Perspectives

Deloitte Flash for Construction

Strategies for digital transformation

Welcome to the Deloitte Flash for Construction—a quick read from Deloitte designed to provide you with insights into today's business issues related to construction. Our current Flash highlights considerations around preparing to implement a project management information system.

THE ISSUE:

As the world enters the age of AI and automation, organizations across multiple industries are realizing that implementing technology to manage their projects is no longer a luxury but rather an imperative. The construction industry, however, has been slow to evolve how it uses technology to enhance project delivery. But the combination of a surge in remote work during the COVID-19 pandemic and a generation of digital natives joining the workforce is helping to accelerate the breakdown of barriers to digital transformation in the construction industry.

Owners, developers, and contractors have gradually begun implementing, and realizing the benefits of, construction project management software. The benefits are numerous and include standardization of and transparency into business processes, more reliable data, and project management and controls governance. However, new tool adoption is fraught with pitfalls that can lead to unsuccessful implementations and result in potential cost overruns, delays, erosion of trust among project team members, continued and exacerbated inefficiencies because project team members are forced to use manual and duplicative processes, and missed opportunities to use data to make proactive project steering decisions.

Common issues affecting implementation success include:

- **Underestimating the effort required:** Planning and implementing a system requires investing time and resources into foundational work such as process mapping and workflow design, engaging stakeholders, process documentation, and training. If organizations do not account for the level of effort required, their implementation is likely to face challenges and may fail to deliver the expected benefits.
- **Unrealistic tool expectations:** Organizations may expect a new tool will solve all issues, such as process inefficiencies, role expectations and responsibilities, contractor compliance, and poor data quality. However, if the issues are rooted in organizational processes and behavior, the tool alone cannot address those issues, which may lead to potential implementation failure.
- **Tool requirements and capabilities mismatch:** Organizations may rush to select a tool without fully engaging user communities to identify tool requirements or validate tool capabilities, which can lead to increased resistance to using the tool and a higher level of effort to integrate the tool with existing systems such as contract, procurement, and document management systems, and the enterprise resource planning (ERP) system.
- **Budget and schedule slip:** If organizations are not prepared for implementation, the implementation process can require multiple design revisions resulting in schedule slip and cost increases.
- **Overlooking the importance of organizational change management:** If the requisite stakeholders are not identified, involved, or at least receiving steady communication throughout implementation, it can lead to at least two undesirable outcomes:
  - Processes that are designed in the system do not align with the other processes used by the organization because the requisite voices and input were not incorporated, potentially necessitating a redesign; and
  - The system is essentially designed in a silo and users may resist adoption due to being unaware of the system or having limited involvement throughout design and implementation.
- **Limited and poorly timed training:** System training and system go-live often happen months apart, resulting in confusion for users when they start using the software, leading to low user adoption and negative impacts to data quality. Additionally, organizations frequently train users on how to use the tool, but neglect to provide rationale for why processes need to be followed and the importance of using reliable data and populating data accurately.

INSIGHTS:

Prior to embarking on a project management tool implementation journey, organizations should analyze their current state and desired future state; develop a project management, controls, and data governance framework; and standardize policies and procedures. To accomplish this, organizations should:

- **Document current organizational control mechanisms:** Capture relevant processes, procedures, and policies in place throughout the organization.
- **Evaluate and analyze information:** Assess whether current control mechanisms are consistent and adopted throughout the organization. If not, identify and close gaps to standardize processes before a system is implemented.
- **Evaluate current data governance:** Assess whether business rules exist for capturing and managing data. Identify opportunities to cleanse and standardize data—for example, creating pre-defined lists instead of open text boxes, establishing document naming conventions, standardizing units of measure, and defining a uniform cost breakdown structure.
- **Define and document stakeholder roles and responsibilities:** Define the project delivery and management team roles and responsibilities and reporting structures to enable team alignment and accountability. Additionally, review the roles that vendors and contractors play within projects to avoid overlap with responsibilities of internal stakeholders.
- **Evaluate contract documents:** Update terms and conditions in standard contracts to align with the organization's procedures and to require vendors to use the organization's project management system as desired.
- **Analyze reports:** Assess reporting procedures and whether reporting is standardized across the organization. If not, understand the rationale for having different reporting formats or methods.
- **Assess previous technology implementations:** Review adoption levels and lessons learned for the organization regarding change management and training practices on past technology implementations.
- **Establish priorities:** Identify business and functional requirements of a project management system that are essential for the organization and align with the budget and desired schedule for the system implementation. For example, decide whether certain functionality is more important than the look and feel of the software, or whether configurability and flexibility are more important than "out of the box" functionality.
- **Plan to achieve the desired results:** Invest in dedicated resources and time for the project management tool selection and implementation project. Anticipate having resources to continue to provide technical support after go-live.

HOW DELOITTE CAN HELP:

Deloitte's Infrastructure & Capital Projects team leverages both industry and technology experience to help clients drive digital transformation and modernization for construction capital programs. Deloitte has extensive experience in developing governance frameworks, data structures, and foundations; developing and refining processes; and implementing project management tools.

Deloitte can assist with:

- **Strategic governance setup:** We help organizations develop governance frameworks to facilitate the alignment of organizational needs and the implementation of technology tools, including building tools able to evolve as organizations do.
- **Business process analysis and improvement:** We help organizations analyze processes to streamline workflows, reduce redundancies, and increase efficiency and quality of project execution and oversight.
- **Requirements gathering:** We assist organizations to define specific requirements that align with organizational goals, so that the tool selected and implemented is able to address both current and future needs.
- **Managing the implementation:** We assist organizations during implementation to help them align organizational needs and the configuration of the tool.
- **Project delivery/operations:** We assist organizations by providing staff augmentation and support as needed.
- **Hypercare and training:** We provide organizations with post-implementation support and training, including continuing to help with organizational change management and post-go-live support for issues that arise.
- **System enhancement:** We help organizations increase the benefit of their existing tools and systems, evaluating current-state ecosystems and environments to expand functionality and use.
- **Organizational change management:** We assist organizations to develop and implement change management processes that enable successful user adoption of the system.

For more information, please contact one of our leaders. We look forward to assisting you with these important issues.