

Assessing the Appropriate Level of Project, Program, and PMO Structure

By Daniel D. Magruder, PMP

Executive Summary

Does your organization have in-flight projects that are out of control and failing due to inadequate or ineffective project and program management? Are you concerned that your organization may not be properly assessing and defining the appropriate level of project and program management structure and rigor on new projects? Is it possible that your key decision makers and sales teams do not have the knowledge, skills, experience, tools, and techniques needed to adequately perform these crucial assessments? If you answered “yes” to any of these questions, then it’s well worth your time to read this white paper!

A crucial aspect of initiating new projects, which directly impacts and often defines success or failure, is identifying and establishing the requisite level of project and program management structure and rigor.

Key decision makers and stakeholders often lack the experience, skills, tools, and techniques needed to properly assess a project or program prior to making these decisions. Unfortunately, this ultimately leads to inadequate project planning, poor execution, a lack of governance and communication, and insufficient monitoring and control. These are foundational project management issues, which may not be recognized until the project is well underway. Once these issues are realized, they typically result in significant rework, cost, and schedule overruns, excessive escalations, poor customer satisfaction, project resets, and quite possibly project failure. Many of these issues could have been avoided if only the proper assessment resources, due diligence, and techniques had been engaged and utilized during project initiation.

Assessing the appropriate level of project, program, and PMO structure requires well-defined repeatable processes, tools, techniques, and comprehensive assessment criteria with quantifiable attributes. It also requires years of structured project management experience utilizing industry best practices and principles, with extensive experience in directly managing projects, programs, and various types of project management offices (PMOs). One must also clearly understand the function and purpose of each of these three classic project structures and the process of mapping assessment results to the appropriate structure and rigor.

If you are responsible for the success and failure of projects and programs within your organization, then this white paper will help you to better understand the fundamental processes, techniques, and decision criteria that lead to successfully assessing and defining the appropriate level of project, program, and PMO structure and rigor for your projects.

“ Assessing the appropriate level of project, program, and PMO structure requires well-defined repeatable processes, tools, techniques, and comprehensive assessment criteria with quantifiable attributes. ”

Who Should Read this White Paper?

This white paper is intended for resources responsible for assessing, scoping, defining, or delivering an adequate level of project or program management structure and rigor in order to successfully deliver a technology project or program.

Introduction

Volumes have been written about why projects fail, highlighting causes such as lack of sponsorship and stakeholder buy-in, insufficient or vague requirements, scope creep, lack of planning, inadequate testing, poor communications and risk management, and ineffective monitoring and control.

In many cases, the common causes of project failure mentioned above can be traced back to inadequate project or program management structure and rigor being defined and established prior to project startup. Numerous questions and scenarios are discussed when trying to determine the appropriate structure. Does the project simply require one or more project managers? Should an overall program manager also be assigned? Does it require a project or program management office (PMO)? If so, what type of PMO is required, and what roles within the PMO need to be identified? Many times, these decisions are made by inexperienced stakeholders who lack a thorough understanding of the criteria and appropriate techniques that drive these decisions.

The objective of this white paper is to provide techniques and associated decision criteria, which will improve one's ability to consistently assess and define the appropriate project, program or PMO structure and rigor in support of technology projects. Due to the unique requirements, scope, and complexity for each project and program, staffing levels and models must be defined on a case by case basis, and therefore are not included in this white paper.

Assessing the Project or Program

In order to determine the appropriate level of project or program management structure, there are several key attributes of the project that require assessment.

Assessment criteria should establish a firm understanding of project type and identifiable complexities. Additionally, the project life cycle and phases must be included, along with an understanding of the existing level of project and program management maturity within the owning organization and project delivery teams.

Assessment Attributes

Project Categories

It is very important to first understand the project category one is delivering, how it aligns with the goals and objectives of the stakeholder community, the owning organization, and the overall company. The following examples of project category considerations have a direct impact on the level of project or program management structure ultimately put in place:

Strategic — Strategic projects and programs are typically high priority and considered critical in order to achieve a company's vision and business objectives. They might also provide the company with a competitive advantage. Complexity is always a factor; however, due to their strategic importance, these projects are highly visible, typically involving higher levels of sponsorship, project structure, and tighter controls in order to help ensure the success of the project or program.

Enterprise — Enterprise projects typically span a broad spectrum of functions, groups, or organizations within one or more companies. The scope and scale of these projects inherently cause them to be more complex. These projects may also be key enablers for driving corporate business objectives and innovation. Enterprise projects involve a much broader spectrum of stakeholders, requirements, and geographical locations. Due to their size and complexity, enterprise projects typically require a very high level of project management structure and rigor.

Functional — These types of projects are primarily focused on a particular function or organization within a company, such as human resources, accounting, sales, distribution, administrative, and so forth. As such, these

projects tend to be more internally focused and managed and may not always receive the same level of visibility or corporate sponsorship as strategic or enterprise projects. The complexity of the solution then becomes the primary driver, which ultimately determines the appropriate level of program and project management structure and rigor on these types of projects.

Product — Product-related projects involve the development or enhancement of a new or existing product and generally consist of numerous releases over the life cycle of the product. These projects have unique characteristics, and new product projects normally have a higher degree of risk. The development teams may be involved with the product throughout its life cycle, which may span years across multiple releases. Product projects must be very well structured, typically requiring very strong process rigor in regard to requirements, design, development, testing, and quality assurance, along with life cycle, release, and configuration management. All of these factors have a direct impact on the level of structure and rigor put in place.

Regulatory — Regulatory projects are driven by the need to comply with internally or externally mandated rules, policies, or standards. They often have very specific timelines in which compliance must be achieved. Complexity is always a key consideration; however, the schedule typically becomes the driving priority on regulatory projects. The appropriate level of project management structure will help to ensure compliance is achieved on time without sacrificing quality or cost objectives.

Operational — Operational projects typically involve industry best-practice processes and tools, with the goal of improving operational efficiencies and effectiveness. A classic example of this type of project within the information technology (IT) industry is an ITIL project (IT infrastructure library). ITIL is recognized globally as a set of best practices and standards for improving operational efficiencies within IT service management. These types of projects typically take years to implement, involving process reengineering, along with significant operational tool development and implementation. These initiatives are often incorrectly categorized as simple operations activities with inadequate project and program management structure and rigor. This approach often leads to failure or the inability to achieve the original business objectives. These are indeed projects and must be structured and managed accordingly in order to be successful.

Project Complexity

Assessing the complexity of a project is a vital consideration in order to properly define the appropriate level of project or program management structure and rigor.

Complexity can be classified into four major categories: business, technical, execution, and delivery. Each category has a unique subset of attributes and characteristics that can then be quantified and assessed. Examples of complexity attributes include items such as the number and types of technologies, deliverables, interfaces, project team size, the number of regions or geographies, deployment size, the number of organizations and stakeholders, the amount of risk, probability and impact, complexity of scope and schedule, the number of current and future business processes impacted, and many others.

The makeup of the project delivery organization is also very important. Is it a project organization, a functional organization structured by department, or a matrix organization? Is it a weak matrix or a strong matrix?

All of these attributes can be documented, quantified, and assessed in order to determine the relative complexity of a particular project. Utilizing a complexity matrix that identifies assessment criteria and provides a method for scoring, including weighting factors, can greatly enhance and improve the accuracy of the complexity assessment process.

There is a direct correlation between the level of project complexity and the level of project and program management structure and rigor. Highly complex projects and programs typically require a significantly higher level of structure and rigor in order to be successful, whereas simple or less complex projects are usually more forgiving.

Project Life Cycle Phases

Another key consideration, which drives program and project management structure and rigor, is the number of project life cycle phases that are in scope. A project or program that includes the entire solution life cycle — initiate, plan, design, build, test, deploy, and operate — will normally require a significantly higher level of project management resources, structure, and rigor than a similar project limited strictly to one phase of the development and delivery life cycle, such as a project that only involves deployments.

Project and Program Management Maturity

Understanding the current level of project and program management maturity within the project delivery team, the owning organization and the overall company will also drive the decision as to what level of structure is required.

Organizations and companies with very mature project management processes and capabilities will often require their delivery partners and vendors to adhere to an equivalent level of project management rigor. This could have a positive or negative impact, depending on the position that the organization or company takes. On the positive side, these companies may be less likely to question the need for adequate project management resources and structure in order to properly manage and control a project. On the negative side, companies with relatively mature project management processes and capabilities might press to perform all project management functions internally, thus limiting the ability of partners and third-party vendors to manage their own resources.

In this scenario, partners and vendors are essentially performing a staff augmentation role and should be very careful not to assume ownership of the overall project or program. Additionally, mature organizations may already have a formal PMO structure in place and mandate that their standard delivery methodology be used for all projects. In these cases, individual projects and programs might simply plug into the existing PMO structure already in place, thus not requiring the build-out of a new or separate PMO. However, this might also limit or preclude a partner or vendor from using their own standard methodologies, thus forcing them to adapt and interface their methodology with the customers as part of the delivery.

Conversely, organizations and companies that have immature project management processes and capabilities may question or push back on appropriately staffing the project, often viewing well-structured project management as unnecessary overhead. The challenge then becomes helping these immature organizations to understand the true value of project and program management, along with PMOs if and when necessary. Delivering a project or program within these organizations may necessitate higher levels of project and program management rigor in order to ensure the appropriate levels of quality assurance, execution, and monitoring and control are in place.

A common project and program management maturity assessment approach is to determine if the organization adheres to Project Management Institute (PMI) and Capability Maturity Model Integration (CMMI) best practices and principles, and if so, to what extent.

Projects, Programs, and PMOs

In order to identify the appropriate level of project, program, and PMO structure, one must also possess a basic understanding of these three fundamental terms and structures:

Project – PMI defines a project as “a temporary endeavor undertaken to create a unique product, service, or result. The temporary nature of projects indicates a definite beginning and end. The end is reached when the project’s objectives have been achieved or when the project is terminated because its objectives cannot be met, or the need for the project no longer exists.” (Project Management Institute, 2008)

Program – PMI defines a program as “a group of related projects managed in a coordinated way to obtain benefits and control not available from managing them individually. Programs may include elements of related work outside the scope of the discrete projects in the program. A project may or may not be part of a program but a program will always have projects.” (Project Management Institute, 2008)

Managing and grouping related projects as one overall program typically allows for gains in efficiency, improved coordination, and adherence to standards. It also helps to ensure tighter integration and management of internal and external dependencies and interdependencies across a given set of projects and related work. Programs are also sometimes used as a means for achieving common business objectives or a shared vision.

PMO – PMI defines a PMO as “an organizational body or entity assigned various responsibilities related to the centralized and coordinated management of those projects under its domain. The responsibilities of a PMO can range from providing management support functions to actually being responsible for the direct management of a project.” (Project Management Institute, 2008)

There are numerous types of project and program management offices (PMOs), including supporting, controlling, directive, strategic, operational, product, functional, enterprise, and others. PMOs may serve a variety of purposes, including, but not limited to:

- Program governance and oversight
- Portfolio management
- Policing or directly managing a project, program, or portfolio
- Monitoring, controlling, and reporting
- Creation of common methodologies, policies, templates, processes, tools, and quality standards
- Ensuring adherence to defined standards
- Continuous process improvement
- Improving the capabilities and maturity of an organization within one or more specific disciplines

- Training and mentoring of project teams, employees, customers, or other resources
- Management of shared resources
- Centralized communications among project managers, project sponsors, managers, and other stakeholders

In general, however, a PMO typically provides structured, centralized management that supports the organization at an enterprise, organizational, functional, portfolio, program, or project level, utilizing shared resources, standard methodologies, tools, and processes.

It's important to note that the unique functional roles within any given PMO will vary based on the type of PMO and its individual charter.

Mapping Assessment Results to Structure Types (putting it all together)

Utilizing the assessment data that have been gathered and quantified, along with a solid understanding of typical project, program, and PMO structures, one can now map the assessment characteristics to the appropriate project, program, or PMO structure.

Conceptually, this appears to be a straightforward mapping exercise; however, there is one critical success factor of properly mapping assessment criteria to project, program, or PMO structure, which cannot be overstated, and that is *experience*.

Similar to any profession, years of experience in formulating, managing, and executing projects, programs, and PMOs provide a level of insight, along with other intangibles, that cannot be overlooked.

There are numerous extenuating circumstances, such as budget and schedule constraints, conflicting stakeholder agendas, internal politics, an understanding of available options and associated tradeoffs, risk factors, solution or service maturity, as well as delivery team availability and experience, which must also be considered. It requires years of experience to recognize and assess these other types of considerations in order to properly construct the appropriate levels of structure and rigor.

Thus, it is the combination of knowledge garnered from years of practical implementation and experience in structured project and program management, combined with the proper due diligence in gathering, quantifying, and analyzing assessment criteria and attributes that ultimately lead to success.

Summary

Establishing the appropriate level of project, program, and PMO structure and rigor is a critical success factor, which drives successful initiation, planning, execution, control, and closure of projects and programs, reduces risk, and greatly increases the likelihood of predictable outcomes.

If you are responsible for the success and failure of projects and programs in your organization, one of your top priorities should be to adopt and institutionalize the use of repeatable assessment processes, tools, and techniques during project initiation. Combining this strategy, along with consistently engaging senior, experienced project and program management assessment professionals could be a game-changer, and exactly what the doctor ordered for your ill projects!

Reference

Project Management Institute (PMI). (2008). *A guide to the project management body of knowledge (PMBOK® guide)* — Fourth edition. Newtown Square, PA: Author.

About the Author

Daniel D. Magruder has over 25 years of experience in the project and program management field. Currently, Daniel is a senior program manager for Cisco Systems within the Advanced Services Complex Program Management team. Daniel has developed and delivered global projects, programs, and PMOs for numerous Fortune 500 companies and he has experience in the automotive, pharmaceutical, manufacturing, retail, financial, and public sectors, and commodities trading industries.