Schedule Control

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Chapter 11
Learning Objectives

- Performing the steps in the project control process
- Determining the effects of actual schedule performance on the project schedule
- Incorporating project changes into the schedule
- Calculating an updated project schedule
- Controlling the project schedule
Real-World Discussion

- According to James Ward it is not uncommon for large IS development consulting firms to have:
  - 25% of large projects canceled
  - 60% experience significant cost overruns
  - 75% suffer problems with quality
- Avoid these problems with proper planning, scheduling, and controlling.
Real-World Discussion (Cont.)

- The key to effective project control is to measure actual progress and compare it to planned progress on a timely and regular basis and to take necessary corrective action immediately.
Project Control Process

- Establish a regular reporting period.
- During each reporting period, collect:
  - Data on actual performance
  - Information on any changes to project scope, schedule and budget
- If changes are incorporated, a new plan must be established.
Effects of Actual Schedule Performance

- Actual finish times (AFT) of completed activities will determine the earliest start and earliest finish times for the remaining activities.
Incorporating Project Changes into the Schedule

- Changes might be initiated by the customer or the project team, or they might be the result of an unanticipated occurrence.
- The degree of impact may depend on when the changes are requested.
- When the customer requests a change, additional costs might need to be charged.
Updating the Project Schedule

- An updated project schedule can be calculated based on *actual finish times* of completed activities
Four Steps

1. Analyzing the schedule
2. Deciding what corrective actions should be taken
3. Revising the plan
4. Recalculating the schedule
Approaches to Schedule Control (Cont.)

- A change in the estimated duration of any activity will cause a corresponding change in the slack for that path.

- When a path of activities has negative slack, focus on:
  - Activities that are near term.
  - Activities that have long estimated durations.
Reducing the Estimated Durations

- Apply more resources.
- Assign a person with greater expertise to perform or help with the activity.
- Reduce the scope or requirements for an activity.
- Totally eliminate some activities.
- Increase productivity through improved methods or technology.
Approaches to Schedule Control (Cont.)

- Reducing durations of activities usually results in an increase in costs or a reduction in scope.

- The key is to effectively address paths with negative or deteriorating slack values as soon as they are identified.
Schedule Control for Information Systems Development

- Common necessary changes during IS development projects:
  - Changes to input screens
  - Changes to reports
  - Changes to on-line queries
  - Changes to database structures
  - Changes to software processing routines
  - Changes to processing speeds
Project Management Software

- Allow one to perform control functions.