

WHITE PAPER

Unlock Innovation with an SAP Migration

EXECUTIVE SUMMARY

With the global pandemic unlocking a fresh wave of digital transformation investments, companies are reconsidering the need to modernize their SAP environment by embracing cloud environments tuned for agile, cost-effective, and data-driven business.

Challenges related to remote work, supply chain disruptions, and the need to evolve business processes and create new digital business models have prompted IT leaders to take a hard look at their legacy SAP landscape. A modern SAP solution, delivered as software as a service (SaaS) or via public- or hybrid-cloud deployments, supports a real-time view of business operations as well as anywhere, anytime accessibility. These are essential for helping organizations navigate the uncertainties of the current climate and look ahead to fuel growth.

Research from [IDC](#) estimates that direct spending on digital transformation efforts will increase at a rate of 15.5% through 2023, with investment forecast to hit \$6.8 trillion as organizations build on existing infrastructure and fine-tune digital strategies.

The global market for cloud ERP, estimated at \$23.9 billion in 2020, is expected to grow at a CAGR of 8.6% from 2020 to 2027, according to [ResearchAndMarkets](#). SAP remains the market leader in ERP software, with 77% of the world's financial transactions touching an SAP system.



\$23.9 BILLION

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SOURCE: [ResearchAndMarkets](#)



Taking a New Look at SAP

Organizations making plans to innovate their business strategy are quickly zeroing in on the need to modernize and migrate their entire SAP environments to the cloud, as well as move to S/4HANA, SAP's next-generation Intelligent ERP solution. According to [a global IDC survey](#), nearly three-quarters (73%) of businesses said they were planning to deploy the system while 9% confirmed they already have implemented SAP S/4HANA in production. More than 54% of those surveyed said they plan to make the leap within the next three years.

Companies have historically been reluctant to move their ERP environment, considered the lifeblood of business operations. Doing so may risk disrupting key operations, whether they're financial transactions or employee HR interactions. In IDG's 2020 "Cloud Computing Study," just 41% of organizations reported that they have migrated or deployed ERP, CRM, and other back-office business applications to the cloud, because of such concerns—and 18% said they had no plans to do so.

Yet critical business challenges have prompted many companies to revisit that decision, drawn in by the many advantages of running SAP on Amazon Web Services (AWS). The ability to scale back data center investments and retire technical debt with an AWS cloud migration significantly reduces the high costs associated with an SAP installation while also bolstering security, resilience, and performance compared to running SAP in a traditional on-premises environment.

Beyond cost and performance advantages, SAP on AWS helps companies accelerate digital transformation and respond more effectively to the shifting business climate with new innovations. Specifically, SAP on AWS serves as a core foundation for next-generation data and analytics efforts, the linchpin of an agile, intelligent enterprise. Data-driven insights from cloud-based SAP environments better empower sales teams, deepen customer engagement, and turbocharge business performance.

Research shows that users are hungry to improve upon past SAP implementations. In its [SAP Success Report](#), SAP consultancy Resulting found that:

- 48% felt that their prior SAP program achieved their business value.
- 36% felt that the program kept to the original delivery plan.
- Less than 30% felt that it tracked within the agreed-upon budget.

According to "[ASUG Pulse of the SAP Customer 2020 Study Results](#)," from the Americas' SAP User Group (ASUG), organizations are maintaining or increasing investments in SAP, with SAP S/4HANA specifically garnering interest: 59% of the respondents are pouring more investment dollars into their SAP environment (versus 53% in 2019).



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Why SAP on AWS Cloud

AWS is moving front and center as one of the preferred platforms for SAP ERP, and specifically SAP S/4HANA, given the breadth of its ecosystem and its proven model for SAP migration and modernization.

In fact, [IDG research finds](#) high levels of satisfaction among SAP customers that chose AWS as the pillar of their ERP transformation. IDG surveyed 100 enterprise customers that have transitioned one or more of their SAP applications to AWS. The respondents were nearly unanimous in reporting high satisfaction with the decision to migrate.

In most cases, infrastructure cost savings are the primary driver of the AWS migration decision, and the savings continue to be significant over time. Nearly all companies surveyed (96%) said they have reduced the total cost of ownership (TCO) of their SAP investments by moving to AWS, with an average TCO reduction of 26%. One in six customers said their savings amounted to more than 40%.

Many organizations are already running multiple SAP workloads on AWS, and nearly two-thirds of the current customers plan to shift additional applications in the future, the research found.

There's good reason for the long view for cloud migration: After initial cost savings, experienced SAP-on-AWS users overwhelmingly reported, they achieved longer-term benefits for critical business outcomes such as:

- Improved efficiencies
- Faster pace of innovation
- Decreased time-to-market
- Enhanced customer service

For example, 43% of the companies that have used SAP on AWS for more than two years have improved organizational efficiency, compared to only 28% with less than a two-year track record with SAP on AWS. Similarly, 40% of the long-term users said they'd advanced innovation more effectively than their less-experienced counterparts.

AWS's breadth of capabilities for data and analytics, along with AWS's low-cost backup and archive capabilities, are key advantages—whether it's to lift and shift legacy SAP installations or modernize on S/4HANA as part of a broader digital transformation. AWS hosts more than 5,000 customers running SAP workloads across a variety of industries, including automotive, transportation, life sciences, manufacturing, consumer goods, and many others.

The AWS Migration Acceleration Program (MAP) for SAP helps customers reduce the complexity and cost of migrating to the cloud. This proven model encompasses a discovery workshop, an initial TCO assessment, technical validation, and assistance in building the proper business case. Together, these services ensure that customers have a smooth migration path to AWS and can immediately reap the benefits of extended SAP functionality to achieve key business outcomes and performance goals.

Why IBM for SAP on AWS

As an AWS Premier Consulting Partner and AWS SAP Competency Partner, IBM has demonstrated technical proficiency and proven success in SAP implementations, migrations, and innovation on AWS. Beyond the AWS universe, IBM has 40+ years of experience in delivering SAP migrations, and its team of 40,000+ global SAP consultants helps customers work through their choices to maximize SAP investments. Moreover, IBM is a leader in security services, which further helps organizations mitigate deployment risks.

As part of its work portfolio, IBM has developed several offerings designed to help customers orient themselves to SAP on AWS and start to leverage its benefits—a movement defined as *Adopt and Evolve*. Late last year, IBM released the Accelerated Move Center (AMC) in collaboration with SAP to accelerate the conversion of existing ECC workloads to S/4HANA on AWS. Once workloads have shifted to AWS, IBM helps clients continuously evolve with advanced services such as data, AI, and automation as it reorients traditional transactional processes to intelligent workflows that align with SAP's industry cloud strategy.

These new offerings extend IBM's experience in delivering industry solutions to customers, including its best-practice templates known as IBM Impact. Developed on AWS along with hardened security access and controls, IBM Impact provides a fast and flexible on-ramp to SAP S/4HANA, reducing implementation time by as much as 30%.

Since its acquisition of Red Hat, in 2019, IBM has increased adoption of automation capabilities powered by Red Hat Ansible to accelerate the provisioning and ongoing management of SAP workloads in the cloud. With Red Hat automation, companies can provision new systems in a couple of hours, as opposed to taking days or weeks.

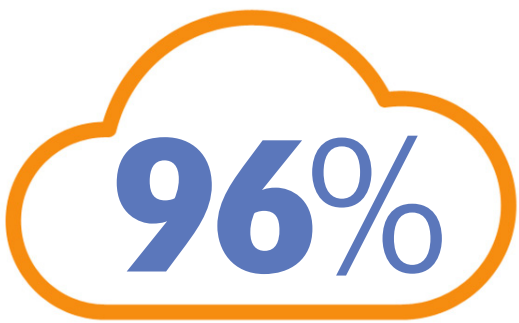
In addition to leveraging the power of automation for technical setup and ongoing operations, IBM is also tapping the capabilities for orienting more of the transactional processing in SAP to touchless operations. Specifically, automation is used to streamline core SAP processes in areas such as configuration, code remediation, and project life cycle activities such as transition and localizations.

IBM Services carries out its mission with a deep bench of more than 250,000 service professionals, including specialists trained in agile systems, hybrid-cloud and multicloud enterprise applications, process transformation, and digital strategies.

SAP on AWS Streamlines Vendor Onboarding

One longtime SAP customer made the leap to SAP on AWS Cloud and a modern microservices architecture to overhaul its mostly manual and inefficient vendor management process—a key challenge for many businesses, regardless of industry. Working with IBM as a systems integration partner, the oil and gas giant extended its existing deployment of AWS, Red Hat OpenShift, and SAP S/4HANA with a new way of building extensions on top of its SAP core.

IBM took advantage of libraries and AWS Cloud's API ecosystem to validate and repopulate data for vendor management onboarding—with the goal of automating existing manual tasks, including the rekeying of information and an overreliance on personnel for approvals—both inefficient and prone to inaccurate data input.



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SOURCE: [IDG research](#)

End users were also frustrated by the legacy vendor management system's interface, which was arcane, slow, and lacking validation capabilities. "The person creating the vendor record did not have all the necessary information at setup, so they had to send several emails to the buyer or vendor to gather all the information required, which took several days to complete," explains Devraj Bardhan, global leader, Digital Studio, for SAP at IBM. "The system response was slow and dependent on manual support for the most fundamental problems."

IBM guided the customer through a development program to build a self-service vendor onboarding app that keeps the focus on the end user and significantly improves process efficiency. Payment details, including international bank account numbers (IBANs) and other bank account details, are checked with multiple APIs. Vendors upload bank statements, which are monitored with machine language technologies to detect anomalies while vendor master data is validated in real time. Address, tax code, contact information, and bank details are also validated with a public API from open source libraries, eliminating manual data input, reducing the risk of errors, and speeding up the onboarding process through self-service.



*With IBM powered by Red Hat Ansible automation, **companies can provision new systems in a couple of hours, as opposed to taking days or weeks.***

The new platform reveals how the combination of SAP on AWS can completely transform existing processes. Quantifiable metrics include:

- Reduction in processing from two hours to seconds
- 4x improvement in performance
- 50% reduction in rejected requests
- Overall increase in data quality
- 20% reduction in overall cost of operation

Accelerate Your SAP Transformation with IBM and AWS

IBM has deep experience with both the SAP and AWS domains, having collaborated on more than 6,500 successful SAP programs, from legacy ERP to the latest SAP S/4HANA installations in the cloud. IBM also hosts one of the largest SAP learning user hubs, providing customers with a forum for upskilling via self-service.

IBM's depth of solutions implementation expertise and long history of successful deployments is a natural complement to AWS's broad microservices offerings. AWS and IBM can help organizations build a modern environment that's primed for innovation and driving measurable business results.

No matter what SAP system you run or strategy you'd like to adopt, AWS and IBM have the experience, tooling, methods, and best practices to streamline your migration or transformation. If you're looking to shift your on-premises SAP applications to a managed AWS cloud environment, run the **Cost Benefits Estimator tool** and see a summary of potential savings. Also IBM's S/4 HANA Impact Assessment offers objective insights based on your own data and fortified by IBM's experience. Sign up for an assessment [here](#).

