Project Planning & Control

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Lecture - 03

Course Scope & Plan, Questions and Discussions

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Okay, so, when you come, we come to actually, the scope of the project of this course is to focus on time management. So, okay instead of calling this construction, planning, and control, I could call this course construction scheduling because planning really can involve a lot more things, rather than time. Scheduling means it is basically time management. So, we are actually focused in this course on time management. We are not going to talk about quality; we are not going to talk about safety; you know, very little, quite a little bit on cost, but it is not cost management. We are not going to talk about the environment; primarily, focus on time. When you talk about managing time, we actually come up with tools.

So, this is the other thing which a standard does. What are the tools which we need to use? How do we utilize which tool? And these are some of the tools which we cover which is the Gantt or the bar chat; the critical path method, which is really the core of the course is going to be on the critical path method, okay. We will spend a little bit time on program evaluation and review technique, which is PERT and other techniques like LSM; a little bit on Monte-Carlo simulation okay so that, you get introduced to some of the more advanced concepts and

planning. Like ahead, as I said earlier, the emphasis is on planning, monitoring, and checking; this is still the most basic part of the course.

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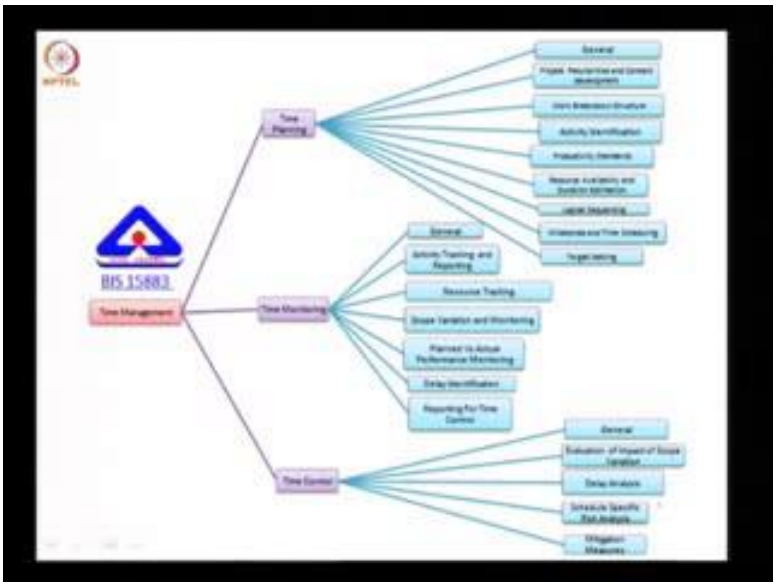

Now, one of the elements here is, I will this is an outline of the BIS standard on time management. So, this is like I said 15883, part 2, and you will see the standard itself is; it is has got plan, monitor, control; this is the base of the standard and as you get into the elements of the standard, it will have elements of planning; it will have elements for monitoring; it will have elements for control. So, I mean, please keep this in mind; the standard is, I think, the first version of it came out only very recently.

So, it is not a very matured standard yet; and until, we people start using it and giving feedback and doing that standard will not; it will have to go through that kind of again, a continuous improvement process in itself, but you know, I think we are at least, fortunate that we have a standard today, which specifies certain things. So, we can specify this as standard and try to follow it in the best way as possible. We will refer to this standard as well as the PMI standard, you know, where it is relevant, but also the concepts of what we are covering are sometimes, you know, slightly different from what these standards specified. So, some of those fundamentals, I will certainly go outside the standard to cover.

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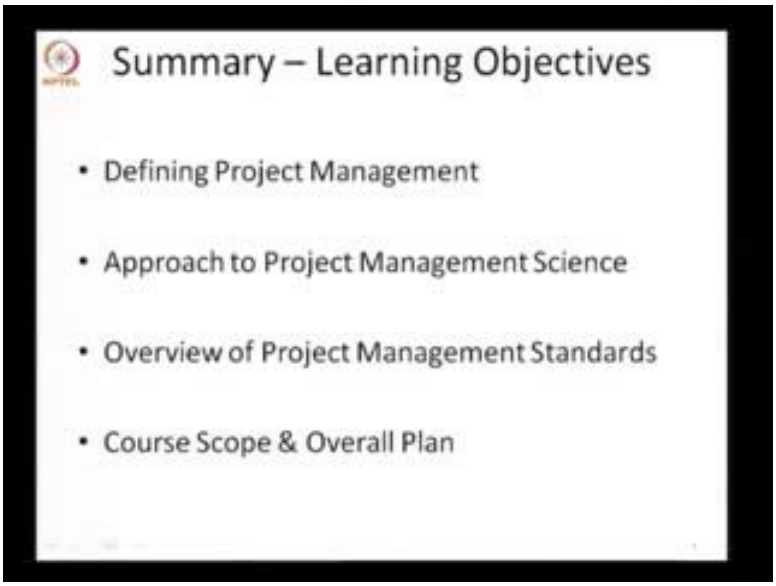

So, I will basically summarize, and we will have a discussion after that. I think, I hope by the end of this, you are able to define project management. Okay, we have looked at approaches to project management as a science. We have had an overview of the project management standards, and we have actually, covered the core scope and the overall plan as to how we are going to go about this. I am not giving you a lecture-wise schedule that is available on the website and the NPTEL requirements. We will generally follow that lecture-wise schedule for the course. Are there question which you can ask?

Student: So, in the plan, monitoring and control so, monitor and control; which is very close to checking part; part check?

Check is monitoring. Okay if I take it back here

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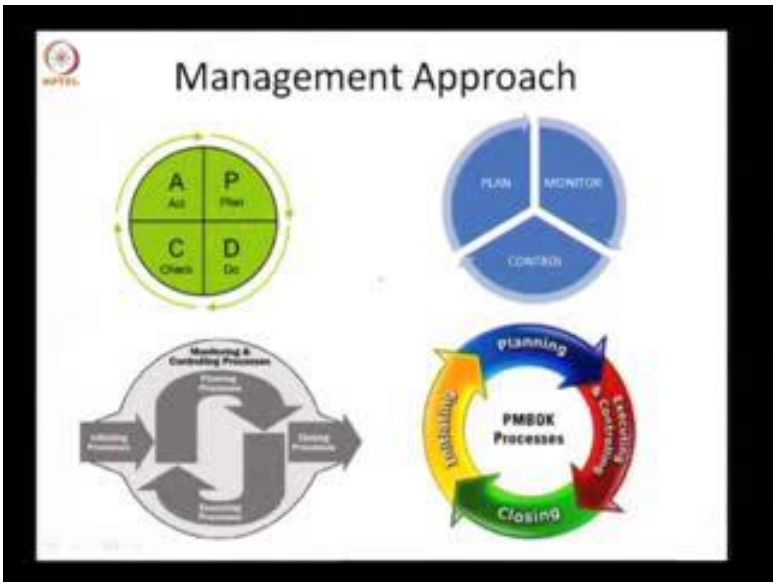

So, basically control is still act. So, what you do not have in plan, monitoring, control is you do not have the doing part. Okay, so, we are a saying you plan something it will be done. So, you do not have the doing part, but you have the monitoring as a checking the controlling as the act. Okay so, so I mean yeah. So, there are many examples we can. So, let me answer some other the other questions you may have then I can give you certain example on this. Are there any other questions?. Okay just give you a very broad example of plan, monitoring, and control and the use of tools let me a put it into a situation which is totally outside project management but you might be able relative to it let us say I want to go from this campus to the central station, and I need to go, what is the, how would you go about to doing. So, that is a project to make a trip to Chennai from IIT campus to central station you have to plan

Student: a route

You will plan a route what is the tools you need for a planning a route (refer time: 05:41).

Student: mobile phones, Google maps....

So, okay you will use google maps you will plan the route and what will the plan result in what-what will it what are all the parameters of your plan (refer time: 05:51)

Student: distance, time, cost...

distance time. So, let say it is what you want is time and cost are let say not too much of a problem at a stage no yeah. So, it is the cost not an issue time is the main issue you want to be able to manage the time of where you are going to go. So, you take Google maps you will

know the route you will you will let say you want to reach there at 10 O'clock for a train what would what would be a planning decision.

Student: time of departure

time of departure will be and mode of transport what typically what is your mode of transport

Student: Train

(refer time: 06:30) Okay let us say you have an own mode of transport let us say it is it is friend with the bike okay let say the I am giving you some control, MRTS you do not know have any control I am giving you some control it is friend with the bike now how much time do you estimate?

Student: forty minutes

forty minutes. So, I can do planning without tools I can basically ask friend who is done this before and say he will say forty minutes let us very heuristic planning I can do that if I made this trip many time I just use my experience and come up with that, but google map this is that the tools are good you should have forty minutes I want to be that at what set 10 O'clock I should at least start by nine twenty. So, that is the plan is over now we actually start the journey you do not know Google map with you anymore assume okay you do not have the connectivity to do monitor what are what are your option? How would you monitor you progress? (refer time: 07:33)

Student: certain stretch...come to known destination ...landmark...

Okay so, so does that have to be included in your plan? (refer time: 07:40)

Student: Yes, If we are going by bike

If you are going by bike you would have to include that in your plan that I will reach these milestones at this times only then I can actually monitor if I had to say that look I am going to start at nine twenty and near the station at ten o clock I will not have intermediate milestones should monitor my plan (refer time: 08:00). Okay so, so let say you are very meticulous and planning you say I have to be you this junction by this time this junction then I making good progress. So, you start all this all does as been done in planning now including milestones, not just your start time you start off and okay you find you do not have a watch it is a tool the tool is absent now how do you monitor (refer time: 08:31)

Student: We will have stop and ask other..

Yeah will have monitoring become more difficult without a tool okay and you will. So, these are the tools that I helping you. So, if you now let's say now you have a now a watch, and you know the milestone and you progressing towards this station and you find that you are supposed to be some point in nine forty, but you reach that only by nine forty-five. So, because your monitoring, you got a statistic on your progress and you find your five minutes late at a milestone what you do? (refer time: 09:07)

Student: I will control the minutes.

You have to take control you have the either the tell you are friend go faster are you have to say that the find new route might be slow because traffic is high. So, you will have to find the alternate route. So, you have to take control of the situation and respond and plan again.

So, I hope. So, that. So, that is the very kind of a very everyday context example of a plan, monitor, control or even PDCA in a way you have done the plan you are actually made the journey you have checked where you are you are taking action to change the plan in a way. I would prefer put it in the context of plan, monitor, control because it is very much more project oriented PDCA can be a much broader than just projects. Any other question?. Okay.