opentext™

WHITE PAPER

Integration as a strategic enabler for ERP modernization

Contents

Executive summary

Companies have spent plenty of time and money implementing enterprise resource planning (ERP) solutions to automate specific business processes, such as finance, purchasing, inventory management and operations. This has had a positive impact on business performance, but the monolithic design of traditional ERP systems, as well as the heavy customizations required to meet organizations' specific needs have made the systems inflexible. As the demands around digital transformation of business processes increase, this is becoming a major challenge.

It is then no surprise that ERP systems are now evolving rapidly. Best-of-breed cloud applications are replacing the different modules of legacy ERP systems as users demand seamless "anytime, anywhere" access to data and functionalities that optimally support their business processes. Using a collection of independently designed cloud applications instead of a single, modular ERP suite provides flexibility, but also makes integration between the different applications extremely important.

Adding to the complexity of ERP integration, modern supply chains require increasingly deeper collaboration across entire ecosystems of buyers, suppliers, logistics providers and other parties, which relies heavily on automated data exchange between the organization's ERP and external partner systems.

Along with these considerations, today's dynamic and uncertain economic conditions require resilient and agile business models and work practices. According to the American SAP User Group (ASUG), ERP integration holds the key to a successful response for organizations worldwide: "Companies shouldn't expect old ways of getting work done to be relevant for today's business environment… prioritizing integration across all applications and data sources, whether on-premises, in the cloud, or across both landscapes, makes a case for reinvention and bold action clearer for companies worldwide."[1]

This paper examines the pivotal role that integration plays when transitioning to a modern ERP environment.data services, provide the foundation for predictive maintenance systems, enhanced safety and security features and a new era of personalization.

1 ASUG, The role of integration in turning an ERP cloud migration into true business transformation. (September 2021).

Defining the modern ERP

For a decade now, industry experts have announced the death of the monolithic ERP.[2] Over that time, the move has accelerated from massive, modular, on-premises ERP suites towards a collection of best-of-breed cloud applications designed to address specific ERP functionalities. Today, organizations can increasingly select their applications from a broad range of options to best meet their business and operational requirements.

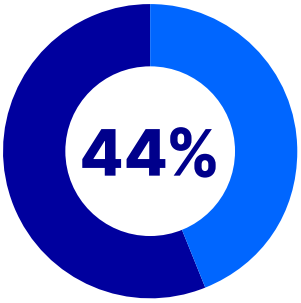
The modern ERP can be characterized as a collection of mostly cloud-based applications that use modernized code and APIs to deliver always-on capabilities to users anywhere, anytime. The industry is witnessing major players, such as SAP, Oracle and Microsoft, re-inventing their enterprise suites and delivering ranges of cloud-based ERP solutions. But this ERP re-definition is also providing space for smaller, nimbler cloud-native ERP providers to offer innovation and industry-specific applications. An organization can literally pick and choose the ERP environment it wants to create.

However, the last decade has also involved a great deal of digital transformation. Organizations haven't just used digital systems to replace paper-based processes but also implemented disruptive digital technologies to re-imagine their business models and strategies. These digital transformation initiatives call for connecting to and leveraging new forms of data from more source systems and applications than ever before—many of which have to work seamlessly with the ERP at the heart of the business.

Given the dynamic and complex nature of this environment, the scale of the integration challenge becomes clear. To gain full benefit from ERP and digital investments, organizations need seamless integration to enable effective information flows across business applications and their extended partner ecosystem.

Transitioning to the cloud has many benefits but after years of incrementally enhancing legacy ERP systems with third-party and homegrown applications, databases, point solutions and add-ons, enterprises are discovering the compound cost of running such a massive landscape and the difficulty of migrating to a new system. This can take a significant amount of time, and particularly large organizations may need to manage a mix of modern and legacy solutions in parallel for a long period of time while systematically driving modernization across the enterprise.

2 SAP, Monolithic ERP is dead. Long live post-modern ERP. (November 2014)



44% of the transactional data in ERPs comes from outside the organization.[5]

Highlighting the magnitude of the challenge, Deloitte has estimated that up to 75 percent of ERP projects fail in some respect.[3] Other estimates place the failure rate of broader digital transformation initiatives even higher at 80 percent.[4]

Key capabilities of a modern ERP

- **Cloud-based:** ERPs from the traditional vendors, such as SAP, are increasingly deployed in the cloud and new cloud-native ERP solutions are gaining popularity.
- **Mobile-ready:** Modern ERPs support mobile access and productivity as more organizations work remotely.
- **Flexible:** ERP capabilities are increasingly delivered as collections of discrete applications focusing on specific business functions or areas. This can include specific industries, such as manufacturing or finance, or a specific business process, such as customer experience.
- **Scalable:** ERP is no longer the reserve of the large enterprise but is available for small and mid-sized companies with the ability to easily scale the solution in alignment with business growth.
- **Centralized:** In connection with ERP modernization, many organizations are consolidating their ERPs from various regional or BU instances onto centralized, global instances.
- **Secure:** Cloud-based ERPs offer robust security features, from encryption to endpoint security to leading edge identity and access management.

The pivotal role of ERP integration

The shift from modular ERP systems to collections of best-of-breed cloud applications places more focus on ERP integration, which is needed for synchronizing data and automating processes between the ERP and other applications and data sources. The challenge is that integration requirements come in many shapes and sizes.

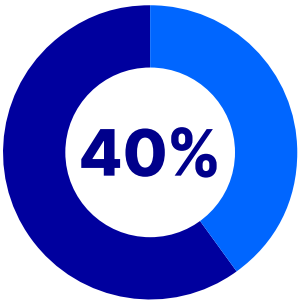
For common, repeatable use cases, it is often easy to find pre-configured integration solutions that are easy to deploy. However, system customizations, advanced processing rules and niche or bespoke applications often make integrations difficult to configure, support and maintain.

External integrations with suppliers, customers and other business partners add further complexity, as they require coordination of activities between discrete organizations, all of whom have their own individually configured systems, preferences, and ways of working. With 44 percent of the transactional data in ERPs coming from external sources[5], efficiently managing this complexity is crucial for operating a modern business.

3 Deloitte, Your guide to a successful ERP journey. (2019)

4 Cio.com, Here's why 80% of digital transformation projects fail. (March 2020)

5 IDG MarketPulse, ERP Modernization and Growing Data Challenges Drive 91% of Enterprises to Modernize



40% of ERP implementations underachieve as a result of underinvestment in integration.[7]

As ERP systems become more fragmented, it's virtually impossible to digitize and automate key business processes and workflows without integration, as many tasks would have to be done manually, leading to high levels of inefficiency, errors, cost and risk. Highlighting the critical role of integration overall, in a survey by Forrester, almost 95 percent of respondents stated that operational and technical challenges with their integration strategy result in serious business repercussions, such as losing revenue, losing customers to competitors and having difficulty optimizing processes.[6]

Integration also plays a key role in transitioning to modern ERP systems. According to Gartner, 40 percent of ERP implementations underachieve specifically as a result of underinvestment in integration.7 Integration is also often cited as one of the major factors hindering overall digital transformation success.[8]

As integration plays an increasingly important role in an organization's ERP strategy, implementing a modern ERP system, such as SAP S/4HANA®, often acts as a catalyst to also modernize its integration capabilities.

5 integration focus areas for successful ERP modernization

In terms of integration, organizations should focus on these five areas when modernizing their ERP systems:

Minimizing risk and disruption

ERP migrations typically involve significant risks for organizations. The average cost of a greenfield migration to SAP S/4HANA including operation over seven years is around $24 million US9 but large organizations can easily spend much more on their ERP transformations. In addition to the high cost, ERP projects are often complex to manage, require collaboration across various stakeholders and take several years to complete.

With so much at stake, ensuring the minimum level of business disruption possible during the transition is essential. Almost 80 percent of SAP customers state managing disruption to business operations as a key requirement for their ERP migration.[10]

Minimal business disruption is the No. 1 requirement for companies implementing SAP S/4HANA.10

Still, more than half of all companies report operational disruption when they go live.[11] When applied from the start, a strategic approach to integration can significantly reduce the likelihood and impact of disruptions through careful requirements gathering and comprehensive testing.

6 Forrester, Digital businesses demand agile integration. (2019)

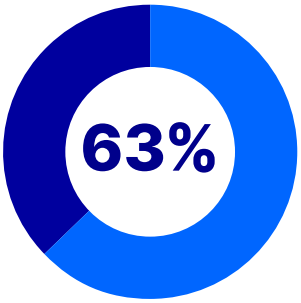
7 Gartner, Magic Quadrant for Cloud ERP for Product-Centric Enterprise. (June 2020) GARTNER is a registered trademark and service mark of Gartner, Inc. and/or its affiliates in the U.S. and internationally and is used herein with permission. All rights reserved.

8 RT Insights, Poor integration hinders digital transformation success. (March 2022)

9 Business IT, Should you say no to SAP S/4 and HANA? (April 2021)

10 SAPinsider, SAP S/4HANA migration benchmark report. (May 2022)

11 Third Stage Consulting, 2020 ERP and HCM report. (2020)



63% of companies have experienced ERP connectivity loss due to integration issues.[13]

Minimizing ERP customization

Over the years, ERP implementations have been greatly customized to meet specific business needs. The American SAP user group (ASUG) found that 91 percent of its members use customized code.[12] Customizations can be difficult to maintain and often complex to handle during modernization. For example, another recent study of SAP users found that 92 percent felt existing customizations were problematic to their migration to SAP S/4HANA.[13]

Customization goes against the overall principles around cloud applications, which means that organizations transitioning to a cloud-based ERP solution should look to minimize custom code and features when designing and deploying a new ERP. Instead, the desired functionalities and logic should be handled mostly outside the ERP.

This can be done in separate, bespoke applications but modern integration solutions can also support advanced logic for adding business rules, data validation or other processing steps where it makes sense to meet specific requirements.

Avoiding project delay and budget overrun

Project delays are costly and produce knock-on effects for business strategy. Experience suggests that ERP implementations can cost three to four times their original budgets and can take up to 30 percent longer than expected to deliver.[14]

A robust integration strategy can help minimize the chances of costly delays for ERP projects through detailed insights and planning. One of the key aspects of this is ensuring sufficient resourcing throughout the project, which is easily overlooked if integration is not treated as a strategic consideration early in the ERP project.

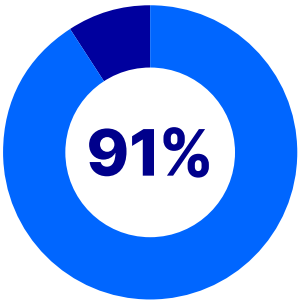
Avoiding creation of integration “spaghetti”

As organizations digitally transform their business and modernize their ERP strategies, they are faced with a proliferation of enterprise applications and systems. According to different estimates, the average number of applications used by an organization ranges from slightly less than 200 to almost 1,000, and the numbers are growing.[15]

Not all of these applications need to be integrated, of course, but the growing complexity of the enterprise application landscape does reflect on ERP integration. A survey by IDG found that 63 percent of companies have experienced ERP connectivity losses due to integration issues16 and many organizations feel their current tools are not sufficient for meeting all of their needs.

The challenges can, at least in part, be attributed to an integration strategy where multiple tools and platforms with overlapping capabilities are leveraged without centralized governance. The same IDG survey also found that only 33 percent of respondents are using a centralized platform for most integrations, whereas 59 percent used a mix of tools and eight percent had no centralized platform at all.[17]

12 Forbes, What does modernization mean to CIOs? (February 2022)
13 Computer Weekly, UKISUG 2021: S/4 Hana skills deficit and legacy custom code hamper migration. (November 2021)
14 Oracle, 50 Critical ERP Statistics: 2020 Market Trends, Data and Analysis. (May 2021)
15 Elastica.io, 12 New Application Integration Statistics and Trends for 2022. (2022)
16 IDG MarketPulse, ERP Modernization and Growing Data Challenges Drive 91% of Enterprises to Modernize Integration Solutions. (2021)
17 ibid



91% of organizations are looking for new solutions to integrate their ERP.[20]

Over the years, ERP implementations have been greatly customized to meet Unifying the organization's integration strategy and consolidating integration technologies where possible help to improve governance, increase efficiency and gain better visibility into operations. ERP migrations offer a great opportunity for doing this.

Addressing the skills challenge

Integration of ERP and other applications or external systems often requires specialist skills that may not be available internally, especially for organizations looking to modernize their integration capabilities at the same time as their ERP solution.

For many organizations, shortage of integration skills is one of the biggest challenges during ERP modernization. According to IDG research, 86 percent of organizations have experienced delays with ERP integration, with lack of integration expertise reported as the No. 1 reason.[18]

Lack of integration expertise is the No. 1 reason behind ERP integration project delays.[18]

Securing the right integration skills is therefore essential for successful ERP migrations, particularly since ERP projects are already suffering from lack of skilled staff across the board. For example, research by ASUG indicates that a quarter of SAP S/4HANA projects have been delayed due to skills shortages, with some put on hold as a result.[19]

The future of ERP integration

As integration needs increase, so does their variety. There is an increasing need for simple integration tasks, which can be performed by business users using a new generation of self-service integration tools. At the same time, the need for complex integration—involving capabilities such as calls to several applications on a single flow, performing advanced data transformations and configuring different types of business logic and rules—is also increasing and is critical to optimizing digital business processes. With 91 percent of organizations looking for new solutions to integrate their ERP[20], the need for modernizing integration solutions seems apparent.

Enterprises need to create a future-proof integration strategy to meet current needs while allowing scalability as their requirements evolve. This calls for careful selection of integration partners and solution providers, as well as extensive coordination across the enterprise. For most organizations it also means taking stock of their existing integration solutions and devising a roadmap that helps develop the required capabilities while systematically navigating the transition in line with the organization's overall digital transformation goals.

18 IDG MarketPulse, ERP Modernization and Growing Data Challenges Drive 91% of Enterprises to Modernize Integration Solutions. (2021)
19 The Register, Skills shortages put SAP projects on hold. (February 2022)
20 IDG MarketPulse, ERP Modernization and Growing Data Challenges Drive 91% of Enterprises to Modernize Integration Solutions. (2021)

Resources

Read more about ERP integration ›

Related solutions

OpenText™ B2B Integration Enterprise ›

OpenText™ B2B Integration Foundation ›

OpenText integration solutions

OpenText™ Business Network integration solutions help companies transform and future-proof their integration environments by leveraging a scalable and secure platform that allows connecting any integration endpoints—whether internal applications or external trading partner systems—and orchestrating data flows between them in an intelligent and flexible way. This allows for automating business processes, driving greater process efficiencies and discovering new opportunities for business optimization.

With a long history as a B2B integration provider connecting more than 1.1 million organizations around the world, OpenText has deep expertise in managing the complexities of B2B data exchange. This is particularly helpful for organizations looking at migrating to a new ERP system while having to manage a large number of integrated trading partners, since many of them have fragmented integration environments that can add risk to the ERP migration projects if not managed correctly.

Further, if the ERP project involves redesigning business processes, adopting new, more advanced integration capabilities can be extremely valuable in improving operational data quality and increasing process automation. Regardless of the chosen ERP system, OpenText helps organizations navigate the complexities around integration with detailed insights and expertise while mitigating risks.

opentext™