

Selecting the Right Program Management Information System Tool

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SYSTEMATICALLY ASSESS OPTIONS TO SELECT YOUR PMIS TOOL

Choosing a Program Management Information System (PMIS) based on tool features and costs sets the groundwork for a program that can enhance productivity, collaboration, and effectiveness of project management.

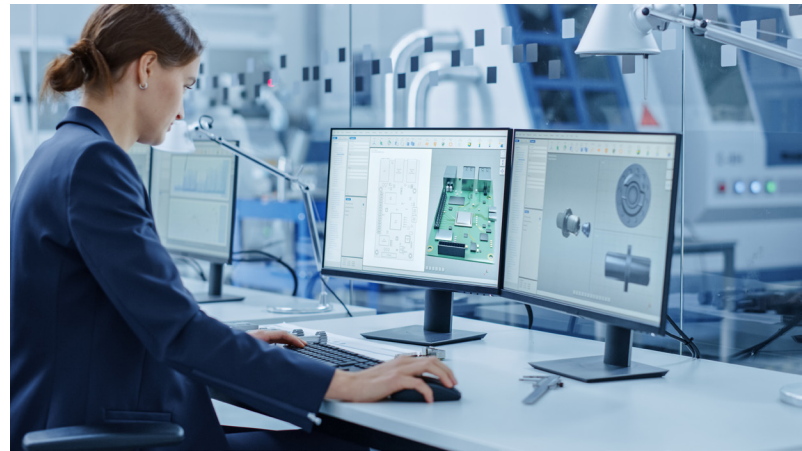
To begin, it helps to identify your drivers for a software solution, such as speed of implementation, total cost of ownership, level of customization, and integrations with existing tools and systems. This will help you narrow the field of PMIS solutions for your specific program.

To effectively navigate the array of PMIS options, recognize the categories of tools based on their core characteristics and suitability for different project needs. PMIS tools can be broadly divided into three categories: off-the-shelf, custom-built, and hybrid. Each category offers distinct advantages and considerations.

1. Off-the-Shelf PMIS Tools

Off-the-shelf tools are good for programs with standardized requirements where a proven, reliable solution is needed quickly. They are ideal for quick startups since they can be implemented without extensive integration to existing systems and are useful when there is an immediate need, such as a quick program start date or a short program duration.

Many off-the-shelf tools come with some standard application



programming interface, or API, options for basic integrations to additional software suites such as estimating, scheduling, or accounting. APIs help two programs or applications communicate. These built-in options allow a phased, agile implementation and a quick startup of off-the-shelf functions with the option or ability to add integrations later.

The key drivers for off-the-shelf tools include quick implementation, tested reliability, and a standardized approach to project information. If your selection process is focused on off-the-shelf options, consider standardized API integration options provided as part of licensing.

2. Custom-Built PMIS Tools

Custom-built tools are best for programs with unique requirements or heavy customization needs. They are essential when off-the-shelf solutions cannot meet most of your

requirements. The primary drivers for choosing custom-built tools include a high level of customization and flexibility, and the ability or requirement to integrate with existing systems. However, customization comes with challenges, such as significant time to build, test, deploy, and train employees.

Custom-built solutions need dedicated staff or support for ongoing technology and security updates in addition to improvements for evolving business needs. They require specialized knowledge of the organization, program, and integrations as well as technically specialized resources to build, test, deploy, and maintain the tool.

Review documentation of unique and customized requirements before exploring a customized tool. Consider the level of up front development time and cost and how that impacts your program start dates.

3. Hybrid PMIS Solutions

Hybrid Solutions combine off-the-shelf tools with some customization, making them suitable for complex programs requiring both standard functionalities and some customization to meet diverse project needs. The off-the-shelf component can be implemented quickly, providing a foundation of industry-proven technology and allowing immediate productivity while customization is developed.

Hybrid solutions can grow with your organization. Leveraging off-the-shelf tools for common functionalities lowers initial costs. As the budget allows, customizations can be added as needed. The off-the-shelf part provides a scalable base, while the custom components can be adjusted to meet evolving needs.

Hidden costs, like support and maintenance, can be costly with multiple customizations. If customizations impact the off-the-shelf tool, consider the level of support needed for maintenance and expertise needed for support.

NO-CODE AND LOW-CODE TECHNOLOGY

With both off-the-shelf and custom-built tools, the concept of no-code or low-code technology is increasingly used to streamline development and deployment, and reduce dependence on a specialized technical team. In off-the-shelf solutions, no-code or low-code functions are often seen in functions like workflow management to automate the document review and approval process.


PMIS TOTAL COST OF OWNERSHIP

It's essential to consider the total cost of ownership, or TCO, when selecting a PMIS. TCO includes the initial purchase price or licensing fee and long-term costs with implementation, training, maintenance, and support. TCO analysis helps in understanding the financial impact of adopting a particular PMIS over its entire lifecycle. One key driver for TCO is understanding if the PMIS is being used for a single program or across all projects at the enterprise level.

Off-the-shelf tools typically have lower upfront development costs and quicker implementation time, and the licensing or subscription will include standard maintenance, software updates, and technical support. However, licenses will require recurring costs unless the owner retires the software at the conclusion of the program, which requires data archiving.

Custom-built tools, while requiring significant initial investment and development time, often offer greater flexibility and tailored features that can result in lower long-term costs if well-aligned with the organization's needs. However, routine maintenance, updates, security checks, and patches require a dedicated team for ongoing software and technical support along with custom training, which add to the total cost.

Hybrid solutions aim to balance these aspects, potentially offering a more predictable and manageable TCO. The off-the-shelf tool includes ongoing security and maintenance, leaving only the customized changes requiring development costs and long-term support. By conducting a thorough TCO analysis, organizations can make more informed decisions that align with their budgetary constraints and long-term program goals.

Understanding the specific drivers for each type of tool – whether it's no-code, low-code, off-the-shelf, custom-built, or hybrid solutions – will guide you in making an informed decision. 



About the Author

Clarice Kinsella has served the architecture/engineering industry for over 20 years and has managed capital projects and programs in the power, mining, and industrial sectors.

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