

# PROJECT PLANNING & CONTROL Lesson 7: Controlling the Project

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## **Chapter Description**

- Aims
  - The aim of this chapter to expose students to capture and apply the basic features of controlling the project in relation to project management
- Expected Outcomes
   At the conclusion of this chapter, the students should be able to:
  - Identify the control system and data
  - Demonstrate strategic plan for control techniques
  - Demonstrate SMART principles to a project

- References
  - Erik W. Larson & Clifford F. (2014). Project Management: The Managerial Process (6<sup>th</sup> Ed.). McGraw-Hill Education, New York.

## Contents of Lesson 7 CONTROLLING THE PROJECT

Establishing the Control System Control Data Control Charts and techniques Project Reviews and Walkthrough



### What is Project Control?

**Project control:** keeps project on-track, on-time and within budget.

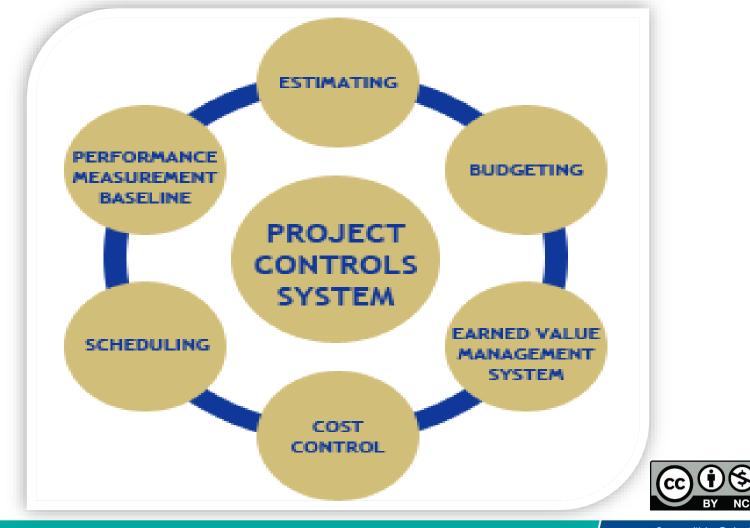
- Managing the budget and schedule of a project.
- Planning, tracking, analysis, and reporting of the cost and schedule data for a project





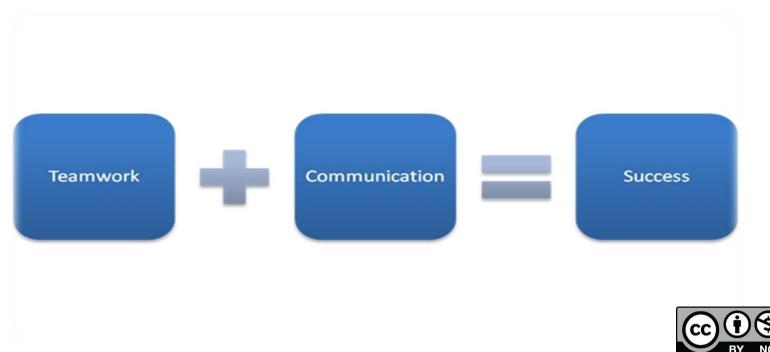


#### **Project Controls System**



# Establishing the Control system

The success of a project depends on communication and the good working relationships among team members



## Communication Tips – Improving Relationships among the team

- Respect people's differences
- Think positively
- Acknowledge co-workers
- Listen to co-workers when they talk to you
- Appreciate others
- Pitch in and help
- Live up to your end of the job

- Respect people's time and priorities
- Be willing to admit mistakes and apologize gracefully
- Invest in other parts of your life
- Understand that life on the job will not be perfect



# Establishing the Control system

- 1. Contract Management: contract requirements and negotiations
- 2. Project Management: meet contractual requirements on time and on budget
- 3. Billing/AR: payment status & questions
- 4. Finance: profitability of project
- 5. Subcontract management: funding

### Project Controller Responsibilities

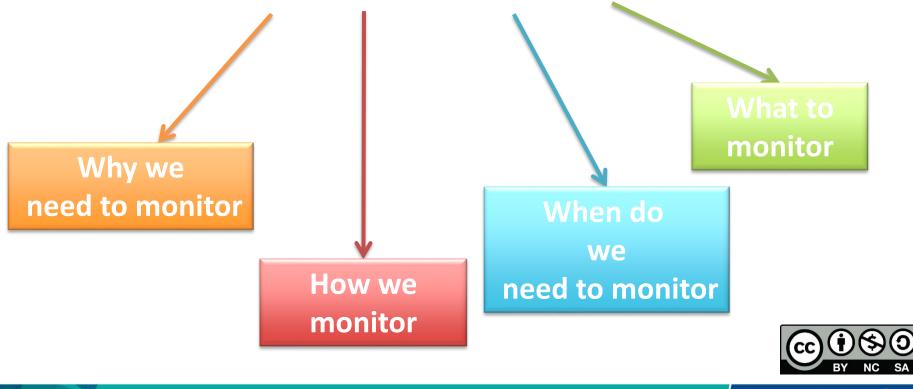
•<u>Project management challenge</u>: to deliver a product or service that meets the *customer's requirements on time and within budget along with keeping the customer satisfied* 

•The Project Controller's primary responsibilities are to assist the Project Manager in meeting these goals



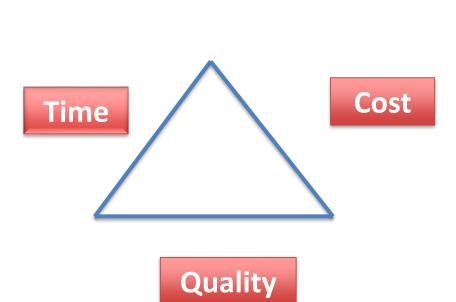
## Control Data Monitoring

 Monitoring – collecting, recording, and reporting information concerning project performance that project manger and others wish to know.



#### How and what to monitor?

- Through meetings with clients, parties involved in project (Contractor, supplier, etc.)
- Updated CPA, PERT Charts Update Gantt Charts
- Using Earned Value Analysis
- Calculate Critical Ratios
- Milestones
- Reports





#### **Sample Weekly Status Report**

•	Milestones	Plan	Actual	Status
	<ul> <li>Complete 3270 testing</li> </ul>	5 Jun	9 Jun	Complete
	<ul> <li>Event Recorder Activated in Tampa</li> </ul>	6 Aug		On schedule
	- Presentation to NWA Finance Com	6 Sep		On schedule
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#### Issues Requiring Discussion/Assistance

- Need definition of WORLDSPAN/CORDA Change Management Process
- IMPACT: Need process that notifies ResNet of scheduled system changes
- ASSIGNED TO: J. Huss
- Last period's Accomplishments
  - Completed initial design of Event Recorder analysis and began coding
  - Researched slow response times in Tampa. Look at Baltimore response times
  - Completed minor adjustments to measurement reports per customer request
- Next Period's Goals
  - Conduct formal review session for Address Verification approval
  - Beta test Event Recorder in the Hotline area in Bldg C



### **Project Control**

#### **COST VS QUALITY**

Proven that cost can be reduced without affecting quality

#### TIME VS COST

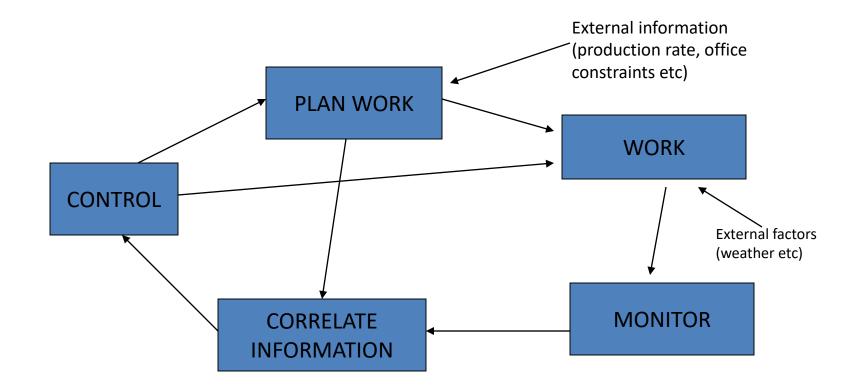
Optimum time for completion of project. If longer or shorter, project will cost more

#### **QUALITY VS TIME**

Generally, there is an optimum time. Quality may be affected if too fast



# THE PLANNING AND CONTROL CYCLE





## **PROJECT CONTROL**

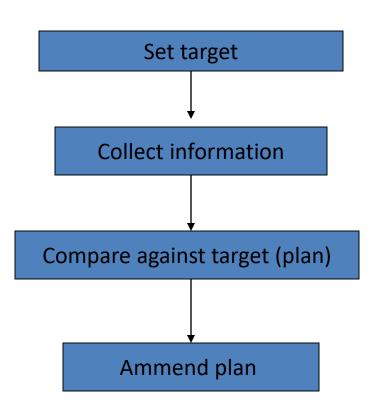
## **RE-ACTIVE CONTROL (or feedback control)**





## **PROJECT CONTROL**

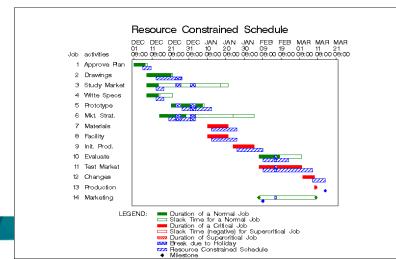
## PRO-ACTIVE CONTROL (or feed forward)

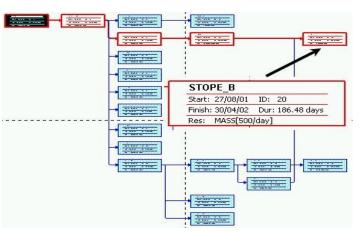




# **Control charts and techniques**

- There are some useful charts and techniques for the purpose of controlling project
- Depends on:
  - Time control
  - Cost control
  - Quality control





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2	Develop script	40 hrs	40 hrs	0 hrs	40 hrs	0 hrs	100%	Scott Cooper,Patti Mintz				
3	Develop production	64 hrs	64 hrs	0 hrs	64 hrs	0 hrs	100%	Garrett R. Vargas, Patti Mintz Scott Cooper Patti Mintz, Video Tape (4 30-min. cassette				
4	Pick locations	16 hrs	16 hrs	0 hrs	16 hrs	0 hrs	100%					
5	Hold auditions	64 hrs	64 hrs	0 hrs	32 hrs	32 hrs	50%	Peter Kelly,Soott Cooper,Jonathan Mollerup				
6	Pre-Production com	0 hrs	0 hrs	0 hrs	0 hrs	0 hrs	0%					
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9	Shoot video	200 hrs	200 hrs	0 hrs	0 hrs	200 hrs	0%					
10	Log footage	16 hrs	16 hrs	0 hrs	0 hrs	16 hrs	0%					
11	Production complete	0 hrs	0 hrs	0 hrs	0 hrs	0 hrs	0%					
12	Post-Production	76 hrs	76 hrs	0 hrs	0 hrs	76 hrs	0%					
13	Fine cut edit	48 hrs	48 hrs	0 hrs	0 hrs	48 hrs	0%					
14	Add final audio	24 hrs	24 hrs	0 hrs	0 hrs	24 hrs	0%					
15	Hand off master to (	4 hrs	4 hrs	0 hrs	0 hrs	4 hrs	0%					

## **Cost Control**

- As design develops, the QS will check design against the cost allocated for each element. If exceeded, the client can either:-
  - 1. Change another element to ensure total cost remain.
  - 2. Change that element to get it back to the original cost
  - 3. Accept the increase in cost as inevitable
- Weakness of this is that quality may be affected when the cost of certain element is reduced
- Value engineering and management may be a better alternative

# **Project Reviews and Walkthrough**

#### Reviews

- Formal & informal meetings with stakeholders
- May focus on specific deliverables or milestones
- Used to get acceptance, surface problems or issues, or make key decisions

#### Status Reporting

- Describes present state of the project
- Compares actual progress to baseline plan
  - Scope, schedule, and budget
- Like a snap shot of the project at a specific time

# **Problem Tracking & Management**

#### Daily – project manager tracks

- progress against schedule
- problems

#### Successful problem management

- identify before happens or at least at first symptoms
- put recovery plans in place don't delay

#### Problem management process

- identify & determine criticality
- assign an owner
- document recovery plan
- monitor progress, daily if critical

## Conclusion

To make a controlling successful, a Project Manager should have:

- Specific organisational activities being focused on
- Different kinds of organisational goals
- Timely corrective action
- Communication of the mechanics of the control process



# THANK YOU