Accelerated digital transformation is under way at enterprises worldwide. As Microsoft CEO Satya Nadella noted early in the pandemic, “We’ve seen two years’ worth of digital transformation in two months.”

It’s clear that the global pandemic merely sped up shifts already in progress. And, as Accenture highlights in its “Technology Vision 2021” report, 90% of the executives surveyed believe that the agility and resilience needed for success depend on fast-forwarding digital transformation.

In that context, integrating data from multiple systems into enterprise resource planning (ERP) software has emerged as a top priority for IT and supply chain decision-makers. That’s because data is the fuel that powers digital transformation. More than three-quarters (79%) of the enterprises surveyed by IDG on behalf of OpenText said ERP integration is a top priority.

However, the survey also revealed that businesses are experiencing significant ERP integration challenges, including broken connectivity between systems, talent and skill shortages, and constrained budgets, among other issues. “We don’t have enough [in-house] experience,” one IDG survey respondent said, speaking for the 39% of his peers who face workforce and skill gaps.

Although the IDG and OpenText survey results highlight the difficulties posed by ERP modernization, they also point the way to solutions.
The Challenge of ERP Integration

As organizations modernize their IT systems, they increasingly turn away from large, all-encompassing ERP solutions and instead turn to constellations of best-of-breed solutions providing specific functions (typically in the cloud), says Ville Parkkinen, senior manager of product marketing at OpenText.

"Obviously, that gives you great flexibility, because you can pick and choose applications as they best fit your business," Parkkinen says. "But that also creates an integration challenge, because you're dealing with individual applications that are not designed to work together—unlike the legacy ERP suites that have a more modular design."

Consequently, organizations often find themselves juggling diverse integration endpoints, including multiple ERP solutions, both on-premises and in various clouds, Parkkinen says.

Adding to the complexity: forced migrations as platforms upgrade. For example, SAP's on-premises ERP environment, ECC, has supported global manufacturing operations for many years. However, SAP will retire ECC in 2027, requiring customers to migrate to an alternative such as SAP's S/4HANA.

Parkkinen says the multitude of ERP solutions reflects a deeper problem: the need to connect data across numerous increasingly diverse systems. An API-driven economy that includes Internet of Things (IoT) and other data adds to the deluge of information organizations use. At the same time, according to Parkkinen, digital transformation drives greater automation. "When you make a change in, for example, your CRM system, you expect that data to be automatically synchronized into your ERP system, instead of someone having to manually key that in."

Data Sources: Growing Internally and Externally

IDG survey respondents report the following sources of data for their ERP systems:

- 68% CRM Systems
- 66% HR Systems
- 66% Applications used by partners
- 62% IT service management systems

More than half of the respondents reported having ERP integrations with supply chain management systems (57%), warehouse management systems (54%), e-commerce (53%), and transportation management systems (53%). Financial and accounting systems weren't far behind, reported by 43% of the organizations.

As if that variety of internal data sources didn't present enough challenges, 44% of the transactional data feeding ERP solutions comes from outside the organization. In other words, it originates in external systems managed by suppliers, customers, logistics providers, and partners. For example, 21% of the respondents reported integrations with banking institutions.

This means that connectivity with external stakeholders is critical to ensuring that external data reaches internal ERP systems. Even with reliable connections, however, much external data needs correcting before the organization can use it. As one survey respondent said, "[We have] wide-ranging compatibility issues in data streams and considerable coding required to achieve full integration."

44% of transactional data feeding ERP systems originates outside the organization.
ERP MODERNIZATION AND GROWING DATA CHALLENGES

Against this backdrop, integrating and managing data across multiple sources still presents challenges, even with a single consolidated ERP system. Adding to the headaches is the ongoing accelerated modernization of legacy systems, each of which may present unique integration challenges.

Overall, ERP integration solutions are falling down on the job, according to the survey. Most respondents (63%) reported ERP connectivity losses due to integration issues. The percentage jumps to 76% for organizations that don’t use a centralized platform for the majority of their integrations.

48% of IT and supply chain leaders said lack of integration expertise inhibits ERP integration.

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Solving the ERP Integration Challenge

Companies using a centralized integration platform for most data integration tasks experience connectivity issues at the lowest rate (44% of the respondents), according to the IDG survey. That’s because ad hoc, home-brewed solutions typically provide spotty coverage and lack proper governance, according to Parkkinen.

“You have an option of doing integration in a crude way, by just writing code,” he says. “If, let’s say, I write code to synchronize the data from an ERP system to the CRM, I may get that to work. But I have no way of monitoring if the connection is working; if there is an error in the process, there’s no notification that things went wrong.”

That visibility is the reason Parkkinen calls governance the most critical part of a centralized data integration platform. Yet, only 33% of the respondents are using a centralized platform for most data integration. Instead, 59% use a mix of tools, even those with a centralized solution in place. And 8% have no centralized platform at all.

What’s preventing ERP data integration? Respondents cited skills gaps and competing priorities.

- 48% Lack of integration expertise is a top inhibitor of ERP integration
- 47% Competing priorities also contribute to delays

As one survey respondent said about his organization’s primary data integration challenge, “The technical expertise needed is not available in-house.”

91% of enterprises plan to modernize or adopt new solutions for ERP integration.

For example, a vendor can help organizations define the optimal integration pattern and number of times to update data per day. That should result in cost savings, since aggressive updates without valid business reasons add unnecessary cost, according to Parkkinen.

Enterprises Look to the Future of ERP Integration

Along with challenges, however, the IDG survey results also point to possible solutions. All enterprises surveyed are planning to modernize their ERP solutions, and cloud and on-premises solutions get nearly equal attention. (See Fig. 2)

- 54% Will update on-premises solutions
- 56% Will move an on-premises solution to the cloud
- 31% Recently upgraded to a cloud ERP solution
- 20% Plan to update a cloud ERP solution
- 16% Recently updated an on-premises ERP solution

Overall, 91% of the surveyed enterprises plan to modernize or adopt new integration solutions. Organizations also know that any solutions they adopt must allow room to grow. As one survey respondent said, “The integration environment should work seamlessly in the future with new software.”

Third-party integration partners can help on multiple levels. In addition to picking up the slack at overburdened IT organizations, these vendors offer other essential benefits, Parkkinen says. “With all the different approaches to designing an integration, a vendor who knows what they’re doing can bring you the best design for a specific business use case.”
Furthermore, the way companies engage with vendors is also important. “A managed service can be a great cost-saving mechanism, because you pay for people only when they’re working for you,” Parkkinen adds.

**The Bottom Line**

The IDG research highlights how companies must work to improve integration between ERP platforms and business ecosystems. Leveraging a third-party integration provider can help plug the resource and skills gaps and ensure that downstream enterprise processes get the timely and accurate information they need to help the business thrive.

Learn how a centralized ERP data integration solution can meet the challenges of modern ERP integration at BusinessNetwork.OpenText.com

**About the Survey**

IDG surveyed IT and supply chain leaders in North America and the U.K. in December 2020 and January 2021. The goal: to determine how enterprise organizations are undertaking integration between their ERP platforms and the rest of their business IT systems.

The respondents worked in an IT executive or supply chain management role at organizations with 1,000 or more employees. Sixty people responded from North America, and 40 responded from the U.K., for a total of 100 respondents.

The automotive/manufacturing/industrial sector had the largest representation, with 23 respondents. Other verticals included financial services (16); retail (15); healthcare, excluding pharma (9); and business services (7).

**Regional Differences: North America vs U.K.**

The survey revealed significant differences between North America and the U.K. in key areas.

**Prevalence of on-premises versus cloud ERP deployments**

More respondents in North America (95%) than in the U.K. (53%) manage on-premises ERP systems.

Among the North American respondents, 88% manage ERPs in the public cloud, versus 45% in the U.K. Conversely, more respondents in the U.K. (55%) manage ERPs in private clouds than in North America (38%).

**ERP modernization plans**

Although all respondents plan to modernize their ERP systems, the survey reflected regional differences in the types of systems they plan to upgrade.

Only 7% of the North American respondents plan to update cloud ERP solutions, versus 40% of the respondents in the U.K. Conversely, 70% of the respondents in North America plan to update on-premises ERP systems, versus 30% of the U.K. respondents.

Reflecting resource and cost constraints, many enterprises (40%) look to outside vendors to help with ERP integration. The figure is greater in the U.S. (45%) than in the U.K. (31%).

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**Fig. 2 Plans to Modernize ERP**

<table>
<thead>
<tr>
<th>By Region:</th>
<th>NA</th>
<th>EMEA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>20%</strong> We plan to update a cloud ERP solution</td>
<td>7%</td>
<td>40%</td>
</tr>
<tr>
<td><strong>56%</strong> We plan to move an on-premises ERP solution to the cloud</td>
<td>68%</td>
<td>38%</td>
</tr>
<tr>
<td><strong>54%</strong> We plan to update an on-premises ERP solution</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td><strong>31%</strong> We recently updated a cloud ERP solution</td>
<td>25%</td>
<td>40%</td>
</tr>
<tr>
<td><strong>16%</strong> We recently updated an on-premises ERP solution</td>
<td>17%</td>
<td>15%</td>
</tr>
<tr>
<td><strong>16%</strong> We plan to consolidate multiple ERP providers onto a single ERP provider</td>
<td>15%</td>
<td>18%</td>
</tr>
<tr>
<td><strong>5%</strong> We plan to consolidate multiple ERP instances onto a single instance</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td><strong>0%</strong> We have no plans to modernize our ERP</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
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SOURCE: IDG