture has a direct connection with the previous lecture. Previous lecture, I discussed about conflicts. Now, to resolve that conflict, one of the important technique is called negotiation.

So negotiation is the field of knowledge and endeavor that focuses on gaining the favor of people from whom we want things. There are other names for negotiation in literature. Some people call it "mediate", "make peace", "bring to agreement", "settle differences", "moderate", "arbitrate", "compromise", "bargain". These are other names for negotiation. Most of the conflicts that involve the organization and outsiders have to do with property right and contractual obligations.

The Nature of Negotiation

- Most of the conflicts that involve the organization and outsiders have to do with property rights and contractual obligations.

- In these cases, the parties to negotiation see themselves as opponents.

So the core reason, most of the time, the core reason for conflict is there is a dispute with the property rights and contract obligations, because some people may not follow the contract as per the agreement. Some people may climb the right for the property. Most people will climb that their own right, then that lead to conflict. So in these cases, the parties to negotiation see themselves as opponents. So the parties who are involved in the negotiation always they see the other party as an enemy or opponents.

The Nature of Negotiation

- Conflicts arising inside the organization may also appear to involve property rights and obligations, but they typically differ from conflicts with outsiders

- As far as the firm is concerned, they are conflicts between allies, not opponents

Conflict arising inside the organization may also appear to involve property rights and obligations, but they typically differ from conflict with outsiders. As far as the firm is concerned, they are conflict between allies, not opponents. So in the project context, the conflict arise only between allies, friends, not opponents. Organization like groups consist of interdependent parts that have their own values, interest, perceptions and goals. Each unit seeks to fulfill its particular goal and the effectiveness of the organization depends on the success of each unit's fulfillment of its specialized task.

The Nature of Negotiation

- Organizations, like groups, consist of interdependent parts that have their own values, interests, perceptions, and goals.

- Each unit seeks to fulfill its particular goal and the effectiveness of the organization depends on the success of each unit's fulfillment of its specialized task.

Since each unit wants to fulfill their own goal that lead to conflicts. So we need to talk about negotiation here. One of the ways to solve the conflict is called lateral relations, in which organizations facilitate this integration is to establish lateral relations, which allow decision to be made horizontally across lines of authority. There is no hierarchical, there is no vertical decisions.   Now we are making a horizontal decision.
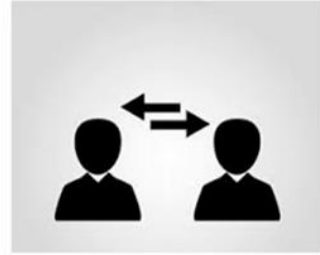
Lateral Relations

- One of the ways in which organizations facilitate this integration is to establish "lateral relations [which] allow decisions to be made horizontally across lines of authority"

- A lateral relationship in management is a link between two employees of the same organization who are at the same level of authority
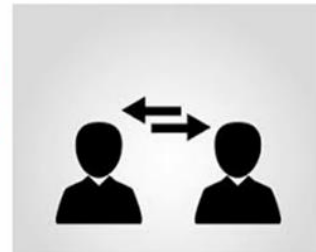
Lateral Relations

- As each unit will have its own goals, integrating the activities of two or more units is certain to produce the conflicts that should not take place.
- The conflicts may, however, be resolved by negotiating a solution, if one exists, that produces gains (or minimizes losses) for all parties.

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach.* John Wiley & Sons.

So a lateral relationship in management is a link between two employee of the same organization who are at the same level of authority. So when we discuss the people who are involved in the same level of authority that will reduce the conflicts, that is called lateral relations. As each unit will have its own goals, integrating the activities of two or more unit is certain to produce the conflict that should not take place. The conflicts may however be resolved by negotiating a solution if one exists that produces gains for all parties or minimizes the loss. The best strategy to resolve the conflict is we have to make a decision that is called a negotiation that will provide a gain for all the parties or minimize the losses for all the parties.

The Nature of Negotiation

- The proper outcome of negotiation should be to optimize the outcome in terms of overall organizational goals
- Although it is not always obvious how to do this, negotiation is clearly the correct approach

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach.* John Wiley & Sons.

Now we will discuss about nature of negotiation. The proper outcome of negotiation should be to optimize the outcome in terms of overall organization goals. Although it is

not always obvious how to do this, negotiation is clearly the correct approach. Some requirement of negotiation, few conflicts have to do with whether or not a task will be undertaken. Some people say we have to take this task, some people will say we should not take the task that lead to conflict.

Some Requirements of Negotiation

- Few conflicts have to do with *whether* or not a task will be undertaken
- Instead, they have to do with the *design* of the deliverable
  - How
  - Whom
  - When
  - What cost
- The work of the project should get done
  - If not, everyone loses

Instead they have to do with the design of the deliverable like how we are going to deliver, whom we are going to deliver, when we are going to deliver, at what cost we are going to deliver. When we understand this then the conflict will be reduced. So the work of the project should get done if not everyone loses. So the ultimate aim of the organization is the project has to be done, the project has to be completed. Everybody should feel that the project is ultimate purpose.

Some Requirements of Negotiation

- One requirement for the conflict reduction/resolution methods used by the PM is that they must allow the conflict to be settled without irreparable harm to the project's objectives
- A second requirement is that they allow (and foster) honesty between the negotiators

So if they understand that the completion of the project is more important, otherwise it is a loss for everyone then there would not be much conflict. One requirement for the conflict reduction or resolution method used by the project manager is that they must allow the

conflict to be settled without irreparable harm to the project objectives. So when we take a solution for the conflicts, we have to suggest a solution without irreparable harm to the project objectives. The project is more important. A second requirement is they allow or foster   honesty   between   the   negotiators.

Some Requirements of Negotiation

- A third requirement of all conflicting parties is to seek solutions to conflict that not only satisfy their own individual needs but also satisfy the needs of other parties to the conflict, as well as the needs of the parent organization

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

So when you go for the negotiation, the honesty is more important. The first task is project is important. The second point is that the honesty is more important. The third requirement of all conflicting parties is to seek solutions to conflict that not only satisfy their own individual needs but also satisfy the needs of other parties to the conflict as well as the needs of the parent organization.   Here you have to satisfy your own need.

At the same time, you have to satisfy the needs of others and you have to satisfy the needs of the parent organization. These are the three important requirements for negotiation. Now we will talk about the principled negotiation. So some of the principles are separate the people from the problem. Do not carry the people's image on to the problem because you   separated   problem   is   different,   the   people   is   different.

Principled Negotiation

1. Separate the people from the problem

2. Focus on interests, not positions

3. Before trying to reach agreement, invent options for mutual gain

4. Insist on using objective criteria

Then focus on interest not the positions. Here the interest is the project should be successful. Whether who is saying that that is not important. The third principle is before trying to reach agreement, invent options for mutual gain. So before you go to the negotiation table, you should have various options in your hand that need to be discussed with   other   parties.

Insist on using objective criteria that is when you make a criteria for resolving the conflicts, you make it objective criteria. If there is any subjectivity, there is a chance that people will interpret in different way. So that is why the fourth principle is insist on using objective criteria. The another point is ethics in negotiation. It is very important when you go   for   negotiation.

Ethics in negotiation

- During the negotiation process, an ethical situation often arises that is worth noting.

- Consider the situation where a firm requests an outside contractor to develop a software package to achieve some function.

Ethics in negotiation

- When the firm asks for a specific objective to be accomplished, it frequently does not know if that is a major or a trivial task as it lacks technical competence in that area

- Thus, the contractor has the opportunity to misrepresent the task to its customer, either inflating the cost for a trivial task or minimizing the impact of a significant task in order to acquire the contract and later boosting the cost

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So during the negotiation process, an ethical situation often arises that is worth noting. Consider the situation where a firm request an outside contractors to develop a software package to achieve some function. When the firm ask for a specific objective to be accomplished, it frequently does not know if that is a major or a trivial task as it lacks technical competence in that area. So the contractor has the opportunity to misrepresent the task to its consumer either inflating the cost for a trivial task or minimizing the impact of a significant task in order to acquire the contract and later boosting the cost. Here the nature of the task may not be known to the other party.

He may not be technically sound. So you should not inflate the cost of the project just because of that other person is not aware that. So we need to have the ethics whether the task is genuinely a simple task or complicated task, complex task. Based on that you should go for casting. The ethics of a situation require that each party in the negotiation be harnessed with one other even in situations where it is clear that there will not be further work between the two.

Ethics in negotiation

- The ethics of the situation require that each party in the negotiation be honest with the other, even in situations where it is clear that there will not be further work between the two

So with the other party you may not have further task or further work do with other party, but still you have to maintain the harnessity. Now we will discuss about partnering, chartering and scope change. Three situations commonly arising during the project that call for highest level of negotiation skill the project manager can muster is the use of subcontractors. So whenever you use subcontractors you need to have the skill of negotiation because you have to negotiate with your suppliers in terms of cost, in terms of quality, in terms of delivery schedule there the concept of negotiations required. The second requirement where you need to have the negotiation skill is the use of input from two or more functional units to design and develop the project's mission.

Partnering, Chartering, and Scope Change

- Three situations commonly arising during projects that call for the highest level of negotiating skill the PM can muster:
  - The use of subcontractors
  - The use of input from two or more functional units to design and develop the project's mission, and
  - The management of changes ordered in the project's deliverables and/or priorities after the project is underway

Suppose you are getting input from two, three peoples so you need to have the skill of negotiation because some people may not supply the input at the right time. So you need the support of each people there you need to have the negotiation skill. The third one is the management of changes ordered in the project's deliverables and or priorities after the

project is underway. After the project is started but the management is asking some changes so you have to convince, you have to negotiate your team members or you have to negotiate the project sponsor itself that they cannot do or they can do about these new changes. So here also there is a need for negotiation skill.

Partnering

- In recent years there has been a steady growth in the frequency of outsourcing parts of projects
- External suppliers, increasingly, are delivering parts of projects, including tangible products and services as well as intangible knowledge and skills.

First we will talk about the first way, the first technique for negotiation is partnering. In recent years there has been a steady growth in the frequency of outsourcing parts of the project. So external suppliers increasingly are delivering the parts of the projects including tangible products and services as well as intangible knowledge and skills. So when you buy something from the outside when you outsource it so you need to have the partnering, you have to have a good relationship with the other party. There are many reasons beyond avoidance of litigation that the firms enter partnering arrangement with each other having a collaboration or coordination with other person that is called partnering.

Partnering

- There are many reasons beyond avoidance of litigation that firms enter partnering arrangements with each other
- For example,
    - Diversification of technical risk
    - Avoidance of capital investment
    - Reducing political risk on multinational projects,
    - Shortening the duration of the project
    - Pooling of complementary knowledge, among others

For example, diversification of technical risk. So when you have your partnering you can

diversify your technical risk because the other party is only a person who is expert in technical knowledge so you are completely relying on the other person so that your risk is reduced. Then avoidance of capital investment. When you have your partnering that other party may have already capital, already may have the infrastructure so you need not go for any capital investment.

There is advantage of partnering. Then reducing political risk on multinational projects. If you have a collaboration with other countries, if you have your partnering you can avoid political risk. Then shortening the duration of the project. When you have a collaboration or when you have your partnering with others there is a more chance that project duration can be reduced. The another benefit is pooling the complementary knowledge among them.

This is very important point. When you have your partnership collaboration with others each person may have their own competency. So, when you bring it together then there is a chance that synergy will occur so that there will be a complementary knowledge can be shared with other collaborator or partner so that the quality of the project will be improved. Traditionally, relations between the organizations carrying out your project and your subcontractor working on the project are best characterized as adversarial. Many time the relationship between the project and subcontractors will not be good. So, the project people may say that this subcontractor is delivering product which is not good quality.

Partnering

- Traditionally, relations between the organization carrying out a project and a subcontractor working on the project are best characterized as adversarial.

- The parent organization's objective is to get the deliverable at the lowest possible cost, as soon as possible.

They are not, that subcontractor is not delivering at the right time. So the relationship will not be good. So, the parent organization's objective is to get the deliverable at the lowest possible cost as soon as possible. This is possible only if you have a partnering with your supplier or other member. The subcontractor's objective is to produce the deliverable   at   the   highest   possible   profit   with   the   least   effort.

Partnering

- The subcontractor's objective is to produce the deliverable at the highest possible profit with the least effort.
- These conflicting interests tend to lead both parties to work in an atmosphere of mutual suspicion and antagonism.
- Indeed, it is almost axiomatic that the two parties will have significantly different ideas about the exact nature of the deliverable

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach.* John Wiley & Sons.

Now here the conflict comes. So, the project people want things to be done at the lowest cost but the subcontractor's aim is that he has to earn profit. So these conflicting interests tend to lead both the parties to work in an atmosphere of mutual suspicion and antagonism. So there is a suspicion on their relationship. Everybody thinks that the other person is enemy. Indeed, it is almost axiomatic that the two parties will have significantly different ideas about the exact nature of the deliverables.

Deliverable is same but both the parties will have different ideas. So that lead to conflict. That conflict can be minimized if you have a partnering with our collaborator. So project partnering is a method of transforming contractual relationship into a cohesive cooperative project team with a single set of goals and established procedures for resolving dispute in a timely and effective manner.

Partnering

- Project partnering is a method of transforming contractual relationships into a cohesive, cooperative project team with a single set of goals and established procedures for resolving disputes in a timely and effective manner

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach.* John Wiley & Sons.

This is the definition of partnering. So here we are moving from contractual relationship to cohesive and cooperative relationship. So contractual relationship what will happen that the relationship between both the parties will not be good. So when you have the partnering there is a chance, there is a, you can easily achieve cohesive and cooperative project. Now we will discuss about multi-step process for building partnered projects. So how to have the partnership? Otherwise how to do partnered project? First the parent firm must make a commitment to partnering.

Multistep process for building partnered projects

- First, the parent firm must make a commitment to partnering, select subcontractors who will also make such a commitment, engage in joint team-building exercises, and develop a "charter" for the project

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

Select subcontractors who will also make such a commitment, engage in joint team building exercise and develop a charter of the project. The first point is there should be a support from the parent organization. They need a commitment to the partner and they need a support from selecting subcontractors. So when there is a good support from the parent organization then we can, that is the first step then we can go for partnering. So the second step is both the parties must implement a partnering process with a four-part agreement on.

Multistep process for building partnered projects

- Second, both parties must implement the partnering process with a four-part agreement on:
  - "joint evaluation" of the project's progress
  - a method for resolving any problems or disagreements
  - acceptance of a goal for continuous improvement (also known as "total quality management," or TQM) for the joint project
  - continuous support for the process of partnering from senior management of both parties.

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

So both the parties who are willing to have the partnership, they should follow these four important points. First point is they should have a joint evaluation of the project's progress. Both the parties should sit together in the evaluation meeting. The second one is a method for resolving any problems and disagreements. So they need to have a procedure for resolving the problems in case if any disagreements occurs between two parties.

Third principle is acceptance of a goal for a continuous improvement for the joint project. So every parties should think that they will similar to our total quality management. Every partners in the, every party should work together for continuous improvement. So continuous support for the process of partnering from senior management of both the parties. So we have to have a support, continuous support from both the senior management of the partners.

Multistep process for building partnered projects

- Finally, the parties commit to a joint review of "project execution" when the project is completed.
- Each step in this process must be accompanied by negotiation, and the negotiations must be non-adversarial

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

Secondly the parties commit to a joint review of project execution when the project is completed. Each step in this process must be accompanied by negotiation and the negotiation must be non-adversarial. That means there should be a win-win situation between two parties who are involved in the negotiation. The entire concept is firmly rooted in the assumption of mutual trust between the partners. And this assumption too requires   non-adversarial   negotiation.

Multistep process for building partnered projects

- The entire concept is firmly rooted in the assumption of mutual trust between the partners, and this assumption, too, requires non-adversarial negotiation.

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

So very important enabler for good relationship with the partner is trusting each other. If there is a lack of trust between the two parties then it is very difficult to achieve good relationship in partnering. So far we discussed about partnering between two parties. Now we will discuss about partnering, partnering beyond two parties. The concept of partnering however goes for beyond two party agreements between buyer and seller or interdepartmental   cooperation   on   a   project.

Partnering beyond two parties

- The concept of partnering, however, goes far beyond two-party agreements between buyer and seller or interdepartmental cooperation on a project.

- The use of multiparty consortia to pursue technological research objectives is common.

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

The use of a multi-party consortia to pursue a technological research objective is common. Suppose somebody is working on a particular technology, there may be more than two people will work as a consortium, a group of people will work for achieving the technology. There are a great many such groups of competitors engaged in cooperative research and other cooperative activities. They exist worldwide and are often multinational in their membership. For example, airbus industry, originally British, French, Spanish and German and the international Aero engines, originally in the US, Japan,   Germany,   Italy   and   the   UK   they   have   the   partnerships.

Partnering beyond two parties

- There are a great many such groups of competitors engaged in cooperative research and other cooperative activities

- They exist worldwide and are often multinational in their membership

- For example, Airbus Industry (originally British, French, Spanish, and German) and International Aero Engines (originally the US, Japan, Germany, Italy, and the UK)

Partnering beyond two parties

- Airbus Industry is not only a consortium of private firms from four different nations, but each of the four governments subsidized their respective private firms.

- This venture, apparently undertaken in order to foster a European competitor to the United States' Boeing Aircraft, resulted in a successful competitor in the market for commercial aircraft.

It is not between one countries, there are multiple countries working on same project, research and development project. Airbus industry is not only a consortium of private firms from four different nations, but each of the four governments subsidised their respective private firms. This venture apparently undertaken in order to foster a European

competitor to the United States Boeing aircraft, resulted in a successful competitor in a market for commercial aircraft. Now we will discuss about what are the problems in partnering. There can be no doubt that those who have not had much experience with the partnering underrate its difficulty.

Partnering – Problems

- There can be no doubt that those who have not had much experience with partnering underrate its difficulty.
- Partnering requires strong support from senior management of all participants, and it requires continuous support of project objectives and partnering agreements

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach.* John Wiley & Sons.

Partnering – Problems

- Above all, and most difficult of all, it requires open and honest communication between the partners.
- With all of its problems, however, partnering yields benefits great enough to be worth the efforts required to make it work correctly

HONEST AND RESPECTFUL COMMUNICATION

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach.* John Wiley & Sons.

So partnering requires strong support from senior management of all participants and it requires continuous support of project objectives and partnering agreements. Above all, the most difficult of all, it requires open and harnessed communication between the partners. Previously we discussed about importance of trust. So to achieve that the trust, the first enabler is sharing the information, having a good communication with other parties. With all of its problems, however, partnering yields benefit great enough to be worth the effort required to make it work correctly.

Chartering

- A project (program, etc.) charter is a detailed written agreement between the stakeholders in the project, that is, the client or sponsor, the PM, senior management, the functional managers who are committing resources and/or people to a specific project (program, etc.), and even possibly others such as community groups or environmental entities

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

The next methodology is called chartering. So far we studied about partnering that is one of the way to have the negotiation. I will discuss about chartering. A project or program, charter is a detailed written agreement between the stakeholders in the project that is the client or sponsor, the project manager and the senior management, the functional managers who are committing resources and or people to a specific project and even possibly others such as community groups or environmental entities. Where the chartering is, it is a written agreement between different parties who are involved for that work. Otherwise, if there is no written agreement, what will happen? There will be a different way of the expectation from   others.

Chartering

- Charter may take many different forms.
- Typically, it gives an overview of the project and details the expected deliverables, including schedules, personnel, resource commitments, risks, and evaluation methods
- It attests to the fact that all the stakeholders are "on the same page," agreeing about what is to be done, when, and the cost

Charter may take many different forms. Typically it gives an overview of the project and details the expected deliverables including schedules, personal, resource commitment, risk and evaluation methods. So chartering attests to the fact that all the stakeholders are on same page agreeing about what is to be done, when it is to be done and what will be the

cost. Note that if there is such an agreement, there is also an implication that none of the parties will change the agreement unilaterally or at least without prior consultation with the other stakeholders. That is why chartering is important. Many projects do not have charters, which is one reason that many projects do not meet their scope or not completed on   time   or   not   completed   on   budget.

Chartering

- Note that if there is such an agreement, there is also an implication that none of the parties will change the agreement unilaterally, or, at least, without prior consultation with the other stakeholders.

- Many projects do not have charters, which is one reason that many projects do not meet their scope, are not completed on time, and/or are not completed on budget.

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

Sample Charter

An informal project charter appears in Cowen et al. (1992,), in which the various members of the partnering team sign a commitment to

- Meet design intent
- Complete contract without need for litigation
- Finish project on schedule
- Timely resolution of issues
- Manage joint schedule
- Keep cost growth to less than 2 percent

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

So chartering is more important. Now I will show you a sample charter. An informal project charter appears in Coven et al in which the various members of the partnering team sign a commitment to meet design intent, to complete the contract without   need for litigation, to finish project on schedule and to solve the issues on timely   manner and managing joint schedule and to keep cost growth to less than 2%. This is the sample charter. Of course, to meet the underlying purpose of a charter, even these less specific terms assume an agreement on the design intent, the schedule and the cost.

Sample Charter

- Of course, to meet the underlying purpose of a charter, even these less-specific terms assume an agreement on the "design intent," the schedule, and costs.

Scope Change

- The problem of changing the scope expected of a project is a major issue in project management and constitutes part of the second PMBOK knowledge area.

- No matter how carefully a project is planned, it is almost certain to be changed before completion.

- No matter how carefully defined at the start, the scope of most projects is subject to considerable uncertainty.

So far we discussed about partnering and chartering. Now we will discuss about scope change. The problem of changing the scope expected to a project is a major issue in project management and constitute part of the second project management body of knowledge area. No matter how carefully a project is planned, it is almost certain to be changed before completion. No matter how carefully defined at the start, the scope of most project is subject to considerable uncertainty. Now we will discuss about three basic causes of changes in scope, changes in project.

- Some changes result because planners erred in their initial assessment about how to achieve a given end or erred in their choice of the proper goal for the project.

Some changes result because the planners erred in their initial assessment about how to achieve a given end or erred in their choice of proper goal for the project. Sometime what will happen, the reason for changing the project is very wrongly providing the objectives without knowing the consequences. The second one is a technological uncertainty is the fundamental cause factor for their error. Suppose that time when they are at the time of project proposal, there may be one technology. Now at the time of implementing the project, there may be another technology.

Three basic causes for change in projects

- Technological uncertainty is the fundamental causal factor for either error.
  - The foundation for a building must be changed because a preliminary geological study did not reveal a weakness in the structure of the ground on which the building will stand.
  - The project team becomes aware of a recent innovation that allows a faster, cheaper solution to the conformation of a new computer.

So we need to have the change. So the foundation for example, the foundation for a building must be changed because a preliminary geological study did not reveal a weakness in the structure of the ground on which the building will stand. So now we have to have a, because now there may be a new technology to see the weakness of the stand. That says that it is not good enough, this foundation is not enough. Now we have to change our requirement. Second one, the project team becomes aware of recent innovation that

allows a faster, cheaper solution to the confirmation of a new computer.

So when there is a technological development, then we need to go for change the project objectives in fact. And the third source of change is the mandate. This is a change in the environment in which the project is being conducted. As such it cannot be controlled by the project manager. Some of the reason for changing is a new law has passed, then we have to change the project objective.

Three basic causes for change in projects

- A third source of change is the mandate. This is a change in the environment in which the project is being conducted.
  - As such, it cannot be controlled by the PM.
  - A new law is passed.
  - A government regulatory unit articulates a new policy.
  - A trade association sets a new standard.

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

The government regulatory unit articulates a new policy, then we have to change the project. A trade association set a new standard, then we have to change the project. So in this lecture, we discussed about nature of negotiation, then I talked about one way to resolve the conflict is having lateral relationship. That is a horizontal relationship with all the members of the same authority level. Then we discussed about some requirement for a negotiation, then I discussed about principled negotiation, then I discussed about ethics in negotiation, then I have discussed partnering, chartering and scope change. Thank you. Thank you.