Project Management

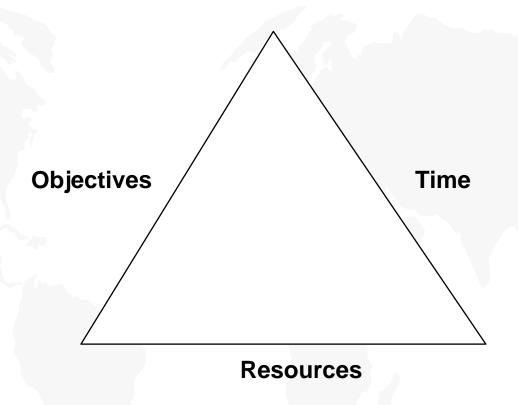# Why Plan?

- ◆ **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**

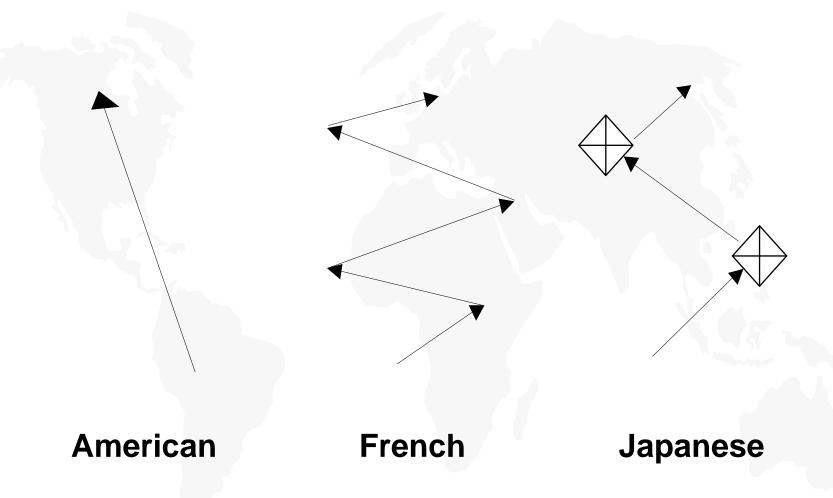**A project without a plan is like a boat without a rudder. It will go, but where?**

Time, Objectives and Resources

Objectives

Time

Resources

Resources + Time = Objectives

Cultural Planning Styles

American   **French**   **Japanese**

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 is size of tasks
- – Wide variation in level of detail
- – No third party review

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
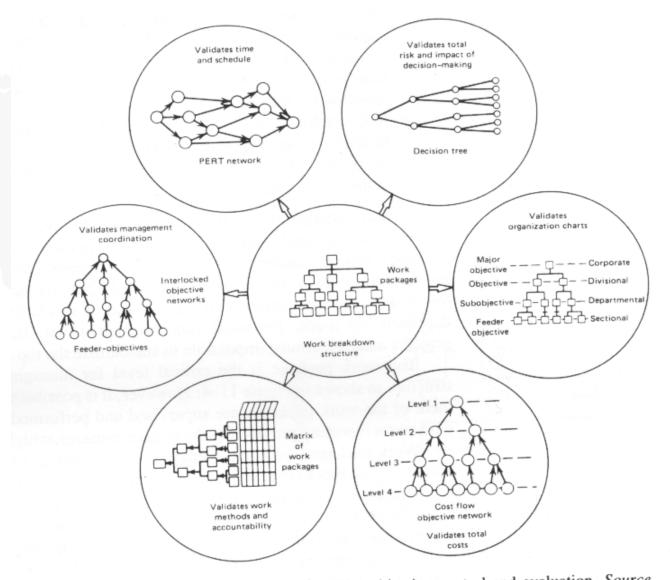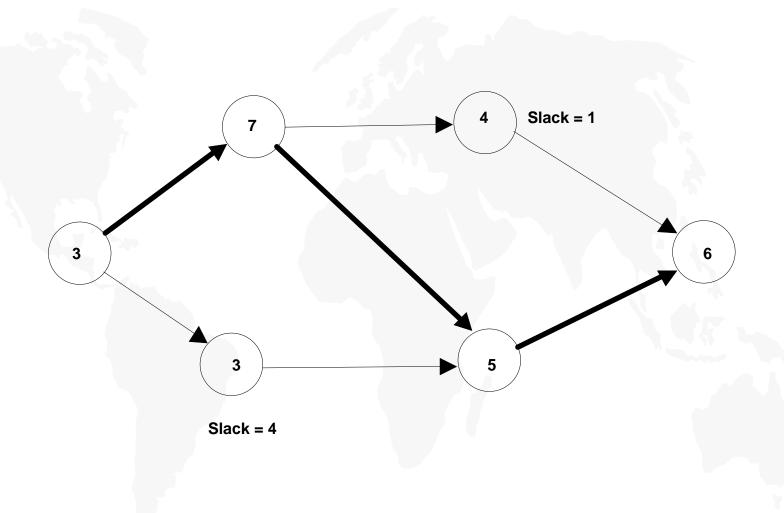- – Control

Work Breakdown Structure

FIGURE 11–3. Work breakdown structure for objective control and evaluation. *Source*. Paul Mali, *Managing by Objectives* (p. 163). Copyright © 1972 by John Wiley & Sons, New York. Reprinted by permission of the publisher.

Network (PERT Chart) & Slack Time

rev 1.3

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**

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?**
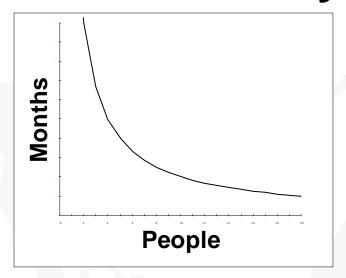
Getting the Information

◆ **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**
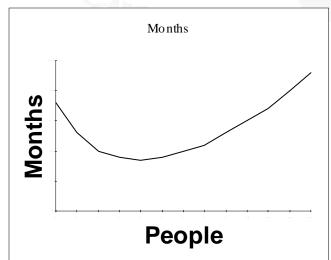
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Am I on schedule and on budget?

◆ **Gantt Charts**

◆ **Network Charts**

◆ **Plan vs. Actual vs. Revised Plan**

◆ **Identify why things went faster or slower than planned**
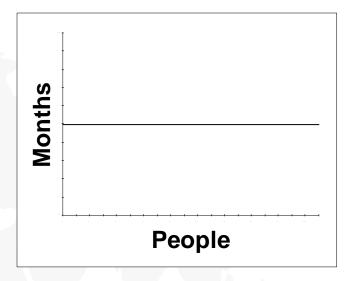
◆ **You can get lost in the tracking system**

Crash Times & Mythical Man Month

Perfectly Partionable Tasks

Unpartionable Tasks

Tasks with complex interrelationships

by Frederick P. Brooks, Jr.

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**

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**

Task Specific Leadership Style

- ◆ **Matrix Dimensions**
  - – Task Behavior
  - – Relationship Behavior

- ◆ **Other's Readiness**
  - – Ability
  - – Motivation

- ◆ **Leadership Style**
  - – Directing
  - – Guiding, Coaching
  - – Supporting, Participating
  - – Delegating

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?
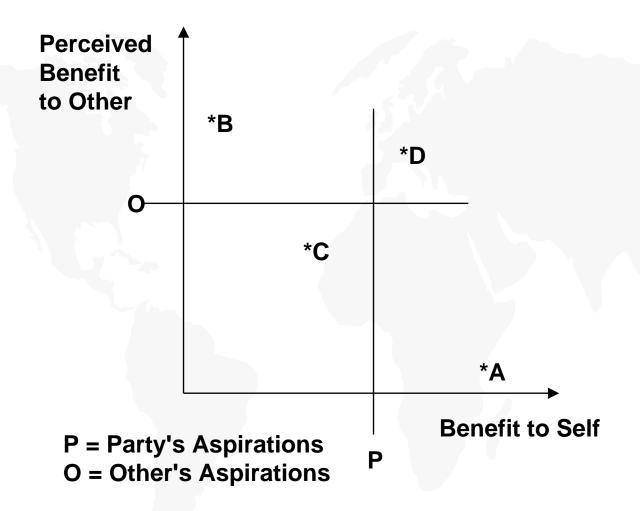 - Leadership: Independence

- ## Norming
  - Self-organization
  - How can I help the group?
  - Leadership: Interdependence

- ## Performing
  - Maturity and mutual acceptance
  - How can we do better?
  - Leadership: Interdependence

Sources of Conflict

Perceived Benefit to Other

*B

*D

O

*C

*A

Benefit to Self

P = Party's Aspirations
O = Other's Aspirations

P

Perceived divergence of interests

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.

Strategic Choices - Handling Conflict

Yielding

Problem Solving

**Concern about
other's outcomes**

Inaction

Contending

Concern about own outcomes