

FEATURED PAPER

Program Management: It's About the Business! (Part 1 of a Series)

By: Russ Martinelli and Jim Waddell

Introduction

Program management has been in practice for decades, but isolated to a few industries in which it was developed and matured such as the U.S. Military and aerospace industries. It wasn't until the 1980's when it migrated to the commercial sector that it was used more broadly to develop products, services and infrastructure capabilities (see sidebar for definitions). Today program management is widely recognized as a true management discipline, and we're happy to see institutions like the Project Management Institute come to recognize its strategic importance and value to companies.

In many companies, program management is a primary business function that aligns a firm's specific business objectives with its execution efforts to successfully achieve the objectives. As the title of this article indicates, program management is about achieving business results. We show how program management is rooted in the achievement of business objectives, why it is utilized to resolve some of the challenging business problems facing companies today, and how it functions as a strategic delivery system within the organization. This article provides an overview of these topics; a more detailed analysis can be found in our book titled Program Management for Improved Business Results (ISBN: 0-471-78354-4).

Definitions

- Product: A manufactured physical good that is new to the firm ¹.
- Service: Any primary or complimentary activity that does not directly produce a physical product. It is part of the non-goods transaction between a buyer and seller ².
- Infrastructure capability. An element of any large-scale technological system consisting of immovable physical facilities that provides essential public or private services through storage, conversion, and transfer of certain commodities ³.

Program Management Defined

A common, universally accepted definition of program management does not exist. If you research the definition via multiple sources, you'll most likely come away with somewhat different definitions, similar in some aspects, and different in others. We define program management as "*The coordinated management of interdependent projects over a finite period of time to achieve a set of business objectives*" ⁴. Although all projects and programs deliver the tactical and operational deliverables, the real power of program management is the integration and management of highly interdependent projects to deliver a product, service or infrastructure capability that contributes to the achievement of a company's strategic objectives and desired business results.

The key words in the definition of program management stated above are *coordinated management, interdependent projects, finite period* and *business goals*. To bring a new product or service to market, or a new infrastructure capability on line requires the work of many functions – such as hardware engineering, software engineering, mechanical engineering,

marketing, manufacturing, test, and so on. Programs therefore are organized into a core program team structure and a set of cross-discipline project teams.

Coordinated management of multiple projects means that the activities of each project team are synchronized through the framework of a common lifecycle executed at the program level by the program core team. For program management, cross-functional coordination and integration has to be extended to include *cross-project* coordination and integration. Each program is made up of multiple projects, each of which is most likely cross-functional in nature.

As the term implies, *interdependent projects* are those that have a mutual dependence on the output of other projects in order to achieve success. Commonly, the interdependencies come in the form of deliverables that are the tangible outputs from one project team, and of which other project teams are dependent upon to complete portions of their work. Program management ensures the dependencies between the multiple projects are managed in a concerted manner.

A program in our definition is of limited duration, a one-time venture which begins with clearly defined business objectives, and ends when the objectives are attained. A *finite period* means that a program is a temporary undertaking, having a point of beginning and the point of ending. The finite period concept is important as other definitions for a program imply that it is of an ongoing nature.

Accomplishment of the stated *business goals* is the overriding objective of a program, and the ultimate responsibility of the program manager. For example, in product development, a key goal of a program is normally to deliver the product within a specific market window. In a competitive environment, time to market is arguably the most closely tracked metric by both the program manager and senior management. We don't dispute that delivery of the right product at the right time is critical, especially since we have had plenty of personal experiences where that was the primary measure of our success; however delivery of the product is only the mechanism to realize the true business goals – such as capturing additional market share, increasing profit through sales and gross margin growth, and strengthening brand value through quality, features and customer support.

Why Program Management?

Even though companies have invested an enormous amount of time, money and resources trying to improve their operational capabilities, many of these companies still face serious business problems. This, many times, is due to the fact that most companies approach solving their business problems in a piece-meal fashion rather than looking at the total system that many of these problems may be a part of. Program management offers a systems approach toward many of these business problems that are related to the strategy and execution of delivering revenue generating solutions for products, services and infrastructure. As such, companies employing the program management model have found competitive advantages in solving the following business problems.

Lack of business integration. Program management is the mechanism by which the work of the various operating functions within a company is integrated to create an effective business model. Therefore, rivals can be outplayed in the long run by a company's ability to execute accurately, timely and repeatedly through program management practices that

integrate and synchronize the work of the operating functions while focusing the work on intended business objectives. Program management is a very effective approach for breaking down the functional barriers that can prevent effective and efficient product, service or infrastructure development.

Misalignment between strategy and execution. In a large number of organizations, there exists a misalignment between the firm's strategic objectives and the corresponding ability to effectively identify, manage and execute on the projects targeted goals⁵. There is often a chasm between business objectives and project management activities. Program management can be viewed as the organizational "glue" that translates strategic business objectives into actionable plans and then manages the tactics to achieve the desired business results. When the program management model is employed, the gap between strategic elements and project execution is effectively eliminated.

Mitigating business risk. Business risk encompasses all unknown and uncertain events that may prevent an enterprise from executing its strategies, meeting its performance goals, and achieving its business objectives. Risk-taking is necessary in many industries if a company is intent on being a market leader. Products, services or infrastructure capabilities that don't push the risk envelop may not be worth the development investment required. However, risk-taking does not mean taking chances. It involves understanding the risk/reward ratio, then managing the risks, or uncertainties, that are involved in each development effort. To be successful, the program manager, along with his/her team, must manage risk across the multiple, interdependent projects that are part of the overall program.

Managing complexity. Due to the amount of complexity required to meet customer demands for performance, features and customization, development efforts are now often beyond the scope of a single project⁶. The days of stable, slow to evolve designs are a thing of the past. This requires the simultaneous management of multiple, highly interdependent projects. Program management was originally conceived for this reason – management of highly complex development undertakings. It puts a systems structure in place which provides an effective framework for tackling highly complex development efforts by disaggregating the complexity into manageable elements organized as projects, and then integrate the element outputs into a holistic product, service or infrastructure capability.

The problems outlined above are business problems and not program or project execution problems. Organizations that have instituted a program management model to drive their development efforts have done so to address some or all of the business problems described above. Therefore program management is meant to be viewed and deployed as a *primary business function* within the enterprise.

Program Management and the Integrated Management System™

Historically, the primary managerial functions and processes of product, service or infrastructure development have been defined and viewed as independent entities, each with its own purpose and set of activities. Companies have invested much time, money and human effort into refining and improving each of their independent functions and processes, only to come to the inevitable conclusion that they are not coming any closer to effectively and

efficiently turning their ideas into positive business results. Increasingly, this fact is leading business leaders to the realization that their independent variables cannot remain independent. Rather, they must be transformed into a set of *interdependent* elements that form a coherent development system. The Integrated Management System™, shown in Figure 1, is the mechanism from which new products, services or infrastructure are conceived and developed to realize the mission and strategic objectives of the business⁷.

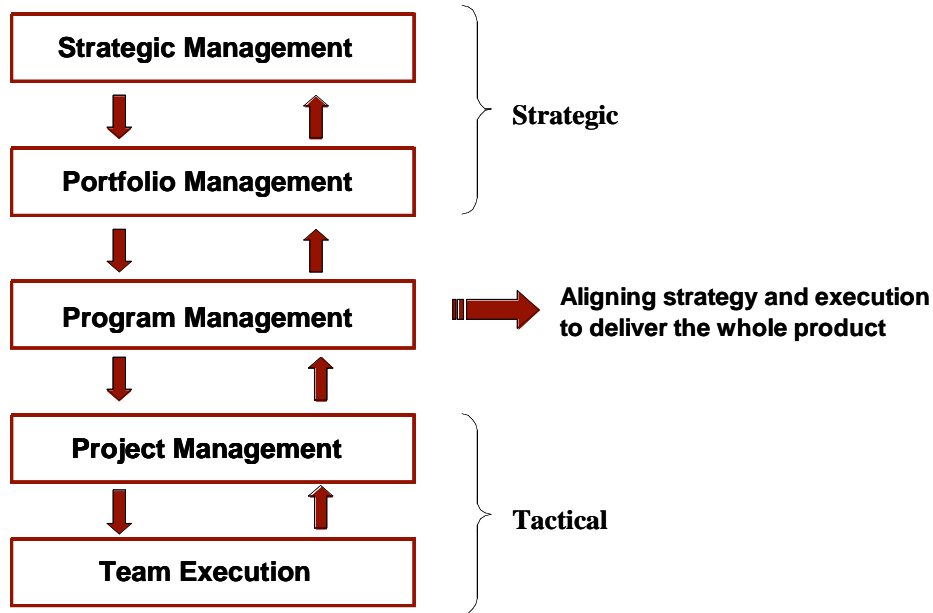


Figure 1: The Integrated Management System™

The strategic subsystems of the Integrated Management System™ consist of the strategic management and portfolio management processes. The strategic management process involves definition of the company mission, analysis of the internal and external environment, identification of the strategic objectives, and definition of strategic options to fulfill the objectives. The portfolio management process includes the review and selection of the strategic options to be implemented, and evaluation of the success of the strategic process in achieving the business objectives.

Project management and team execution, the tactical elements of the Integrated Management System™, form the basis for planning, implementing and delivering the interdependent elements of the product, services or infrastructure capability. This is where the real hands-on work gets completed. The project managers are responsible for the detailed planning and execution of the project deliverables pertaining to their respective operating functions (e.g.; hardware engineering, software engineering and marketing). Each project manager, along with his or her respective team members, develops a specific project plan and resulting schedule. Once the integrated program plan is created and approved, each project team executes their respective project within the program structure, focusing on the tasks, milestones and deliverables required to develop and deliver their respective piece of the whole product, service or infrastructure capability under development.

At the heart of the Integrated Management System™ is the program management function. The program manager does *not* create the mission or strategic objectives - this is the role of senior management. The program manager does *not* plan and execute the project deliverables - this is the role of the project managers and project team members. The program manager *does* ensure the attainment of the value proposition of the program identified by the portfolio management process by delivering an integrated solution through the collaboration and coordination of the multiple interdependent projects that are part of the overall program. The integrated solution resulting from the program, in the form of a product, service, or infrastructure capability, becomes the means to achieve a company's strategic business objectives.

Conclusion

We define program management as *the coordinated management of interdependent projects over a finite period of time to achieve a set of business objectives*. In practice, program management offers a systematic approach to resolve some of the key business problems facing companies today, including poor business integration, misalignment between strategy and execution activities, management of business risk, and conquering product and process complexity. As the heart of the Integrated Management System™, program management is the key business function that aligns the strategic and tactical elements of a business' development efforts. As such, it becomes a delivery mechanism for achieving a firm's strategic objectives and intended business results.

In the next article, "Conquering Complexity with Program Management", we dive deeper into one of the major problems facing development companies today – effectively managing growing complexity. We will describe how companies that successfully manage complexity do two key things: adopt a systems approach to development, and adopt the program management model to manage and integrate the system elements.

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