



Migrating SAP to AWS

5 lessons from customers
who made the leap

What is your ERP plan?

60% of organizations are in the process of adopting a cloud ERP solution¹

The enterprise application landscape is changing across nearly every industry. Nowhere is this more evident than with SAP users. The direction of travel – both for SAP and for the wider industry — is to cloud platforms such as Amazon Web Services (AWS), with goals that include better positioning for future business growth, as well as increasing cost efficiency and business agility.

The question is: when do you make the leap?

Migrating an SAP environment to AWS brings challenges and opportunities to any business. The migration process must factor in security, network integration, and operational processes, as well as costs, risks, and resource optimization—with as little disruption to normal operations as possible.

Understanding these challenges—and more importantly knowing what to do about them—is key to delivering a smooth, successful cloud adoption process for mission- critical applications.

In this guide, we share five key lessons that we and our customers have learned about migrating SAP to AWS.

¹[Unit4.com: "Why are so many companies moving to a Cloud ERP"](https://unit4.com/insights/why-are-so-many-companies-moving-to-a-cloud-erp)

The cloud services market is estimated to reach \$397 billion by 2022 (Gartner)²

SAP is what we do

Leverage a provider with a proven track record

Helping customers move their SAP applications to AWS is a major part of what we do at DXC Technology. We have a dedicated SAP practice with 15,000 professionals helping over 5 million named SAP users across more than 875 enterprises. We're also one of SAP's most accomplished partners for SAP HANA Cloud. DXC is rated "excellent" by SAP for Hosting Platform Operations, SAP HANA Platform Operations, Cloud, and Infrastructure Platform Operations.

With thousands of active certifications, AWS accredited and certified personnel, and AWS certified SAP on AWS competency, DXC is well positioned and experienced in supporting any implementation of your SAP applications on AWS—whether it is a new or existing installation. DXC and AWS regularly share product roadmaps to leverage the latest AWS cloud-native capabilities relevant for hosting and managing SAP on AWS.

Whether you are looking to lift and shift ECC to reduce costs, migrate to SAP S/4HANA, or innovate with AWS services, AWS offers proven approaches backed by unmatched experience supporting 5000+ SAP customers in the cloud. Get more flexibility and value out of your SAP investments with the world's most secure, reliable, and extensive cloud infrastructure, 200+ AWS services to innovate, and, purpose-built SAP automation tooling to keep valuable personnel focused on value-adding activities.

With many SAP clients on AWS already, DXC can make your SAP migration to AWS more cost-effective, secure, and rewarding for your organization. You'll enable faster innovation and greater levels of automation and business flexibility to achieve desired business outcomes more quickly and consistently.

³[McKinsey & Co.: How CIOs and CTOs can accelerate digital transformations through cloud platforms](#)



Companies adopting cloud platforms report that they can bring new capabilities to market about 20 to 40 percent faster.³

LESSON 1

— Move for the right reasons

Cloud agility accelerates your response to business

Adopt fast and accelerate success

The benefits of cloud are clear: you only pay for what you use, you can scale up or down on demand as needed, and you can benefit from the enormous economies of scale that AWS brings. But the real benefits lie in agility and scalability.

Running SAP on AWS allows you to expand and shrink your infrastructure in minutes according to business need. You can suspend and resume systems at will. And you avoid the restrictions of fixed, multi-year contracts.

All this allows you to move quickly, and learn how to pivot accordingly, to find the best outcome for the business.

The sheer breadth of services available through AWS opens the door to new possibilities. Cutting-edge technologies like machine learning (ML), artificial intelligence (AI), the Internet of Things (IoT), big data analytics, and serverless infrastructure are only a click away. Businesses can get started using managed services at minimal cost that would require dedicated teams and significant investment to run in-house.

Top drivers for cloud migration

Percentage of respondents who ranked each category as No. 1 or No. 2

■ No. 1 ■ No. 2

Security and data protection



Data modernization



Cost and performance of IT operations



Source: Tom Davenport, Ashish Verma, and David Linthicum, *Data modernization and the cloud*, Deloitte Insights, August 26, 2019.

Deloitte Insights | deloitte.com/insights

Source: <https://www2.deloitte.com/us/en/insights/industry/technology/why-organizations-are-moving-to-the-cloud.html>

The DXC Difference

Experience and know how

Building on decades of experience, we at DXC have repeatedly and successfully introduced and implemented innovative solutions and processes. This uniquely positions us to help your organization clearly and confidently visualize and adopt a roadmap to success.

Our Cloud Right™ approach helps you make the right technology investments at the right time and on the right platforms. When cloud is done right, it can provide up to three times the return on investment (ROI) and faster business results with less cost, risk, and disruption. DXC meets quarterly with AWS engineering teams, reviewing future plans on both sides to ensure we are leveraging the latest AWS innovations within our Platform as a Service (PaaS) for SAP on AWS services. We work in lockstep with AWS sales and solutions teams on pursuits and with current clients to show them how AWS can help them get more from their SAP deployments by incorporating emerging technology more easily and cost-effectively than ever.

The focus of our Platform Services for SAP is on developing and leveraging the latest in automation across the SAP IT stack to enable provisioning, lifecycle management, landscape optimization, and resilience. Relying on our 35+ years of experience and partnership with SAP enables us to continuously provide customized and innovative SAP IT and application management services.



Rapidly growing fast-food chain

Achieve cost optimization and agility with AWS Well Architected Framework for SAP

Consider a well-known fast-food chain based in Asia with global expansion ambitions. Their business objective is to expand their family of 6,000 stores to become one of the world's top 5 restaurant companies. To achieve this, they decided to strengthen IT operations end to end, from the data center to point-of-sale terminals, and build a more resilient business by stabilizing applications and infrastructure. To accomplish these goals, the restaurateur decided to implement end-to-end IT service management by leveraging DXC managed services and capabilities with ServiceNow. They also sought to consolidate technology and management of their ERP SAP applications on AWS, and enable nationwide workplace/site support for approximately 3200 stores in the Philippines.

These enhancements resulted in a reduction of IT performance-related incidents by 43%. The adoption of modernized IT infrastructure has resulted in lower upfront cost and on-demand scalability, as well as greater business resilience in the midst of the COVID-19 crisis.



LESSON 2

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**Study proven
migration
strategies to
reduce risk
at every stage**

Ensure upfront support of all migration stakeholders

Outperforming companies have active CEO involvement*

You may be ready to move workloads to AWS (many businesses are), but remain hesitant with ongoing fears of business disruption and persistent escalating costs. Like anything, cloud migration requires proper planning. The key is determining business priorities, working out a path to cloud adoption that optimizes your results, and de-risking at every stage.

It's crucial to understand how your migration will affect people and processes. From day one, involve all areas of the business to understand what they require now and what benefits they'd like to see once on AWS. That way, you ensure their current and future needs are met. At this stage, you need to set goals and, crucially, have everyone agree on them.

Next, decide which workloads require moving – and if there are better options than re-hosting. Bear in mind the possibility of refactoring, re-architecting, retiring, or replacing applications and prioritize according to business need.

During the move, be open and clear about progress. If there are problems, explain to stakeholders what they are, what it means for them, and how you're going to fix it.

DXC migrates more than

65,000

IT workloads a year with an above-average

99.5% success rate

*www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/cloud-migration-opportunity-business-value-grows-but-missteps-abound

The DXC Difference

We Do Cloud Right™

DXC is the right partner to bring SAP applications into the cloud at a high speed and low risk to your business. Our onboarding program can move SAP to cloud in less than two months. We're accustomed to migrating hundreds of SAP workloads for customers, maintaining uptimes above 99.8% in the transition process.

As a premier cloud platform services provider, our managed SAP offerings simplify your operations and deliver new business insights.

DXC's distinctive Cloud Right approach helps customers make the right technology investments at the right time and on the right platforms. We carefully assess your strategic, operational, financial, and technological constraints and opportunities, understanding what needs to change to meet your business vision and delivering targeted improvements that boost performance and contain risk across all clouds, platforms, the established IT estate, and the application landscape. Our migration methodology helps us understand the idiosyncrasies of your business and map a transformation path to AWS for your SAP environment focused on achieving your goals. Moreover, our library of tools automates many phases of the project, including assessment and discovery, data migration, testing, and defect management. Post-migration, we can also manage your SAP environments to help reduce costs by up to 35% and give your people more time to focus on innovation.



Pharma accelerates business via rapid data processing

Enable rapid business results with HANA

A major US pharmaceutical firm wanted to move their SAP systems into HANA, but they lacked the skills to move large systems and support the constantly changing technology. In less than 6 months, DXC transformed their entire SAP estate to S/4 HANA on AWS including migration of a BW, GTS, MDG, Fiori, GRC, ATTP, SLT, SOLMAN, SCM, RPM, Netweaver stack for system landscape. Cost reductions were enabled through use of nearline Storage (NLS) on AWS for most of the legacy data in BW to reduce the HANA footprint. In addition, the DXC solution is compliant with all FDA regulatory qualifications applicable to this migration.

This SAP HANA-based solution enables the client to introduce stable and competitive best practice business processes both locally and for international growth. DXC's managed SAP Services allow them to focus on their core business and leave the complexity of SAP HANA infrastructure hosting and application management to DXC. Running the entire landscape on the scalable AWS platform allows for future growth and innovation aimed at enabling the client to achieve their business goals.



LESSON 3

Automation empowers your teams to achieve more



Bridge the skills gap

Automation backed by delivery experts accelerate business outcomes

You want to gain business agility by moving your SAP workloads to AWS and are hampered in your current environment by long lead times for provisioning, dedicated high-cost environments, and lack of experienced SAP resources.

Automating some of the processes for SAP infrastructure management enables you to deal with the shortage in skilled cloud professionals and helps teams across the business become more productive.

You can accelerate your business response times from weeks and days to hours and minutes. You can be more flexible and have the tools to make better, faster decisions by running your SAP workloads on AWS. Automation also simplifies the complexity of running infrastructure, reducing the risk of human error, and improving uptime.

³Gartner, "The Cloud Infrastructure and Platform Services Skills I&O Teams Require for the Future"

⁴Robert Half Technology: [Reskilling IT for the cloud](#)

50%

of infrastructure and operations orgs will fail to meet their company cloud adoption goals because of a lack of in-house skills and experience.³

67%

of IT managers want to expand their teams in areas such as cloud computing and security, but 89% are having a tough time recruiting for those skills.

-Robert Half Technology⁴

The DXC Difference

Ease of use and speed through automation

The automated capabilities of our PaaS for SAP on AWS simplify operations across your entire SAP stack — from the AWS infrastructure through the application management layer. Common SAP lifecycle actions are enabled via DXC's automation. You do not need to recreate custom scripting and maintain all kinds of workload images and libraries by themselves.

You can leverage DXC's self-service portal as well as operational experts to accelerate your business response. Automation accelerates both SAP landscape provisioning on AWS and day to day lifecycle actions (scaling, suspend/resume, refresh, etc.). PaaS for SAP on AWS customers have slashed the time it takes for many common SAP lifecycle management tasks from days to minutes and cut total cost of ownership by one-third.

Our PaaS seamlessly integrates your SAP landscapes and helps you get to cloud more quickly the right way, so you avoid downtime and lost revenues during migration. Customers typically see 30% faster time to value.

Fruit juice provider achieves global expansion

Gain agility and scalability to support your business objectives

A major Americas-based beverage manufacturer and distributor needed to improve the order-intake process throughout its supply chain. An end-to-end production environment, from farming, manufacturing, logistics, and distribution was created. The client used the opportunity to secure an optimized SAP architecture with high availability and built-in redundancy. DXC's full-stack SAP management solution enables IT simplification and support across the SAP stack by leveraging of DXC's SAP Application Management Services and PaaS for SAP on AWS.

Automation features enable proactive monitoring of business metrics. The customer saved 30% on SAP support costs, improved user-generated incidents by 40% and has a proactive monitoring program in place to solve issues before they impact the business.



LESSON 4

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**Believe the
hype — Security
can actually be
stronger in
the cloud**

Security can't be an afterthought

Adopt an enterprise-wide security strategy

You may still have concerns about the security of cloud, as many companies do. This is especially true when it comes to mission-critical applications like SAP that handle your (and your customers') most important data.

A security breach or data leak has serious implications for brand reputation and business continuity, not to mention the potential of regulatory sanctions.

When technology teams are under pressure to support more complex configurations and more user accessibility, how can they provide the integrated cloud security and compliance for SAP workloads and their underlying infrastructure and data?

The key is an enterprise-wide security strategy for SAP workloads that considers the needs of the relevant stakeholders and data owners for each application. By capturing all corporate and legal compliance needs upfront, you can ensure that your cloud architecture reflects your security needs from day one.

51%

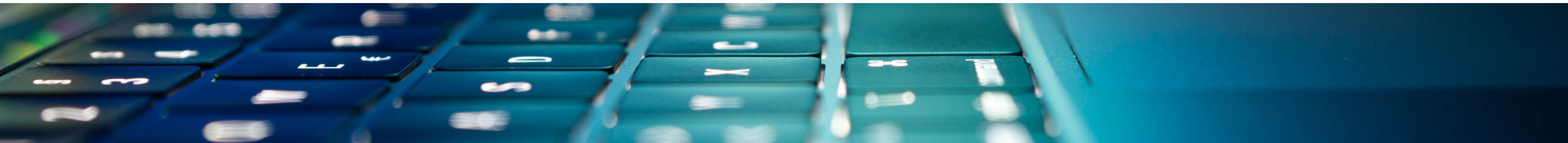
of senior executives we work with say it's essential to treat risk, security, and compliance as a key influence on design.

-DXC

70%

say security is a stumbling block in implementing a digital strategy.

-DXC



The DXC Difference

Protecting the full SAP IT stack including operations

You may have heard about the AWS Shared Responsibility Model for cloud security. AWS ensures the security of the cloud, while the customer that's running the workload must ensure their applications are secure in the cloud. We take care of the latter part for you, including configuration of AWS native tools like AWS Security Hub, Amazon GuardDuty, and AWS CloudTrail for AWS Well-Architected Framework alignment.

Between DXC and AWS, your entire SAP stack is covered – from compute, storage and networking through the operating systems, platform, applications, and customer data. DXC can protect the full SAP IT stack including operations due to our internal expertise and dedicated business focused on security, SAP management and IT operations everywhere.

Our DXC PaaS for SAP on AWS contains features to improve and automate security for enterprise SAP workloads. We separate customer, public, and management traffic. We encrypt data at rest and in transit and employ endpoint security protection. We also segregate at the human layer, too, by limiting access to individual hosts, enforcing MFA (Multi-Factor Authentication), automatically revoking access for departing employees, not sharing SAP passwords with our support teams, and ensuring complete traceability of support activity.



Aircraft manufacturer trusts DXC and AWS security best practices

Fully secure SAP IT stack

The potential consequences of a successful cyberattack on an aerospace company could be catastrophic. This is one of the big reasons why the industry is so tightly regulated, and its companies are so security conscious.

When a major European aircraft manufacturer wanted to make its design processes more efficient by moving them to the cloud, security and compliance had to be the number-one priority. DXC implemented a robust security strategy across the full IT stack. Combining AWS cloud native advanced security tools and configurations, enforcing SAP security recommendations, and adopting DXC's proven security best practices to protect operations.

The customer's computer-aided design (CAD) workers now use AWS to vastly improve scalability and convert between 2D and 3D models 30% faster. At the same time, the combination of DXC's security strategy and the infrastructure protection provided by AWS helps them keep their key assets and data safe.



LESSON 5

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**Moving to AWS
will help you view
data in an entirely
new light**

Hone your competitive edge

Leverage AWS data analytics to increase revenue growth and reduce operational overhead

There's a reason that cloud is the new normal. Businesses value the immediate cost benefits, scale and flexibility. But you also see potential to unlock the value of your data at a fraction of the cost and complexity that traditionally comes with innovation.

In industries struggling against stiff online and overseas competition, like manufacturing and retail, for example, the ability to process, analyze and monetize the vast amounts of data your business generates could be the key to differentiation – and survival.

Enterprise data warehousing, information management, operational reporting, and self-service analytics will help you determine not only why things happened but enable you to use that insight to model what will happen in the future. In short, you use your better understanding of customer behavior to support new product development.

By making 10% more data accessible, a typical Fortune 1000 company will see a \$65 million increase in net income.¹

-Forbes

41%

of organisations are considering moving their analytics platform/ solution to the cloud within the next year.

-Microstrategy

¹<https://www.forbes.com/sites/brentdykes/2019/03/28/the-four-key-pillars-to-fostering-a-data-driven-culture/?sh=31cebb8c7d90>

The DXC Difference

Rapid data conversion to actionable intelligence

Moving your SAP workloads to cloud is the starting point for a deeper and more rewarding relationship with your business data. You are creating vast volumes of it, more than you ever have, which creates a big challenge when it comes to discovering hidden value in that data. Having the ability to visualize — even analyze — what's happening at any given point, across the core of your business, is part of the value of running SAP on AWS.

The concept of the 'intelligent enterprise' is realized largely in part by running mission-critical applications in a cloud environment that enables real-time analysis and is optimized for integration and growth. To fully reap the rewards of digital transformation, your enterprise must convert data to actionable intelligence, offering you a more holistic view of yourself to enhance decision making, reveal hidden opportunities, and reduce risk. Moving SAP into the cloud opens a world of opportunity.

With 25 regions and 81 availability zones around the globe AWS offers the broadest coverage for SAP workloads and enterprise needs by serving more than 5000 SAP customers. This strong partnership helps AWS bring industry-leading SAP certified instances from 256GB to 24TB and more. It can also satisfy the sometimes-extreme configuration and performance needs by scaling out to 48TB for SAP S/4 HANA, or 100TB for SAP BW/4 HANA. Finally, AWS, together with AWS Partners, accelerates the leverage of SAP data combined with non-SAP data to enable analytics-based applications serving direct enterprise business initiatives.



Aluminum Smelter enjoys zero migration downtime and positive business outcomes

S/4HANA on AWS provides real-time business insights

One of Australia's largest aluminum smelters has been operating 24 hours a day since 1983. Their SAP solution was no longer supported and required updates to the database technologies and key interface systems. All the while they wanted to leverage the data within these systems to provide their highly mobile workforce access to information in the field to improve workforce efficiencies and responsiveness.

Through an upgrade to S/4 HANA and implementation of the latest SAP applications like SAP Work Manager, Simple Finance, Warehouse Management, and web-based incident forms, DXC eliminated old, custom developments whereby modernizing and simplifying the SAP landscape.

The customer now saves up to hundreds of thousands of dollars per year by eliminating data entry into SAP Enterprise Asset Management resulting in faster data-retrieval times, improved reporting and simplified reconciliations.



About DXC Technology

DXC Technology (NYSE: DXC) helps global companies run their mission-critical systems and operations while modernizing IT, optimizing data architectures, and ensuring security and scalability across public, private and hybrid clouds. The world's largest companies and public sector organizations trust DXC to deploy services across the Enterprise Technology Stack to drive new levels of performance, competitiveness, and customer experience. Learn more about how we deliver excellence for our customers and colleagues at www.dxc.com.

For more information visit www.dxc.com

DXC provides full-stack SAP Management Services which most of the clients mentioned above leverage allowing them to achieve low total-cost of ownership for their SAP landscapes with maximum business agility to address any market demand.

About DXC Platform as a service (PaaS) for SAP on AWS

DXC platform as a service (PaaS) for SAP on AWS helps you run SAP in a cost-effective, reliable, and agile way.

Customers can lower the total cost of ownership of their SAP workloads by up to 35%, provision entire SAP environments in hours, and scale them up or down in minutes based on organizational demands. The service guarantees 99.95% uptime of your critical SAP applications.

Our PaaS for SAP on AWS draws upon more than 30+ years of SAP excellence and a global partnership with AWS. We have 15,000 SAP professionals supporting more than 5 million users at 875 customers. DXC also holds more than 11,600 AWS Accreditations and 3000 AWS Certifications.

Learn more at www.dxc.technology/SAPonAWS

AGUES **D**ELIVERING EXCELLENCE FOR OUR C
RING **E**XCELLENCE FOR OUR CUSTOMERS AN
R OUR **C**USTOMERS AND COLLEAGUES DELIV