Session 10: Project-level status tracking

What data do we collect?
What do we do with it?
How does the user pay?

Responsibilities

- Individual project team members report the status of tasks assigned to them.
  - In week 2 we discussed how to do this
    - What to report?
    - How often?
  - What about "stand-up" oral reports?

- The project manager has to aggregate those reports, based on the project plan, into a project status report.

Aggregating individual status reports

- Remaining cost:
  - sum of individual estimates on assigned tasks
  - sum of estimated costs on tasks not yet assigned.

- Minimum remaining time
  - length of unfinished tasks on the critical path

- Actual remaining time
  - minimum remaining durations + estimated durations of tasks that won't be done in parallel, due to forecasted resource limitations

  (A good PMS will generate this easily)

What kinds of cost?

- Labor is usually the main cost
  - Team members record time spent on each task on their weekly time sheets
  - Job categories have associated billing rates

  Would we prefer to assign a development task to a junior programmer at $40/hour or to a software engineer at $125/hour?

- Other costs include:
  - equipment use
  - travel
  - etc.
Ways of billing and accounting for cost

- Data from weekly time sheets is always collected, regardless of billing or contract arrangements. *Why?*
- Time & materials contract:
  - The customer is billed (monthly, quarterly, etc.)
- Fixed-price contract
  - Developer organization needs to know if its on track to make profit (or break even)
- Some (usually smaller) companies use an annual cost allocation strategy

How does that work?

What happens when I.T. services are "free" (lump sum)

- Demand for service exceeds capability of the resources
- Users are chronically dissatisfied.
- Chargeback is the businesslike approach even within the same company
- Pseudo-chargeback is helpful (*How?*) when top management won't allow the real thing.

Obligations to inform

- Keeping the sponsoring users informed
  - It depends on the relationship
    a. a formal contract with an outside developer
    b. an in-house I.T. organization
    c. users representatives living with the team
  - Should they see all the details?
  - How often should we report status to them?
- Keeping I.T. management informed
  - No secrets from our own boss?

What about the team members?

How do we catch up once we've fallen behind schedule?

- By working harder and longer hours?
- By adding people?
  - What about Brooks's law?
  - How about getting better people?
  - By raising the project's priority?
- By reducing estimated durations for later tasks?
  - e.g. compress the system-testing schedule!
- By hoping for a miracle!

Project managers try all of these!
Burden of Proof

- In assessing a plan for the remainder of a project the burden of proof is on those who claim that it can be done, but
- Many organizations take the opposite view!
  - Anyone who questions a deadline is a poor team player, and lacks commitment.
  - Management often favors those who tell them what they want to hear.
- How do we satisfy that burden?

Independent audit

- Sometimes a project manager will try to avoid or postpone embarrassment by
  - concealing slippage or overrun
  - issuing vague, optimistic status reports
- Or the project manager may just be naïve or inexperienced and really believe the optimistic status reports.
- A specialist or consultant can be engaged to assess
  - The credibility of the project plan and estimates
  - The correctness of current status reports
  - Project team communications and morale

Project Management Office

- Some organizations have established a PMO in order to
  - Establish organization-wide standards and methodology for project planning and control
  - Define project roles for the organization
  - Provide consulting expertise to project teams
  - Review (audit) project status
- The Director of the PMO and his/her staff are assumed to be the organization's most knowledgeable people about project management.