IIS Platform Migrations:

A Primer for IIS and Immunization Programs

This primer provides an informational overview of the phases and activities involved in an immunization information system (IIS) migration as well as success factors for migrating to a new IIS platform.

Planning for and implementing a significant change in IIS technology, such as a migrating to a different IIS technology platform, is a complex and resource-intensive undertaking that can take several years. Programs looking to migrate platforms must continue to support their current system and users while also planning for and implementing significant changes in technology and workflows. Programs must assess whether the long-term benefits of an alternate IIS system or platform outweigh the costs associated with pursuing a migration.

Considerations for proceeding with a migration include the state of the current system (including stability and sustainability), factors creating an impetus for change, risks of not changing, viable options given jurisdictional or agency policies and standards, technical and operational readiness, and availability of funds to support a migration. For example, better meeting the IIS Functional Standards may be the driving factor to migrate to a new IIS platform. See **Considerations for Proceeding with an IIS Platform Migration** for more guidance on this critical deliberation.

Helpful hints

- **Bolded text** (as used above) throughout the primer indicates that the resource referenced is available elsewhere in the IIS Migration Toolkit.

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MIGRATION TOOLKIT
phii.org/migration-toolkit

The migration process

Programs pursuing an IIS migration should use project management and change management to ensure a coordinated and systematic approach to the process.

- **Project management** is a discipline focused on managing cost, schedule and sufficient resource allocation to ensure the achievement of project objectives.
- **Change management** is a discipline focused on the process, tools and techniques to manage the people side of change to achieve a business outcome.

Together, these complementary disciplines help meet/exceed project goals and mitigate risk. For example, project management provides the structure to complete the migration process and change management ensures that staff and stakeholders are on board with the change and readily adopt and use the new system.

A suggested approach for managing a migration process using project management and change management methodologies is presented in the **IIS Migration Project Management Framework**. The framework is built around the five industry-standard project management phases: 1) initiate, 2) plan, 3) execute, 4) monitor and control, and 5) close. The framework provides and reviews the primary objective, primary project outputs and exit criteria for each phase. The graphic on the cover page illustrates the framework, which proceeds sequentially from the "initiate" phase to the "close" phase, with the "execute" and "monitor and control" phases operating in an iterative mini-cycle within the process.

Critical success factors

Factors critical to the success of an IIS migration project include:

- Leadership support and engagement
- Sufficient operational readiness
- Effective project governance and project management
- Effective change management
- Clear requirements
- Strong, supportive and effective procurement
- Thorough testing

Leadership support and engagement

Leadership support and engagement is arguably the most critical factor as research reveals that most projects fail due to lack of executive sponsorship/leadership. An active and engaged executive project sponsor, as well as ongoing support of senior and mid-level leadership, is essential given the costs, risks, length of time and staffing resources required to make such a major transition in technology. Such leadership support should be obtained early in the process, during the Initiation phase, and could take the form of approving the business case, acquiring funding or additional staff resources, expediting approval processes, negotiating with various stakeholders involved in the process (including central IT), or other forms of timely support that can initiate and/or help keep the project on track.

Sufficient operational readiness

Operational readiness includes factors such as a strong business case, realistic expectations and timeframe, and dedicated funding and staff to support the migration effort.

Although IIS migrations are about making a significant change to IIS technology, the business case for the change should be clearly understood by all parties involved early on. The business case provides the value proposition for the project, answering the questions: What problem are we trying to solve? Why should we undertake this project? What are the risks of not migrating? Answering the question of what we are trying to solve or accomplish is a first step in understanding if the gains outweigh the costs and is critical in gaining leadership and stakeholder support for proceeding with the project.

Realistic expectations around the time needed to migrate to a new platform are also key, as the process can take multiple years to complete. A two-year timeline allows for approximately one year of preparatory, planning and procurement work and one year for the detailed migration execution and project close. Note, however, that this timeline assumes a best-case scenario with no unanticipated issues. Sufficient time to complete the process helps ensure avoiding risks inherent in skipping steps or compressing timelines.

Additionally, dedicated funding and staff to support the migration effort is needed given the work involved in acquiring and implementing a new system while supporting the existing system and workflows in parallel. Additional staff may help manage the day-to-day workload and/or support the migration-related activities. For example, programs may need to consider back-filling existing IIS staff to allow them time to focus their expertise on the migration efforts.

Effective project governance and project management

Project governance and project management provide accountability and structure to effectively move through the steps involved in migrating to a new IIS platform. Project governance provides the framework in which project decisions are made based on operational responsibilities. Project management is the day-to-day management and oversight of all tasks to proceed through each phase of the project: initiate, plan, execute, monitor and control, and close.

A dedicated project manager can help oversee all steps involved in this process and proactively plan for and manage the project scope, schedule, risks and costs. Project management also provides the structure for clear identification of roles and responsibilities among various partners involved in the migration efforts, such as program staff, central IT, procurement offices, vendor(s), etc.

Effective change management

Effective change management helps prepare stakeholders and staff for the process of migrating and the eventual transition to the new IIS platform. Attention to change management also helps individuals feel empowered throughout the process so they are ready and willing to “flip the switch” to adopt the new IIS system once it is implemented. Without attention to this critical success factor, stakeholders and staff can be resentful of and resistant to this significant transition.

Stakeholder analysis in the "initiate" phase of the project helps inform strategies around stakeholder engagement, communication and training on the new system—all of which contribute to effective change management. Both internal and external stakeholders should be considered. Communication with stakeholders early in the process is especially important to foster engagement, set expectations and prepare individuals for the migration. Routine, meaningful communications throughout this process also offer transparency and help build stakeholder trust in the process. The stakeholder analysis is also key to planning training efforts to ensure that internal and external users are adequately prepared to use the new system.

Clear requirements

Ultimately the technology changes being pursued need to support IIS Functional Standards, IPOM requirements, program business processes and any unique jurisdictional business requirements such as laws and organizational policies/standards. Thorough requirements documentation during the execution phase is critical to ensure that those bidding on a procurement solicitation clearly understand the business/program current and future needs, especially those related to unique jurisdictional laws or policies. Time spent on requirements documentation and prioritization of requirements will ensure that the solution or technology pursued will ultimately meet the needs of the IIS and immunization program, the department and other stakeholders.

Strong, supportive and effective procurement

No matter how good the plans and intentions are, procurement policies, schedules and activities can make or break a migration. This principle applies to procurement plans for products and services equally. It is important to understand the limitations and opportunities presented by the procurement unit and to develop strong collaboration with procurement representatives to ensure that program expectations about timetable, bidding and the overall procurement process are met.

Thorough testing

It is easy to underestimate the amount of time required for system testing; however, it is critical to allow for sufficient time to ensure that all requirements are met and that all functional areas of the IIS are operating as intended and expected. Testing also helps ensure that changes in one area do not inadvertently and negatively impact other areas. Testing also allows for program staff and selected stakeholders to build confidence in using the new platform in a controlled environment prior to supporting end users. While it may be tempting to shorten testing windows to make up for delays in other areas and help meet project schedules, this approach ultimately decreases the likelihood for success and can also erode stakeholder trust in the process.