ERP Migration: Using Data to Drive Success

Capturing realistic data about current processes supports an easier transition and high-impact improvements.

ore government business processes often run on enterprise resource planning (ERP) systems that are years or even decades old. These monolithic systems are usually siloed and fragmented. Vendor support for aging systems may be coming to an end, and IT staff with the programming skills and institutional knowledge to maintain them are reaching retirement age. Despite pressure to modernize these systems to deliver digital constituent services, enable remote work and streamline internal operations, state and local government leaders are often hesitant to undertake systems transformation initiatives.

"When I was in state and local government, the topic of risk always came up in any conversation about upgrading, modernizing or replacing a legacy ERP system," says Bill Rials, a senior fellow at the Center for Digital Government and a former technology leader in several Mississippi state agencies. "There was a sense of, don't poke the bear too much because no one really even knows or understands what it does, how it works or how to fix it."

Even when agencies do want to modernize, it can be difficult to get reliable data on the performance and efficiency of their legacy ERP systems. In many cases, that results in a strong bias to simply move entrenched processes "as is." Without complete, accurate and objective data insights, organizations risk squandering time, money and the public's trust.

To make data-based decisions about migration and reduce risk, forward-looking state and local governments are adopting process mining solutions to analyze core business systems such as finance and procurement, human capital management, customer relationship management, IT services management and supplier management. Process mining reduces the risks of major ERP migrations and system transformations by automatically leveraging existing data to provide valuable insights and context on processes across the ERP system. Using process mining, organizations can carry forward needed processes with minimal disruption, while also improving them. They can also significantly reduce the hours and resources spent on manually performing these tasks.

Why focusing on processes is essential for managing risk

While many system transformation planners focus on keeping migration projects on time and on budget, they may overlook the importance of defining the actual business outcomes they want to achieve. Objective, measurable outcomes help minimize risk by clarifying where the organization is now with its business processes, where it wants to go, what it needs to do to achieve desired outcomes and whether it's meeting incremental goals along the way. Establishing outcomes helps organizations go beyond simply replicating current state processes to actually improve and innovate better ways of doing things.

Whether migrating an ERP system or starting with a new implementation, it's vital to fully understand the current business processes and system landscape to identify goals and achieve outcomes. It's also important to have a vision for how processes should be structured and optimized in the future, to help identify the path to implementation in the new system. Failing to consider process optimization can result in a longer and more complex ERP migration effort. It may also be more difficult

to realize the desired business and operational benefits from the new system.

A focus on process and outcomes is essential. But traditional process mapping — manually analyzing a large number of complex business processes across the enterprise — is extremely time consuming and costly. It often requires multiple workshops and significant staff resources from business and IT teams. It's easy for these sessions to devolve into documenting the ideal process rather than what's actually happening. In many cases, project teams end up with thousands of pages of subjective, incomplete and quickly outdated information that is too dense and complicated to enable a deep understanding of processes.

How process mining works

Process mining eliminates the drawbacks of manual review by automating data collection from event logs and currentstate systems to create a living, unified, end-to-end model of ERP processes. Leveraging artificial intelligence and machine learning, it compiles data objectively, with the context needed to make sound, data-informed decisions. Organizations can see where they need to focus and automatically discover and fix problems that are difficult – if not impossible – to see when using manual processes.

This pre-migration investigation is a critical starting point for any transformation effort and is especially effective for highvolume core processes such as finance, procurement and human capital management, as well as high-transaction constituent services such as billing and licensing.

Using process mining to guide every phase of migration planning

Organizations can accelerate ERP migration, reduce risk and maximize value throughout the transformation process by using process mining to guide every phase of migration.

Pre-migration. This pillar focuses on preparing for migration. It includes assessing legacy processes, surfacing opportunities for process improvement, establishing goals and outcomes, identifying unique requirements and evaluating how well any proposed new system meets the organization's requirements. Key process mining activities during pre-migration include standardizing and harmonizing processes, building a quantitative business case and simulating the business impact of transformation.

During migration. It's crucial to ensure data integrity, governance and management as data is migrated to the new system. Instead of manually handling errors and other issues one by one, organizations can use a single interface to automatically manage all their data in real time. Key process mining activities during migration include automating process documentation; executing an ongoing, objective fit-gap analysis; and understanding the level and value of current system customization.





Easier ERP Migration Checklist

- Gain an objective fit-gap analysis of current processes to identify improvements needed before transferring to the new system.
- Accelerate process preparation for ERP migration.
- Normalize and improve quality of system data.
- Identify opportunities to standardize and improve processes before migration, reducing risk and supporting faster time-to-value from the new system.
- Continue to improve and evolve business processes through ongoing monitoring of performance and user behavior.

Post-migration. Change management helps ensure an organization achieves the vision and outcomes it identified in the pre-migration phase. Prior to implementing process mining, an organization might handle this phase by sending out surveys to gauge user adoption and satisfaction with the system migration. Process mining provides a real-time view and an ongoing comparison of pre- and post-migration data so organizations can objectively evaluate progress. Key process mining activities post migration include measuring business performance, monitoring user adoption and building the foundation for continuous business improvement.

Process mining provides the transparency and context needed to reduce risk, make strong investment decisions, and help ensure successful migration and transformation of ERP and other large, complex systems. While modern systems can open the door to new opportunities, they are only as good as the business processes that drive them. The key to successful transformation is using objective insights gained from process mining to shape business processes around modern systems instead of trying to fit new systems around processes that are outdated, inefficient or no longer relevant.



Celonis helps organizations reveal and fix hidden inefficiencies. Powered by its market-leading process mining technology, the Celonis Execution Management System (EMS) x-rays a company's entire business operation to show, in real time, how the business really works then acts as a brain, orchestrating across systems, processes and people to fix inefficiencies silently killing performance.

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