Eighth Edition

PMBOK® Guide

A Guide to the Project Management Body of Knowledge

Includes **The Standard for Project Management**

Project Management Institute.

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The Standard for Project Management

and

A Guide to the Project Management Body of Knowledge

PMBOK® Guide
Eighth Edition

Project Management Institute

Preface

PMI is committed to representing the voice of the project management community. That commitment drives a pursuit of practitioner input and continuous feedback on how the content of *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* should evolve.

With the *PMBOK® Guide*—Eighth Edition, PMI delivers the most evidence-based revision to date. Moreover, community input inspired a design that is simultaneously broad in scope and inclusive of all industries and approaches.

Evidence-Based and Globally Represented

To support the creation of this eighth edition, PMI conducted qualitative and quantitative research over the course of 2023 that yielded approximately 48,000 data points.

With this data in hand, a highly selective process was conducted to identify volunteers. That selection process yielded two globally diverse teams of subject matter experts. The development team consisted of 12 subject matter experts with a diverse background from 10 different countries across five continents; the review team featured 12 members from eight different countries, altogether representing dozens of industries and approaches. Over 18 months, the two teams worked independently in a double-blind fashion, iteratively developing and then validating the material in this eighth edition.

That work was validated and refined by two rounds of public community feedback, yielding more than 12,000 comments from project management practitioners around the world.

Summary of Changes

The majority of changes can be grouped into four main categories:

- Key term and concept updates,
- Principle refinement,
- Reintroduction of Process Groups as Focus Areas, and
- Project management performance domain updates.

Update of Key Terms and Concepts

This edition presents updated definitions of key terms and concepts, such as the core definitions for *project*, *project management*, and others. These updates are based on shifts in marketplace expectations encountered by portfolio, program, and project practitioners. While some of these shifts are recent, others accumulated over the last decade or longer. Shifts that motivate these updates include but are not limited to the following:

- Timeliness. Some of the key terms and concepts have not been updated in more than 40 years. In that time, the discipline of project management has meaningfully expanded and matured to merit updates.
- Global accessibility. The project management community is more global than ever before. The language used in some of the historical definitions has been unfriendly to international translation and nonnative English speakers.
- Focus on value. Earlier understandings of project management focused on efficient delivery of work within constraints (e.g., scope, schedule, compliance, quality). However, the current marketplace expects project management to address an expanding set of concepts, including the project's value proposition.

Refined Principles

This edition defines six project management principles that guide effective practice. These six principles are the result of a community-driven simplification of the principles defined in the previous edition's 12 principles. In the eighth edition, principles have been refined to be more actionable, and consolidated to minimize overlap, duplication, and confusion.

Additional details on the refinement of the project management principles can be found in Appendix X5: Evolution of the *PMBOK® Guide*.

Reintroducing Process Groups as Focus Areas

This edition presents five Project Management Focus Areas: Initiating, Planning, Executing, Monitoring and Controlling, and Closing. Most projects feature a life cycle that involves actions and activities related to these Focus Areas.

Historically, these five Focus Areas were presented as logical categories of formal project management processes, known as the Project Management Process Groups. In contrast, today's projects often satisfy these five concepts through the use of multiple approaches. In addition to formal processes, project life cycles are often managed by informal practices and/or flexible policies as well. As such, these historical Process Groups have been reimagined as Focus Areas.

Updated Performance Domains

Community input for the *PMBOK® Guide*—Eighth Edition overwhelmingly recommended updating the project performance domains to include and integrate various project management concepts described in previous editions. The concepts included are as follows:

- Project Management Knowledge Areas are fields or areas of specialization that are commonly employed when managing projects. They are historically defined in prior editions as a set of processes associated with a particular topic. This edition synthesizes those Knowledge Areas with other accepted concepts into seven project management performance domains.
- Project management processes are a formalized series of logically connected activities that manage a project throughout its life cycle. This edition includes a selection of 40 nonprescriptive processes that can be adapted to varied approaches, life cycles, and environments.
- Tailoring considerations and examples are inserted into each performance domain. These considerations and examples illustrate how practitioners can apply context-specific adjustments to individual processes or the overall performance domain.

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The Standard for Project Management

Introduction

1.1 Purpose of *The Standard for Project Management*

The Standard for Project Management provides a basis for understanding project management and how it facilitates intended outcomes. This standard applies to projects across all industries, including business, government, and nonprofit sectors; geographic regions; organizational size; or development approach (e.g., predictive, adaptive, or hybrid). The standard describes the system within which projects operate. This system includes governance, possible functions, the project environment, organizational culture, cross-functional teams, interactions with portfolios and programs, and considerations for the relationships between project management and other management disciplines, including product management.

The standard describes how project management creates value and benefits in organizations as well as how organizational and project leaders can harness the power of project management for success. Effective and efficient project management is a strategic competency within organizations. Projects enable organizations to:

- Align their project deliverables to business strategy and associated goals,
- Compete more effectively,
- Ensure long-term sustainability and growth,
- Drive positive change,
- Respond to the impact of business environment changes, and
- Create a positive impact for society at large.

The project management landscape has undergone significant changes in recent years, shaped by evolving global challenges such as climate change, resource constraints, geopolitical instability, and widening inequalities, alongside advancements in technology like artificial intelligence (AI).

Adaptive project management approaches, including but not limited to agile practices, have become increasingly important. These approaches enable project teams to tailor their strategies to meet the unique challenges and dynamic conditions of each project. While this standard discusses relevant agile practices in project management, it is important to note that the practice of agile extends beyond project management.

Simultaneously, generative AI (GenAI) is contributing to the field of project management by offering advanced tools and capabilities that, when used responsibly and correctly, can potentially improve project outcomes. Artificial intelligence–driven solutions can analyze vast amounts of data to provide actionable insights, predict risks, and recommend optimal courses of action. This technology can enhance decision-making processes, automate routine tasks, and support more accurate forecasting and planning. When applied effectively, AI can help project managers focus on performing strategic activities, managing stakeholder engagement, fostering innovation, and driving continuous improvement within the context of their projects. However, the impact of using AI depends on factors such as the quality of system inputs and human oversight.

In this evolving landscape, the role of a project manager continues to expand beyond traditional organizing skills. Project practitioners should be able to navigate complex environments, leverage emerging technologies, and align project outcomes with organizational strategic objectives. In today's business environment, project managers should be skilled strategists and change managers, capable of driving value to their organization, industry, and situation. While no one person can be an expert in all these things, the expectation in the modern workplace remains the same. Therefore, the practice of project management now requires excellence in an expanding array of disciplines.

The Standard for Project Management serves as a foundational guide for project management practitioners, providing a common language and framework that can be applied across various industries, methodologies, and technological advancements. The standard supports organizations and project professionals in navigating the complexities of modern project management, ensuring consistency and effectiveness in project delivery while allowing for the flexibility needed in today's dynamic business environment. By applying the standard, organizations can better position themselves to achieve strategic objectives, drive innovation, maintain competitiveness, and contribute to societal impact.

1.2 Key Terms and Concepts

The Standard for Project Management reflects the advancement of the profession. Organizations expect projects to deliver outcomes. Project managers are expected to deliver projects that create value for the organization and stakeholders within the organization's system for value delivery. The following terms are defined to provide context for the content in this standard:

- Artifact. A document or other item created during a portfolio, program, or project to help manage it and provide information to the project team, stakeholders, and management.

- Benefit. A gain or asset realized by the organization and other stakeholders as the result of outcomes delivered.
- Outcome. An end result or consequence of a process or project. Outcomes encompass the long-term effects, changes, or value generated by the project's deliverables, which can be either positive or negative. Positive outcomes, often termed "benefits," may include enhancements in performance, efficiency, or customer satisfaction. Conversely, negative outcomes, known as "disbenefits," may involve unintended adverse effects or costs. Evaluating outcomes is essential to determine how effectively a project has achieved its intended objectives and to understand its overall impact.
- Output. A product, result, or service generated by a process. May be an input to a successor process.
- Portfolio. A collection of programs, projects, and operations managed as a group to maximize overall value delivery and achieve strategic objectives, meet mandatory obligations, or generate income streams. Related activities may include subsidiary portfolios (subportfolios) and operations.
- Product. An artifact that is produced, is quantifiable, and can be either an end item in itself or a component item. "Product" is an overarching term that includes tangible (physical goods) and intangible (digital goods and services) items.
- Program. A group of related projects and program activities managed in a coordinated manner to obtain benefits not available from managing them individually. These interrelated activities can serve program components to enable the program to deliver the highest value and may include subsidiary programs.
- Project. A temporary initiative in a unique context undertaken to create value. The temporary nature of a project indicates a beginning and an end to the project work or a phase of the project work. A project's unique context can be driven by its distinct goals, environmental conditions, approaches, stakeholders, or other dimensions. Projects can be stand-alone efforts or part of a portfolio or program.
- Project management. The application of knowledge, skills, tools, and techniques to project activities to meet or exceed the intended value. Meeting or exceeding value in project management does not mean to endorse or accept gold plating or scope creep, but to emphasize a value-driven decision-making process, helping to ensure that the final project outcome satisfies the stakeholders' needs.
- Project management office (PMO). Organizational entities, typically established as departments or teams, primarily tasked with centralizing activities related to the management of portfolios, programs, and/or projects. The nature of these activities can vary according to the unique needs of each organization.
- Project management team. The members of the project team who are directly involved in project management activities.
- Project manager. The person assigned by the performing organization to lead the team that is responsible for achieving the project objectives. Project managers perform a variety of functions such as facilitating the project team's work to achieve the intended outcomes and managing the processes to bring about those outcomes in order to enable value delivery. Additional functions are identified in Section 2.4.

- Project success. The consensus view across intended beneficiaries, other stakeholders, and project participants that a project was perceived to have delivered value that was worth the effort and expense.
- Project team. A set of individuals performing the work of the project to achieve its objectives.
- Value. The excess of financial and nonfinancial benefits over investment that is gained from achieving the goals of a portfolio, program, or project. Different stakeholders perceive value in different ways, which can be explained quantitatively or qualitatively. Thus, organizations may focus on business value as determined by performance metrics or finances, such as return on investment (ROI). Customers may interpret value as the convenience offered by a given product or service. Governments and nongovernmental organizations (NGOs) may prioritize the value of societal impact on groups of people and their communities and environments.
- Value delivery system. A collection of strategic business activities aimed at building, sustaining, and/or advancing an organization. Portfolios, programs, projects, products, and operations can all be part of an organization's system for value delivery. This system enables organizations to align their work with their strategic objectives and achieve desired outcomes.

For other terms used in this standard, refer to the glossary and the *PMI Lexicon of Project Management Terms* [1].[1]

1.3 Foundational Elements of Project Management

This section outlines the essential elements required to understand and effectively engage in project management. The section explores key project management perspectives and relationships that are crucial for effective project delivery and organizational success, covering concepts such as the following:

- How projects create value and drive organizational change;
- The link between organizational governance and project governance during project initiation;
- The differences between operations management and project management; and
- The relationships among portfolio, program, and project management, as well as their connections to operations management.

By examining these foundational elements, project management practitioners can gain a comprehensive understanding of how projects fit into the broader organizational context and contribute to value delivery.

1.3.1 Characteristics of a Project

Organizations expect projects to deliver value in addition to outputs and artifacts. Project managers are expected to deliver project outcomes that create value for the organization and stakeholders within the organization's system for value delivery.

[1] The numbers in brackets refer to the numbered list of references at the end of this standard.

Organizational work encompasses both operations and projects. Although both are expected to deliver value beyond outputs and artifacts, they differ in their value-creation processes. The following terms are defined to provide context for these distinctions and the broader content of this standard:

- Temporary. Projects are initiated to create value by producing tangible and/or intangible deliverables such as products, services, or other results. Unlike ongoing operations, projects are temporary and have a defined beginning and end. Although projects are temporary, their deliverables often persist beyond the project's conclusion. Usually, a project ends when one or more of the following conditions are met:
  - The project's objectives have been achieved;
  - A governing body, the project sponsor, or the project team has determined that the objectives will not or cannot be met;
  - Resources (funding, human, or physical) are exhausted or no longer available;
  - Due to changes in strategy, priorities, or the external environment, the need for the project no longer exists; or
  - The project is terminated for other reasons such as legal, regulatory, or compliance issues.
- Unique context. A unique context in projects refers to the specific conditions and environments that distinguish one project from another, even if they have otherwise similar characteristics. This uniqueness arises from factors such as differences in goals, scope, duration, location, technology, quality, costs, risks, resources, and stakeholders involved in the project. Even if two projects aim for the same value or objectives, each project differs due to the context in which it is carried out. These differences require tailored management approaches to meet the specific needs and challenges of each project. As a result, the unique context of each project requires customized strategies for success.

For example, a large housing development project may involve a single construction vendor in a single government district. However, each of those housing units may involve varying lenders and buyers, distinct customization requests, and unique grading requirements from one plot to another.

- Value creation through organizational change. Projects, in pursuit of value, drive change in organizations. From a business perspective, a project's purpose is to move an organization from one state to another to achieve a specific objective (see Figure 1-1). Before the project begins, an organization is in its current state. The desired result of the change driven by the project is described as the future state. For some projects, this shift may involve creating a transition state where several steps are taken in a structured manner to achieve the future state. The successful completion of a project results in the organization moving to the future state and achieving value for the organization, as defined by key stakeholders.

1.3.2 Connecting Organizational Governance and Project Governance

Organizational governance provides direction and control through policies, processes, procedures, and decisions to meet strategic and operational goals. Typically overseen by an executive committee or organizational leaders, organizational governance helps ensure transparency, oversight, compliance, resiliency, and adaptability for its stakeholders. In many organizations, organizational governance is inspired by the country's laws, business domain regulations, industry standards, and

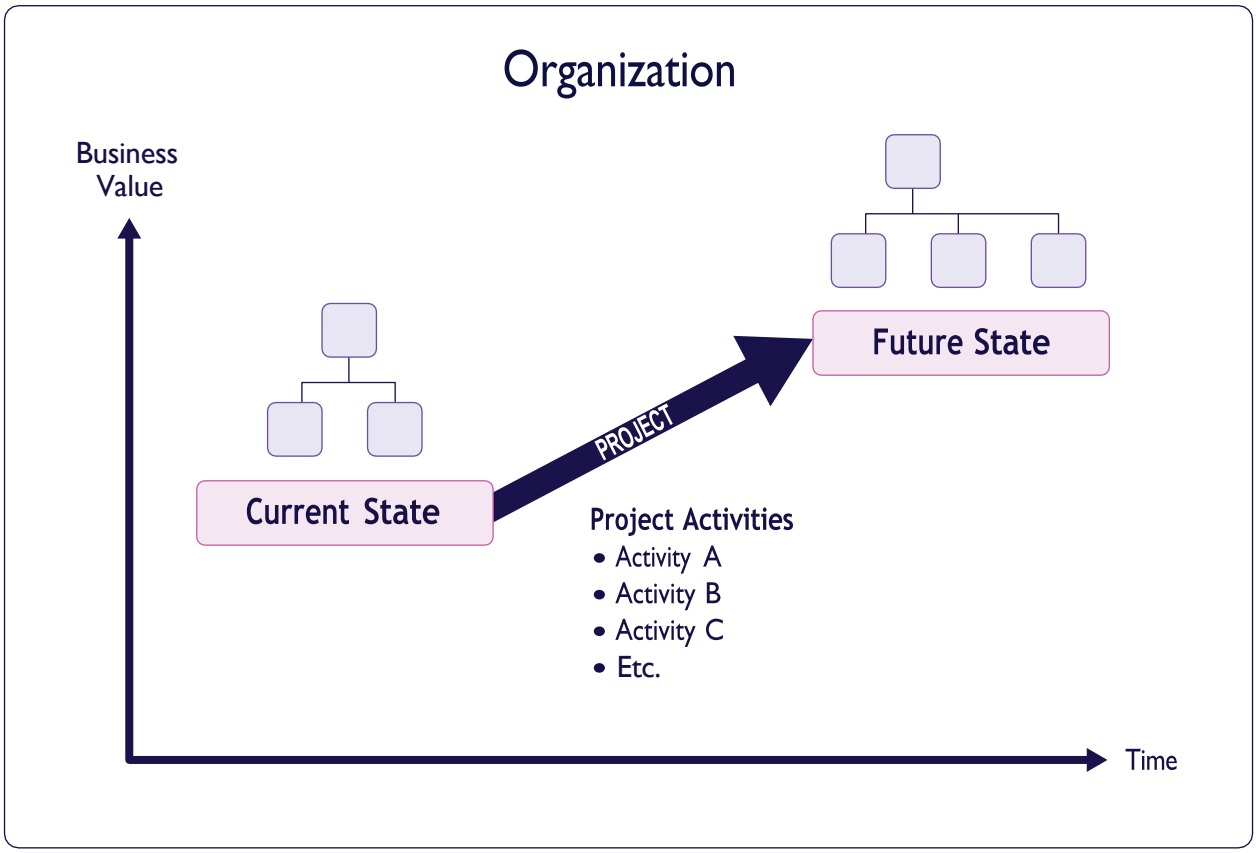

Figure 1-1. Impact of Projects on Organizational States

custom policies that are formed by the organization's unique context. This context can influence the governance of portfolios, programs, and projects in several ways, including the following:

- Enforcing legal, regulatory, and compliance requirements;
- Defining ethical, social, and environmental responsibilities;
- Specifying operational, legal, financial, and risk policies;
- Promoting the alignment of portfolios, programs, and projects with strategic objectives at different hierarchical levels;
- Ensuring that initiatives contribute to the organizational mission and vision: and
- Facilitating decision-making that maximizes delivered value connected to the system for value delivery.

Project governance is the adaptable framework that guides project management activities to create value through a unique product, service, or result aligned with organizational, strategic, and operational goals. Governance provides structure, systems and processes, roles, responsibilities, and decision-making models, such as RACI (responsible, accountable, consulted, informed) matrices or governance boards, to manage projects effectively. Governance frameworks can also ensure alignment with stakeholder expectations by defining accountability and communication protocols.

Additionally, project governance helps prioritize initiatives and allocate resources to support strategic objectives. For instance, a steering committee in a product launch project may oversee milestones, enforce quality standards, and resolve escalated issues. Further details on the Governance performance domain are discussed in the second part of this publication (see Section 2.1 of *A Guide to the Project Management Body of Knowledge [PMBOK® Guide]*) [2].

In summary, while organizational governance provides the overall direction and control for the entire organization, project governance focuses on the specific processes and frameworks that should be implemented to manage individual projects effectively. Both are essential for ensuring that projects contribute to the organization's strategic objectives and are executed successfully.

1.3.2.1 Project Initiation

Organizational leaders authorize projects in response to organizational strategic-objective realization and stakeholder needs. Projects enable organizations to make necessary changes to address these factors. The factors can be categorized into several areas, including the following:

- Meeting regulatory, legal, or social requirements;
- Satisfying stakeholder requests or needs;
- Implementing or changing business or technological strategies; and
- Creating, improving, or fixing products, processes, organizations, or services.

By responding to these factors, leaders can enhance an organization's viability. Projects provide the means to make these changes and should ultimately link to the organization's strategic objectives and business value.

1.3.3 Operations and Project Management

Operations management focuses on the efficient, effective production of products and/or services. Additionally, operations management helps ensure that business operations are conducted efficiently and effectively by utilizing optimal resources to meet customer demands and deliver value. As such, operations management is concerned with managing processes that transform inputs (e.g., materials, components, energy, and labor) into outputs (e.g., products, goods, services, and/or other results). Operations management is distinct from formal project management as outlined in this standard.

Changes in business or organizational operations can be the focus of a project, particularly when significant changes are required due to new products or service delivery offerings. Ongoing operations are outside of the scope of a project. However, there are intersecting points where the two areas cross. For example, projects can intersect with operations at various points during a product life cycle, such as the following:

- When developing new products or services, upgrading offerings, or expanding outputs;
- While improving product or service delivery operations or their development process;
- At the end of the product life cycle; and
- At each closeout phase or iteration.

At determined points, deliverables, human resources, and knowledge are transferred between the project and operations for implementation of the delivered work. These transfers help ensure the seamless integration of project outcomes into the organization's operational framework. This implementation may occur through a transfer of project resources or knowledge to operations or through a transfer of operational resources to the project. Engaging operations teams early in project planning is beneficial and can significantly influence the long-term success and sustainability of a project. This is when the project is typically handed over to operations to sustain and use the results of the project.

1.3.4 Relationship of Portfolio, Program, Project, and Operations Management

By utilizing project management principles, processes, tools, and techniques, organizations can effectively achieve their goals and objectives while delivering value. Portfolios, programs, projects, and operations are integral components of an organization, each serving interconnected roles.

Projects are often managed as stand-alone initiatives but they can also be part of larger portfolios or programs. When projects are grouped together into a program, they are managed in a coordinated manner to obtain benefits not available from managing them individually. Programs drive significant organizational change; they are not merely large projects. Programs aim to achieve organizational change and improvement by connecting resources and aligning projects strategically to create synergies. This integration maximizes generated value, enhances efficiency, and delivers value that individual projects cannot achieve on their own.

Some organizations use a portfolio to manage multiple programs and projects that are underway at any given time. A portfolio is a collection of programs, projects, and operations managed as a group to maximize overall value delivery and achieve strategic objectives, meet mandatory obligations, or generate income streams. Portfolio management involves selecting, prioritizing, managing, and optimizing an organization's programs and projects in line with its strategic goals, obligations (legal or otherwise), or business objectives. This holistic view helps ensure that resources are allocated efficiently and that the portfolio delivers maximum value.

Portfolios, programs, projects, and operations often engage with the same stakeholders and may compete for the same resources. Portfolio, program, and project managers should work together with operations leaders to maintain a balanced approach to resource allocation and stakeholder engagement. Overlap and competition for resources can otherwise threaten the organization's strategic objectives.

Figure 1-2 illustrates a sample portfolio indicating the relationships among the organizational components (i.e., programs, projects, shared resources, and stakeholders). Organizational and portfolio planning impact these components through prioritization based on risks, funding, and other considerations. The portfolio view allows organizations to see how the strategic goals are reflected in the portfolio. This portfolio view also enables the implementation and coordination of appropriate portfolio, program, and project governance. Coordinated governance allows for the authorized allocation of human, financial, and physical resources based on expected performance and benefits.

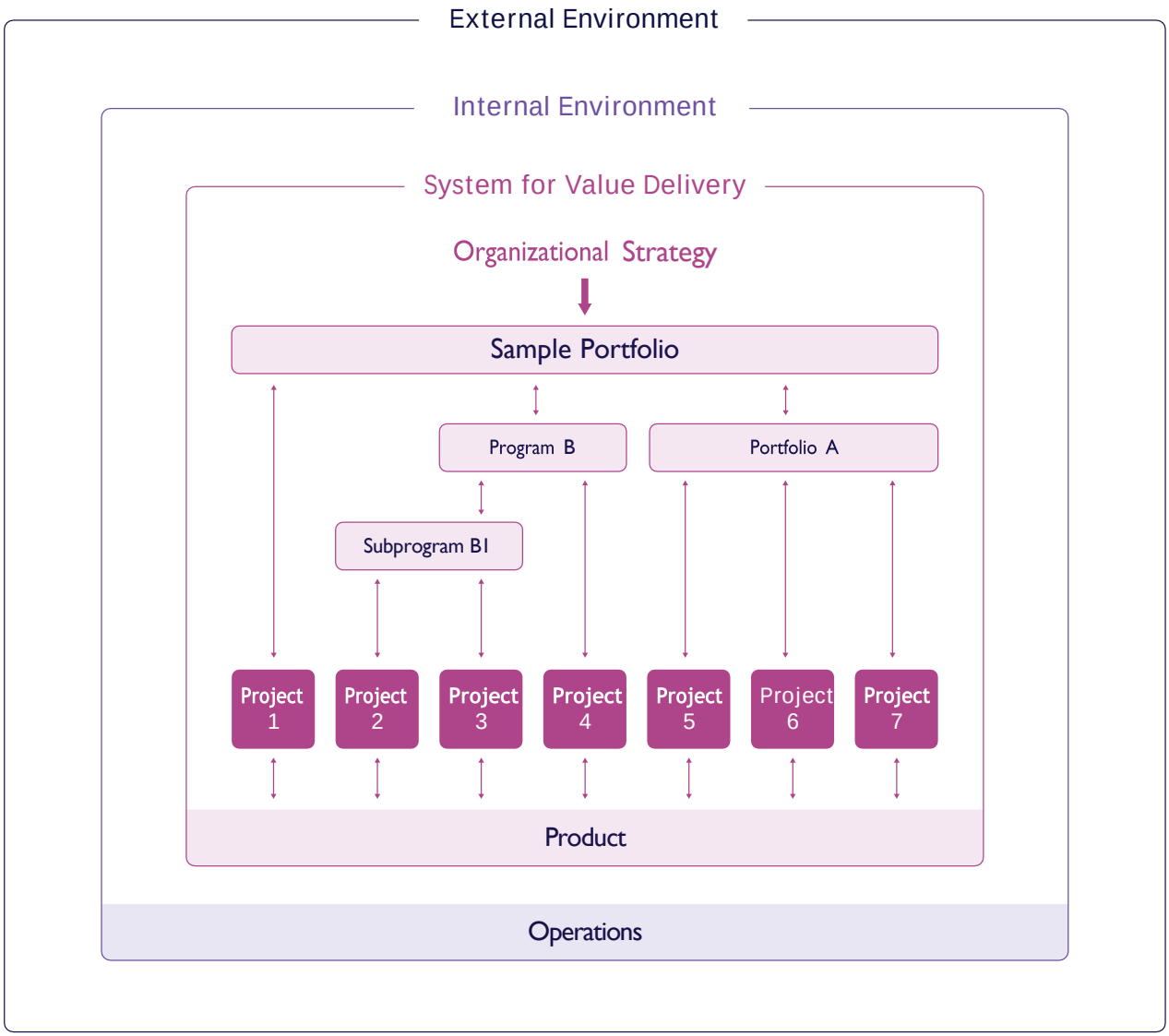

Figure 1-2. A Framework for Managing Portfolios, Programs, Projects, and Operations

Table 1-1 gives a comparative overview of portfolios, programs, and projects from an organizational perspective. The table highlights key differences and similarities in terms of definition, scope, change, planning, monitoring, and success criteria.

Table 1-1. Comparative Overview of Portfolios, Programs, and Projects

Organizational Project Management			
	Portfolios	Programs	Projects
Defnition	A collection of programs, projects, and operations managed as a group to maximize overall value delivery and achieve strategic objectives, meet mandatory obligations, or generate income streams	A group of related projects and program activities managed in a coordinated manner to obtain benefts not available from managing them individually	A temporary initiative in a unique context undertaken to create value
Scope	Organizational scope aligned with strategic objectives	Includes and integrates the scope of its component projects and subprograms	Defned objectives, progressively elaborated
Change	Adaptable to continuous monitoring and adjustment to align with strategic priorities and changes in the environment	Adaptable to optimize value delivery at the program level	Adaptable to enable and maximize value delivery
Planning	Strategic planning, priority defnition, and resource allocation between programs and projects	High-level planning that tracks interdependencies and aligns with program objectives	Predictive, adaptive, or hybrid, depending on project requirements and organizational context
Monitoring	Monitors strategic changes and resource allocation	Monitors progress of component projects and benefts realization	Monitoring and controlling outputs and value
Success	Measured by strategic value delivery, overall change management success, and alignment with organizational vision and mission	Measured by the program's ability to collectively deliver benefts and value and achieve strategic objectives	Measured by delivered value that was worth the effort and expense, including quality, timeliness, budget compliance, sustainability, and stakeholder satisfaction

Section 2

A System for Value Delivery

The information in this section provides a context for a value delivery system, the project environment, product management, project functions, and project management roles as follows:

- Creating Value. Section 2.1 describes how projects operate within a system to produce value or enhance value production capabilities for organizations and their stakeholders.
- Project Environment. Section 2.2 identifies internal and external factors that can influence projects and the delivery of value.
- Product Management Considerations. Section 2.3 identifies the ways portfolios, programs, projects, and products relate to one another.
- Functions Associated With Projects. Section 2.4 identifies the functions that support project delivery.
- Project Management Roles. Section 2.5 describes the various roles of those involved in managing projects and their functions.

2.1 Creating Value

Projects exist in both large and small contexts. These contexts can range from government agencies, enterprises, or contractual arrangements to local nonprofits organizing community events or families organizing their vacations. For brevity, this standard uses the term “organization” broadly to encompass government agencies, enterprises, businesses, contractual arrangements, joint ventures, and other entities. Organizations create value for stakeholders, and the expected value to be created via any project investment should meet or exceed the threshold for targets, both financial and nonfinancial, that have been set. Projects are specifically designed to deliver value or enhance value