BENCHMARK REPORT
EXECUTIVE SUMMARY
by Robert Holland April 2024

DEPLOYMENT APPROACHES TO SAP S/4HANA

SAP S/4HANA ADOPTION continues to steadily increase as organizations move away from SAP Business Suite and SAP ECC. While that growth has not accelerated, the proportion of respondent organizations that have no plans for SAP S/4HANA is going down. This year, just 11% of respondents reported having no plans, the smallest number since SAPinsider started tracking this information in 2020. What is notable is that, while the move to SAP S/4HANA is still more likely than not to be part of a broader transformation, more respondents are focusing on completing their deployment as quickly as possible.

To provide insight on this year's SAP S/4HANA deployment trends, SAPinsider surveyed 150 members of our community between January and April 2024. As has been the case for the last five years, the likely deployment models for respondent organizations are system conversions or brownfield deployments **(Figure 1).** This makes sense because of the volume of SAP ECC or SAP Business Suite customers that will see their mainstream maintenance end in 2027. These may also be organizations that want to complete their move to SAP S/4HANA as quickly as possible.

The next most likely deployment model is that of a new or greenfield implementation. This type of deployment is necessary for organizations that are net new ERP customers for SAP, a group which SAP stated may consist of over half of those organizations that have licensed SAP S/4HANA. It is also a deployment model that is far more likely to be used by smaller organizations (those with annual revenues below US $2 billion) with 45% of those respondents using or planning on using a new implementation, compared to 32% of all respondents and just 23% of respondents from organizations whose annual revenue exceeded $2 billion. Conversely, the larger the organization is the more likely they are to be planning a system conversion (38%) or a selective data transition (38%) for their SAP S/4HANA deployment. Given that most of these organizations have likely run SAP environments for many years, a selective data transition will help them move their structure to the new system without having to migrate all their data.
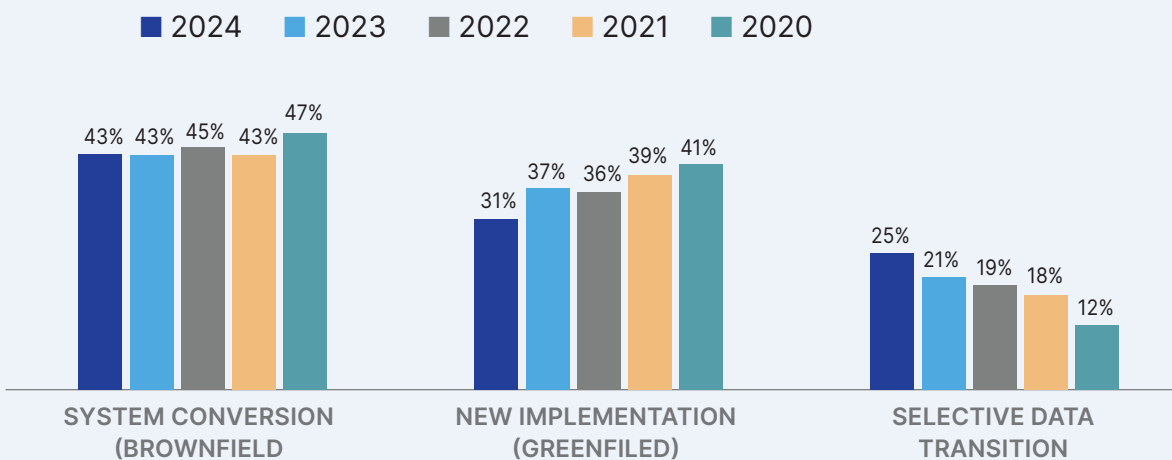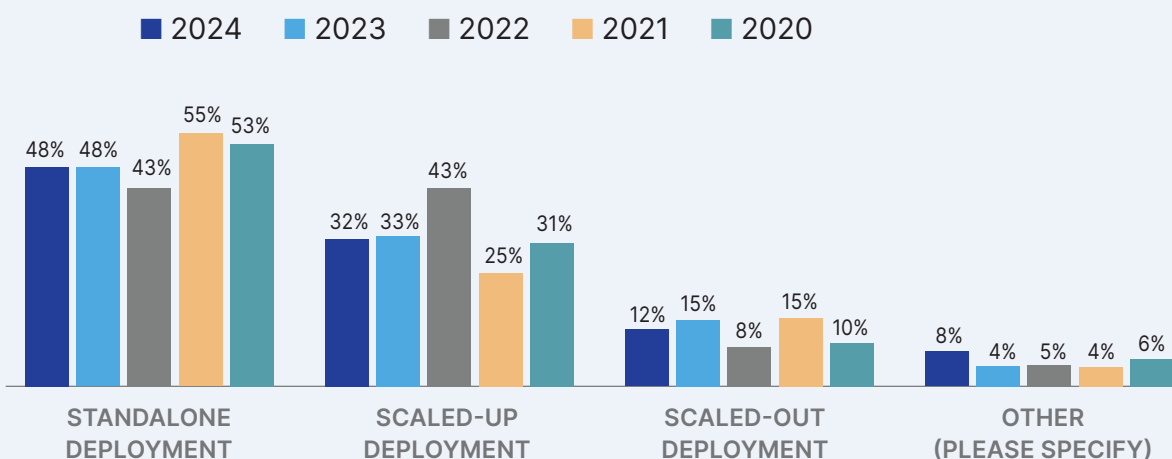
Figure 1: **Planned Deployment Model for SAP S/4HANA**

■ 2024 ■ 2023 ■ 2022 ■ 2021 ■ 2020

SYSTEM CONVERSION (BROWNFIELD: 43%, 43%, 45%, 43%, 47%

NEW IMPLEMENTATION (GREENFILED): 31%, 37%, 36%, 39%, 41%

SELECTIVE DATA TRANSITION: 25%, 21%, 19%, 18%, 12%

Figure 2: **Type of Deployment Planned for SAP S/4HANA**

■ 2024 ■ 2023 ■ 2022 ■ 2021 ■ 2020

STANDALONE DEPLOYMENT: 48%, 48%, 43%, 55%, 53%

SCALED-UP DEPLOYMENT: 32%, 33%, 43%, 25%, 31%

SCALED-OUT DEPLOYMENT: 12%, 15%, 8%, 15%, 10%

OTHER (PLEASE SPECIFY): 8%, 4%, 5%, 4%, 6%

Once the deployment model has been selected, organizations must determine what type of deployment they will use. The most likely type of deployment (48%) is a standalone deployment which is where a single existing ERP instance is moved into an equivalent SAP S/4HANA instance **(Figure 2).** A third (32%) of respondents plan a scaled-up deployment where multiple ERP instances are combined into one larger instance. Another option is that of a scaled-out deployment where a large ERP instance is distributed over multiple machines, servers, or cloud environments. Large organizations reported that they were more likely to perform a scaled-out deployment (15%) than smaller organizations (7%), but smaller organizations were more likely to use a standalone (50%) or scaled-up (43%) deployment) than larger organizations (44% and 28% respectively).

Insider Perspective

"The biggest factors impacting our current infrastructure plans are the age and expense of maintaining our existing systems. By moving to the cloud, we hope to be able to transition away from ageing systems more quickly than would be possible if we had to source new on-premise infrastructure. We are also looking to benefit from the cost savings of outsourcing the management and administration of new systems."

– IT MANAGER, SERVICES COMPANY

Deciding between the different deployment models was, as was the case last year, one of the two most difficult challenges that respondents reported facing as they moved to SAP S/4HANA. Almost as difficult a decision was that of choosing the appropriate infrastructure for the deployment. While there has been a decline over the last three years in the proportion of respondents with no plans to deploy in the cloud, this year saw a small bump in that number **(Figure 3).** There was only a negligible difference between large and smaller organizations in this regard, with 27% of respondents from large organizations indicating that they had no plans to deploy in the cloud and 26% of respondents from smaller organizations reporting similarly. The bigger difference was that 22% of large organizations reported that they planned to use a private cloud infrastructure-as-a-service environment compared to just 15% of respondents from smaller organizations. An equal number of respondents (15%) from large and smaller organizations reported that they were already using or were planning to use a cloud ERP offering such as RISE with SAP or GROW with SAP.

Despite the increase in respondents reporting that they had no plans to deploy SAP S/4HANA in the cloud, something that SAP is de-emphasizing as they look to move all customers to subscription-based licensing, the biggest changes in the cloud strategy results is the reduction in respondents reporting that on planning some sort of hybrid environment. Each of the three different hybrid choices showed a reduction in respondents planning to use those types of landscapes with a higher number planning to use SAP S/4HANA Cloud or an offering that falls in SAP's Cloud ERP Suite (RISE with SAP or GROW with SAP). This suggests organizations are looking to reduce the complexity of the environments in which they deploy SAP S/4HANA.

Although 30% of respondents report that their organization already deployed SAP S/4HANA with another 4% having deployed SAP S/4HANA Cloud or RISE with SAP, not every organization is able to immediately switch to the solution. Some need to maintain multiple systems in parallel for a period to demonstrate that the new system is running accurately, while others may need to preserve access to historical data if a system conversion or selective data transition was used as the deployment model. Examining the numbers below, those who reported in 2023 that they planned to switch during the current year appear to have completed that transition as the number of respondents reporting that they have already switched increased from 27% last year to 33% this year **(Figure 4).** What is notable, however, is that another 14% of respondents plan to switch to SAP S/4HANA this year with a further 10% planning to switch in 2025.

These numbers indicate that some organizations are accelerating their move to SAP S/4HANA. However, this year's

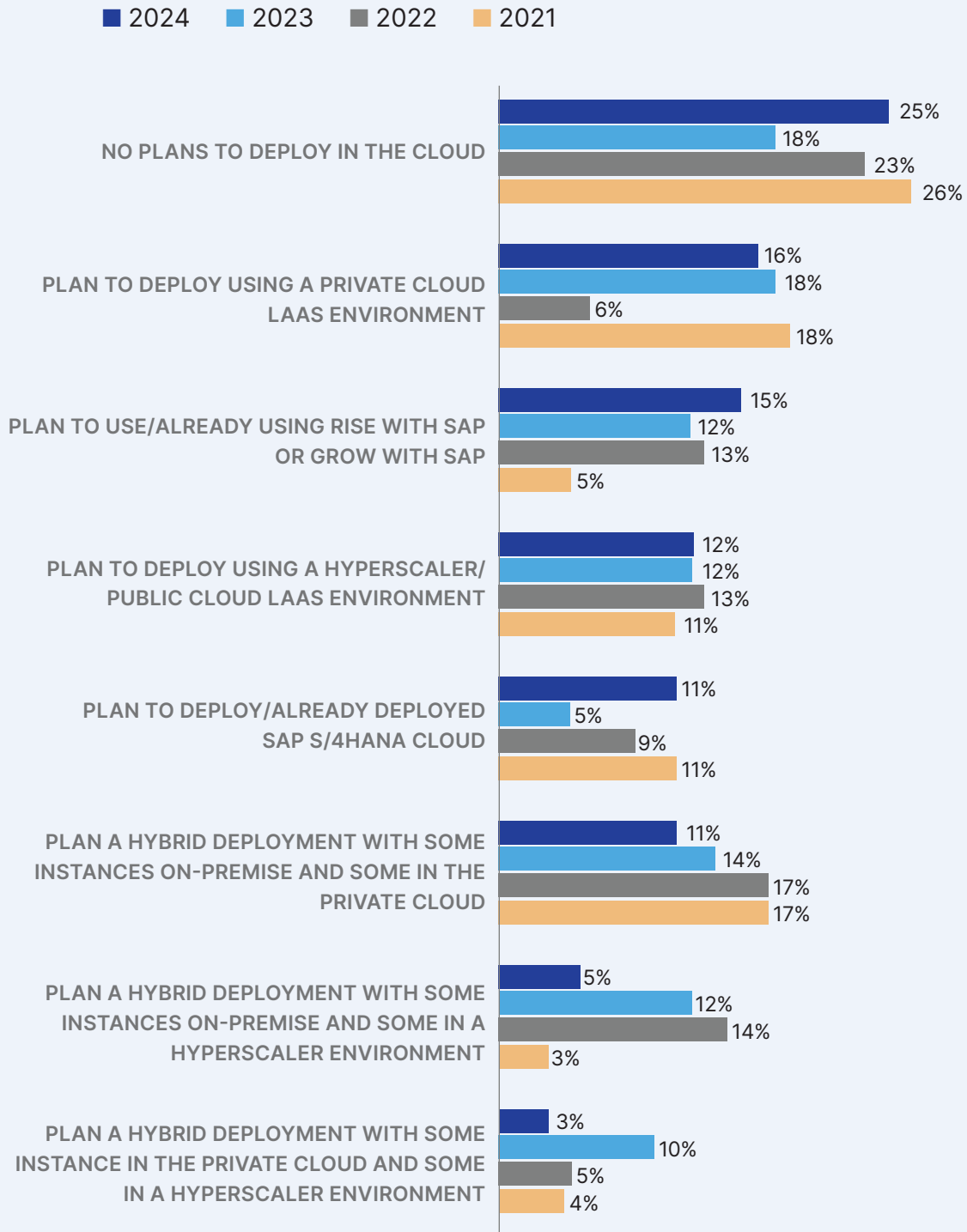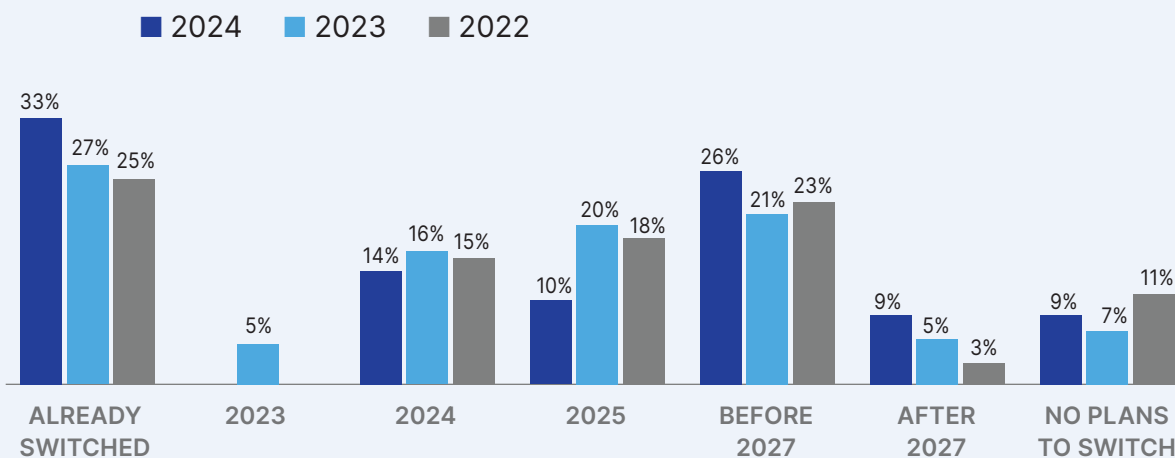**Figure 3: Cloud Strategy for SAP S/4HANA Deployment**

Legend: ■ 2024 ■ 2023 ■ 2022 ■ 2021

NO PLANS TO DEPLOY IN THE CLOUD
- 2024: 25%
- 2023: 18%
- 2022: 23%
- 2021: 26%

PLAN TO DEPLOY USING A PRIVATE CLOUD IAAS ENVIRONMENT
- 2024: 16%
- 2023: 18%
- 2022: 6%
- 2021: 18%

PLAN TO USE/ALREADY USING RISE WITH SAP OR GROW WITH SAP
- 2024: 15%
- 2023: 12%
- 2022: 13%
- 2021: 5%

PLAN TO DEPLOY USING A HYPERSCALER/ PUBLIC CLOUD IAAS ENVIRONMENT
- 2024: 12%
- 2023: 12%
- 2022: 13%
- 2021: 11%

PLAN TO DEPLOY/ALREADY DEPLOYED SAP S/4HANA CLOUD
- 2024: 11%
- 2023: 5%
- 2022: 9%
- 2021: 11%

PLAN A HYBRID DEPLOYMENT WITH SOME INSTANCES ON-PREMISE AND SOME IN THE PRIVATE CLOUD
- 2024: 11%
- 2023: 14%
- 2022: 17%
- 2021: 17%

PLAN A HYBRID DEPLOYMENT WITH SOME INSTANCES ON-PREMISE AND SOME IN A HYPERSCALER ENVIRONMENT
- 2024: 5%
- 2023: 12%
- 2022: 14%
- 2021: 3%

PLAN A HYBRID DEPLOYMENT WITH SOME INSTANCE IN THE PRIVATE CLOUD AND SOME IN A HYPERSCALER ENVIRONMENT
- 2024: 3%
- 2023: 10%
- 2022: 5%
- 2021: 4%

Figure 4: Timeline for Switching to SAP S/4HANA

■ 2024 ■ 2023 ■ 2022

	2024	2023	2022
ALREADY SWITCHED	33%	27%	25%
2023		5%	
2024	14%	16%	15%
2025	10%	20%	18%
BEFORE 2027	26%	21%	23%
AFTER 2027	9%	5%	3%
NO PLANS TO SWITCH	9%	7%	11%

survey also showed that more respondent organizations are only planning to switch sometime before 2027. And the number of respondents not planning to switch until after 2027 nearly doubled from 5% last year to 9% this year. When factoring in the size of the organization, smaller organizations were more likely to have already switched (37%) or plan to switch during 2024 (17%) than large organizations (28% and 7% respectively). Large organizations are also much more likely to only plan to switch before 2027 (33%) than smaller organizations (22%). A similar difference is seen between large (15%) and smaller (6%) organizations when considering which plan to switch after 2027.

While organizations plan for how they will move to SAP S/4HANA, the biggest factor they must manage is how they will align with SAP's plans for cloud ERP. The deployment model, type of deployment, and the infrastructure used will all need to accommodate the plans that SAP continues to push forward. But, while there has been resistance to adopting cloud ERP over the last three years, research this year suggests that is starting to change. Wherever organizations are on their journey to SAP S/4HANA and on their plans for SAP S/4HANA deployment, securing software and licenses for the path they want to follow may be the biggest challenge they encounter over the next two years.

This year's survey also revealed the following trends:

- Organizations already running SAP S/4HANA are largely divided into those who have never upgraded from the version they first deployed and those who are on a one- or two-year upgrade cycle. This is evident from the fact that 31% of respondents report that they are already running or implementing SAP S/4HANA 2023 despite the fact that it was released only six months ago.

- For organizations deploying or planning to deploy SAP S/4HANA Cloud, the most likely version is SAP S/4HANA Cloud, private edition (60%), with SAP S/4HANA Cloud, public edition (27%) and SAP S/4HANA Cloud, private edition, customer data center option (13%) less likely to be used.

- The average timeline for a transition to SAP S/4HANA, not including building the business case, remains between 12 and 18 months, although an increased number of respondents this year (26%) reported that they expected the transition to take between 18 months and two years than was the case last year (20%).

REQUIRED ACTIONS

Based on the survey responses, organizations should consider the following when making their plans for SAP S/4HANA deployment:

- **Dedicate time to exploring the benefits of the different deployment models for SAP S/4HANA.** It may seem as though a system conversion is the easiest SAP S/4HANA deployment model for organizations moving from SAP ECC or SAP Business Suite. However, this may not necessarily be the case. If the existing system was created at a time when the organization was much smaller or when business processes were quite different, there may be significant advantages to performing a new implementation and recreating those processes from scratch. Even if it makes sense to bring existing structures into a new ERP system, a selective data transition may provide a better foundation for future innovation. This is why it is vital to dedicate time to evaluating the different deployment models for SAP S/4HANA, and why it is one of the biggest challenges involved in the overall deployment.

- **Utilize infrastructure that will help minimize cost and provide the best performance and security in the long-term.** As organizations move to SAP S/4HANA they are likely to be considering new and updated infrastructure in order to ensure the longevity of the environment that they are creating. But they are also having to conform to reduce costs in existing systems while providing additional flexibility, deploying SAP S/4HANA with an approach that minimizes cost, while also providing a high performing and secure infrastructure and operating system. Juggling these factors can be challenging, which is why working with an experienced infrastructure provider that can help maximize the value of any infrastructure used, whether that is in the private cloud, public cloud, or in a hybrid landscape, should be a key requirement for anyone deploying SAP S/4HANA.

- **Ensure that deployment plans take SAP's cloud ERP strategy into consideration.** Not every organization is looking to move to RISE with SAP or cloud ERP. However, for organizations that do not yet have SAP S/4HANA licenses, moving forward with an on-premise deployment may be significantly more difficult than in the past. Given that an increased number of respondents plan on not moving to the cloud, it is vital to understand how plans for SAP S/4HANA deployment align with SAP's cloud ERP strategy. This is especially true for those that do not already have SAP S/4HANA licenses. Even those who already have licenses may find themselves under significant pressure as SAP has goals to move all on-premise licenses to cloud ERP. This includes both legacy ERP systems such as SAP ECC and SAP Business Suite, but also any SAP S/4HANA deployments that are on-premise.

STRATEGY AND NEEDS FOR SAP S/4HANA DEPLOYMENT

DART | MODEL FRAMEWORK

DRIVERS

- Upcoming end of maintenance requires a transition to SAP S/4HANA (54%)
- Pressure to digitally transform existing ERP solutions to create a harmonized and centralized model and structure (37%)
- Pressure to reduce costs in existing systems and infrastructure and provide additional flexibility and scalability (25%)
- Business demands updated processes that better fit current needs and meet regulatory requirements (23%)

ACTIONS

- Deploying SAP S/4HANA using an approach that minimizes cost (49%)
- Implementing standardized end-to-end processes for core ERP users (45%)
- Preserving only operationally necessary customization to the core ERP (38%)
- Integrating SAP and non-SAP front-end systems and innovations with the core ERP (34%)

REQUIREMENTS

- High performing and secure infrastructure and OS (85%)
- A proven partner with experience implementing SAP S/4HANA (85%)
- Deep integration between SAP S/4HANA and other enterprise systems (81%)
- Educating business users and executives on SAP S/4HANA features and benefits (76%)
- Capability to automatically migrate data to new systems (76%)

TECHNOLOGIES

- Infrastructure-as-a-Service (36%)
- Hardware and operating systems optimized for SAP HANA (35%)
- Managed infrastructure solutions (34%)
- Virtualization and hyper-converged infrastructure (34%)
- Open-source technologies (30%)
- Code analysis tools (29%)
- Platform-as-a-Service (27%)
- Automated testing and test management solutions (24%)
- Cloud ERP (20%)
- Auto code remediation tools (18%)
- Impact analysis tools (18%)
- Automated deployment and configuration tools (14%)
- Business Process Modeling tools (11%)

Appendix: 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 is 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 they 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.

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