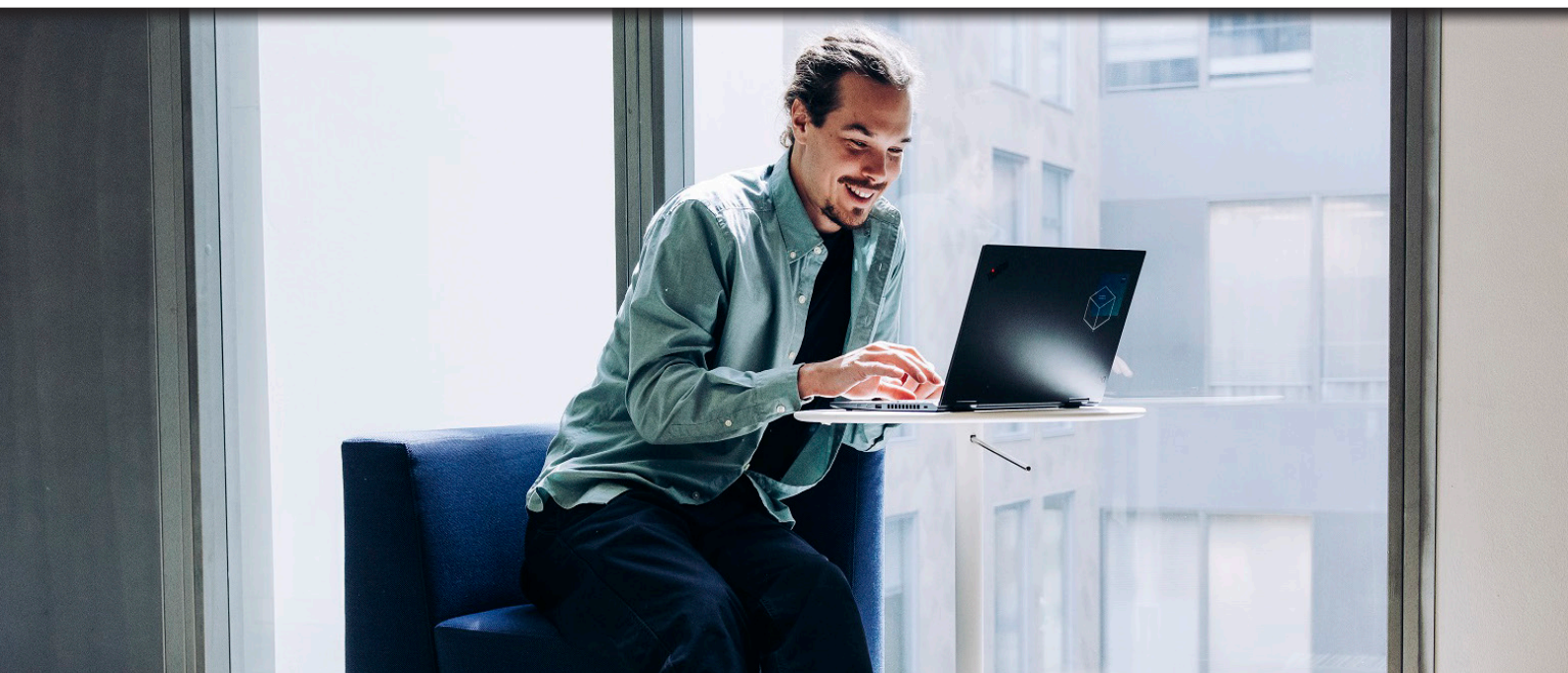enfo

Whitepaper

Enfo and AWS: Ten compelling reasons to run your business on SAP S/4HANA in the AWS cloud

SAP S/4HANA in the AWS cloud

Moving to the cloud has become the preferred solution when migrating to SAP S/4HANA – and AWS has proved a popular choice among businesses

Every SAP customer faces a critical decision when it comes to migrating to S/4HANA, the latest version of the software giant's business management system. For many, moving to the cloud has become the preferred solution – and is actively encouraged by SAP itself. But even then, IT leaders must decide which cloud platform to opt for.

SAP S/4HANA comes with the promise of greater agility for the business, lower costs, and faster return on investment for innovation. Consequently, any upgrade is an opportunity to consider options and the best way forward.

As the market leader, Amazon Web Services (AWS) has proved a popular choice for SAP users. This is because organisations that have evaluated how to transition from a traditional datacentre environment to the AWS cloud have discovered compelling reasons for making

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>
> **Jari Seppänen, SAP Solution Architect, Enfo**

the switch. Here, we outline 10 reasons for running business-critical SAP S4/HANA workloads in the AWS cloud.

1. Flexibility

Running your business on SAP S/4HANA in the AWS cloud increases flexibility from

two important perspectives – management and governance.

"From a technical management viewpoint, flexibility is increased when it comes to managing workloads and configurations. From a governance point of view, running SAP S/4HANA in the AWS cloud means you can run it as an outsourced service," says Jari Seppänen, SAP Solution Architect at IT services company Enfo.

The flexibility to transition to a new vendor is much easier compared to a traditional datacentre model, he says: "Service transition from an old datacentre vendor to a new datacentre model is complex. When systems are in AWS cloud, no extra transition project is required."

Enfo ensures fast and efficient cloud migrations by working with all major cloud service providers to execute proven and best practice SAP transitions and transformations to the cloud for maximum flexibility.

2. More time to focus on business development

In a competitive environment, where innovation is vital for the future of the business, the focus must be on new ideas, development and profit. Organisations don't want to devote resources to maintaining infrastructure – they want to address how to stay ahead of the competition and thrive. By running SAP S/4HANA in the AWS cloud, the organisation can dedicate its time and energies to growing the business.

"One of the biggest benefits is that organisations can focus on improvement and innovation. Using SAP S/4HANA and running SAP workloads in the most modern way in the AWS cloud ensures the most innovative technologies are in use. A good example is SAP Lens, which includes a collection of customer-proven design principles and best practices for ensuring SAP workloads on AWS are well-architected," says Seppänen.

"The business doesn't need to worry about this as SAP and AWS do it on their behalf. They can focus on innovation."

3. Enhanced security and compliance

Security is a top priority for any business running SAP S/4HANA. Organisations can be reassured that the move to AWS cloud minimises risk compared to an on-premise model, where security skills dedicated to datacentres cannot match the level of investment, resources, skills and state-of-the-art security technologies available from AWS.

AWS is backed by a deep set of cloud security tools, with over 300 security, compliance, and governance services and features. In addition, AWS supports 98 security standards and compliance certifications, including PCI-DSS, HIPAA/HITECH, FedRAMP, GDPR, FIPS 140-2 and NIST 800-171.

"There is absolutely no question that running SAP workloads on the AWS cloud enhances security from the management, governance and customer organisation side. Customers can fully trust the hyperscaler on competence and compliance with all standards," says Seppänen.

The business can be assured about the strength of security for SAP workloads on AWS.

"AWS is better at security than anyone else and there is way less downtime. The organisation can focus more on applications and business development," says Seppänen.

Running SAP workloads on AWS means it is easier to check for irregularities and meet compliance obligations.

"It gives greater visibility to auditors if they want to check configurations. The infrastructure and physical environment are maintained by AWS and all settings and security is fully visible. There should be no secrets," says Seppänen.

4. Reduced downtime

Downtime is the bane of IT managers, generating frustration from users and customers, reputational damage, lost business and soaring costs.

For example, according to a study by Nielsen Research, the average manufacturing company sees 800 hours equipment downtime per year – more than 15 hours per week. When you consider that the average automotive manufacturer loses $22,000 per minute when the production line halts, costs will quickly rack up. Unplanned downtime costs industrial manufacturers as much as $50bn a year, according to research by Deloitte.

This demonstrates why downtime must be minimised to avoid wasted resources. By running SAP S/4HANA in the AWS cloud, businesses can reduce downtime significantly.

SAP customers can select from many options to build the high availability and disaster recovery capabilities they need, based on AWS services. AWS offers multiple regions with availability zones where it is possible to build passive, pilot-light or warm-standby solutions. With these technology solutions it is possible to move SAP workloads from one geographical location to another in a very short time.

5. Cost

One of the most popular reasons for moving to the cloud is to cut spending, and cost reductions can be found by running SAP S/4HANA on AWS.

"Workloads can be managed in a more flexible way so that companies are only paying for what they use," says Seppänen.

Organisations can easily scale up or down, depending on the SAP application and business requirements, to optimise efficiency and minimise costs.

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Running SAP workloads in a flexible AWS cloud environment means the business can run systems on-demand and become more cost-efficient.

Juha Yli-Uotila, SAP Basis Architect, Enfo

SAP customers can also benefit from AWS services, for example when building demonstration systems for a proof of concept (POC). Customers would only pay for the time they use the system for the POC.

6. Increased sustainability

Sustainability is important to the business from both a cost and a corporate responsibility perspective. Many organisations must demonstrate to investors and customers that they are taking steps to decrease their energy use and carbon emissions. Contracts and new business can depend on sustainability targets being met. Meanwhile, as energy costs soar, all organisations are eager to reduce

unnecessary energy costs and move to the most efficient technology platforms.

Running SAP workloads in the AWS cloud ensures that these sustainability measures are met compared to running workloads in a typical on-premise datacentre.

A study by analyst 451 Research found that AWS infrastructure is 3.6 times more energy efficient than the median of surveyed enterprise datacentres, with more than two-thirds of this advantage due to a more energy-efficient server population and higher server utilisation. The 451 Research study found that AWS performs the same task compared to an enterprise site with an 88% lower carbon footprint.

"Running SAP workloads in a flexible AWS cloud environment means the business can run systems on-demand and reduce emissions and become more cost-efficient," says Juha Yli-Uotila, SAP Basis Architect at Enfo.

Seppänen adds: "AWS has added a sixth pillar to SAP Lens – sustainability. This new feature helps SAP customers learn, measure and improve their SAP workloads at AWS and it offers recommendations for reducing environmental impact."

7. Reduced complexity and skills uplift

Most organisations embarking on a digital journey are at different stages, but as digital ecosystems become more mature, data volumes grow, and there is increased pressure to reduce complexity. Maintenance of scattered and bespoke IT architecture creates expensive dependencies. Complexity is costly as it takes time and uses premium IT skills.

By running SAP on AWS, organisations can cut complexity compared to running SAP in a traditional datacentre model.

"Systems and environments are complex. If you run SAP workloads in a traditional datacentre, time will be taken up managing this complexity. But running SAP S/4HANA in the AWS cloud leaves the management of infrastructure with AWS, so the business can focus on other priorities," says Seppänen.

An added benefit is that IT workers' time is not expended in sorting out complexity.

"There is a skills benefit. By running SAP workloads in the AWS cloud, you don't need to worry about having experts for backup and the network, like you would in a traditional environment where you are taking care of your own datacentre," says Yli-Uotila.

There are further reductions in complexity around software licensing and network and security architecture.

"Running workloads in AWS simplifies licensing models. It also simplifies the network architecture and traffic through cloud connectors and the security architecture," says Seppänen.

8. Automation possibilities and future-proofing the business

Organisations want to be ahead of the curve when it comes to adopting advancements in technology such as artificial intelligence (AI) and machine learning (ML). Running SAP S/4HANA in the AWS cloud compared to a traditional datacentre ensures that any tech developments benefit the organisation directly.

SAP S/4HANA on AWS gives easy access to cloud-based services such as ML and data analytics to help future-proof the organisation.

"A business running SAP workloads in a traditional datacentre might have their own technical staff, so how can they ensure progress with only one or two server guys to gain the latest knowledge? SAP and AWS have more expertise and power to develop their services," says Seppänen.

Making more use of the automation tools available on AWS means that businesses can optimise services. For example, using AWS Launch Wizard for SAP it is possible to streamline system sizing, configuration and deployment of SAP applications. This helps SAP customers to follow AWS cloud application best practices.

"Workloads can be shut down and started up automatically. Scalability is possible with automation by automatically adjusting the amount of servers running workloads for the associated cost benefits, so the business is only running the workloads it needs. You can scale up or scale down and everything is taken care of in AWS compared to a traditional datacentre model," says Yli-Uotila.

9. Reducing risk of vendor lock-in

Renewing supplier contracts can prove difficult in a traditional datacentre environment. Running SAP S/4HANA in the AWS cloud reduces the risk of vendor lock-in.

Typical on-premise infrastructure support contracts often run for three to five years. When organisations renew contracts they will check pricing through a request for proposal, which is a drawn-out process and can result in having little choice but to retain the incumbent supplier. Using SAP S/4HANA in the cloud makes changing cloud provider a much more straightforward process.

"Changing on-premise vendors is a huge transition project, which can take from six months to one year. Companies can avoid vendor lock-in by running SAP S/4HANA on AWS cloud services," says Seppänen.

10. Global reach

Global organisations with operating units in many different countries can gain from running SAP S/4HANA on AWS because of its worldwide presence – giving rise to additional benefits.

"By running SAP S/4HANA in the AWS cloud, organisations benefit from high availability and can use multi-regional landscapes and distribute workloads from one continent to another. AWS datacentres can be used all over the world," says Seppänen.

The global reach of AWS brings several benefits, adds Yli-Uotila: "The high-availability architecture offered by AWS means that organisations are assured about security issues. Data is closer to vendor applications and there is improved resilience."

Accessing data at speed is vital for business analytics and insight.

"With SAP workloads in AWS, applications and services can be used for better insights. Having the data in one place improves accessibility and data can be accessed for business benefit at speed," concludes Yli-Uotila.

About Enfo

Results you want, people you love working with

Enfo is a family of more than 800 digital experts. With our knowledge in digital trust, data and analytics, applications, integration, and managed services, we both build and run IT solutions on cloud. We prioritize a collaborative approach and responsibility in everything we do. We work for a more sustainable and intelligent world where technology empowers people, businesses, and societies and accelerates their progress.