The Interfaces Between Strategic Management of an Enterprise and Project Portfolio Management Within the Enterprise

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ABSTRACT

The aim of this paper is to define the interfaces or inter-relationships between the business processes used to manage the strategic growth of an enterprise and those used to manage the program/project portfolios within the enterprise. It will clarify the boundaries between *strategic management processes* and *project portfolio management processes,* and identify who holds primary responsibilities for these inter-related sets of management processes. The main issues to be considered include:

- Is it possible to define a clear boundary between strategic and program/project portfolio management processes? It is concluded that this is possible and a boundary definition is presented for consideration.
- How should we differentiate between *strategic project management* and *operational project management*? An approach to such differentiation is proposed.
- Which, if any, of the *strategic project management* practices and processes should be considered to be within the domain of 'project management'? A descriptive list of these is proposed.
- What should be the role of a typical PMO in relation to 1) strategic management processes, and 2) both strategic and operational project management processes? A definition of this role is proposed.

The importance of identifying the major categories of project portfolios and of major categories projects within those enterprises is also discussed.

Keywords: Project management, strategic management, strategic project management, operational project management, project management office.

1. The Strategic Growth Management Processes Within an Enterprise

Building on strategic planning, and related management processes developed over the past 50 years, well-managed enterprises today utilize integrated strategic growth management processes to define, approve and control their current and future growth plans and the actions – principally the execution of portfolios of programs and projects -- needed to achieve their agreed strategic objectives. "Strategic management is the art and science of formulating, implementing and evaluating cross-functional decisions that will enable an organization to achieve its objectives" ["Strategic Management" Wikipedia 2008.] Fig. 1 illustrates a typical and widely used five-step strategic growth management process that has been developed and applied across a number of industries, business sectors, and governmental and non-governmental agencies in many countries. The integrated processes summarized in Fig. 1 incorporate and use the fundamentals of several strategic planning approaches, including competitive strategies, business environment assessment, industry structure analysis [Porter 2008]; portfolio analysis and analysis using the Boston Consulting Group's Box [BCG 2008]; plus a number of others.

Responsibilities for Strategic Management Plans, Decisions and Processes: In the 1970s and 1980s it was common practice for a senior staff person, typically with a title like Vice President -- Planning, to hold responsibility for preparing a company's long range or strategic plan for the coming 3 to 5 years. In those years such plans were then usually elaborate projections to which the key senior

executives of the company were not necessarily fully committed, and the plans were rarely fully implemented. Today in well-managed companies the same senior executives who are responsible for execution of strategic management decisions at the corporate and at major operating division levels of an organization are also held responsible for creating the integrated strategic growth plans that incorporate these strategic decisions. These persons include the chief executive officer/CEO and other senior corporate level executives, managers of subsidiary business units, functional area managers within a subsidiary business unit, and directors or managers of major operating departments and product line and geographic units. In addition, the strategic roles of a typical board of directors are to [Thompson & Strickland (1995), slides 49 and 53]:

- See that strategic management tasks and processes in Fig. 1 are performed adequately;
- Review important strategic moves and officially approve strategic plans;
- Insure that strategic proposals are adequately analyzed and superior to alternatives; and
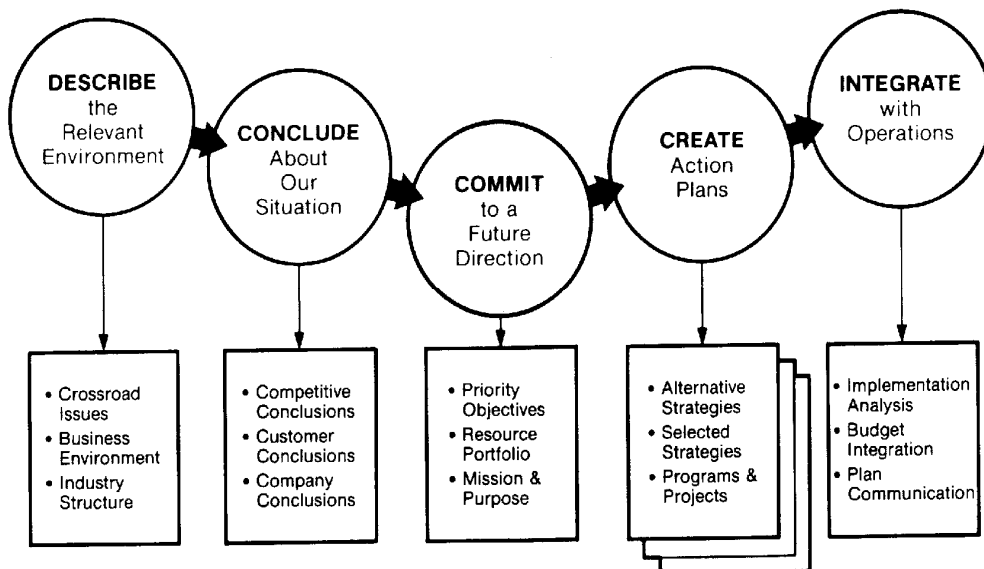- Evaluate the caliber of top management's strategy-making and implementing skills.

Fig. 1. The Growth Management Process for Strategic Management™ [Source: GMC 1985]

The Role of Strategic Planners: The role of strategic planners includes these important responsibilities [Thompson & Strickland (1995), slides 49-51]:

- Collect information needed by strategy managers
- Conduct background analyses as needed
- Establish and administer an annual strategy review cycle
- Coordinate review and approval process of strategic plans
- Assist all managers to focus on strategic issues.

Planners should not make strategic decisions or do strategic thinking for line managers, because 1) planners know less about the situation, placing them in a weaker position than line managers to devise workable action plans; and 2) this practice separates responsibility and accountability for strategy-making from implementing. This is a major flaw in strategic management within many organizations! It 1) allows managers to toss decisions to planners and avoid doing their own strategic thinking, and 2) the result is that implementers have little or no "buy in" or commitment to someone else's strategies.

2. Strategic Versus Operational Project Management

Strategic Project Management: It is useful to differentiate between strategic and operational project (and program) management. Strategic project management includes these six important processes and related responsibilities:

1. Select and authorize new projects and programs to be added to the appropriate, currently active project portfolios within the organization.
2. Validate that each selected and authorized project and program properly supports the currently approved strategic objectives of the organization.
3. Prioritize all validated projects and programs within each established project portfolio to facilitate proper allocation of money and other key resources between these "portfolio components."
4. Allocate key resources (money, skilled people, equipment, facilities, other) to each portfolio and each project and program therein.
5. Establish the master schedule for each project portfolio reflecting the established priorities and the approved allocation of money and other key resources to each project and program.
6. Cancel or change the scope, schedule, end result, and cost of approved projects and programs when such actions are required or justified.

Of these six, only Item 5 is considered to be properly within the usual domain of the project management discipline. The other five are strategic management responsibilities, and are not normally within the responsibility of a typical Project Management Office.

Operational Project Management: Operational project management includes application of all the knowledge areas and processes described in the PMI PMBOK Guide [PMI 2008], including the specific practices, systems and methods to be used for authorizing, planning, and controlling projects and multi-project programs. These operational PM responsibilities include, for each project and program within each portfolio and for each defined project category:

- Select and assign project and program managers.
- Design/select/apply the best project life-cycle models for each project category..
- Select and implement the specific project planning, scheduling, executing, and controlling methods and software tools to be used.

3. Defining Project Categories and Project Portfolios

Defining Project Categories: Practical experience over many decades in managing the many types (or categories) of projects has led to:
- Recognition, definition and understanding of the project management principles and practices that are common to all (or at least many) projects in all types of human endeavors and organizations, as documented in the several PM bodies of knowledge and the PM literature in general; and also:
- Recognition that the diversity inherent within the many existing and potential projects demands that projects be segregated in several ways for several purposes to continue to improve the ways in which both the buyers (owners) and sellers (contractors or developers) of projects
  1) Strategically select and prioritize their projects;
  2) Operationally plan and execute their projects individually, within programs, and within project portfolios;
  3) Educate and train the managers and specialists involved in projects and PM; and

4) Develop and manage the careers of managers and specialists involved in projects.

Beyond Project Buyers and Sellers: In addition to project buyers and sellers there are at least four other major players in the PM industry worldwide who depend to varying degrees on categorizing projects in their offerings to the marketplace:
- PM software application developers and vendors (who are often sellers of IT projects);
- Consultants, educators, and trainers in PM;
- Universities offering courses, certificates, and degrees in PM; and
- Professional associations devoted to or interested in PM.

For example, for strategic purposes projects are often categorized by market share and strategic intent, but for operational purposes they are often categorized in ten project types based on the end results of each project, and identifying the various project life cycle models used for each project type, as described by Archibald [2003 pp 41-48.] A useful discussion of project categorization is given in PMI [2006, pp 28-30] for project portfolio purposes. Another example of the need for systematic project categorization relates to whether predictive or adaptive project life cycle models will be used for a particular project category, and which of the many models within each of the project types is best for a specific project: Agile, SCRUM or Extreme Programming/XP – are often used for IT projects, but not for capital facilities design and construction – or any other category of projects.

Defining Project Portfolios: Rather than there being only one project portfolio in every organization, with sub-portfolios as needed, as apparently recommended in PMI's The Standard for Portfolio Management [PMI 2006, pp 26-28], it generally makes more sense to define more than one portfolio on a strategic basis in large organizations to reflect strategic objectives as well as product line, geographic or technological divisions of the organization, industry or market. Combe and Githens [1999] identify three general types of project portfolios:
- Value-Creating: Strategic or enterprise projects.
- Operational: Projects that make the organization more efficient and satisfy some fundamental functional work.
- Compliance: "Must-do" projects required to maintain regulatory compliance.

Some typical project portfolio descriptors observed in the field include new product (or service), product line extension, information technology/IT, capital facilities, operations improvements, major facilities maintenance, research and development, and compliance or remedial (legal or other.)

NB: This discussion excludes the class or category of 'commercial projects' which many organizations create and deliver under contract as an on-going part of their established business. These commercial projects are to produce and deliver well-known results or products with little or no innovation that fit well-known strategic objectives of the organizations. Such projects may be completely managed by a Project Portfolio PMO, including selection, prioritization, and change of scope including project termination.

4. Project Portfolio Management/PPM

Project portfolio management is fundamentally the integration of the strategic project management processes and responsibilities listed in Section 2.1 above with the well known operational PM processes and responsibilities. PPM provides the bridge between strategic and operational project management.

PPM Versus Multi-Project Management: PPM links the selection, definition, approval,

allocation of money and other key resources, authorization, and prioritization of programs and projects within defined portfolios, with assurance that each project and program supports the approved growth strategies established by the senior management team of the organization. The key differences between portfolio and multiple project management are shown in Table 1.

	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 1. High-Level Comparison of Project Portfolio Management and Multiple Project Management [Source: Dye and Pennypacker, 2000]

Dyer and Pennypacker [1999, pp xi-xvi] provide an excellent introduction to PPM, plus a number of different perspectives on PPM by authoritative and experienced authors. For very useful insights into PPM for new products see Cooper, Edgett, and Kleinschmidt [2001], and for an excellent description of PPM tools see Levine [2005, pp 59-77, "Tools for Project Portfolio Management."]

Design and Implementation of the PPM Processes: Prior to designing and implementing a set of PPM processes it is important to design, approve and implement the organization's strategic management process, in order to properly integrate that with the PPM processes. Designing and implementing an integrated PPM requires close cooperation between the organization's strategy managers and its project/program management experts, who are usually located in one or more Project Management Office/PMO.

Managing the Project Portfolio Management Processes: The PPM processes are usually operated quarterly, semi-annually, or annually, in concert at least with the annual strategic plan up-dating cycle for the overall organization. As mentioned in Section 1.2, the role of strategic planners includes these important responsibilities:

- Collect information needed by strategy managers
- Conduct background analyses as needed
- Establish and administer an annual strategy review cycle
- Coordinate the review and approval process of strategic plans
- Assist all managers to focus on strategic issues.

Similarly, the PMO may be given equivalent responsibilities for the PPM processes.

The Role of the PMO in Managing the PPM Processes: As indicated in Table 1, executive/senior managers – the 'strategy managers' of the organization – hold responsibility for managing the overall Project Portfolio Management process, and for making the important strategic decisions resulting from following this process. The PMO may well have broad administrative responsibilities relating to the on-going, operational management of all active projects and programs within the active portfolios. It usually will also provide significant project manager and staff support relating to the current status of all active 'portfolio components' – earned value to date of each project, plus their risk management status, etc., that will be vital input to the periodic cycle of the PPM process. The PMO will usually provide the preliminary master project schedules for new projects being considered for selection and authorization. However, the resulting decisions – selecting new projects, changing project priorities, re-allocating resources, project cancellation or major changes in project scope, etc. – reach into the strategic and line authority of senior executives. Most PMOs

presently lack the expertise needed to objectively apply the strategic analyses that are required to properly advise these senior executive on these important strategic decisions. Granted, this expertise can be developed, but only time will tell if the project management discipline will be allowed to, in effect, take over the strategic decision-making for much or all of an organization, or whether the existing strategic discipline will gain the needed expertise to fully exploit the power of project management methods in strategic management of the enterprise. The discipline of strategic planning and management is rather highly developed. See www.sps.org.uk/ or www.strategyplus.org/.

Managing Project Portfolios: Project Portfolios are primarily useful at the strategic level to determine if the proper 'balanced portfolios' have been achieved regarding the expenditure of money and other scarce resources. It is unlikely that project portfolios will often be managed as a multi-project program is supposed to be. Because of the strategic nature of project portfolios some authors recommend the use of a 'plural executive' such as a Project Portfolio Steering Group [Archibald 2003, pp 177-179,] or a PPM Governance Council [Levine 2050, p 58] to make on-going decisions regarding projects or programs within a specific portfolio.

5. The Interfaces Between Strategic Management and PPM

The primary interface between strategic management processes of an organization and the PPM process within the organization involves the last two phases of the former, as illustrated in Fig. 1, and the six strategic project management tasks listed in Section 2.1. Table 2 lists these elements.

From Fig. 1 **Strategic Planning Phases 4 and 5**	From Section 2 **The Six Strategic PM Tasks**
4. Create Action Plans.	**1. Select and authorize** new projects and programs to be added to the appropriate, project portfolios within the organization. **2. Validate** that each selected and authorized project and program properly supports the approved strategic objectives of the organization. **3. Prioritize** all validated projects and programs within each established project portfolio to facilitate proper allocation of money and other key resources between these "portfolio components."
5. Integrate With Operations.	**4. Allocate key resources** (money, skilled people, equipment, facilities, other) to each portfolio and each project and program therein. **5. Establish the master schedule for each project portfolio** reflecting the established priorities and the approved allocation of money and other key resources to each project and program. **6. Cancel or change** the scope, schedule, end result, and cost of approved projects and programs when such actions are required or justified.

Table 2. Interfaces Between Elements of the Strategic Management Process and Strategic Project Management Process Steps.

Defining Responsibilities of Key Personnel: Table 3 is a detailed responsibility assignment matrix for Strategic Planning Phase: "Create Action Plans." Unfortunately, the page limit for this paper prevents presenting similar treatment of the remaining steps and phases listed in Table 2.

1. Select & authorize new projects & programs	Project and Program Planners and Schedulers	Strategic Planners	"Strategy Managers" Senior Managers and Executives
1.1 Develop alternative	Provide historical	> Collect information	Prepare and Review

strategies to achieve strategic objectives	information on previous strategies, programs and projects	needed by strategy managers > Conduct background analyses as needed > Coordinate review and approval process of strategic plans > Assist all managers to focus on strategic issues.	proposed strategic alternative objectives
1.2 Select agreed strategies	Same as above	Same as above	Approve the selected strategic objectives
1.3 Identify candidate projects and programs to achieve strategies	Assist all involved with clear statements of project scope and objectives	Same as above	Submit candidate projects and programs for consideration
1.4 Prepare sufficient information to enable selection of candidate projects and programs	Develop preliminary definitions/WBS's, master schedules, and cost estimates for top candidate projects and programs	Same as above	Provide available information to assist planners with their tasks
1.5 Select best candidate projects and projects and approve their placement in the most appropriate portfolios	Advise Strategy Managers in project selection, prioritization, and the portfolio placement process	Same as above	Approve final selection and placement of programs and projects

Table 3. Responsibility Assignment Matrix for PPM Task No. 1, "Select and Authorize New Projects and Programs" Within Strategic Task Strategic Planning Phase "Create Action Plans"

6. Conclusions

1. Five of the six strategic project management processes are the responsibilities of an organization's 'strategy managers,' and not its project/program managers. The one strategic PM process that is the responsibility of PM experts is "5. Establish the master schedule for each project portfolio reflecting the established priorities and the approved allocation of money and other key resources to each project and program." Portfolio master schedules are subject to the approval of the strategy managers.

2. The 'strategy managers' within an organization are equally responsible for 1) creating and executing both the strategic growth plans and strategies for the organization, and for 2) the selection, prioritization, provision of funds and other resources, and strategic direction of all project portfolios required to achieve the approved strategic objectives.

3. Project management knowledge, experience, and expertise are usually developed and retained within an appropriate number of Project Management Offices/PMOs, depending on the size and complexity of the organization and also on the range of project and program categories that exist within the organization.

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