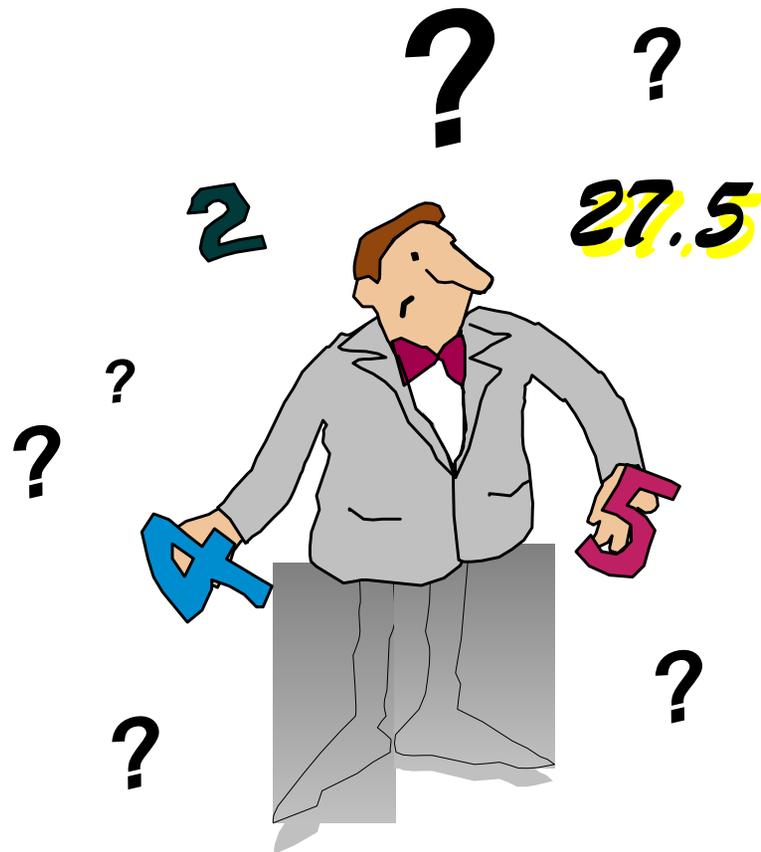


# Estimating

## Module 6



# Discussion



# Top-down Estimating

- Top-down estimating results in high-level estimates of projects or their summary tasks based on parametric, analogy or comparison, or expert judgment.
- Based on collecting judgments, past experiences, and on evaluating past data concerning similar activities.

# Parametric Estimating

Uses specific measures to estimate the effort required to complete a task or to produce a work product, such as hours per lines of code and dollars per function point.

## Advantages

- Can be more accurate and detailed than analogous
- Can be quicker than bottom-up

## Disadvantages

- Accuracy varies widely
- Can be more costly to produce
- Historical information may not be available
- Parameters may not be quantifiable or scalable

# Analogous Estimating

Use the actual cost of a previous, similar task, activity, or project as the basis for estimating the cost of the current task, activity, or project.

## Advantages

- Little time and effort
- Less costly
- Details don't need to be known

## Disadvantages

- Less accurate
- Historical information or expert opinion may not be available

# Bottom-up Estimating

Cost and duration of individual work items in hours and summarized to a project total.

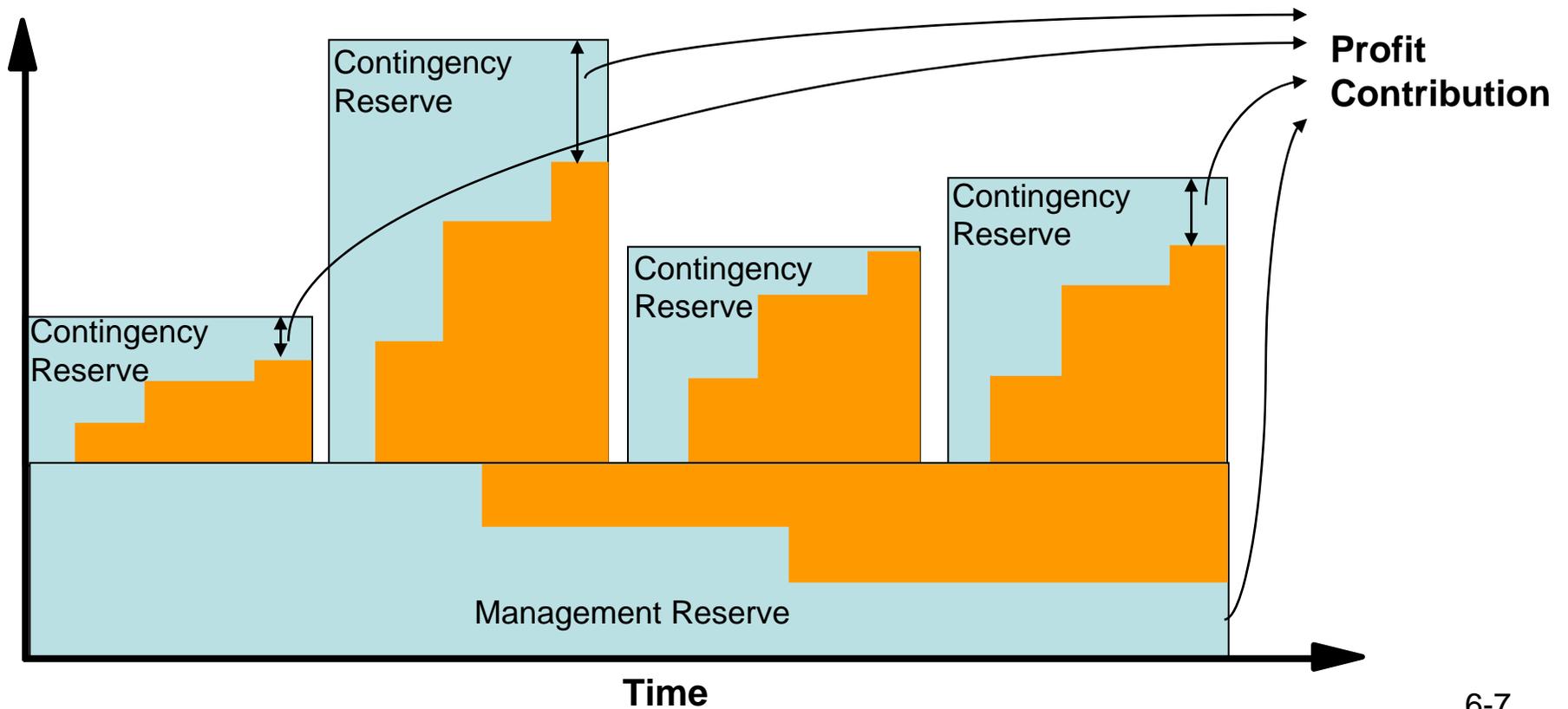
## Advantages

- Improved accuracy
- Appropriate detail to monitor and control project
- Provide team buy-in to estimates

## Disadvantages

- Longer time
- Higher cost
- Only as accurate as the WBS
- Team members may pad estimates

# Contingency and Management Reserve



# Create Case Study Estimates

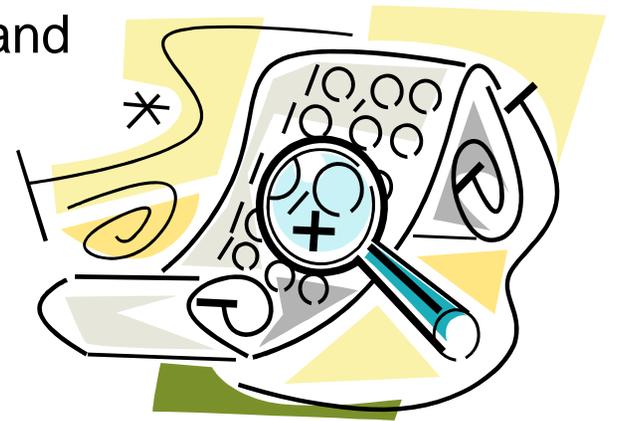
**Purpose:** Practice creating cost estimates based upon your WBS and resources

**Process:**

1. Estimate the quantity and cost of equipment and other materials
2. Estimate human resource hours
3. Apply costs to the hours
4. Calculate the total cost

**Participation:** Teams led by Project Manager

**Product:** Completed cost estimate template  
Be prepared to present your cost estimate



# Debrief

- What are the difficult aspects of estimating?
- How do you overcome the difficulties?
- How do you validate your estimates?



# PM Feedback

After the case study exercise:

- The PM describes what went well
- The team describes what went well
- The PM describes what could have been better
- The team describes what could have been better
- Hand the feedback forms to the PM
- After providing the PM feedback. Document your on page 44 of the Learning Log.
  - This should include any changes that you plan daily work as a result of this exercise.

