

Project Management

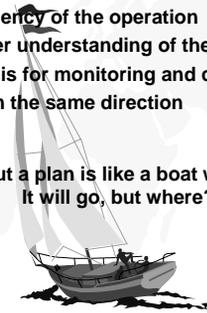
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Why Plan?

- ◆ Eliminate or reduce uncertainty
- ◆ Improve efficiency of the operation
- ◆ Obtain a better understanding of the objectives
- ◆ Provide a basis for monitoring and controlling work
- ◆ Focus team in the same direction

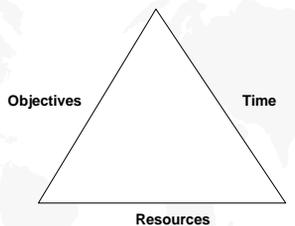
A project without a plan is like a boat without a rudder.
It will go, but where?



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Time, Objectives and Resources



Resources + Time = Objectives

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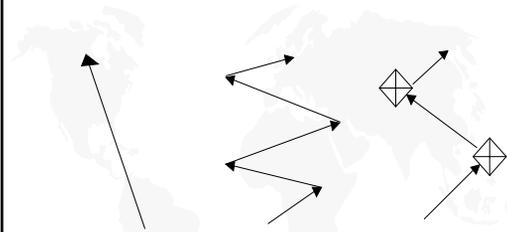
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Cultural Planning Styles

American

French

Japanese



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Statement of Work (SOW)

◆ Narrative description of the work

- Specifications
- Objectives
- Scope
- Funding limits

◆ Causes for misinterpretations

- No structure - tasks, specifications, approvals, and special instructions mixed together
- Imprecise language (nearly, optimum, and approximately)
- No pattern, structure or chronological order
- Wide variation in size of tasks
- Wide variation in level of detail
- No third party review

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Work Breakdown Structure (WBS)

◆ Breakdown of the total project into smaller task

- Level 1: Total program
- Level 2: Project
- Level 3: Task
- Level 4: Sub task
- Level 5: Work Package
- Level 6: Level of effort

◆ WBS provides the basis for:

- Responsibility matrix
- Network scheduling
- Costing
- Risk analysis
- Organizational structure
- Coordination of objectives
- Control

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Work Breakdown Structure

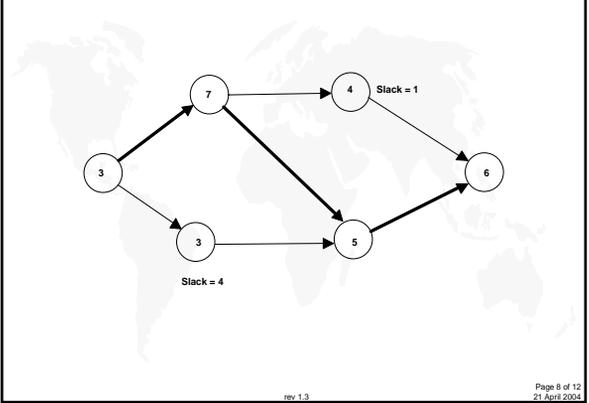


FIGURE 71-6 Work Breakdown Structure: The objective control and evaluation. Source: Paul M. Merriam, Jr. Copyright © 1973 by John Wiley & Sons, New York. Reprinted by permission of the publisher.

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Network (PERT Chart) & Slack Time



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PERT & Critical Path

1. Create Work Breakdown Structure
2. Sequence WBS activities (arrow chart)
3. Review arrow chart with line managers (experts)
4. Estimate activity duration by line managers (experts)
5. Look at/adjust Critical Path
6. Place calendar dates on each event and insure resources are available

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Management Cost and Control System

- ◆ Am I on schedule?
- ◆ Am I on budget?
- ◆ Am I meeting the project objectives?
- ◆ How do I get back on track?
- ◆ How do I get the information to evaluate the above items?
- ◆ How do I communicate the project's status to the rest of the world?

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Getting the Information

- ◆ Team is the key, the person doing the work is in the best position to know how their part of the project is going.
- ◆ Education about the Management Cost and Control System for the whole team
- ◆ MBWA - Management by working around - phone calls, e-mail, video conferencing, face to face, time card input, status reports
- ◆ Trade off between status reporting and doing the work

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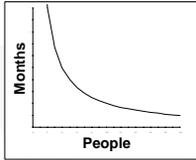
Am I on schedule and on budget?

- ◆ Gantt Charts
- ◆ Network Charts
- ◆ Plan vs. Actual vs. Revised Plan
- ◆ Identify why things went faster or slower than planned
- ◆ You can get lost in the tracking system

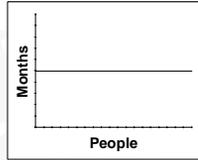
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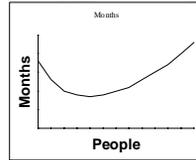
Crash Times & Mythical Man Month



Perfectly Partitionable Tasks



Unpartitionable Tasks



Tasks with complex interrelationships

by Frederick P. Brooks, Jr.

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Failures of plans

- ◆ Corporate goals not understood at lower organizational levels
- ◆ Plans encompass too much in too little time
- ◆ Poor financial estimates
- ◆ Plans based upon insufficient data
- ◆ No planning methodology
- ◆ Planning performed by a planning group
- ◆ Management assumes that all activities will be completed on schedule

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Stopping a project

- ◆ Final achievement of the objectives
- ◆ Poor initial planning and market prognosis
- ◆ A better alternative is found
- ◆ A change in the company strategy
- ◆ Allocated time is succeeded
- ◆ Budgeted costs are exceeded
- ◆ Key people leave the organization
- ◆ Personal whims of management
- ◆ Problem too complex for the resources available

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Task Specific Leadership Style

- ◆ Matrix Dimensions
 - Task Behavior
 - Relationship Behavior
- ◆ Other's Readiness
 - Ability
 - Motivation
- ◆ Leadership Style
 - Directing
 - Guiding, Coaching
 - Supporting, Participating
 - Delegating

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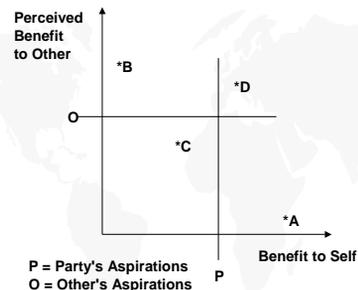
Team development stages

- ◆ **Forming**
 - Initial awareness - why are we here?
 - Will I be accepted?
 - Leadership: Dependence
- ◆ **Storming**
 - Sorting-out process - bidding for control and power
 - Will I be respected?
 - Leadership: Independence
- ◆ **Norming**
 - Self-organization
 - How can I help the group?
 - Leadership: Interdependence
- ◆ **Performing**
 - Maturity and mutual acceptance
 - How can we do better?
 - Leadership: Interdependence

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Sources of Conflict



Perceived divergence of interests

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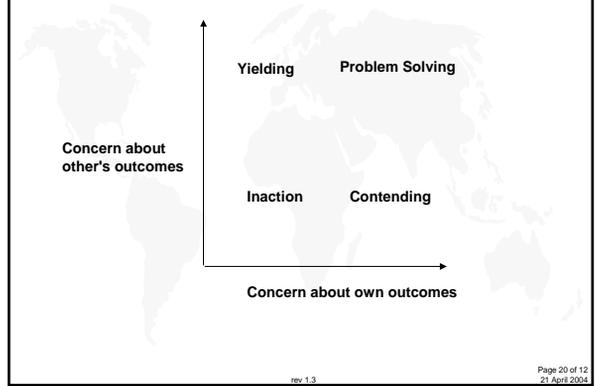
Conflict Handling Modes

- ◆ **Inaction (Withdrawal)**
 - Retreating from an actual or potential disagreement. Termination of efforts to resolve the conflict.
- ◆ **Yielding (Smoothing)**
 - Lowering one's aspirations.
- ◆ **Contending (Forcing)**
 - Any effort to resolve a conflict on one's own terms without regard to the other party's interests. Making threats, imposing penalties, preemptive actions.
- ◆ **Problem Solving (Confrontation, Compromising)**
 - Any effort to identify the issues dividing the parties and to develop and move toward a solution that appeals to both sides.

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Strategic Choices - Handling Conflict



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