

Project Time Management

PMG212

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Lecture 2



Agenda

- Functional Employee's Role
- The Project Manager as The Planning Agent
- Project Management Growth
- General Systems Management
- Project Management: 1945–1960
- Project Management: 1960–1985
- Type of Industry
- The Six Imperatives of Project Management
- Project Internal and External Obstacles

- **Functional Employee's Role**
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Functional Employee's Role

- Accept responsibility for accomplishing the assigned deliverables within the project's constraints
- Complete the work at the earliest possible time
- Periodically inform both the project and line manager of the project's status
- Bring problems to the surface quickly for resolution
- Share information with the rest of the project team

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THE PROJECT MANAGER AS THE PLANNING AGENT

- The major responsibility of the project manager is planning.
- If project planning is performed correctly the project manager provides overall or summary definitions of the work to be accomplished, but the line managers (the true experts) do the detailed planning.

THE PROJECT MANAGER AS THE PLANNING AGENT

The project manager must provide:

- Complete task definitions
- Resource requirement definitions (possibly skill levels)
- Major timetable milestones
- Definition of end-item quality and reliability requirements
- The basis for performance measurement

THE PROJECT MANAGER AS THE PLANNING AGENT

Project managers are responsible for project administration and, therefore, must have the right to establish their own policies, procedures, rules, guidelines, and directives provided these policies, guidelines, and so on, conform to overall company policy.

THE PROJECT MANAGER AS THE PLANNING AGENT

Line managers only make the promises to a functional employee concerning:

- Promotion
- Grade
- Salary
- Bonus
- Overtime
- Responsibility
- Future work assignments

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Project Management Growth

The growth and acceptance of project management has changed significantly over the past forty years, and these changes are expected to continue well into the twenty-first century, especially in the area of multinational project management.

It is interesting to trace the evolution and growth of project management from the early days of systems management to what some people call “modern project management.”

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GENERAL SYSTEMS MANAGEMENT

Organizational theory and management philosophies have undergone a dramatic change in recent years with the emergence of the project management approach to management.

Because project management is an outgrowth of systems management, it is only fitting that the underlying principles of general systems theory be described.



GENERAL SYSTEMS MANAGEMENT

Simply stated, general systems theory can be classified as a management approach that attempts to integrate and unify scientific information across many fields of knowledge. ببساطة ، يمكن تصنيف نظرية النظم العامة على أنها نهج إداري يحاول دمج وتوحيد المعلومات العلمية عبر العديد من مجالات المعرفة.

Systems theory attempts to solve problems by looking at the total picture, rather than through an analysis of the individual components.

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PROJECT MANAGEMENT: 1945–1960

During the 1940s, line managers used the concept of over-the-fence management to manage projects.

Each line manager, wearing the hat of a project manager, would perform the work necessitated by their line organization, and when completed, would throw the “ball” over the fence in hopes that someone would catch it.

PROJECT MANAGEMENT: 1945–1960

Once the ball was thrown over the fence, the line managers would wash their hands of any responsibility for the project because the ball was no longer in their yard.

If a project failed, blame was placed on whichever line manager had the ball at that time.

The problem with over-the-fence management was that the customer had no single contact point for questions.

The filtering of information wasted time for both the customer and the contractor.

Customers who wanted firsthand information had to seek out the manager in possession of the ball. For small projects, this was easy.

But as projects grew in size and complexity, this became more difficult.



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PROJECT MANAGEMENT: 1960–1985

The growth of project management has come about more through necessity than through desire.

Its slow growth can be attributed mainly to lack of acceptance of the new management techniques necessary for its successful implementation.



PROJECT MANAGEMENT: 1960–1985

Between the middle and late 1960s, more executives began searching for new management techniques and organizational structures that could be quickly adapted to a changing environment.

The table below and the following Figure identify two major variables that executives consider with regard to organizational restructuring.

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Type of Industry	Tasks	Environment
A	Simple	Dynamic
B	Simple	Static
C	Complex	Dynamic
D	Complex	Static

Type of Industry

Almost all type C and most type D industries have project management–related structures.

The key variable appears to be task complexity. Companies that have complex tasks and that also operate in a dynamic environment find project management mandatory.

Such industries would include aerospace, defense, construction, high-technology engineering, computers, and electronic instrumentation.



Other than aerospace, defense, and construction, the majority of the companies in the 1960s maintained an informal method for managing projects.

In informal project management, just as the words imply, the projects were handled on an informal basis whereby the authority of the project manager was minimized.

PROJECT MANAGEMENT: 1960–1985

Most projects were handled by functional managers and stayed in one or two functional lines, and formal communications were either unnecessary or handled informally because of the good working relationships between line managers.



PROJECT MANAGEMENT: 1960–1985

Many organizations today, such as low-technology manufacturing, have line managers who have been working side by side for ten or more years.

In such situations, informal project management may be effective on capital equipment or facility development projects.



PROJECT MANAGEMENT: 1960–1985

By 1970 and again during the early 1980s, more companies departed from informal project management and restructured to formalize the project management process, mainly because the size and complexity of their activities had grown to a point where they were unmanageable within the current structure.



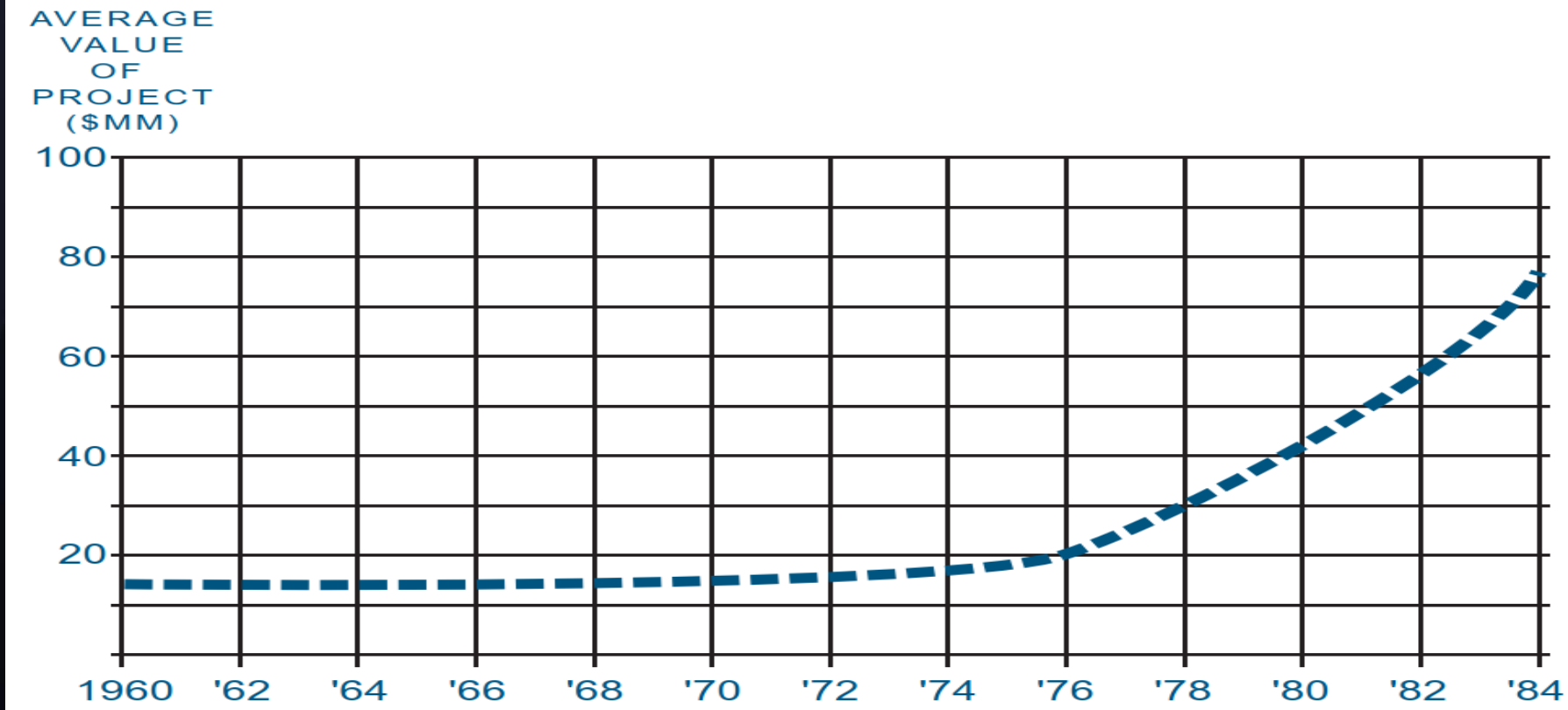
The following five questions help determine whether formal project management is necessary:

- Are the jobs complex?
- Are there dynamic environmental considerations?
- Are the constraints tight?
- Are there several activities to be integrated?
- Are there several functional boundaries to be crossed?

Some companies have successfully implemented both formal and informal project management concurrently, but these companies are few and far between.

Today we realize that the last two questions may be the most important.

PROJECT MANAGEMENT: 1960–1985



Average project size capability for a construction company, 1960–1984.



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The Six Imperatives of Project Management

- The time span between project initiation and completion appears to be increasing.
- The capital committed to the project prior to the use of the end item appears to be increasing.
- As technology increases, the commitment of time and money appears to become inflexible.

The Six Imperatives of Project Management

- Technology requires more and more specialized manpower.
- The inevitable counterpart of specialization is organization. نظير ما لا مفر منه
- The above five “imperatives” identify the necessity for more effective planning, scheduling, and control.

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Project internal and external obstacles

Project management can overcome such internal and external obstacles as:

- Unstable economy
- Shortages
- Soaring costs ارتفاع التكاليف
- Increased complexity

Project internal and external obstacles

Project management can overcome such internal and external obstacles as:

- Heightened زيادةcompetition
- Technological changes
- Societal concerns الهموم المجتمعية
- Quality of work

Thank You

