WHAT IT TAKES TO CREATE ERP INTEGRATION STRATEGY SUCCESS

Companies are using more standalone systems, yet users are demanding better technology experiences. Bridging this chasm requires a solid integration strategy.

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As companies use an ever-increasing number of standalone systems, an effective integration strategy has never been more important.

CIOs have a number of routes they can take and issues they must consider. Here are some.

Building a better bakery
Inter-County Bakery Supply, a wholesaler in Deer Park, N.Y., needed more efficiency than solely what its legacy ERP offered. The company needed a better way to integrate data across a variety of cloud applications, mobile users and analytics applications. Rather than invest more money in adding integrations to their existing ERP, they migrated their business processes to a collection of ERP applications from ERP vendor VAI.

"After implementing VAI's ERP solution and integrating the various applications we wanted, such as analytics and mobile, we received that real-time look at our operations," said Anthony Lotito, COO at Inter-County Bakery Supply.

Inter-County Bakery Supply leadership wanted to offer its sales reps easier ways to customize orders that could be built from more than 3,500 elements. These include perishable ingredients, and various types of fully or partially prepared items. Each type of ingredient also included a complex process for tracking its status across the supply and distribution chain.

VAI's compelling proposition was that it was created for the food industry, Lotito said. It featured integrations for the types of processes that Inter-County Bakery Supply was trying to streamline, such as the ability to

manage inventory and gain real-time insights into purchase order history and trends. VAI features a straightforward way to add integrations for track-and trace-capabilities, warehouse visibility and forecasting. The core VAI platform also provides various integrations for common third-party applications, such as marketing automation, Electronic Data Interchange, document imaging and tax software.

Distributing ERP functionality
Many enterprises are moving away from consolidated ERP systems to collections of targeted cloud modules that offer ERP functionality.

"Institutions are increasingly drifting away from the historical default of buying a single vendor ecosystem to address their wall-to-wall application needs, and instead favoring a basket of point

solutions that best meet individual departmental needs that can integrate into a core ERP," said John Harrison, managing director at Protiviti, an IT consultancy based in Menlo Park, Calif.

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This trend is driven by non-IT departmental buyers subscribing to SaaS offerings that only meet their needs before consulting with IT. Business managers later realize that these narrow applications also need data from other sources within the institution or need to send data to other systems.

"One of the main challenges to this proliferation of different systems is in connecting them in an effective and economic manner," Harrison said.

A big challenge is that the number of point-to-point connections grows exponentially rather than linearly as new applications are added, he said. As a result, enterprises struggle with meeting business expectations to delivering new integrations with reliability, accuracy and speed.

Building a connected portfolio

Building an ERP integration strategy requires taking stock of the technology ecosystem.

Managers should adopt a connected portfolio mindset to address the ERP integration strategy challenges, Harrison said. This involves ensuring that the application selection process includes due diligence related to the compatibility and default connectors to your current ERP and other connected systems. A fallback alternative is to determine if the product has a robust set of APIs or development kits that allow interfaces to be built efficiently.

Another approach is to invest in integration platform-as-a-service (iPaaS) offerings such as Dell Boomi or MuleSoft Anypoint, he said. These offer the ability to connect various applications and data sources in a consistent and controlled manner. These typically bring functionality to monitor and manage data flows, as well as offering a set of starting templates for popular applications with extensibility to other open systems. The IT department can help ensure this kind of back end aligns with the enterprise's data management strategy in terms of shared repositories, and a common data architecture that allows a consistent interpretation of data as it flows through various systems.

"A burden that is often underestimated is ongoing maintenance of these integrations," Harrison said.

This is exacerbated with regular updates to cloud applications, small changes in data structures and new versions of APIs, he said. Enterprises should be proactive in monitoring release notes for these types of changes. QA teams should also develop a library of regression tests for important end-to-end scenarios. They should also consider test automation that can identify any impacts of these changes before they create a bigger problem.

Do a strategic analysis
A key part of any ERP integration strategy is making a detailed inventory of the current systems.

Be sure to do an analysis to determine what strategy you'll need to streamline the integration process, said Tim Christ, managing partner for LeadFire Business Consulting, based in San Antonio, Texas.

"Many legacy systems don't support easy integration, but some do, so it really is a case-by-case basis," he said.

Then managers need to evaluate

how these systems integrate, he said. Important questions to ask include the following:

Is it read-only, or read and write?

If conflicts arise, which version wins?

In general, moving to the cloud can help simplify this process, he said.

In contrast, on-premises ERP applications are written in code specific to the application, he said. Consequently, enterprise developers either have to edit the source code, or buy middleware that will sits between the on-premises software and the other apps they want to integrate to.

Cloud services can also help streamline processes built on various tools that have been cobbled together, Christ said. For example, one San Antonio company with offices across the country took three weeks to pull data together from remote locations in order to run their books, he said. This involved pulling data from an older CRM, a point-of-sale system, an antiquated financial system and a lot of spreadsheets. The company implemented a new process on top of Salesforce, Sage Intacct and a point-of-sale application from the Intacct marketplace.

"Integrations in the cloud are much easier, because all the technology has the same foundation and there is an application layer built into the software that allows developers to connect various software systems together," Christ said.