



Research Report



in association with



S/4HANA Revisited

Has the time now come for SAP's next-generation application environment to go mainstream?

Freeform Dynamics, 2020

Management Summary

When SAP first started to promote the next generation of its ERP environment, fully exploiting the latest HANA in-memory database technology, the response from the user base was less than enthusiastic. With incomplete functionality and an unproven architecture, the perceived level of compromise, cost and risk associated with migration provoked firm push back from customers. While early perceptions of a lack of readiness and a dubious business case still linger, both the business context and the solution have since moved on. So, has the time now come to make your move to S/4HANA?

Main points

No one messes with a critical business system for fun

When 480 senior respondents were interviewed in a recent study, it was no surprise to hear that most SAP environments are well-established, business critical and often take the form of a complex multi-instance systems landscape. Against this background, you need a very good reason to migrate to a whole new environment.

ECC is delivering OK, but for how long?

While business needs and expectations are mostly being well-enough met for now, shortfalls are evident, most frequently in relation to openness and flexibility. Meanwhile, the majority of SAP customers cite priorities such as digital transformation, product/service innovation and development of new business models as strategic priorities. This raises the question of how well current ECC environments will cope with the changes and transformations that they will soon need to support.

The Covid-19 pandemic provides a glimpse of things to come

Some argue that one of the effects of the current crisis is acceleration of digital transformation activity as traditional supply and demand chains are disrupted and the customer engagement emphasis switches to online. The study data is consistent with this, and there's a hint that SAP system constraints are becoming more obvious for some.

The benefits of S/4HANA are acknowledged, but are they strong enough?

S/4HANA offers a range of well-publicized benefits over ECC, from an improved user experience, through real-time analytics, to more intelligent process automation. Platform simplification then promises to reduce operational overheads and generally enhance service levels to the business. While such benefits are hugely valuable and generally confirmed as legitimate in our study, a frequent question is are they enough to build a business case around.

The trick is to think of S/4HANA as a strategic digital business platform

If the case for S/4HANA isn't clear in your organization, it could be that you are thinking in terms of justifying yet another ERP migration. Implementation of S/4HANA equates to much more than that. Built on an open, scalable and agile architecture into which all current and future applications, technologies and data can be plugged, it can act as a strategic platform to support a broad range of digital initiatives. The S/4HANA proposition makes a lot more sense if you think of it this way. The question then becomes, can you afford to let your current environment stand in the way of progress?

Introduction

At the time of writing, the world is still in the midst of the global Covid-19 pandemic, with health, wellbeing and social concerns occupying many of our thoughts. Against this backdrop, it may seem like a strange time to begin a conversation about the future of your SAP environment.

The timing is actually quite useful, however, when you consider the impact of what we're dealing with right now from a business and economic perspective, including dramatic changes in customer behavior and the disruption of normal supply and demand activity. Many organizations have had to transform the way they engage and even develop whole new business models almost overnight. As a result, systems and processes have frequently been stressed and challenged in ways that few anticipated.

Regardless of how well your own core systems have supported you so far through the current situation, a question likely to have come into sharp focus more than ever is the readiness of your business infrastructure to support change and transformation. Implicit in this is the role of your SAP environment as the chances are it underpins multiple core business functions and is overall regarded as critical to your organization (Figure 1).

Would you consider SAP as your primary solution for any of the following?



Is your SAP environment regarded as business critical?

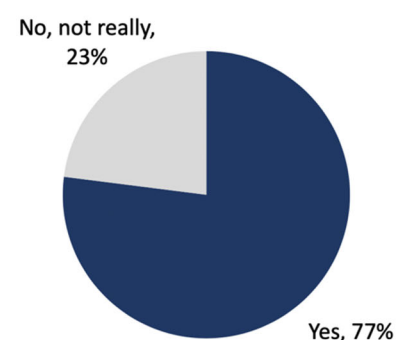


Figure 1 SAP environments support multiple core functions and are widely considered to be business critical

The data shown here comes from a recent study in which 480 respondents provided their thoughts via a telephone interview on the evolution of SAP environments and their role in supporting business transformation. Participants were drawn from a cross-section of geographies, industries and organization sizes and ranged from business stakeholders to senior members of the SAP delivery team (see Appendix for demographics). A particular focus for the discussion was S/4HANA, and perceptions of how this latest incarnation of SAP's application suite might fit into the organization's plans and activities.

While the interviews for our study were completed just as the Covid-19 pandemic was beginning to bite (i.e. most were conducted before the impact was fully appreciated), the insights presented in the remainder of this report are still hugely relevant. Indeed, many of the drivers for S/4HANA that we'll be considering are now more acute than ever.

That said, the S/4HANA discussion comes with a lot of baggage so let's address that first.

Putting history behind us

In its enthusiasm to help customers accelerate digital transformation, and to position itself strongly in this space, it has been said that SAP was premature and too aggressive with the initial push of its next generation application architecture a few years ago.

Despite the pressure through heavy messaging and even deadline-driven threats in relation to maintenance, customers simply weren't willing to rush to the 'bleeding edge' with such a new solution. In hindsight this was pretty predictable when you consider that the situation back then was similar to the one that exists today, defined by well-established systems that may not be perfect, but that mostly meet business needs effectively enough (Figure 2).

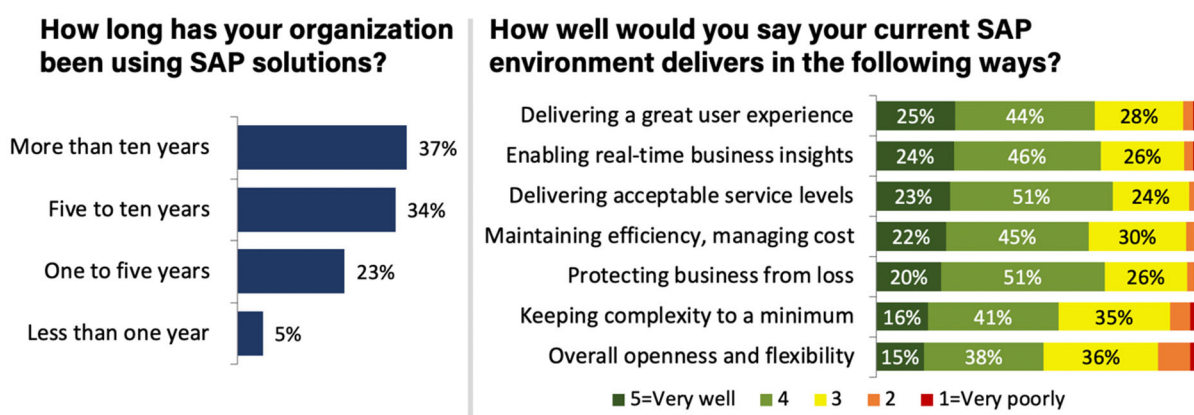


Figure 2 While not perfect, SAP environments are generally well established and considered to be 'good enough'

The old saying "If it ain't broke, don't fix it" springs to mind, especially when the fix is likely to involve significant cost, risk and disruption.

The other big blocker in the early days was lack of completeness. Most SAP customers would not have been able to adopt the new offering even if they wanted to. In many areas, it would have meant a step backwards in functional terms, and/or living with an arbitrary mix of the new and the old. Few were ready to accept such compromises or commit to a path based on faith that SAP would ultimately deliver on its roadmap.

Time to press the reset button

As a result of the above, SAP's messaging for a time came across as being out of tune with its customers. This was arguably out of character, however, and nothing compared to some of the marketing we hear from other IT vendors.

And to give SAP credit, some of the things its early messaging revolved around have since found their way onto many corporate agendas as we shall see. Plus, of course, S/4HANA has come on significantly in terms of technical maturity and functional completeness.

Against this background, it's important not to let lingering early impressions get in the way of taking S/4HANA seriously. The proposition is a lot more meaningful today, the solution is much more capable, and partners are now well geared up to support you. When considered in today's context, S/4HANA is now extremely relevant.

Today's context for the S/4HANA discussion

The S/4HANA proposition is not just about delivering a more modern set of ERP capabilities. The idea is to help you create an open, AI-enabled, analytics-driven business systems environment that's highly flexible and scalable and therefore able to cope with business change and transformation quickly, efficiently and effectively.

The relevance of this is clear when we look at some of the business priorities on today's corporate agenda (Figure 3).

Are any of these a priority for your organization?



Figure 3 Some of the key priorities on today's corporate agenda

We said previously that many SAP customers see their current ECC implementations as 'good enough', but as organizations continue to drive towards the above kinds of objectives, the truth is that older SAP environments will be increasingly challenged. This will be particularly true with regard to the weaker areas previously identified such as openness and flexibility.

Hints of Covid-19 accentuating the imperatives

One of the things we often hear in relation to the current pandemic is that it is forcing an acceleration of digital transformation, which is in turn highlighting limitations in current systems and further accentuating the need for a more agile business infrastructure.

While the data from our study cannot provide definitive corroboration of this, it does hint at how perceptions and priorities may be changing. For example, those participating in earlier interviews up to and including the week beginning 23rd March 2020 (about three quarters of the sample) were less likely to cite digital transformation as a priority than those who were interviewed later (60% vs 71%). Differences between earlier and later interviews also suggested an increase in emphasis on the development of new business models (48% vs 56%) and infrastructure modernization (37% vs 44%). Meanwhile, the number of respondents saying their SAP environment was delivering 'Very well' in terms of openness and flexibility fell between the earlier and later interviews (17% vs 10%).

In the interests of caution, we have not graphed these pandemic-related figures as the composition of the earlier and later sample segments was not identical. We didn't want to risk charts being used out of context without the caveats. That said, the sampling differences are unlikely to fully account for the changes in priorities and perceptions noted. In short, the circumstantial evidence points to Covid-19 increasing the relevance of the S/4HANA discussion. With this in mind, let's look at the proposition in more detail.

The case for S/4HANA in a nutshell

When it comes to the headline-level benefits of S/4HANA, the research highlights a strong acknowledgment of the potential direct value in many key areas (Figure 4).

How would you rate the value of S/4HANA in relation to the following?

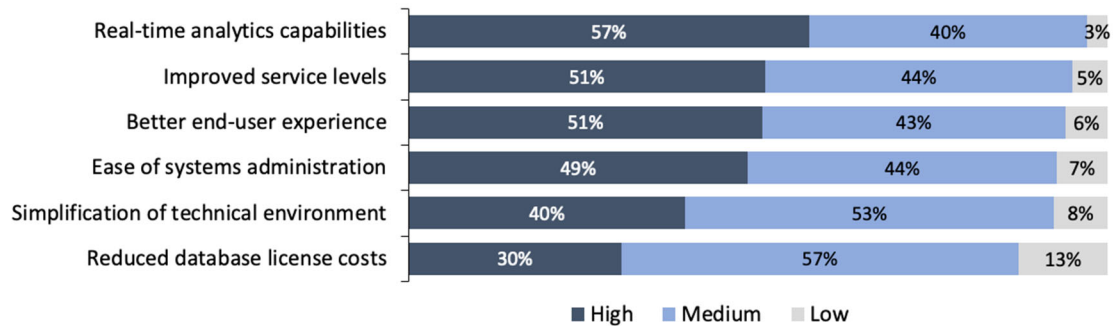


Figure 4 The headline-level benefits of S/4HANA

Drilling into real-time analytics, a benefit promoted vigorously by SAP, it's clear that the message has reached home with customers. What's interesting, though, is that the real appeal is around embedded rather than on-demand analytics capability (Figure 5).

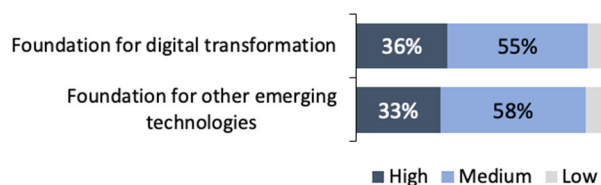
Do you see S/4HANA as a foundation for the following?



Figure 5 Specific analytics-related benefits

The idea we also see above of enabling analytics based on SAP and non-SAP data underlines the value of S/4HANA as an open platform as well as a suite of business applications, a concept that comes through in a number of other ways (Figure 6).

How would you rate the value of S/4HANA in relation to the following?



Do you see S/4HANA as a foundation for these?

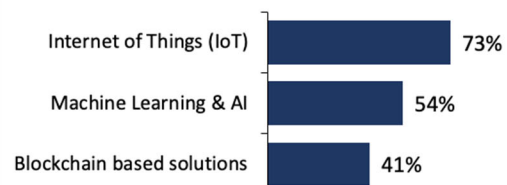


Figure 6 S/4HANA as a foundation for digital transformation

The emerging technologies highlighted here are important because they are often seen as key enablers of the new engagement and business models discussed earlier.

The growing appreciation of S/4HANA as a platform rather than just a suite of applications is significant. In essence, the opportunity is to create a common point of consolidation, integration, intelligence and control as the business increasingly operates in a more connected and real-time manner. But S/4HANA is not some kind of magic. The implementation and migration practicalities are as critical as ever to work through.

Identifying stakeholders and defining their needs

Let's assume for our discussion in this section that you, personally, have bought into the S/4HANA proposition in principle. The next step is to consider who else needs to say "yes" and think through what matters to them.

Everyone has a view, but they all want something different

Firstly, given the breadth, depth and business criticality of most SAP environments, any significant upgrade, extension or migration requires securing agreement from many different stakeholders, sometimes even key customers and suppliers (Figure 7).

How much is your SAP agenda driven or influenced by the following?

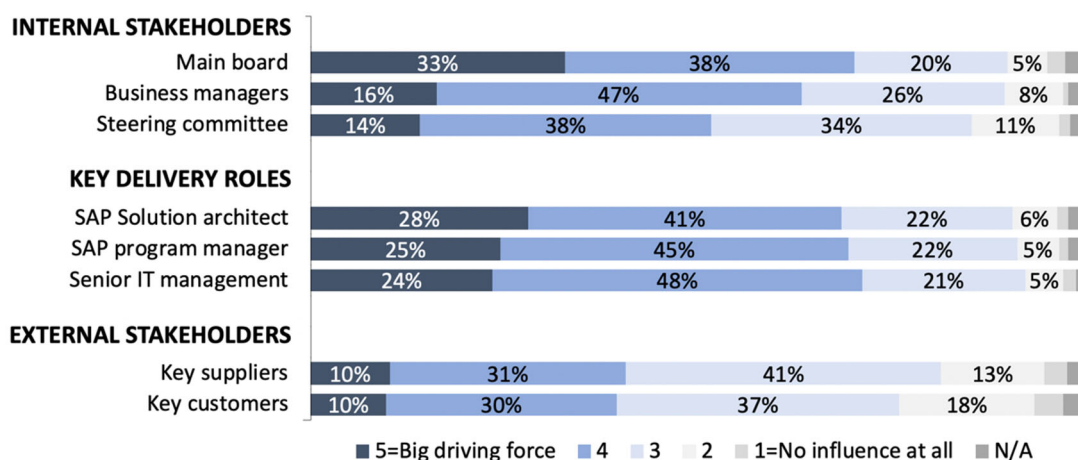


Figure 7 The many different influences and perspectives

The problem is that it isn't always easy to get decisions made quickly as various forms of organizational disharmony frequently exist (Figure 8).

Are any of the following an ongoing challenge when making SAP-related decisions?

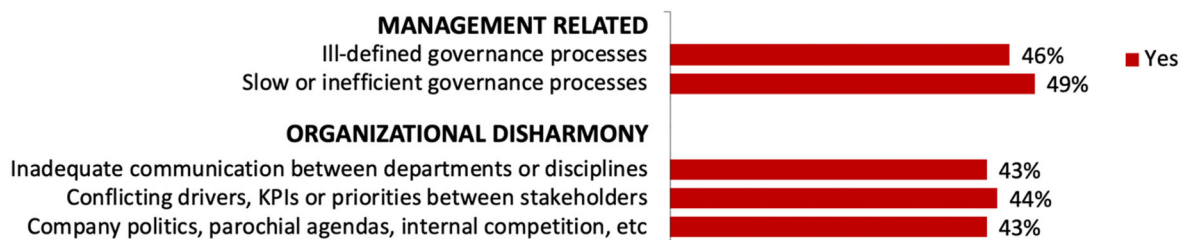


Figure 8 Achieving alignment and consensus can be hard

Against this background, it's important to identify key stakeholders and align relevant S/4HANA benefits with each. Day-to-day value around user experience, improved service levels and real-time analytics (especially if process-embedded) is likely to appeal to those in the business. Meanwhile, senior execs will appreciate the operational openness and scalability, organizational flexibility and agility, and the prospect of getting SAP off the critical path for strategic change and transformation initiatives. Reduced overheads stemming from greater simplicity and efficiency will clearly appeal to financial executives.

Meeting minds with corporate IT

S/4HANA might be viewed fundamentally as a business solution, but a large part of the decision to take it on board revolves around technology choices, which means the corporate IT team will generally have at least some influence on decisions (Figure 9).

When it comes to platform and infrastructure decisions relating to SAP, how much are the SAP team guided by decisions already made at a broader corporate IT level?

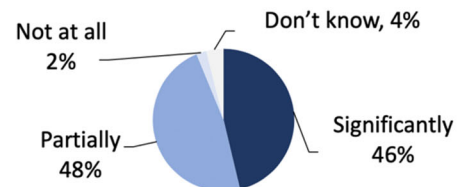


Figure 9 Corporate IT usually has influence, which is often quite significant

This level of influence is significant as alignment between the SAP team and Corporate IT is often only partial in relation to key requirements and practicalities (Figure 10).

How well would you say your SAP and corporate IT teams see eye-to-eye on the following

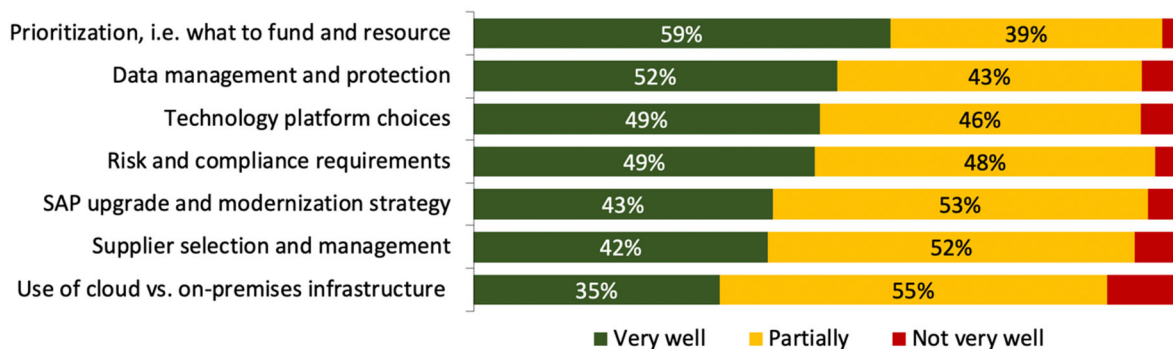


Figure 10 SAP teams and Corporate IT may or may not be fully aligned

To put this into perspective, it's worth reminding ourselves that an important part of the IT leader role nowadays is creating and maintaining as much coherency as possible across the systems and services landscape. Even if the SAP environment is managed by a separate group, the IT team will still seek as much alignment as possible with platform, service and delivery choices made more broadly. This is because things like solution and data integration, systems monitoring and management, and many other functions that cross application boundaries become easier, more efficient and less risky.

The good news is that there is a lot in S/4HANA to like from an IT perspective. The latest in-memory database technology is simpler, faster and more scalable, removing many of the traditional operations and service management headaches, as well as allowing analytics to run directly against transaction data stores. Add a modern, open, API driven architecture into the mix, and integration of other advanced technologies, such as AI and Blockchain, becomes much easier, as does integrating data flows from large IoT estates.

The upshot is that it should be relatively easy to get Corporate IT on side, which is important as the IT team's involvement in any strategic S/4HANA initiative is critical to unlocking the full potential of the underlying architecture and platform. In the meantime, given that the vast majority of S/4HANA implementations will occur within the existing SAP customer base, migration from ECC is the next big area of practicality to consider.

Migration practicalities

For most organizations, migration from ECC to S/4HANA is not simply about getting a system from A to B. The majority of SAP customers have multiple instances of the software, e.g. for different countries, regions or divisions (Figure 11).

Approximately, how many instances of SAP does your organization currently have?

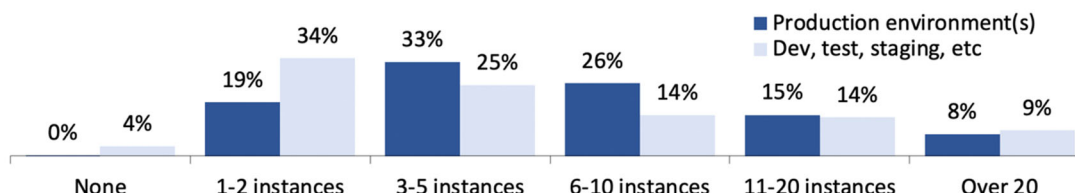


Figure 11 The overwhelming majority of SAP customers run multiple instances of the software

Within each instance there are then multiple modules, some of which will be easier to migrate than others. All of this needs to be considered when setting a migration strategy and against this background, it's not surprising to see a spread of tactics being considered for the move to S/4HANA at an instance, process and/or function level (Figure 12).

Will you take or are you taking any of these S/4HANA migration approaches?

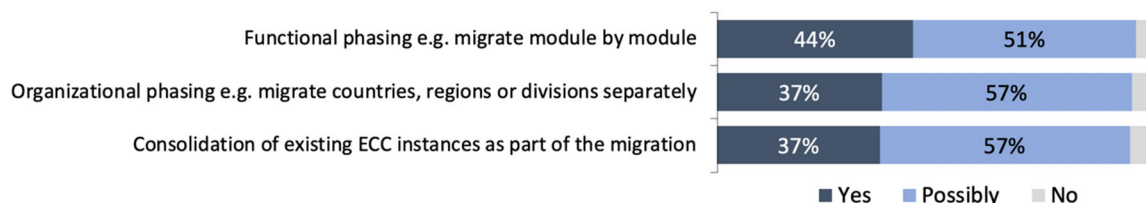


Figure 12 Options exist when it comes to migration approaches

When looking at this chart, it's important to note that the options are not mutually exclusive – e.g. you might phase migration differently depending on the priorities, objectives and constraints of each individual country, division or business unit. It's also notable that those answering "Possibly" exceed those saying "Yes", indicating that most organizations still don't have a firm migration plan in place for moving to S/4HANA.

Related to this discussion is the question of data consistency and cleanliness, which is important when we consider the consolidation opportunity many are planning or considering. Challenges here may also limit the degree to which advantage can be taken of automated data migration tools in the move from ECC to S/4HANA (Figure 13).

Is a lack confidence in data consistency or cleanliness likely to impede migration?



Figure 13 Data consistency and cleanliness can sometimes be an issue

If you know or suspect you have data issues, these should clearly be addressed up front.

Playing the technology generation game

Once you have assessed your dependencies and constraints, options exist that allow you to take a stepwise approach or mix and match different generations of SAP technology if an initial wholesale migration is not possible or desirable (Figure 14).

Will you take or are you taking any of these S/4HANA migration approaches?

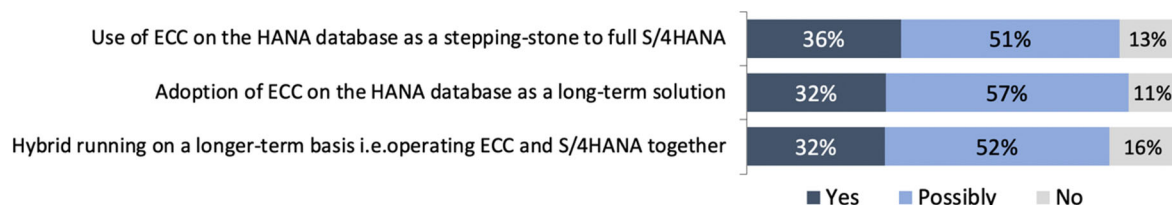


Figure 14 Stepping-stone and hybrid options are available if needed

Each of these approaches has pros and cons. If you use ECC on HANA as a stepping-stone to full S/4HANA, it simplifies the initial migration, and you will unlock some operational and performance benefits by simply modernizing the database layer. However, the stepping-stone approach defers access to many of the business level advantages previously discussed, e.g. around embedded analytics, open integration, and so on.

Of course, you could consider running ECC on HANA over the longer term, or operating in a hybrid manner. This again can minimize cost, risk and disruption, but at some point you're going to have to deal with SAP's 2027 migration deadline which will be left hanging over you until you switch off your last ECC instance.

Turning to the underlying technology layer, when it comes to how you deliver your S/4HANA environment, broader IT trends are likely to be brought to bear. These will frequently be influenced by platform and infrastructure decisions taken at the Corporate IT level as previously discussed (Figure 15).

If, or when, you migrate to S/4HANA, are you likely to take advantage of the following underlying platform, services or delivery options?

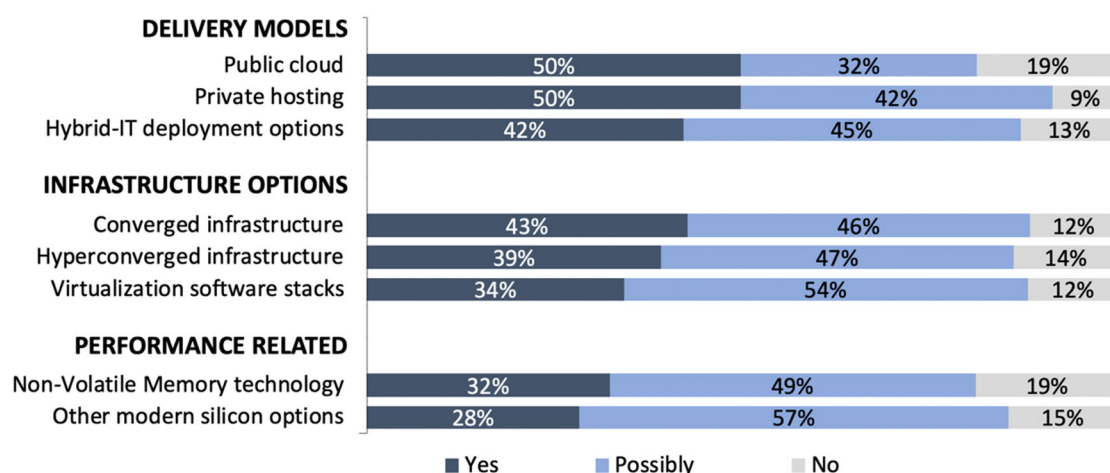


Figure 15 Selecting the right mix of technology and delivery options is key

Selecting the right mix of technology to support your migration depends on many factors. This brings us to the important role of suppliers in the S/4HANA technology space.

The role of suppliers

A couple of huge considerations exist that we haven't mentioned yet – the cost of migration, which is highlighted by four out of five respondents, and associated risks, cited as a significant barrier by around half of those participating in the research (Figure 16).

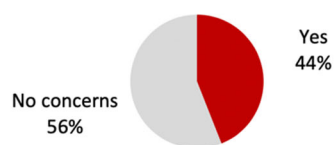
Do you see any of these as significant barriers to S/4HANA adoption?



Figure 16 Cost and risk are major potential barriers to moving forwards

Other potential barriers frequently highlighted in the study include skills and resource limitations and concerns about technology readiness (Figure 17).

Are skills and resource limitations seen as a barrier to adoption of S/4HANA?



Is lack of confidence in the latest technology options likely to impede your migration activities?



Figure 17 Some have concerns around skills and technology readiness

One way of dealing with such confidence and capability-related concerns is to engage suppliers who can help you plug the knowledge and skills gaps and take the strain on activities that only need to be performed a small number of times (or even just once) during the migration process – design, configuration, data conversion, etc. That said, there's clearly an appetite for services across the entire application lifecycle (Figure 18).

How would you rate the value of the following from SAP systems and infrastructure suppliers?

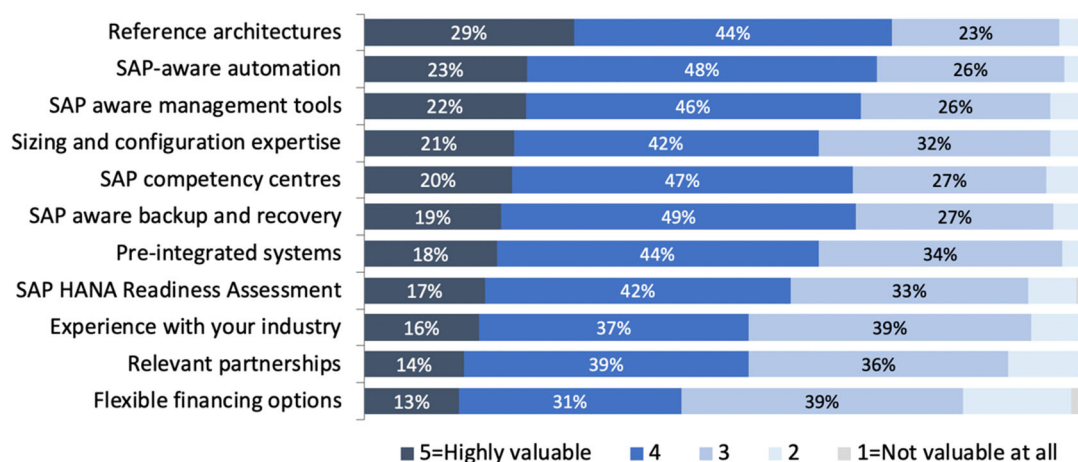


Figure 18 Demand is anticipated across the complete range of lifecycle services

Such offerings are now available from well-established players in the SAP space.

Making things happen

Key to tackling any major initiative is formulating a plan. This may seem obvious, but it's worth restating given that only a third of respondents in our study currently have a comprehensive SAP roadmap and plan in place (Figure 19).

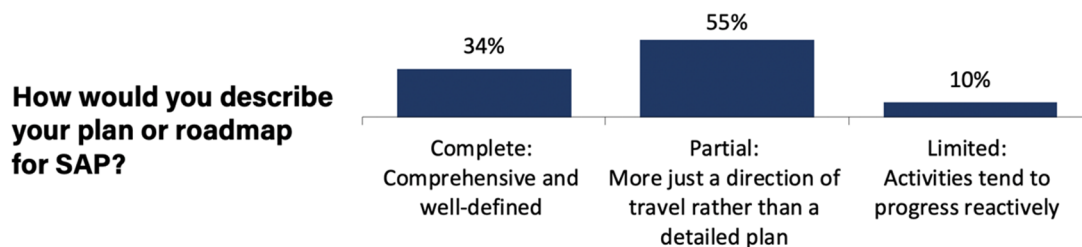


Figure 19 A lot of plans could be much stronger

And planning, of course, isn't just about defining activities and allocating resources. It starts way before that with understanding the full nature of the value represented by transformative solutions such as S/4HANA, exploring the art of the possible based on this, and investigating the practicalities in full. This in turn allows you to get everyone on board and move forward with confidence. With this in mind, it is interesting to look at the current level of S/4HANA advocacy across different stakeholder groups (Figure 20).

Coming back to your stakeholders, who would you say is for or against S/4HANA adoption?

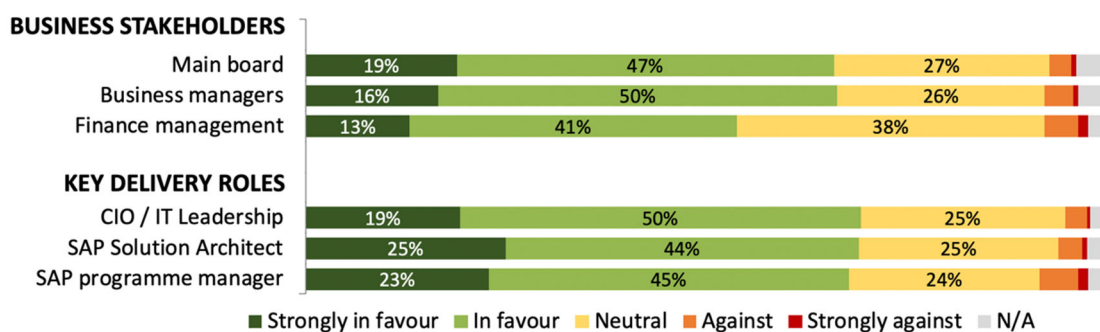


Figure 20 No single group stands out as being hugely more positive; there's potentially something in it for everyone

Puling these threads together, the research suggests that if you want to maximize advocacy and get your migration proposal approved, you probably need to put a comprehensive and compelling plan in front of your stakeholders (Figure 21).

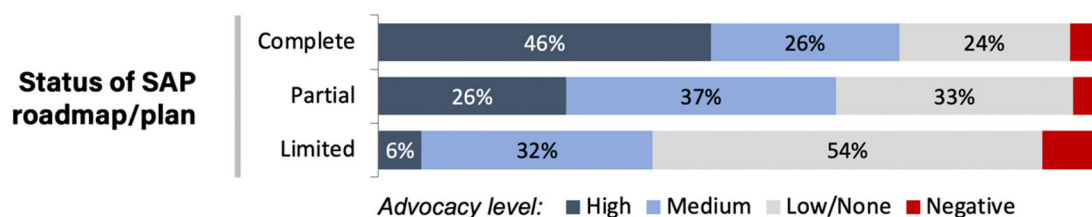


Figure 21 A good plan removes uncertainty and helps to get people on board

This reflects the fact that uncertainty is often the biggest blocker to progress, so do your groundwork, leveraging suppliers as necessary, and lay out the details.

Final thoughts

Those who live and breathe IT are constantly exposed to new and transformative technologies and ideas. IT leaders, senior architects and others looking at how to meet evolving business requirements are therefore very familiar with the process of exploring how emerging solutions can be embraced to deliver business value.

This monitoring of the so-called 'leading edge' is an important part of dealing effectively with many of the fast-moving digital projects organizations are undertaking at the moment, sometimes in response to the Covid-19 pandemic, but usually to support the longer-term goals of the business. Many such initiatives would be too difficult or prohibitively expensive to embark upon without bringing the latest developments in modern platforms, cloud delivery, IoT and AI to bear on the problem.

S/4HANA as a modern technology enabler

In many respects, S/4HANA and the HANA in-memory database technology upon which it is built sit alongside other advanced technologies, with the same potential to transform the way many aspects of the business operates. As the research shows, the appetite for embedded analytics capability, a key benefit of the latest SAP architecture, is very high. The notion of opening up the SAP environment and even using it as a platform to support initiatives in areas such as AI and IoT (key to enabling new engagement and business models) is also getting a very positive response within the SAP customer base.

But the stakes are high

The difference is that to unlock all of this goodness and potential requires a fundamental change to at least the technology layer of one of the most critical business systems many organizations run. Unlike many other digital initiatives, few have the luxury of taking a greenfield approach when it comes to the implementation of S/4HANA. Whichever way you cut it, the stakes are high, so taking your time to consider what's involved in moving at your own pace makes absolute sense.

So why not just defer ad-infinitum?

When considering such a key solution in the context of today's fast-paced digital world, you always need to think about the cost of doing nothing. Sure, your current ECC environment is probably meeting most of your immediate business needs, but how well will it cope with high-volume, high growth IoT requirements, or the need to optimize and automate more aspects of the business through the use of machine learning?

The older your environment, the more you have to gain ... or lose

During the research, we highlighted the relationship between comprehensive planning and the level of enthusiasm for S/4HANA adoption. As we explored the data, however, we also noted some other telling correlations. The level of S/4HANA advocacy, for example, was higher in organizations with older SAP environments, i.e. the ones likely to be based on more traditional, less flexible technology architectures and business processes that constrain digital transformation. In short, these organizations have more to gain, and the opportunity-cost of doing nothing is more significant.

Think of S/4HANA as a platform, not just a modern application suite

The last thought we will leave you with is the advice to think of SAP's latest business application offering as a platform for the future. Yes, there are many direct benefits of migrating to S/4HANA, and some great quick wins in areas such as real-time analytics, an enhanced user experience, and simplification of the whole environment from an operational perspective. But the real value of S/4HANA is as a strategic enabler for digital transformation and adoption of emerging technologies that are destined to become increasingly critical to success.

With that in mind, we hope the insights in this report have helped you understand the potential and develop a compelling, yet practical plan to move forward with confidence.

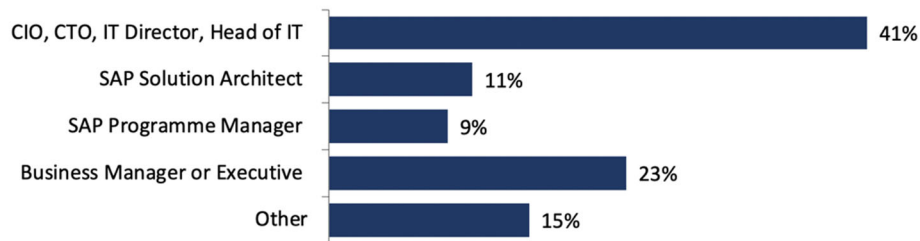
Appendix A – Survey sample demographics

Final sample **480** respondents

Where are you located geographically?



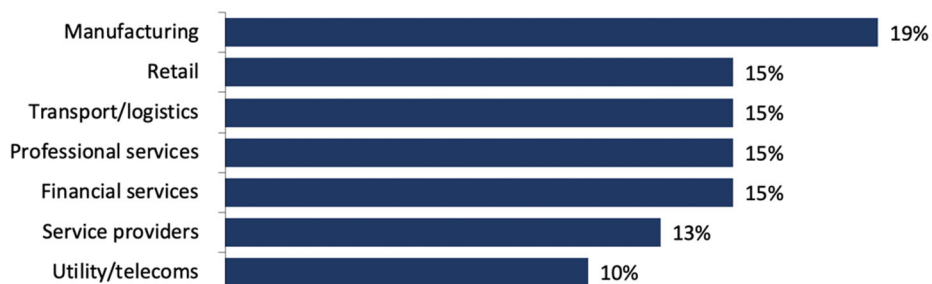
Which of the following best describes your role?



How many employees work in your organization?



Which of the following best describes your company's core business?



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