

What CEOs Must Demand To Compete and Collaborate in 2005 — Part One of Three —

Unleashing the Full Power of Project Management in the Internet Age

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Abstract

This paper is intended to provide chief executive officers (CEOs) and other senior executives with the understanding of what they must demand regarding project management within their organizations, today and in coming years, to compete and collaborate effectively within the realities of the Internet Age. It is also intended for use by project management professionals at all levels to communicate with their senior managers and convey to them the direction that the development of the project management discipline should be headed. The need is explored to simultaneously compete and collaborate in response to the challenges posed by the phenomena of the Internet and World Wide Web, together with ways that are open to the CEO to unleash the full power of project management to satisfy that need. The important linkage is illustrated between the organization's mission, its business strategies, and the execution of those strategies through effective management of both the project portfolios and individual programs and projects. The underlying principles and practices of modern, integrated project management are presented in a manner that hopefully makes sense to CEOs and other senior executives, and the performance level that can be demanded for each of these principles and practices is presented as benchmarks for the CEO to measure against.

CEO Demands: 31 inserts like this are placed in the text where reasonable demands must be made regarding the topic being discussed or described to achieve the full power of project management.

Challenges of the Internet

The advent of the Internet in recent years is posing serious challenges to industry, business and government. CEOs are recognizing the threats and opportunities of the Internet, as shown in Table 1.

1. Changes in type and level of competition	41%
2. Impact of the Internet	38%
3. Industry consolidation	37%
4. Downward pressure on prices	33%
5. Skill shortages	32%

Table 1. CEOs of 506 Companies With Sales Over \$5 Billion
List Their Greatest Challenges for 2001¹

Most executives in business and government today have had some direct experience with the Internet and the World Wide Web—but most of us still do not fully comprehend what these revolutionary developments really are and what their full impact on our world will be. Although we are learning something new every day about these unprecedented phenomena, a 1999 (prior to the dot com meltdown in 2000) survey² of 600 top-ranking executives found that
92% said the Internet will reshape the world marketplace by 2001
37% expected serious competition from start-ups
16% expected competition from their own customers
86% said the Internet would force significant changes in organizational structure.

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The evolution envisioned by some from our traditional vertically integrated companies to the “internetworked enterprise” is shown in Figure 1-1³. The intermediate transitional organization form has been termed the “virtual corporation”, operating through an integrated network that connects the company employees, suppliers, distributors, retailers and customers. Prior to the advent of the Internet a number of companies (including, for example, Chrysler Corporation and Hewlett-Packard) developed their own “intranets” using electronic data interchange and client/server computing technologies.⁴ The Internet has now made at least some intranets obsolete and made possible the internetworked enterprise. Tapscott et al⁵ define three layers in this new digital enterprise economic model, based on a multiclient research project with participation by a number of leading corporations:

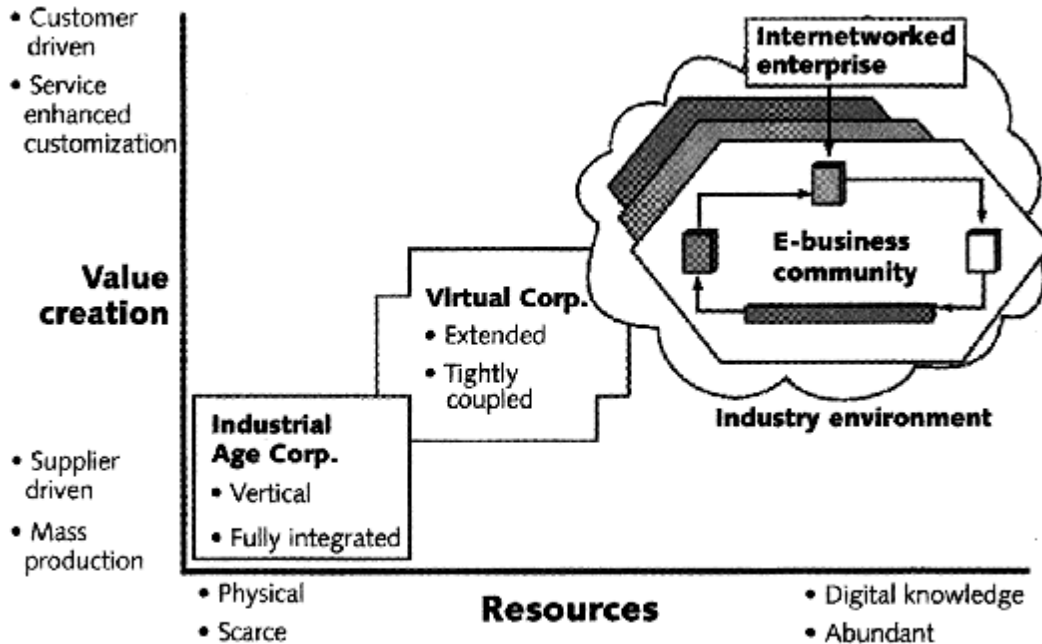


FIGURE 1-1. Vertically integrated enterprises have given way to the virtual corporation and are now moving to the e-business community.

1. The *internetworked enterprise* is the basic functional unit of an industry environment. It relies on internetworked, knowledge-based systems to enhance its capacity to learn, be agile, and respond quickly to customer requirements. It **collaborates and competes** [emphasis added] in industry environments and e-business communities—often in several EBCs at once. It embraces digital strategies for developing products and services and for renewing relationships with customers and suppliers.

“2. An *e-business community* is a specific set of players with shared interests, who, together, seek market dominance within the industry environment. In the software industry, the leading EBCs are Wintel (led by Microsoft and Intel) and Java (led by Sun, IBM, Oracle, and Netscape). Often, a single company is a member of two or more competing EBCs; Microsoft and Intel, for better or for worse, are involved in the Java community. Meanwhile, IBM, Oracle, and Netscape are active players in the Wintel EBC. The term “coopetition” best describes these dynamics.

“3. The *industry environment* is the overall context in which businesses operate (for example, the software industry). An industry environment consists of multiple e-business communities, each of which is competing to dominate and control the overall environment.

“As noted earlier, it is the coordination of business practices and the deployment of knowledge as enabled by the Internet that distinguishes the new environment. In the EBC, the concept of partnership is not merely a vendor’s euphemism for a conventional sales relationship; it takes on real meaning.”

The underlying concept that enables the internetworked enterprise to operate effectively is the real-time, geographically unlimited *collaboration* that is only available economically using the Internet and the World Wide Web. Coupling the Internet with the natural collaborative capabilities of integrated project management produces a powerful approach to the Internet challenges.

Challenges Posed by the Internet

The challenges to business and government executives that are posed by these extraordinary developments should be rather obvious to the thoughtful executive. The most basic challenge is to determine in which of two situations your company, agency or organization finds itself:

Transform or Perish: For many organizations the changes brought on by the Internet and its related technologies are truly a life or death matter. Either the company or agency transforms itself to compete in this new environment, or accepts the fact that its days are numbered.

Exploit the Internet to Grow and Compete: All those for whom the Internet is not a life or death matter have the choice either to capitalize on the opportunities presented by the Internet or not. However, even those who are not today faced with the transform or perish option may well find themselves confronted with that option tomorrow. The developments in the global arena are moving so fast that it is impossible to predict which industries, companies and agencies are invulnerable to the challenges of the Internet phenomena. If an organization adopts a strategy to transform itself then of course this will perform incorporate the second strategy to exploit the Internet to grow and prosper.

Within this context the specific challenges posed by the Internet include:

- What must I do to transform my organization to assure that it will survive and prosper?
- What changes can/must I introduce into my organization to participate appropriately in the new e-business communities and the “Customer Led Revolution”—within this new “truth economy”?
- How can my company compete effectively when much of our previously proprietary intellectual property has been made available on the Internet?
- How can we adequately protect our proprietary interests and intellectual capital and at the same time enter into strategic partnerships with companies that can easily become direct competitors?
- How can I promote, foster and support the means to enable the broad collaboration that is necessary both within my organization and with our strategic partners?
- What can I do to be sure that we can develop and launch our new products and services rapidly enough to compete in this high-speed environment?
- How can/do I prioritize and manage strategies, projects within strategic programs and within my project portfolios, and activities within projects in this new environment?

For the shareholder and prospective investor, how can I differentiate my organization from all the other “dot com” companies so that our financial fortunes in the stock market do not rise and fall with the herd?

The principles of program and project management, effectively applied, provide powerful answers to these challenges, as discussed in the remainder of this paper.

Unleashing the Full Power of Project Management to Compete and Collaborate

To gain the full power of project management the CEO must demand that:

- Project portfolio management fully supports the organization’s growth strategies.
- A coherent project management process exists and is fully understood.
- This process and the supporting systems and tools are fully integrated with corporate policies, procedures and systems.
- The Internet and World Wide Web are used properly in the daily project management operations.

The more detailed demands that must be made are identified in the remainder of this paper. When these demands are fulfilled the results will provide a significant competitive advantage to the organization in today’s world of Internet speed. They will also enable the organization to collaborate effectively with customers, suppliers, government and other controlling agencies, and even direct competitors, as required in this Internet Age.

Implementing Business Strategies Through Projects

Strategically managing the growth of a company, agency, institution, or other human enterprise requires:

- **A vision of the future** of the organization at the top level;
- **Consensus and commitment** within the power structure of the organization on the mission and future direction of the organization;
- **Documentation** of the key objectives and strategies to fulfill the mission;
- **Planning and execution of specific projects** to carry out the stated strategies and reach the desired objectives.

Objectives are descriptions of where we want to go. *Strategies* are statements of how we are going to get there. Strategies are carried out and objectives are reached, when major growth steps are involved, through execution of projects and multi-project programs. Projects translate strategies into actions and objectives into realities.

It is important to recognize that objectives and strategies exist in a hierarchy—and not just at one level—in most organizations. A useful way to describe this hierarchy is to define three levels:

Level 1: Policy

Level 2: Strategic

Level 3: Operational

Figure 2 shows how the strategies become objectives at the next lower level in the hierarchy, until at the operational level projects are identified to achieve the operational objectives. Unless the higher-level objectives and strategies are translated into actions through projects, the plans will simply sit unachieved on the shelf. The linkage between strategic and project management is also shown in Figure 2. Strategic managers set the future course of the organization. Project management executes the specific efforts that achieve the growth strategies. The managers of these projects are acting for and representing the project owners, and receive their direction through the project sponsors.

Two broad classes of organizations can be identified: First, those *project-driven* organizations whose primary business is in fact made up of projects. Examples of this class include architect/engineer/constructor, general contractor, and specialty contractor firms; software development firms who sell their products or services on a contract basis; telecommunications systems suppliers; consultants and other professional services firms; and other organizations that bid for work on a project-by-project basis. Growth strategies in such organizations are reflected in the type, size, location and nature of the projects selected for bidding, as well as the choices made in how the required resources will be provided (in-house or out-sourced) to carry out the projects, if and when a contract is awarded or the project is otherwise approved for execution

The second category of organizations—those that are *project-dependent* for growth— includes all others that provide goods and services as their mainstream business. Projects within these organizations are primarily internally sponsored and funded. Examples include manufacturing (consumer products, pharmaceuticals, engineered products, etc.), banking, transportation, communications, governmental agencies, computer hardware and software developers and suppliers, universities and other institutions, among others. These organizations depend on projects to support their primary lines of business, but projects are not their principle offering to the marketplace. Many of these sponsors of internally funded projects are important buyers of projects from project-driven organizations.

In both of these types of organizations, projects are the primary vehicles for executing their growth strategies. For this reason the project management capabilities of organizations are crucial to their current and future success.

Objectives of Modern Project Management

The objectives of project management are two-fold:

- To assure that each project when initially conceived and authorized supports the organization's approved higher level strategic objectives and contains acceptable risks regarding the project's objectives: competitive, technical, cost and schedule.
- To plan, control and lead each project simultaneously with all other projects effectively and efficiently so that each will achieve its approved objectives: meeting the related

CEO Strategic Demands:

1. That every authorized project clearly supports an approved strategic objective of the organization.
2. That each project's risks are evaluated and managed using currently available methods and systems.
3. That all projects are evaluated, prioritized and approved on the basis of the same corporate criteria.

strategic objective by producing the specified results on schedule and within budget. The first of these objectives is closely linked to the strategic management of the organization. Application of project management practices during the early strategic planning and project concept phases has been introduced in more organizations within the past few years, with beneficial results. Too frequently, project failures can be traced directly to unrealistic original technical, cost or schedule targets, and inadequate risk analysis and risk management.

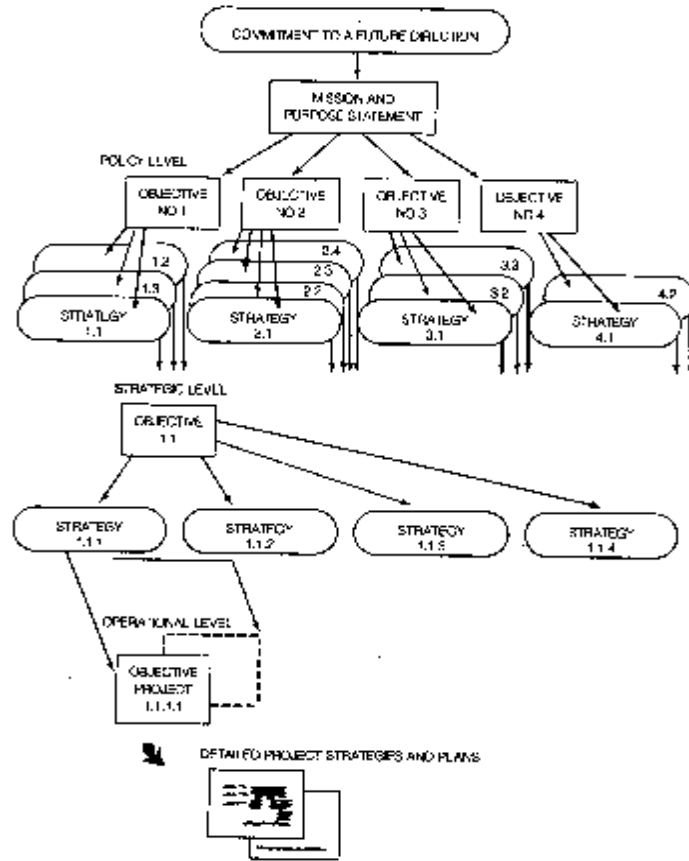


Figure 2. The hierarchy of objectives, strategies and projects.⁶

Project: A temporary endeavor undertaken to create a unique product, service or result.

Program: A group of related projects managed in a coordinated way.

Source: *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*, 2000 Edition © Project Management Institute, 191

Project: A complex effort, usually less than three years in duration, made up of interrelated tasks performed by various organizations, with a well-defined objective, schedule and budget.

Program: A long-term undertaking that is usually made up of more than one project.

Source: Archibald, Russell D., *Managing High-Technology Programs and Projects*, Second Edition, 1992, John Wiley & Sons, 24

A Few Key Definitions

Integrated Project Portfolio Management

Rather than attempt to manage individual projects as if they were stand-alone endeavors, executives have learned over the years that every project is always interrelated, primarily through the use of common resources, with some—if not all—other projects in the organization. Relating selected projects within a *program* is often a step in the right direction. Organizations have progressed from single project and program management to multiple project management, and they are now moving rapidly to project portfolio management. Dye and Pennypacker show the key differences between portfolio and multiple project management in Table 2.

	Project Portfolio Management	Multiple Project Management
Purpose	Project Selection and Prioritization	Resource Allocation
Focus	Strategic	Tactical
Planning Emphasis	Long & Medium-Term (annual/quarterly)	Short-Term (day-to-day)
Responsibility	Executive/Senior Management	Project/Resource Managers

Table 2. High-Level Comparison of Project Portfolio Management and Multiple Project Management.⁷

As indicated in Figure 3, the project portfolio consists of the programs and projects supporting a given higher-level strategy. There could be only one overall corporate project portfolio, but it generally makes more sense to define more than one portfolio on a strategic basis in large organizations to reflect product line, geographic or technological divisions of the organization, industry or market.

A *Project Portfolio Steering Group* consisting of senior executives as appropriate is responsible for establishing the project portfolio management process and for the decisions that must be made concerning the programs and projects within the project portfolio(s) during the operation of that process.

The project portfolio management process consists of the following twelve basic steps:

1. Define the project portfolios required within the organization.
2. Define the project categories within each portfolio based on uniform criteria for the entire organization.
3. Identify and group all projects within categories and programs.
4. Validate projects with the organization's strategic objectives.
5. Prioritize projects within programs and portfolios.
6. Develop the Project Portfolio Master Schedule.
7. Establish and maintain the key resources data bank.
8. Allocate available key resources to programs and projects.
9. Compare financial needs with availability.
10. Decide how to respond to shortfalls in money or other key resources and approve the list of funded projects.
11. Plan, authorize and manage each program and project using the Project Management Process and supporting systems and tools.
12. Periodically re-prioritize, re-allocate resources and re-schedule all programs and projects as required.

The Organization's Project Management Process

In order to achieve the full benefits of modern project management each company or agency must have a documented picture of its overall project management process. This process

- Describes how the organization's project portfolios are related to the organization's growth strategies,
- Identifies the basic types or categories of projects that exist or are planned,
- Defines the project life cycle for each project category,

CEO Demands:

4. That the project management process of the organization be documented in a coherent, easily understood manner.
5. That all projects be managed within their appropriate, defined portfolios.

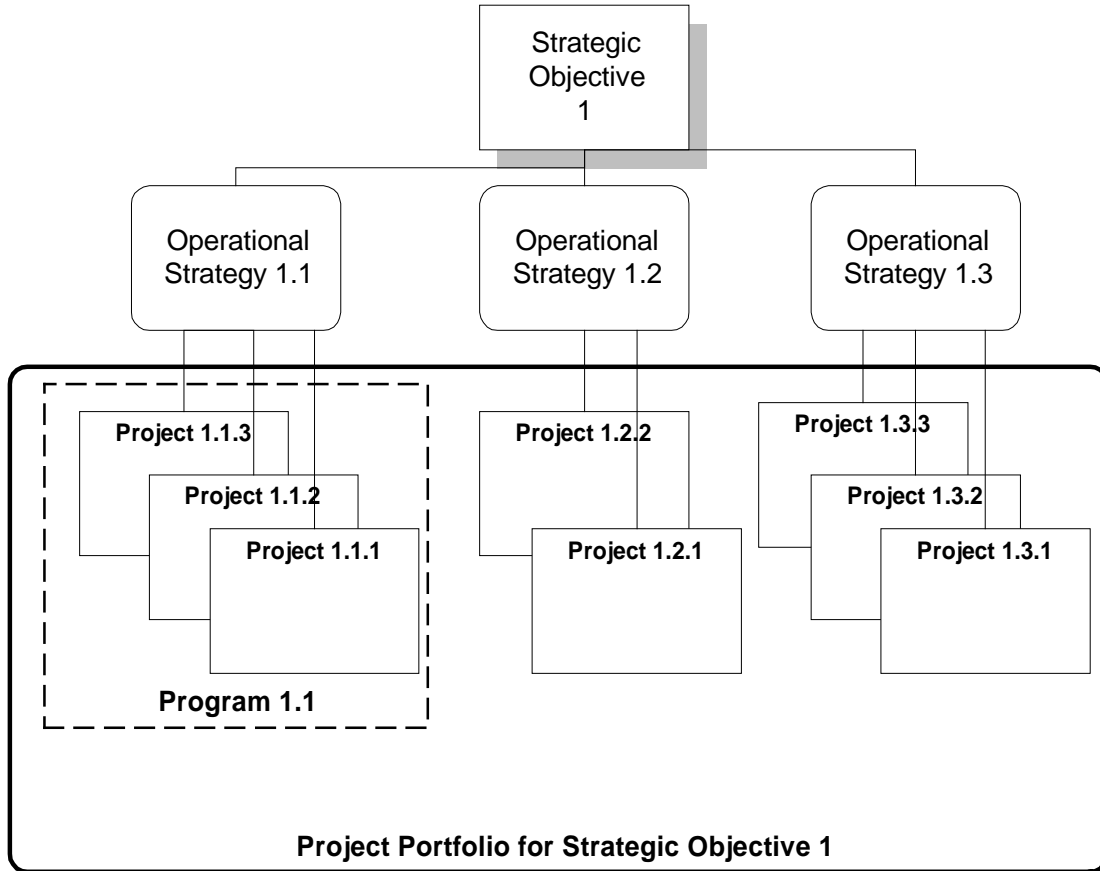


Figure 3. Schematic of Strategies, Projects, a Program and a Project Portfolio.

- Defines, for each project category, the corporate guidelines for project risk analysis and planning and control, with provision for appropriate adaptation for specific situations,
- Specifies the documents and related levels of approval authority for initiating and authorizing new projects and major changes to authorized projects,
- Identifies the key roles and defines their responsibilities and authority as related to project and functional management, and
- Specifies the procedures for escalating the inevitable conflicts (for scarce resources, priorities between projects and others) to the appropriate level for their prompt resolution.

This process is often documented as an overall flow chart with supporting narrative descriptions, together with appropriate references to pertinent corporate policies, procedures and forms. When this is done properly the result is *integrated* project management.

References:

- 1 Sources: Accenture (formerly Anderson Consulting) and The Conference Board; multiple answers accepted; as reported in **PC Magazine Internet Business**, June 12, 2001, p 5
- 2 Siegel, David, **Futurize Your Enterprise**, Wiley, NY, 1999, 4, quoting a survey by the Booz Allen & Hamilton/Economic Intelligence Unit.
- 3 Tapscott, Don, Alex Lowy and David Ticoll, **Blueprint to the Digital Economy**, McGraw-Hill, 1998, 22.
- 4 Ibid., 23.
- 5 Ibid., 23-24. An excellent in-depth discussion of the various types of EBC is given in this reference.
- 6 From Archibald, Russell D., **Managing High-Technology Programs and Projects**, 2nd Ed, 1992, John Wiley & Sons, New York, 9.
- 7 Dye, Lowell D., and Pennypacker, James S. 2000. "Project Portfolio Managing and Managing Multiple Projects: Two Sides of the Same Coin?" **Proceedings of the 2000 PMI Seminars & Symposium**. Newtown Square, PA: Project Management Institute. 321.