6 - Schedule

Planning

6.4 - Estimate Activity Durations

To estimate the number of work periods needed to complete individual activities with estimated resources.

Inputs

- Project Management Plan
  - Schedule management plan
  - Scope baseline
- Project documents
  - Activity attributes
  - Activity list
  - Assumption log
  - Lessons learned register
  - Milestone list
  - Project team assignments
  - Resource breakdown structure
  - Resource calendars
  - Resource requirements
  - Risk register
- Enterprise / Organization
  - Enterprise Environmental Factors
  - Organizational Process Assets

T&T

- Expert Judgment
- Analogous Estimation
- Parametric estimating
- Three-Point Estimating
  - The formulas are:
  - Triangular Distribution.
    E = (O + M + P) / 3
  - Beta Distribution
    (from the traditional PERT technique).
    E = (O + 4M + P) / 6
- Bottum-up estimating
- Data analysis
  - Alternatives analysing
  - Reserve analysis
- Decision Making
  - Voting
- Meetings

Outputs

- Duration estimates

	Optimistic	Most likely	Pessimistic	PERT weighted average
Act. A	12	15	24	16.0
Act. B	8	9	14	9.7
Act. C	15	19	27	19.7
Act. D	10	14	28	15.7
Act. E	17	20	35	22.0
Estimate for the critical path:				83.1

- Basis of estimates
- Project Document Updates
  - Activity attributes
  - Assumption log
  - Lessons learned register

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