

*Let's talk about public projects*¹

Knowledge – The most important resource for projects²

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Introduction

No project should have to plan, organize, and implement everything from scratch. Although, according to some generally accepted definitions, each project is unique, much of the knowledge gained can be useful across multiple projects. However, due to its uniqueness—meaning the implementation of previously unseen elements—a project can also be a source of knowledge that may be valuable in subsequent projects. During project implementation, it is possible to generate entirely new knowledge or improve the application of certain practices.

Knowledge is the fundamental resource necessary for the implementation of public sector projects (as well as projects of other sectors). Knowledge management involves the creation of new knowledge, its application, preservation, and dissemination for use elsewhere.

Project knowledge refers to the data used, methods, processes, and entire public project management methodologies defined and in effect within a public organization. According to the Governmental Project Management Maturity Model (GPM3; Gasik, 2023), in less advanced administrations, knowledge remains within the public organizations that generated it. However, in more mature administrations, knowledge generated in one organization can be used, when necessary, across all institutions within a given jurisdiction.

¹ Editor's note: This article is the latest in a series related to the management of public programs and projects, those organized, financed and managed by governments and public officials. The author, Dr. Stanisław Gasik, is the author of the book "[*Projects, Government, and Public Policy*](#)", recently published by CRC Press / Taylor and Francis Group. That book and these articles are based on Dr. Gasik's research into governmental project management around the world over the last decade. Stanisław is well-known and respected by PMWJ editors; we welcome and support his efforts to share knowledge that can help governments worldwide achieve their most important initiatives.

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Types of Knowledge

A unit of knowledge is something that serves to solve a task (or part of it) or to address a problem (or part of it) (Gasik, 2011). Knowledge management in a project environment is a very broad field. Knowledge units can refer to knowledge *about* projects, knowledge *in* projects, and knowledge *from* projects (Damm & Schindler, 2002).

Knowledge About Projects

The knowledge resources possessed by an organization implementing projects—describing how they are managed—constitute *knowledge about projects*. This type of knowledge may relate to solving individual problems, completing tasks or their parts, or managing entire processes, projects, or aggregates thereof (e.g., project programs or portfolios). Knowledge about projects—like knowledge in any other field—can be codified, documented within the organization, or held by individuals involved in project implementation. Knowledge about projects is one of the most important resources of every public institution.

The primary way to disseminate knowledge about projects is to make it available for use in subsequent, similar projects. Before starting project planning, it is necessary to review the knowledge gained from previously implemented projects (e.g., Canada TBoCS, 2019).

Knowledge In Projects

Individual projects utilize knowledge previously accumulated within a given project, organization, or the broader project implementation environment (Gasik, 2011). The project team also generates knowledge that is necessary and specific to that particular project. All of this is referred to as *knowledge in projects*.

This type of knowledge is specific to each project and is essential for team members during its execution. Examples include knowledge about project team members, communication methods within the project, task structures, progress, emerging problems and risks, tools used, ways to overcome challenges related to numerous public sector regulations, the labor intensity of specific activities, the efficient implementation of certain processes, and data relevant to project execution (e.g., sourcing products or services).

In public projects, three areas of knowledge are of particular importance (Gasik, 2023): stakeholder management, procurement management, and communication management. Often, elements of this knowledge are derived from an institution's existing project knowledge, but they must be adapted to the specific circumstances of the project. When the available knowledge is insufficient to complete a given task, or when improvements can be made to its implementation methods, a new unit of knowledge is created.

Knowledge from Projects

Knowledge generated in a project can be useful for managing other projects within the same organization or across a wider network of public institutions. When such

knowledge is transferred to and stored by the project organization, it becomes *knowledge from projects*. The process of transforming *knowledge in projects* into *knowledge from projects* is called *learning by experience* (e.g., Prince2®, PeopleCert, 2023). Learning by experience is a key element of continuous project improvement (UK NISTA, 2025).

Knowledge generated in a project originates and remains in the minds of the individuals and teams involved in its creation or application. Without appropriate actions, it will remain accessible only to those individuals or others directly in contact with them. The first way to retain knowledge is to retain the people who possess it within the organization—this falls under human resource management. However, organizations are always exposed to the risk of losing knowledgeable staff. Because employment is inherently time-limited, organizations strive to codify and store this knowledge in repositories to ensure its availability for future projects.

The two main goals of learning by experience are to avoid mistakes and to improve existing project management practices. A unit of acquired knowledge is often called a *lesson learned*. There are two basic ways to use lessons learned. First, a project may encounter a situation previously faced by another project. In such cases, a previously developed solution can inform or inspire a similar approach to the problem in a later project. To enable this type of knowledge reuse, situation descriptions must be classified in a way that allows them to be easily found by people implementing similar projects. Second, if the acquired knowledge appears to be useful across most of the organization's projects, it can be used to modify existing processes or methodologies.

Project team members have active access to the organization's knowledge repository. However, it is the organization's *knowledge manager* who decides whether to retain a given lesson learned there. Those responsible for project management methodologies review the knowledge repositories to identify insights worth incorporating into existing frameworks. Since it is difficult to determine that a new knowledge component will *never* be useful in the future, only items identical to those already stored are not stored in the repository.

Knowledge from projects can be valuable in itself to the organization implementing the project. For example, the first project carried out for a specific client or within a new domain (e.g., artificial intelligence) allows the organization to generate knowledge that enhances the delivery of future projects.

Project knowledge flow is schematically shown in Figure 1.

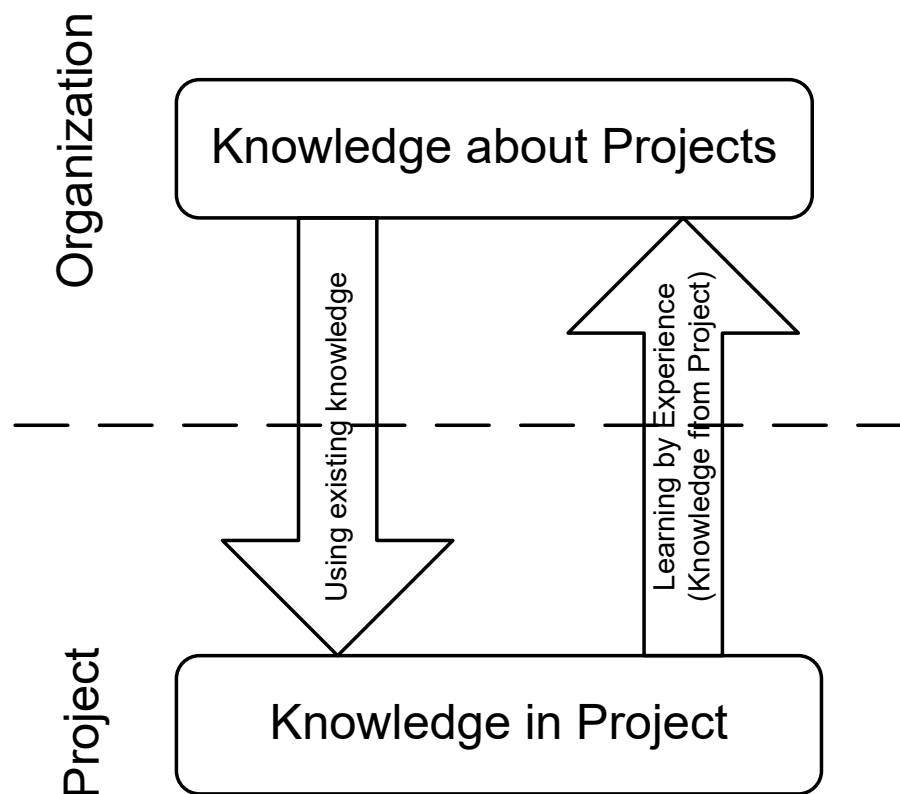


Figure 1. Project knowledge flow

Examples from Public Administration

The *Government Performance and Results Act – Modernization Act* (GPRA MA; U.S. Congress, 2010) requires the identification of best practices related to project and program implementation. Some public sector project management policies also require systematic knowledge collection (e.g., NI DoF, 2025b; Scottish Government, 2013; Canada TBoCS, 2019).

At the executive level, knowledge collection is mandated by the *Office of Management and Budget* (U.S. OMB, 2025). The *Texas Department of Information Resources* (Texas DIR, 2025) and the *Virginia Information Technology Agency* (Virginia VITA, 2025) have each designated centralized repositories for collecting public sector project management knowledge. Similar functions are carried out by other entities, such as the *Ministry of Statistics and Programme Implementation* in India (India MoSPI, 2025), the *Centre for Public Project Management* in Singapore (Singapore MoF, 2013), and the *Infrastructure and Projects Authority* in the United Kingdom (UK IPA, 2020³).

³ IPA was transformed into National in 2024 Infrastructure and Service Transformation Authority (NISTA)

Some Sources of Knowledge

Global Standards

Public administration institutions often refer to global project management standards, such as *PRINCE2®* (PeopleCert, 2023) or the *PMBOK® Guide, 6th Edition* (PMI, 2017). This applies, among other things, to knowledge management processes.

Many UK institutions use *PRINCE2®* in their work. For example, the Northern Ireland Department of Finance (NI DoF, 2025a) refers to this methodology, which identifies multiple sources of knowledge from projects—for instance, during project reviews, implementation, or issue resolution meetings with stakeholders. The *Lessons Log* is one of the project management products, and lessons can be acquired as a result of virtually any project activity.

According to *PRINCE2®*, lessons learned databases should be continually reviewed. During project initiation, the goal is to identify situations similar to those anticipated in the current project. During project implementation, the database should be consulted to gain insight into possible management approaches. It is also important to consider whether activities in the current project could contribute to enhancing the organization's knowledge base. At project completion, the knowledge gained during implementation should be shared across the organization.

In the United States, the *ANSI Standard for Project Management*—published as a component of the *PMBOK® Guide, 6th Edition* and used by many public organizations—also places significant emphasis on knowledge management. One of its processes is *Manage Project Knowledge*, and one of its project closure outputs is the *Lessons Learned Register*. In the *7th Edition of the PMBOK® Guide* (PMI, 2023), which also includes the *Standard for Project Management*, there is no longer a standalone process for managing knowledge, as the focus has shifted toward the continuous acquisition and application of knowledge throughout the project lifecycle.

Audit Chambers

Audit offices are also engaged in knowledge management. Auditors gain valuable insights into project implementation methods and common mistakes. The *U.S. Government Accountability Office (GAO)* has established a panel of experts on public project management practices⁴.

The *UK National Audit Office (NAO)* contributes to improved project implementation by publishing findings from project audits. These findings (UK NAO, 2020) include ensuring projects are aligned with organizational strategic objectives, improving understanding of time and budget constraints, developing cost-saving plans, ensuring that dependencies between operational activities and other projects are managed effectively, and incorporating operational planning from the very beginning of the project.

Audit chamber reports describing public sector project implementation methods provide valuable knowledge about public project management that can be analyzed

⁴ The author was a member of this panel from 2014 to 2020.

further (e.g., Kwak et al., 2014). Based on knowledge gained during audits, audit chambers develop guidelines for managing public sector projects (e.g., U.S. GAO, 2016, 2019, 2020).

Reviews

The most common learning activities are *project reviews*—formal processes designed to analyze practices carried out during a project, with the goal of transforming them into lessons learned that can benefit future projects. A key element of these reviews is reflecting on what went wrong and what was implemented better than required by the current version of the methodology (e.g., NI DoF, 2025b; UK NISTA, 2025; Julian, 2008). The results of these reviews are passed to the organization's project knowledge manager for inclusion in the *Lessons Learned Register*.

NISTA also emphasizes the importance of *metaknowledge*—that is, knowledge among project team members about how to identify and use acquired knowledge. It also highlights that potential improvements should be identified even when they cannot be directly applied to the project currently under implementation.

Examples from Public Institutions

The *U.S. General Services Administration (GSA)* maintains a website dedicated to project management tools (U.S. GSA, 2025). It includes links to documents describing effective project management methods—such as methodological tools (e.g., a project manager checklist)—as well as websites showcasing completed projects. Because the use of these techniques is not mandatory for this type of project, the website should be regarded as a resource that promotes, rather than enforces, the application of project management knowledge.

The portals describe project management procedures separately for project managers, owners, sponsors, and project team members (Michigan MDTMB, 2013). Project Management Offices (PMOs) provide links to professional project management associations. The U.S. state of Virginia maintains an open portal containing best practices and project management knowledge (Virginia VITA, 2016). The *Indian Programme Evaluation Organization* conducts scientific program analyses (India Planning Commission, 2010). In India, external knowledge on program evaluation is also gathered by the *Development Monitoring and Evaluation Office (DMEO)* (India DMEO, 2025). Sharing document templates used in project management can also serve as an effective form of knowledge management (e.g., Tasmania DSS, 2021).

Summary

Every public project requires knowledge—both general, concerning fundamental project management processes, and specific, concerning the realities and regulations of public administration. The sources of this knowledge always lie in practice. Standards, methodologies, and other publications are developed based on practical

experience. Knowledge is also created from lessons learned during projects implemented within a given organization.

New knowledge must be identified, generated, and integrated into the organization's knowledge management processes. To ensure this work is not wasted, organizations should establish mechanisms that enable or require the use of this knowledge in future projects.

No element of knowledge generated within a project should be forgotten or lost. Every project activity—including those in the public sector—relies on the use of knowledge. Therefore, knowledge can be considered the most important resource of any organization. Knowledge management should be one of the key areas of focus for every organization—not only public ones.

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Dr. Stanisław Gasik, PMP is a project management expert. He graduated from the University of Warsaw, Poland, with M. Sc. in mathematics and Ph. D. in organization sciences (with a specialty in project management). Stanisław has over 30 years of experience in project management, consulting, teaching, and implementing PM organizational solutions. His professional and research interests include project knowledge management, portfolio management, and project management maturity. He is the author of the only holistic model of project knowledge management spanning from the individual to the global level.

Since 2013, his main professional focus has been on public projects. He was an expert in project management at the Governmental Accountability Office, an institution of the US Congress. He is the author of "[Projects, Government, and Public Policy](#)," a book that systematizes knowledge about government activities in the area of project management.

He was a significant contributor to PMI's PMBOK® Guide and PMI Standard for Program Management and contributed to other PMI standards. He has lectured at global PMI and IPMA congresses and other international conferences.

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