



# **SAP**insider

BENCHMARK REPORT

# **SAP S/4HANA Migration**

**Robert Holland**

May 2022

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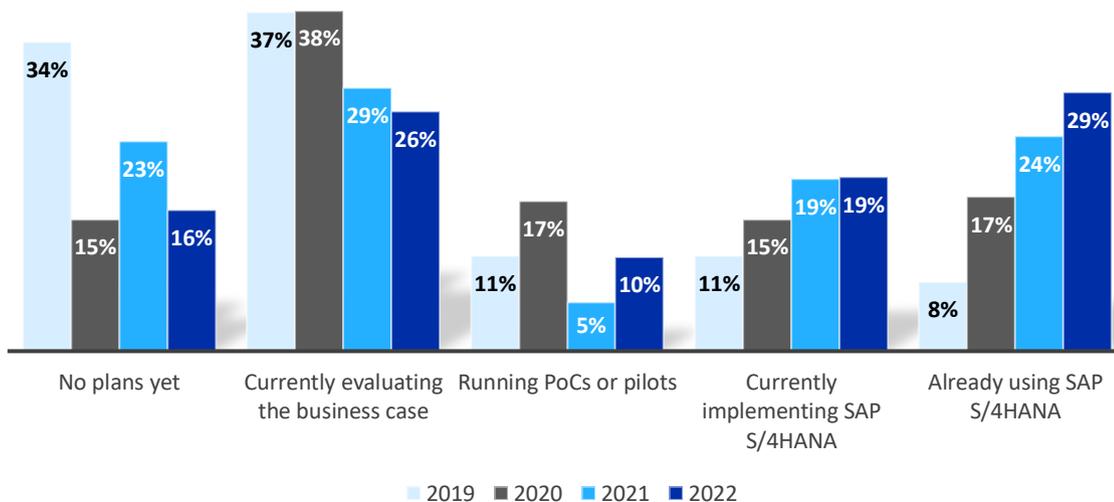
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# Executive Summary

Over the last four years, SAPinsider has tracked the move to SAP S/4HANA. In tracing that move we saw last year a first-time increase in the number of respondents who currently had no plans for the solution. This was a result of the global pandemic combined with SAP's postponement of the end of mainstream maintenance of core ERP systems to 2027. However, across all four years, there has been consistent growth in the proportion of respondents reporting that they are already running SAP S/4HANA. This year's data shows that the release of RISE with SAP has impacted the plans of some respondents, and events like the global pandemic and supply chain disruptions remain significant external factors impacting plans for SAP S/4HANA. In addition, the complexity of change is the biggest reason many organizations have not yet moved to the solution.

To provide us with the insight necessary to perform this research, SAPinsider surveyed 198 members of our community between February and May 2022. We started by asking respondents their current SAP S/4HANA adoption status. As stated, the proportion of those running SAP S/4HANA has now grown to 29%, an increase of approximately 5% over last year (see **Figure 1**).

**Figure 1: SAP S/4HANA adoption status**



Source: SAPinsider, May 2022

This growth correlates with the numbers SAP reported as part of their last quarterly earnings call where they noted that 13,900 customers were live on SAP S/4HANA and 19,300 had acquired licenses. This year's research also shows a drop back to 2020 numbers in terms of respondents who have no plans yet for the move, with 16% falling into this category. Something that has impacted many users' plans for SAP S/4HANA is RISE with SAP. Nearly a quarter of respondents (22%) who were not already using SAP S/4HANA said that their current project was on hold while they evaluated RISE with SAP, 11% were switching from their current plans to use RISE with SAP instead, and 8% were restarting their project using RISE with SAP. However, 24% of respondents said that RISE with SAP had not impacted their existing project, and another 20% said that they had evaluated RISE with SAP but were not making any changes. Interestingly, 14% of respondents said that they were unfamiliar with RISE with SAP.

## INSIDER PERSPECTIVE



We started our journey to SAP S/4HANA when SAP announced that regular maintenance for SAP ECC 6.0 would be discontinued. Knowing that this would be ending and since we had fallen behind on deploying support packages, we decided to make the jump to SAP S/4HANA. Part of the decision to do this was because we have a corporate objective to maintain our critical applications and keep them current and fully patched. Moving to SAP S/4HANA allowed us to achieve our goals of bringing systems up to date with the latest version while also allowing us to introduce new functionality.



**Stephen Herlick**  
 Director ERP  
 OPENLANE

**INSIDER PERSPECTIVE**



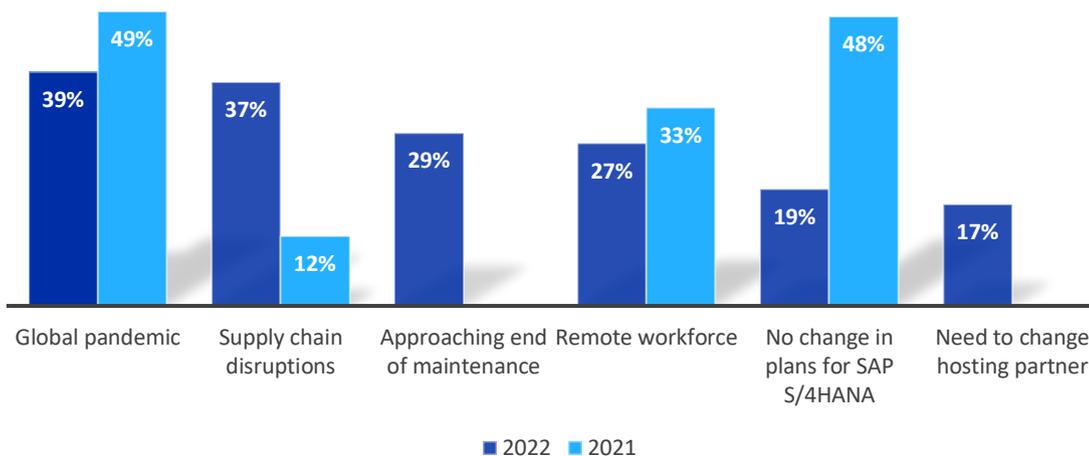
Our current ERP system is from the early 2000s and we are aware that we should take the opportunity to “start from scratch”. But, if we are to do this, we need a detailed plan to change and improve processes and not just migrate technology because this is a complex change. The challenge that we have been experiencing is that it is hard to make the business understand that this is not an IT project, but a business project that they need to be involved in.



~ Development Manager  
Food Services Company

While RISE with SAP is having an impact on plans for SAP S/4HANA, another external factor that continues to have a significant effect is the global pandemic. As seen in **Figure 2**, the global pandemic (39%) continues to be the biggest external factor impacting organization’s plans for SAP S/4HANA, and these organizations are twice as likely to currently have no plans for moving to SAP S/4HANA. Close behind the impact of the pandemic are supply chain disruptions (37%), with these respondents being 50% more likely to be currently implementing SAP S/4HANA. The approaching end of maintenance, a new answer choice this year, is also a strong external factor impacting plans for SAP S/4HANA. The combination of the increased impact of supply chain disruptions, the fact that two years have now passed since SAP originally extended the deadline for ending mainstream maintenance, and the lessening effects of the pandemic are all part of the reason those who did not have plans for SAP S/4HANA are starting to put them in place.

**Figure 2: External factors impacting plans for SAP S/4HANA**



Source: SAPinsider, May 2022

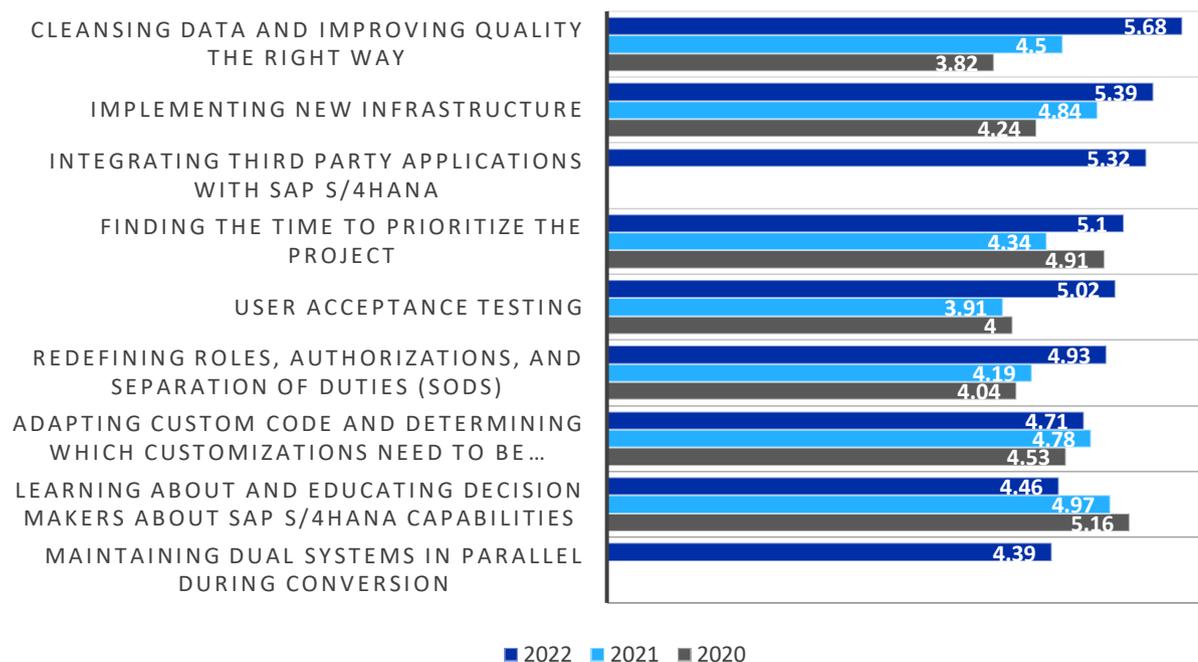
Of those who currently have no plans for SAP S/4HANA, the biggest reason identified was that of the complexity of change (42%). This was followed by licensing costs (30%), ROI costs (29%), operational expenditure costs (29%), and a high custom code footprint (27%). Even organizations taking the fastest possible approach to moving to SAP S/4HANA have significant complexity to deal with, especially if they are looking to reduce the size of their data footprint before moving data into SAP HANA. When coupled with significant costs, not only in terms of licensing but also in subscription costs for cloud platforms which must be met on an operational rather than capital basis, even a system conversion (or brownfield deployment) can make organizations pause. Adding to that the high custom code footprint that is the trademark of many existing SAP ERP deployments, there are many reasons why organizations are delaying their move to SAP S/4HANA.

While some organizations are still making their decision about whether they should move, those who are already running SAP S/4HANA are seeing significant benefits. More than half (58%) said that they were seeing improved performance when compared to their previous ERP system, 56% have improved process efficiencies, 53% have experienced improved end user and business satisfaction, and 47% were able to minimize downtime during their transition. While it is often assumed that newer products

provide better performance, this is not always the case as much can depend on configuration and infrastructure. However, with so many respondents seeing the benefit of both improved performance, improved process efficiencies, and improved end user satisfaction, those who have not already moved to SAP S/4HANA should evaluate whether the benefits that those are already there might impact their plans.

However, while the move to SAP S/4HANA has provided benefits for those who are already running the solution, that move was not without challenges. Those who were already running the solution were asked to rank nine potential challenges they faced during the move from most to least difficult and time consuming (see **Figure 3**). The top choice, because it was selected as the second most difficult challenge by 24% of respondents, was that of cleansing data and improving quality the right way. Both finding the time to prioritize the project (20%) and implementing new infrastructure (17%) were selected by more respondents as the most difficult challenge they faced, though others did not see those challenges as significant.

**Figure 3: Challenges faced in moving to SAP S/4HANA**



Source: SAPinsider, May 2022

Other significant challenges faced by those who have already moved to SAP S/4HANA included integrating third-party applications, which can sometimes require an upgrade to a newer version of the third-party application to be able to integrate and re-create existing workflows, user acceptance testing, and redefining roles, authorizations, and separation of duties. Access control challenges have been encountered by many organizations, particularly because the roles required for Fiori are quite different than those used previously with SAP GUI. Customers that have [spoken at SAPinsider events](#) have discussed how updating roles has often been an unexpected challenge when moving from SAP ECC to SAP S/4HANA.

**INSIDER PERSPECTIVE**



We have been able to leverage the consolidated databases in SAP S/4HANA, such as Business Partner, to help streamline vendor and customer interactions. We are also planning to leverage further capabilities that are now embedded in SAP S/4HANA such as PP/DS, Embedded Analytics, and Warehouse Management. New financial capabilities such as Material Ledger will provide the business with improved insights on manufacturing opportunities.

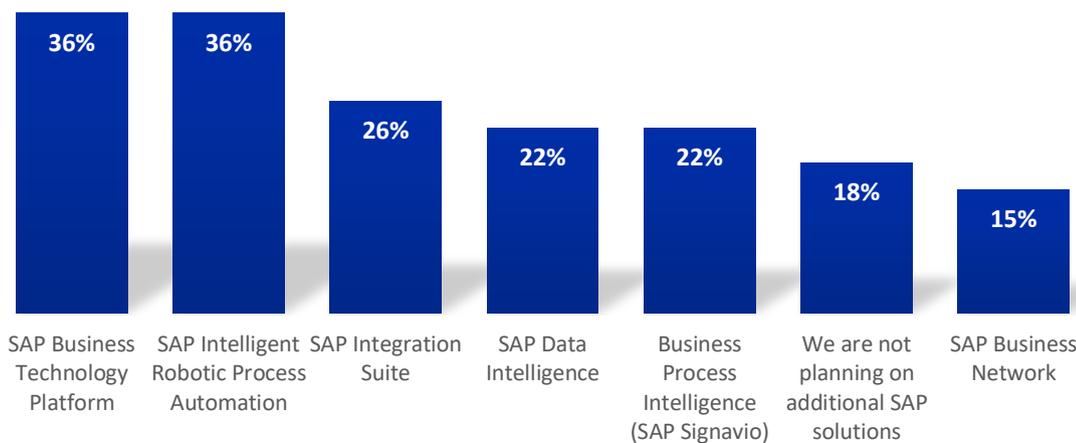
In addition, we view the analytics capabilities and streamlined data flows as a top area to leverage. As SAP S/4HANA enables more AI/ML and other innovations we will utilize those capabilities for improved decision making. All this will eventually lead to a strategy of extended planning and analytics from the embedded capabilities in SAP S/4HANA aligned to cloud capabilities such as IBP and Ariba.



**Steven Birgfeld**  
 Vice President, IT & Services  
 Blue Diamond Growers

Those that are already running SAP S/4HANA frequently look at the solution as a foundation for further innovation. This is especially true for those that have moved to SAP S/4HANA as part of a broader transformation project. To understand more, we asked respondents who were already running, implementing, or were piloting SAP S/4HANA what additional SAP solutions they were considering leveraging their investment. Equally important to respondents were the SAP Business Technology Platform (SAP BTP) and SAP Intelligent Robotic Process Automation (SAP Intelligent RPA), each of which was selected by over a third of respondents (**Figure 4**). With SAP BTP being positioned as the starting point for extensions built on SAP S/4HANA, it is no surprise that this was at the top of the list.

**Figure 4: Additional solutions leveraging SAP S/4HANA investment**



Source: SAPinsider, May 2022

This year’s survey revealed several other trends regarding the move to SAP S/4HANA:

- The most used versions of SAP S/4HANA are 1909 (26%), 2021 (25%), and 2020 (24%), but 12% of respondents were running either SAP S/4HANA 1511, 1610, or 1709. SAP S/4HANA Cloud, including SAP S/4HANA Cloud as part of RISE with SAP, was being used by 18% of respondents.
- A third (33%) of respondents have not yet determined what their upgrade cycle for SAP S/4HANA will be, though others are split between every 2 years (20%), every 3 years (13%), and less frequently (20%). Only 8% plan on an annual upgrade cycle.
- Over three quarters (77%) of respondents currently running SAP S/4HANA have no plans to move to RISE with SAP, while 23% say they do plan to make that move.
- IT (89%) and Finance (64%) teams remain the most likely to be involved in decisions regarding SAP S/4HANA, followed by Supply Chain (38%), and Services (36%) teams.
- Nearly half (45%) of the respondents said that their move to SAP S/4HANA had a significant impact on their organization’s thinking about agile and continuous delivery, while another 27% said that it had a moderate impact. Only 13% said there had been a negligible impact.
- The most likely ERP system (45%) to be run by those who have not yet moved to SAP S/4HANA is SAP ECC 6.0 EHP6 or EHP7. Another 25% were running an earlier version of SAP ECC 6.0, while 29% said that they were either running SAP Business Suite (10%) or SAP Business Suite

on SAP HANA (19%). Even though these organizations may not have moved to SAP S/4HANA, the majority (73%) do see a clear path to integrating SAP's current product line and innovations with their existing ERP system. This is a significant jump over 2021 where just 56% of those not yet running SAP S/4HANA saw a clear path to that integration.

## Required Actions

Based on the survey responses, organizations should take the following actions regarding their move to SAP S/4HANA:

- **Evaluate how SAP's increased focus on cloud ERP and RISE with SAP will impact your plans for SAP S/4HANA.** SAP has been focused on moving organizations to SAP S/4HANA since it was first released in 2015. While that emphasis grew when they initially announced the end of mainstream maintenance of existing systems in 2025, there has more recently been a shift in focus by SAP to that of cloud ERP and RISE with SAP. Blogs and posts discussing SAP S/4HANA deployment options focus on cloud-based deployments, and even discussions of on-premise deployments focus on using solutions like SAP HANA Enterprise Cloud (SAP HEC) or leveraging a hyperscaler environment. While many existing SAP S/4HANA deployments have been in customer-managed data centers or in private cloud environments, it is important to understand how SAP's change in focus might impact your own plans for SAP S/4HANA.
- **Dedicate time to SAP S/4HANA education and understanding how RISE with SAP is impacting and enhancing those capabilities.** Education and training of internal resources, in combination with educating executives and decision makers on the capabilities of the solution, are two of the biggest factors that impact the deployment timeline for SAP S/4HANA. Taking the time now, before the project is already underway, will be important to streamline and accelerate the deployment process once that has started. What is especially relevant today is evaluating what SAP is doing with RISE with SAP and how that is impacting their existing, and future, SAP S/4HANA capabilities.
- **Ensure that your roadmap for moving to SAP S/4HANA has the flexibility to handle unplanned external factors.** Many organizations' plans for SAP S/4HANA have been disrupted over the last two years. First by the global pandemic, then by a newly remote workforce, and more recently by the global supply chain disruptions. Even though events like these may not recur, other challenges like the need to change hosting partners or the rapidly approaching deadline for the end of mainstream maintenance may call for an adjustment of plans. Whatever your roadmap is for SAP S/4HANA, ensure that you build resiliency against external and internal factors that may well force changes. Another one- or two-year delay for organizations that are still considering their plans may mean the loss of any agility they have to complete a transition before the deadline.
- **Explore additional solutions that will leverage and innovate your SAP S/4HANA investment.** We asked respondents to this report what SAP solutions they were considering leveraging their SAP S/4HANA investment. But while solutions like SAP BTP and SAP Intelligent RPA are being evaluated or implemented, other third-party solutions may also offer innovation opportunities. Take the time to explore and understand additional solutions that can help you leverage your deployment of SAP S/4HANA, especially as it comes to making SAP S/4HANA the platform for further innovation within your organization.

## Chapter One: SAP S/4HANA Migration Overview

Every year that passes brings change to the SAP S/4HANA landscape. When the product was first released it did not yet have many of the features that were in older ERP systems. This changed over time as newer releases of SAP S/4HANA provided updated, improved, and additional capabilities which allowed organizations running older systems to begin a transition. A comparable situation was true initially with SAP S/4HANA Cloud, though that now matches the on-premise version in most cases. This is important as SAP's emphasis has shifted to focus on SAP S/4HANA cloud and RISE with SAP. But with 2027 quickly approaching and with a need to build the business case, prepare data, and secure resources, organizations must start planning now for the future.

### Best Practices Model – DART

SAPinsider grounds all its research insights in our proprietary DART model. This research model provides practical insights that connect business **D**rivers and **A**ctions to supporting **R**equirements and **T**echnologies. Drivers represent internal and external pressures that shape organizational direction. Organizations take Actions to address those Drivers. They need certain people, processes, and capabilities as Requirements for those strategies to succeed. Finally, they need enabling Technologies to fulfill their Requirements.

In this report, the top drivers were the opportunity to re-engineer processes to better fit operational needs or correct poor processes/configurations from a previous ERP implementation, the end of maintenance and support for core ERP releases, and the pressure to digitally transform existing ERP solutions to create a harmonized and centralized model and structure. To satisfy these drivers, respondents indicated that they are modernizing or eliminating custom processes to streamline transition and provide more agility for future updates, implementing new systems and processes to support new business changes and requirements, implementing automation and process discovery to gain a better understanding of their existing ERP environment, and centralizing and automating financial planning, accounting, and reconciliation activities on a global basis.

To support their SAP S/4HANA strategies, there are several requirements that our survey respondents indicated they needed, including minimal disruption to operations as they move to SAP S/4HANA, a fully compliant ERP system that supports both global and local regulations, integrations between core ERP and line of business applications, cleansed and harmonized operational data across systems, and IT professionals with the skills to develop extensions and applications that will leverage and support SAP S/4HANA. Respondents also use or plan to use a wide range of tools and technologies to support these requirements.

Respondents' answers to our survey and interview questions revealed clear trends that are summarized in **Table 1** and will be examined throughout this report.

#### INSIDER PERSPECTIVE



The biggest factor behind our move to SAP S/4HANA is that it has allowed us to standardize our business process and correct gaps in our current system. The move to SAP S/4HANA will help us achieve standard business processes across all our entities and allow us to have a scalable platform in place to support future mergers and acquisitions. This will also help us reduce the cost of ownership of the solution.



~ SVP Operations and Strategy  
Healthcare Company

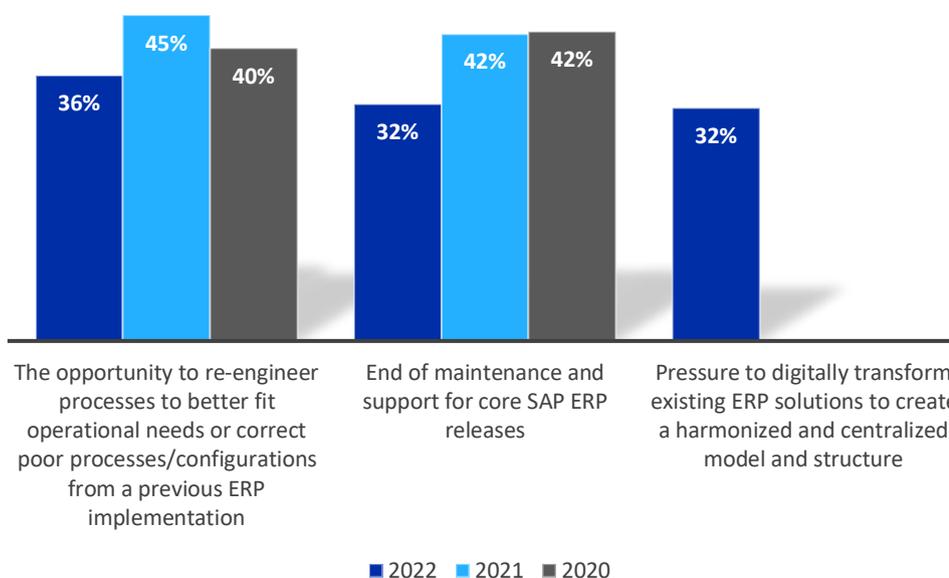
**Table 1: DART model framework for SAP S/4HANA migration**

| Drivers  | Actions   | Requirements  | Technologies  |
|--|---|---|---|
| <ul style="list-style-type: none"> <li>• The opportunity to re-engineer processes to better fit operational needs or correct poor processes/ configurations from a previous ERP implementation (36%)</li> <li>• End of maintenance and support for core SAP ERP releases (32%)</li> <li>• Pressure to digitally transform existing ERP solutions to create a harmonized and centralized model and structure (32%)</li> </ul> | <ul style="list-style-type: none"> <li>• Modernizing or eliminating custom processes to streamline transition and provide more agility for future updates (42%)</li> <li>• Implementing new systems and processes to support new business changes and requirements (37%)</li> <li>• Implementing automation and process discovery to gain a better understanding of my existing ERP environment (37%)</li> <li>• Centralizing and automating financial planning, accounting, and reconciliation activities on a global basis (36%)</li> </ul> | <ul style="list-style-type: none"> <li>• Minimal disruption to operations as they migrate to SAP S/4HANA (79%)</li> <li>• Fully compliant ERP system that supports both global and local regulations (75%)</li> <li>• Integrations between core ERP and line of business applications (72%)</li> <li>• Cleansed and harmonized operational data across systems (71%)</li> <li>• IT professionals with the skills to develop extensions and applications that will leverage and support SAP S/4HANA (71%)</li> </ul> | <ul style="list-style-type: none"> <li>• SAP Readiness Check (31%)</li> <li>• Change management solutions (30%)</li> <li>• Integration tools and solutions (27%)</li> <li>• Automated testing and validation tools (25%)</li> <li>• Extraction, Transformation and Loading (ETL) tools (24%)</li> <li>• SAP Business Technology Platform (23%)</li> <li>• Custom Code Lifecycle Management (22%)</li> <li>• SAP BTP ABAP Environment (21%)</li> <li>• Process Discovery for SAP S/4HANA Transformation (20%)</li> <li>• Data cleansing tools (19%)</li> <li>• Process management tools for ERP Business Process Modeling (19%)</li> <li>• Open-source technologies (16%)</li> </ul> |

## What Drives SAP S/4HANA Migration?

In 2020 the biggest driver for organizations moving to SAP S/4HANA was the approaching end of maintenance, but for the last two years this was second behind the opportunity to re-engineer processes to better fit operational needs or correct poor processes and/or configurations from a previous ERP implementation (Figure 5). This shows that many organizations that are moving to SAP S/4HANA are doing so as part of a broader change in the organization and as a means of improving their way of doing business as well as updating the systems that they are using.

**Figure 5: Top drivers for SAP S/4HANA migration**



Source: SAPinsider, May 2022

There are two primary ways in which organizations approach their move to SAP S/4HANA. The first method is to complete the transition in a way that has the new system running as quickly as possible. The second involves moving to SAP S/4HANA as part of a larger transformation that leverages the opportunity to update and redesign business processes and models. The first approach is focused on getting the job done quickly so that the organization can move forward on a new, and supported, platform. However, this can result in a situation where the organization is not fully leveraging the capabilities of SAP S/4HANA as they have simply replicated their existing processes in the new system while making as few changes as possible. Being able to re-engineer processes to better fit current operational needs, particularly as these have been changing to meet changing customer expectations, or correct configurations that may have been poorly set up years ago are important advantages in the move to a new system.

### INSIDER PERSPECTIVE



We moved to SAP S/4HANA to resolve performance issues that we were experiencing with our customized code. The move allowed us to update and that code and make it work faster in the new system. We also wanted to use the new combined ACDOCA general ledger table as well as creating and using CDS views. Our goal is to create a digital core platform in combination with SAP software-as-a-service solutions for our digital transformation, to deploy SAP Fiori to our users, and move to more standard processes in the future.



~ IT Operations Lead  
Chemicals Company



We have historically had 80-90 manufacturing sites and 25-30 ERP systems as well as other environments. We started moving initially to SAP ECC but are now thinking how we will move through going to SAP S/HANA. Our primary goal is to build a centralized reporting system, so we are getting our feet wet with Central Finance and the Group Reporting module. We weren't really impacted by the pandemic because of the industry we're in, and because the implementation teams working with us were largely remote. There were occasional on-site workshops that would have been beneficial, but we were able to complete some sessions once international travel started again.



~ Director of Analytics  
Global Pharmaceutical Company

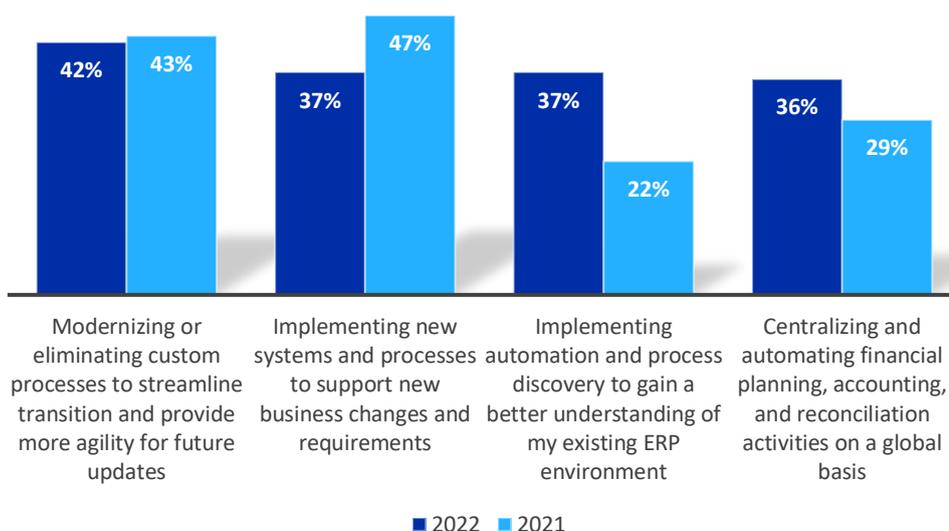
The end of maintenance and support for core SAP ERP releases remains a major factor behind the move to SAP S/4HANA, just as it has in the past. Two years ago, this was the top driver behind the move, and for many organizations they are now in the same place as they were in 2020 as there are just five years before the end of mainstream maintenance of their current ERP systems. Yet a substantial number of organizations still have no plans for SAP S/4HANA, with potentially thirty thousand enterprise ERP customers yet to even license the solution.

A new answer choice this year, that has immediately gained traction, is that of pressure to digitally transform existing ERP solutions to create a harmonized and centralized model and structure. Selected by as many respondents as that of the upcoming end of maintenance, this reflects a key factor that has been driving many organizations around their move to the solution—the need to have a single point of financial and business truth within their organization. Particularly one that they can use for real-time reporting and planning purposes.

## How Do SAPinsiders Address Their Drivers?

Increasing in importance from last year, although remaining constant in terms of the number of users selecting it as their top strategy, was that of modernizing or eliminating custom processes to streamline transition and provide more agility for future updates (Figure 6). This directly supports the top driver of moving to SAP S/4HANA because of the opportunity to re-engineer processes or correct configurations from a previous implementation. It also has the added advantage of providing a cleaner core making future SAP S/4HANA upgrades easier as that is a challenge for organizations that have significant levels of customization in their systems.

Figure 6: Top strategies taken to address the top drivers



Source: SAPinsider, May 2022

Implementing new systems and processes to support new business changes and requirements did drop from the most important strategy being implemented in 2021 but remains a critical action that is being taken. Part of the change in importance this year may be because, while approximately half of those implementing SAP S/4HANA are net new to enterprise ERP at SAP, as more existing ERP customers make the move they are seeing SAP S/4HANA not as a new system but as an iteration on their existing environment.

Increasing significantly in importance from last year is the strategy of implementing automation and process discovery to gain a better understanding of their existing ERP environment. This is a crucial step that any organization transitioning from SAP ECC or SAP Business Suite will need to take as they move to SAP S/4HANA as they must have insight into what processes are being used, what customizations are in use, and what must be moved into the new system. Using automation and process discovery to streamline the task of gaining more insight helps ensure that organizations do not miss any parts of the system, and also reduces the number of manual tasks that might otherwise have to be performed by already busy resources.

Also increasing in importance from our 2021 research was the strategy of centralizing and automating financial planning, accounting, and reconciliation activities on a global basis. Bringing together data from multiple disparate systems into one central repository has been the goal of many organizations for some time but has not always been easy to achieve. Using the move to SAP S/4HANA to create this centralized repository not only supports the new driver of creating a harmonized and centralized model and structure, but it also reflects the way that organizations are often using the central finance deployment option for SAP S/4HANA as a starting point for this data centralization.

## Key Takeaways

Based on our research with respect to integration, the following takeaways are clear:

- **Ensure that you are prepared for the upcoming end of maintenance of existing SAP ERP systems.** In 2020 the biggest driver for those moving to SAP S/4HANA was that of the upcoming maintenance because the survey supporting this research was already largely complete before SAP delayed the end of mainstream maintenance until 2027. But this year we are now in the same position as we were then with five years until that mainstream maintenance ends. If you are one of the more than thirty thousand customers that have yet to license or implement SAP S/4HANA, it is important that you have plans in place to support whichever path you end up taking.
- **Evaluate using your SAP S/4HANA deployment to create a sole source of business and financial truth for your organization.** For many organizations, the move to SAP S/4HANA is the opportunity to bring together data from several older systems to create a centralized repository of business and financial data. Whether they use SAP S/4HANA for central finance as the starting point for this move, are planning for a scaled-up deployment of SAP S/4HANA that consolidates multiple existing ERP systems into one central instance or are simply rolling out SAP S/4HANA

and incorporating and replacing older systems in an ongoing process, having a centralized ERP system offers many benefits. This is particularly true for reporting and planning, which offer more relevant insights when based on a comprehensive data set.

- **Use your move to SAP S/4HANA as a major part of your modernization processes.** Using the move to SAP S/4HANA as an opportunity to kickstart modernization by eliminating unused processes and customizations will benefit both your initial deployment of the solution but offer significant long-term benefits. Taking the time to eliminate unused code not only makes the transition process easier, but it can also reduce the risk of security vulnerabilities that may exist in code that has not been updated or examined in years as well as improving compliance during audits. The process of modernization applies not only to updating systems and infrastructure but also to the way your business functions. Making these changes during the transition process may make that transition itself longer but will provide significant agility in the future.

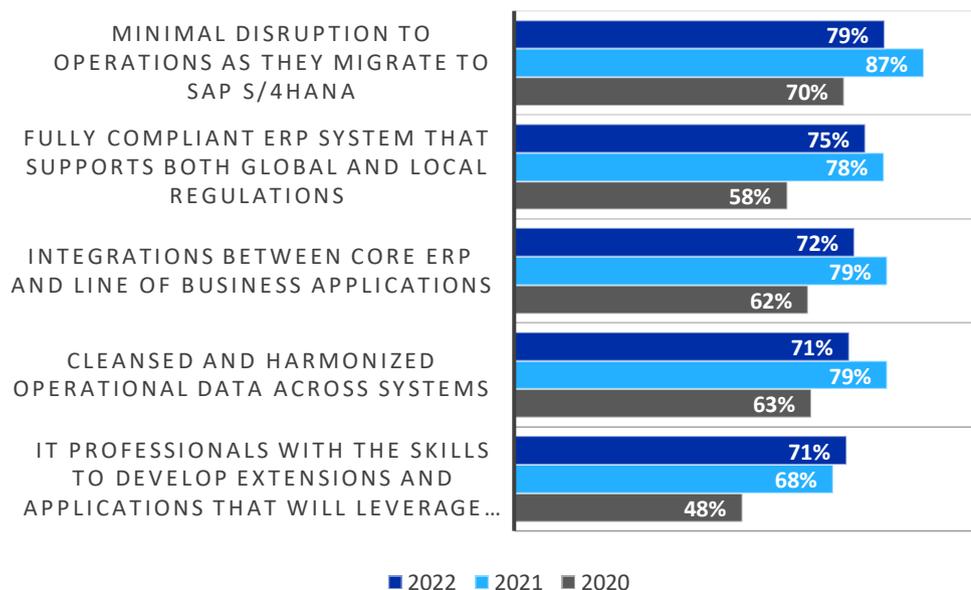
## Chapter Two: How Do SAPinsiders Approach SAP S/4HANA?

The opportunity to re-engineer processes as part of a broader change that creates a harmonized and centralized model and structure offers significant benefits to organizations that can achieve this goal. This is especially true when they can use that centralized model as a basis for improved reporting and planning, a frequent goal for those moving to SAP S/4HANA. But achieving these goals, or others that the organization may have for their move to SAP S/4HANA, cannot be achieved without meeting important requirements and using technology.

### Top SAP S/4HANA Requirements

The top requirements identified by organizations around their move to SAP S/4HANA are largely unchanged from 2021. The most important requirement continues to be minimal disruption to operations as they move to SAP S/4HANA, which was selected as important or very important by 79% of respondents (**Figure 7**). Given the complexities of the move to SAP S/4HANA, minimizing disruptions to an organization's operations during that move process is obviously something that nearly all organizations want to achieve as was represented by this being the requirement that the smallest number of respondents rank this requirement as anything other than moderately important.

**Figure 7: Top requirements for moving to SAP S/4HANA**



Source: SAPinsider, May 2022

#### INSIDER PERSPECTIVE



The deployment model that we selected for SAP S/4HANA was a new implementation because we are moving all our infrastructure to the cloud. We created a custom program to import all the required master data and open transactions, and since it is a greenfield implementation, we have been able to pre-load all the required master data and have done a number of dry runs to test the go-live process. In addition, because we did a greenfield implementation, we have been able to use the new 'PRD' system loaded with real data to train users and help them become more comfortable with SAP S/4HANA. It has also allowed us to leverage business teams to do extensive and detailed testing.



**Stephen Herlick**  
 Director ERP  
 OPENLANE

Moving from the third most important requirement in 2021 to second this year is a fully compliant ERP system that supports both global and local regulations. This has likely increased in importance as respondents doing business in the United States will see data privacy regulations like the California Privacy Rights Act and the Virginia Consumer Data Protection Act go into effect in early 2023. While these regulations are on the radar for organizations in the Americas, they are just some of many regulations being passed around the world that impact those running SAP systems for which a move to SAP S/4HANA will help with compliance.

Integration between core ERP systems and line of business applications continues to be one of the top three requirements that organizations face as they move to SAP S/4HANA. These integrations are a critical part of a smoothly functioning enterprise environment and are something that organizations need to verify will work correctly between their existing applications and SAP S/4HANA. A patch or update may be required to connect an existing system to the version of SAP S/4HANA being implemented, even if that existing solution is from SAP.

Cleansed and harmonized operational data across systems was, like other requirements, selected by a smaller proportion of respondents as important or particularly important than last year but remains in the top requirements that organizations must meet as they move to SAP S/4HANA. Cleansing and harmonizing data is a key step for organizations that are looking to centralize and harmonize their financial and accounting systems, or those bringing together data from multiple existing systems into a central SAP S/4HANA instance.

IT professionals with the skills to develop extensions and applications that will leverage and support SAP S/4HANA will increase slightly in importance from 2021. This shows that organizations that have already moved to SAP S/4HANA are looking to ensure that their teams have the skills and knowledge necessary to innovate and expand upon the value of that investment. It is also a step that organizations that are looking to leverage technologies like the SAP Business Technology Platform need to take if they are to effectively implement and use them.

## Which Technologies Do Respondents Use for their SAP S/4HANA Transition?

As was the case last year, the most used technology by respondents was that of SAP Readiness Check (**Figure 8**). This is no surprise as it is freely available to any organization with a current SAP maintenance agreement, and it provides valuable insight on whether a system is ready for the move to SAP S/4HANA. Although the number of respondents who selected this technology dropped slightly from our 2021 research, more than half of those who have already deployed SAP S/4HANA (52%) have leveraged this tool.

### INSIDER PERSPECTIVE

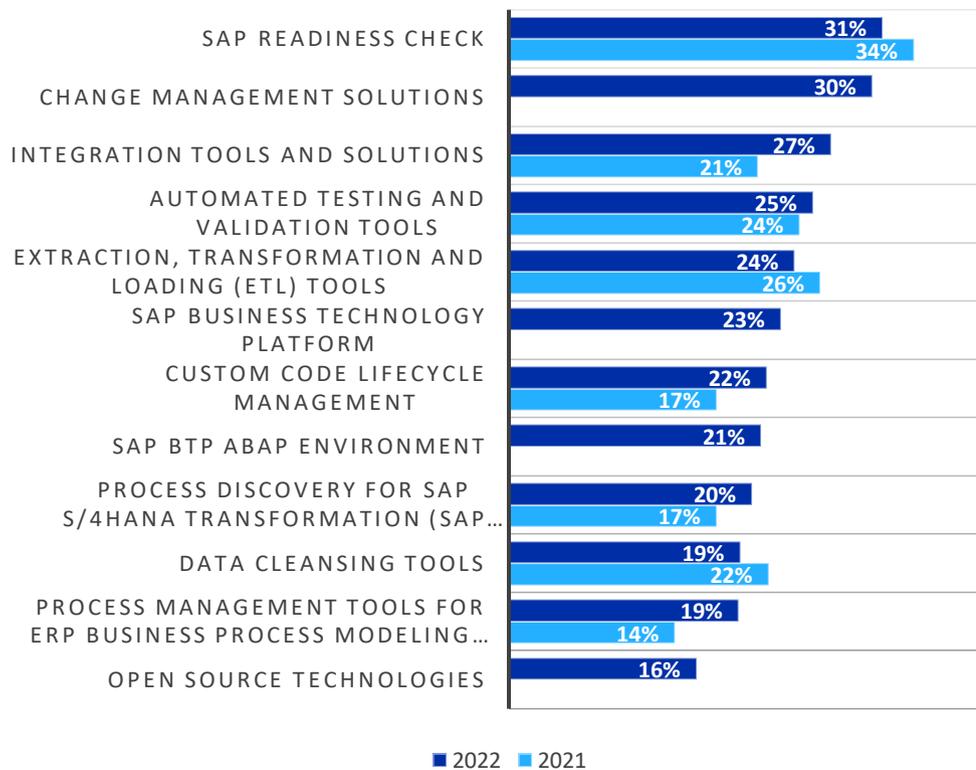


We minimized the disruption caused by our deployment of SAP S/4HANA by ensuring that we had an adequate and strong case for upgrade, communicated regularly about the project, performed training and skill building of internal resources. In addition we hired the services of well-regarded external consulting resources, focused on achieving good project management and implementation methodology, and had a full commitment from management that assured funding for the project.



~ Strategy Advisor  
Financial Services and  
Investment Company

**Figure 8: Tools and technologies currently in use with SAP S/4HANA**



**Source: SAPinsider, May 2022**

Change management solutions, new to the survey this year, was selected by 30% of respondents and immediately became the second most used technology. It was also just as much in use by organizations that have already moved to SAP S/4HANA as that of SAP Readiness Check. Given the complexity of the move to SAP S/4HANA, having a solution in place to help manage that change is extremely important. This is particularly true for those that are implementing SAP S/4HANA as part of broader transformation.

Integration tools and solutions (27%) increased in use from last year indicating that organizations have started to put the tools in place to integrate the solutions across their landscape with their SAP S/4HANA systems. This is also reflected by the fact that 44% of those who are already running SAP S/4HANA are using this technology as compared to much lower proportions of respondents who are not as far in their SAP S/4HANA journey.

Automated testing and validation tools (25%) remain an important method for streamlining and accelerating the move to SAP S/4HANA and were the second most used technology for respondents that reported that their organization was in the process of implementing SAP S/4HANA. ETL tools (24%) are a necessary part of moving data from old databases into SAP HANA, and custom code lifecycle management (22%) technologies help organizations that are looking to manage the complexities of their customized code.

To see how organizations are expanding on their SAP S/4HANA investment, SAP BTP (23%) and SAP BTP ABAP Environment (21%) were added to the list of technologies this year. Not



We went live on SAP S/4HANA 2020 and then deployed Service Pack 3 due to requirements needed to use SAP Transportation Management. We will continue this approach, as needed, for improvements and enhancements required for current or in-process capabilities. We also plan to do full level upgrades, for example from SAP S/4HANA 2020 to SAP S/4HANA 2023, on a probable 3-year increment. We may revisit that timeline if new features and fixes are compelling enough as we want to stay on top of capabilities while trying to minimize disruption to the business and planned roll outs. We're still learning this aspect of the SAP S/4HANA lifecycle and will adjust accordingly to meet our needs, which is my recommendation to others as well.

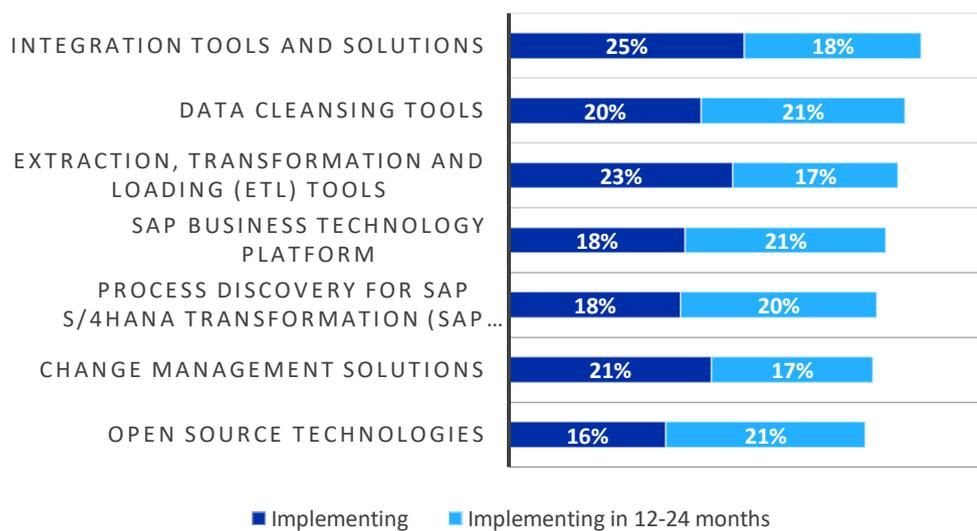


**Steven Birgfeld**  
 Vice President, IT & Services  
 Blue Diamond Growers

surprisingly, 43% of those who are already running SAP S/4HANA are using SAP BTP, with only fractionally fewer using the SAP BTP ABAP Environment. However, when looking at those who are in the process of implementing SAP S/4HANA, 21% are using SAP BTP, but 27% are currently using the SAP BTP ABAP Environment showing that more of these respondents are looking at that environment to help with extending SAP S/4HANA.

The technologies that respondents are most likely to be implementing to support their cybersecurity strategies include integration tools and solutions (43%), data cleansing tools (41%), ETL tools (40%), SAP BTP (39%), Process Discovery for SAP S/4HANA (38%), change management solutions (38%), and open-source technologies (37%) (Figure 9).

**Figure 9: Tools and technologies being implemented for use with SAP S/4HANA**



Source: SAPinsider, May 2022

Data cleansing tools, low on the list of technologies currently in use (19%), is being implemented by 41% of respondents with the timeframe for that implementation being equally split between a current implementation and one planned for the next 12-24 months. But these tools are most in demand for those who are running PoCs or pilots of SAP S/4HANA, with 40% of those respondents currently implementing and a further 30% implementing in the coming year. For those who are in the process of deploying SAP S/4HANA, 27% are implementing data cleansing tools this year while another 27% are deploying next year. But even though fewer respondents in total were implementing this technology, data cleansing tools were at the top of the list of technologies being implemented with 26% doing so this year and 28% in the next 12-18 months.

Process Discovery for SAP S/4HANA Transformation replaced the old SAP Business Scenario Recommendations tool and is available as part of RISE with SAP as well as to customers with a valid SAP maintenance contract. Unlike SAP Readiness Check, which focuses on determining whether a system is ready to be moved to SAP S/4HANA and the migration part of that project, Process Discovery focuses on the business aspects of the move and generates output targeted at business users. While in use by only 20% of

respondents today, another 39% plan to implement Process Discovery over the next two years.

Lastly, while it is one of the least used or implemented technologies overall, a quarter (26%) of those who are already using SAP S/4HANA reported that they were currently implementing process management tools for ERP Business Process Modeling (BPM) with another 6% planning to do so in the coming year. This is a key part of re-engineering processes and shows a substantial number of those who have already moved and are now looking to make changes to their existing business processes.

Technologies that respondents identified as being evaluated for use with SAP S/4HANA include custom code lifecycle management (24%), SAP BTP (23%), SAP BTP ABAP Environment (23%), automated testing and validation tools (22%), and Process Discovery for SAP S/4HANA (22%).

## Key Takeaways

When it comes to equipping organizations with the capabilities and technologies required to implement an effective security strategy, consider the following:

- **Identify how automation and change management tools can help you better understand your existing environment and streamline and accelerate the transition process.** Many tasks in the move to SAP S/4HANA can be labor intensive. Working with business teams to understand the processes that they currently use and are most important to their daily activities, for example, is something that cannot be readily automated. However, using automation in tools for code analysis, testing and test management, or deployment and configuration can significantly streamline otherwise time-intensive tasks. Similarly, change management tools can help better manage the move to SAP S/4HANA and ensure that alterations in things like business processes are being accurately tracked across the deployment.
- **Ensure that the systems that are integrated with your existing ERP system are compatible with SAP S/4HANA.** One of the most important requirements for organizations is that of integration between core ERP and line of business applications. [Previous SAPinsider research](#) has shown that, on average, organizations are integrating 7 other business solutions with their ERP system. In addition, many of these solutions may not be from SAP. Before proceeding with your deployment, it is critical that you understand whether the existing solutions you connect with your ERP are compatible with SAP S/4HANA. Many organizations have run into challenges where software and integrations that they depended on no longer functioned correctly after they had been upgraded. Spend time before the move verifying which systems are connected, whether an upgrade or patch to those systems is needed, and whether anything additional is needed in SAP S/4HANA to make that integration work.

- **Evaluate change management solutions to help manage the move to and deployment of SAP S/4HANA.** Change management solutions help organizations with monitoring and optimizing the process of managing changes. This includes managing changes to code, documentation, and even the requirements that are set out for a solution. The goal of these solutions is to ensure that the desired changes are implemented successfully and that any negative impact is minimized. Having change management solutions in place around your move to SAP S/4HANA will not only help with the transition from your existing ERP system, but will help track project tasks, and adjustments to processes, facilitate communication and project management, and provide governance, auditing, and analysis of the project. With the benefits that these solutions offer it is no surprise that 30% of respondents are already using them in conjunction with their move to SAP S/4HANA.

## Chapter Three: Required Actions

The move to SAP S/4HANA is a major change for any organization. This is why, according to SAP's numbers, only half of those who have licensed SAP S/4HANA are existing SAP enterprise ERP customers, and why more than thirty thousand of those enterprise ERP customers have yet to decide what they will do. Even a system conversion that includes only required changes and is done with as little disruption as possible may take upwards of a year to complete, not including the preparation time commitment needed from both IT and business teams to make that move successful.

SAP is looking to streamline and accelerate that process and is focusing on solutions like SAP S/4HANA Cloud and RISE with SAP as part of that message. But no matter what approach is taken, organizations will need to decide what they will do over the coming years as the end of mainstream maintenance approaches.

However, despite the pressure caused by the end of maintenance date in 2027, over the last two years there has been a shift in the reasons for organizations moving to SAP S/4HANA. While some are only making the move because they feel they must, others are leveraging the opportunity to combine the move to SAP S/4HANA with broader transformation projects. As we saw in [SAPinsider research earlier this year](#), transformation is a major part of plans for most organizations. While this may still primarily be related to infrastructure transformation, more than half of those responding to that research said that they were planning or performing transformation that included updating and redesigning business processes or redesigning business models with a digital mindset. Organizations are also setting up internal centers of excellence to help support these transformations. This correlates closely with the main driver for organizations moving to SAP S/4HANA—the opportunity to re-engineer processes to better fit operational needs or to correct poor configurations from a previous ERP implementation.

System Integrators (Sis) and consulting or implementation firms are a key part of making this change possible. While around a quarter of respondents (24%) said that they planned to utilize internal teams only for their move to SAP S/4HANA, 59% said that they were planning on leveraging consultants or experts with specific skills, and 17% planned to outsource the entire project. Organizations were most likely to use SIs for tasks like project management (37%), optimizing workflows and processes (34%), integration of third-party applications (32%), building the business case and roadmap (31%), or just knowledge sharing (31%). Being able to utilize those with experience moving to SAP S/4HANA can help make the process much easier than any tool or technology, but organizations must plan if they are to have the budget available to secure those resources and ensure the assistance, they need will be available when they need it.

No matter where you are with your move to SAP S/4HANA, the next few years represent a window. Evaluate your existing systems and learn as much about them as you can, determine what your SAP S/4HANA deployment will look like, and leverage opportunities like events and conferences to hear from and talk with those who have already moved or are planning their move, to learn from their experiences. Ensure that, whether you are making your decision about whether to move or looking to innovate on top of your existing deployment, you are ready for the future.

### INSIDER PERSPECTIVE



We are gradually decommissioning our old ERP systems and moving to one central instance with Central Finance on top of that as a reporting platform. We have Group Reporting on top of Central Finance and are continuing the roll out of our ERP system to our existing plants. In all we expect that the rollout of our ERP system will take another 3-4 years and then we will move to SAP S/4HANA based on that Central Finance instance. But the important first step was putting in place a program that helped us centralize and deploy a global tool set that could help us standardize and improve efficiency including getting new reporting, analytics, and planning in place.



~ Director of Analytics  
Global Pharmaceutical Company

## Steps to Success

Our research reveals that SAP customers should apply the following key steps to ensure their SAP S/4HANA strategies have the foundation for success:

- **Discover as much as you can about your existing systems so that you can be as prepared as possible for the move to SAP S/4HANA.** The more you understand about your existing ERP system the more it will help with your preparations for SAP S/4HANA. Whether you use an automation and process discovery tool or rely on SAP Readiness Check, having insight into whether customizations are critical or are not in use, which tables are still relevant to day-to-day business activities, or just having a better understanding of what data must be moved to the new system will help make any transition easier.
- **Explore how you can leverage solutions like SAP BTP, SAP BTP ABAP Environment, and open-source technologies to drive innovation using your SAP S/4HANA implementation.** For some organizations, the move to SAP S/4HANA is about getting on a new system so that they can avoid the upcoming end of maintenance. But for others, the move to SAP S/4HANA is the starting point for innovation. Whether that involves building extensions in SAP BTP so that customizations are no longer needed, moving critical customizations to SAP BTP ABAP Environment, or figuring out how the technologies provided by a hyperscaler or managed service provider can leverage and enhance the data in your SAP S/4HANA system. Explore these technologies and determine how you can build upon your investment in SAP S/4HANA.
- **Evaluate your SAP S/4HANA lifecycle, how often you will upgrade, and how SAP S/4HANA Cloud and RISE with SAP impact those plans.** For many organizations running older SAP ERP systems, even a task like implementing a support or enhancement pack was often problematic due to the volume of customizations that were in place. With organizations moving to SAP S/4HANA it is important to understand what your lifecycle for the solution will be. Unlike with SAP ECC or SAP Business Suite, a new version of SAP S/4HANA with updated functionality is released at least once a year. For SAP S/4HANA Cloud that release cycle is even more frequent with two major releases and regular monthly updates planned for 2022. Taking the time to understand what release schedule makes the most sense, and whether offerings like RISE with SAP will have any impact on your plans, will be a crucial step in the lifecycle of your SAP S/4HANA implementation.
- **Ensure that training and education on SAP S/4HANA and the technologies around it is a key part of your deployment and innovation roadmap.** Although learning about and educating decision makers about SAP S/4HANA capabilities is no longer the biggest challenge organizations face with their move, as it was in 2020 and 2021, it is still a challenge that organizations face today. Whether you are just starting on your journey to SAP S/4HANA, or already have it running in your organization, ensuring that your teams have dedicated time for education and learning about the solution and the technologies that are connected to it is critical. This is true both from the perspective of fully understanding the product you are implementing, but also in ensuring that teams have the skills necessary to expand upon that implementation in the future.

## Methodology

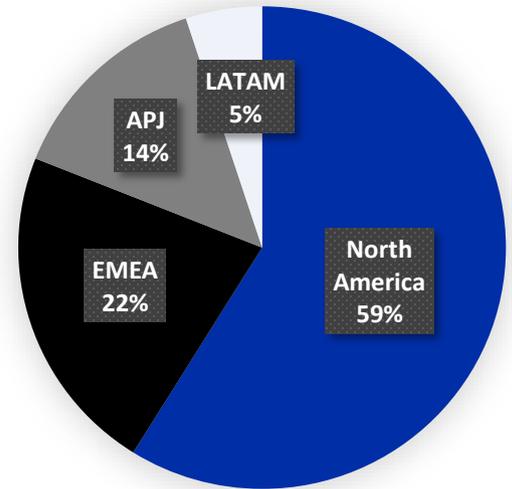
Between February and May 2022, SAPinsider examined the experiences of business and technology professionals about where they are regarding SAP S/4HANA. Our survey was administered to 198 members of the SAPinsider Community and generated responses from across a wide range of geographies, industries, and company sizes. Respondents completed an online survey and provided feedback in customer interviews that questioned them on topics such as:

- What best describes your organization's SAP S/4HANA adoption status?
- What internal teams are involved in your organization's decisions regarding SAP S/4HANA?
- What ERP system(s) does your organization currently run?
- How has the release of RISE with SAP impacted your organization's plans for SAP S/4HANA?
- What is your planned upgrade cycle for SAP S/4HANA?
- What benefits have you seen, or goals have you met, with your SAP S/4HANA move?

The demographics of the respondents included the following:

- **Job function:** Functional areas reported by respondents include: Information Technology (63%), Manufacturing & Production (6%); Business Development & Sales (6%); Finance (4%); GRC & Compliance (4%); Supply Chain & Logistics (4%); and Customer Service (3%).
- **Market sector:** The survey respondents came from every major economic sector, including: Industrial (31%); Software and Technology (28%); Retail, Distribution, and CPG (11%); Financial Services and Insurance (8%); Healthcare and Life Sciences (8%); Public Sector (6%); Media and Entertainment (6%); and Hospitality, Transportation, and Travel (3%).
- **Organization size:** Survey respondents came from organizations of all sizes, including those with annual revenues: smaller than \$10 million (8%); \$10-\$199 million (20%); \$200-\$499 million (16%); \$500 million-\$1 billion (10%); \$1-\$10 billion (17%); and greater than \$10 billion (15%).
- **Geography:** Of our survey respondents, 59% were from North America; 22% were from Europe, the Middle East, and Africa (EMEA); 14% were from Asia-Pacific, Japan, and Australia (APJ); and 5% were from Latin America (LATAM).

## PARTICIPANT PROFILE



## Appendix A: The DART™ Methodology

SAPinsider has rewritten the rules of research to provide actionable deliverables from its fact-based approach. The DART methodology serves as the very foundation on which SAPinsider educates end users to act, creates market awareness, drives demand, empowers sales forces, and validates return on investments. It's no wonder that organizations worldwide turn to SAPinsider for research with results.

The DART methodology provides practical insights, including:

- **Drivers:** These are macro-level events that are affecting an organization. They can be both external and internal and require the implementation of strategic plans, people, processes, and systems.
- **Actions:** These are strategies that companies can implement to address the effects of drivers on the business. These are the integration of people, processes, and technology. These should be business-based actions first, but they should fully leverage technology-enabled solutions to be relevant for our focus.
- **Requirements:** These are business and process-level requirements that support the strategies. These tend to be end-to-end for a business process.
- **Technology:** These are technology and systems-related requirements that enable the business requirements and support the company's overall strategies. The requirements must consider the current technology architecture and provide for the adoption of new and innovative technology-enabled capabilities.

## **SAP**insider

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