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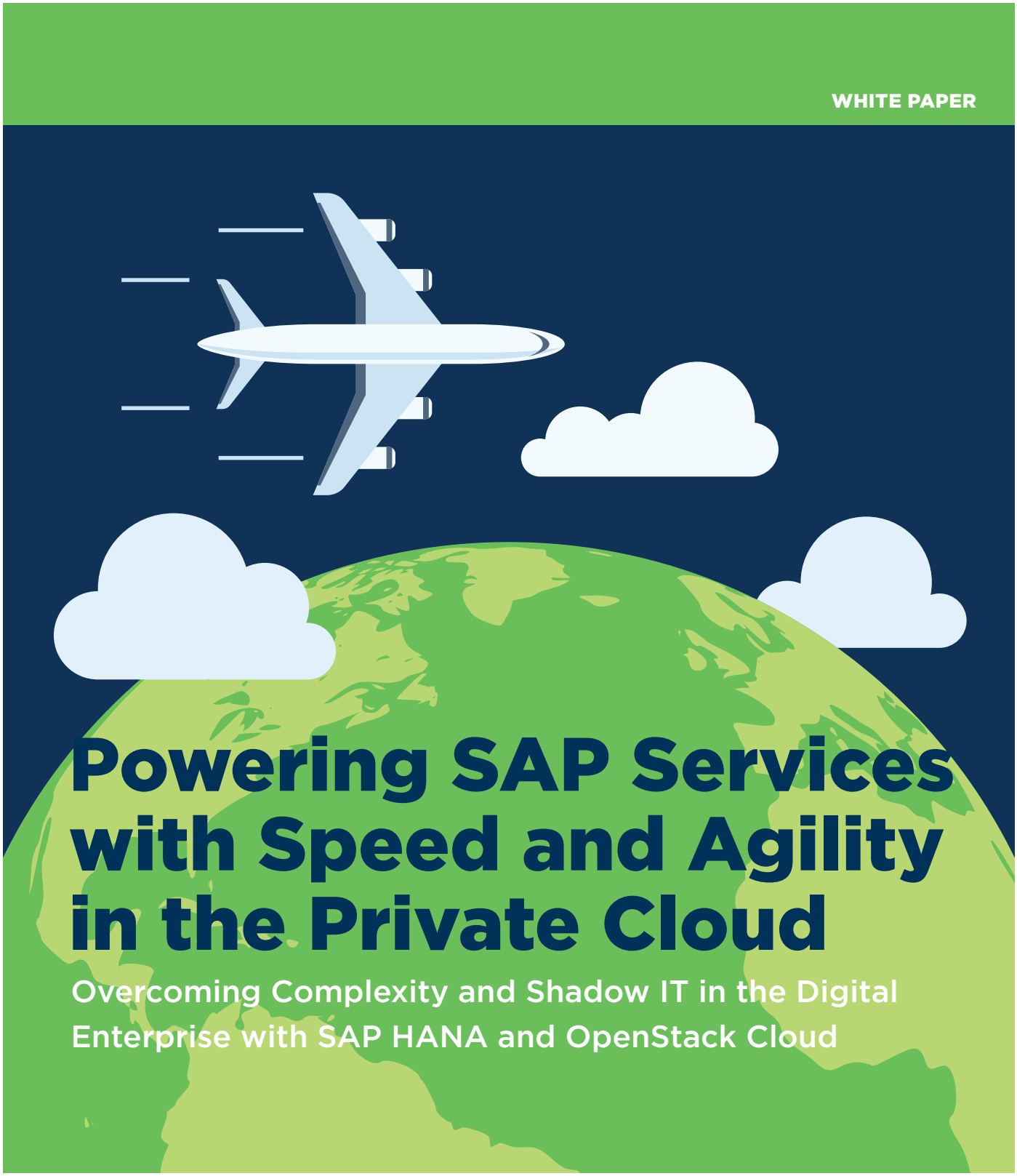

Powering SAP Services with Speed and Agility in the Private Cloud

Overcoming Complexity and Shadow IT in the Digital Enterprise with SAP HANA and OpenStack Cloud

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Injecting Speed and Agility in the Digital Enterprise

Across the globe, today's enterprises are embracing digital transformation. Our increasingly **mobile, social, always-on culture has given rise to a new digital economy**, one in which growing customer expectations and competitive pressures are driving new business imperatives.

The pace of change in the **digital universe** is staggering. Household names like Sears and Radio Shack have been removed from the S&P 500 for their inability to keep up with technology trends. Consider companies like Blackberry and Blockbuster who led their industries but quickly faced extinction when they were unable to keep up with competitors' digital initiatives.

Business leaders who succeed in this new digital economy view digital transformation as an opportunity, not a threat. These businesses capitalize on the opportunity by adopting technologies that enable them to exceed customer expectations and **innovate in a fast, agile way**. Those with operations built on SAP business solutions, in particular, are accelerating digital transformation with mission-critical SAP applications like business process management, **supply chain, finance**, and **customer relationship management**.

Furthermore, the digital opportunity enables IT to quickly meet the needs of the business and earn a reputation as an innovation center, not a cost center. Technologies like SAP HANA and OpenStack cloud give IT the power needed to directly contribute to **revenue growth, cost reductions, competitive positioning, and customer acquisition**.

Bill McDermott, SAP CEO, explained it this way, "*You have to bet some percentage of your R&D on the idea of inventing a product that does not exist—perhaps that a customer never even gave you an indication that they're interest in—but you make something so magnificent that once the customers get it, they don't know how they ever lived without it. That's* ***innovation.***"

With a future that requires innovation and an immediate need for compliance today, the question remains: How can IT streamline infrastructure management and reduce complexity to better allocate resources and allow more time for innovation while ensuring strict compliance?

Infrastructure management tools play a vital role in priming the IT organization's infrastructure for innovation and compliance. By automating management, streamlining operations, and improving visibility, these tools help IT reduce infrastructure complexity and ensure compliance across multiple dimensions—ultimately mitigating risk throughout the enterprise.

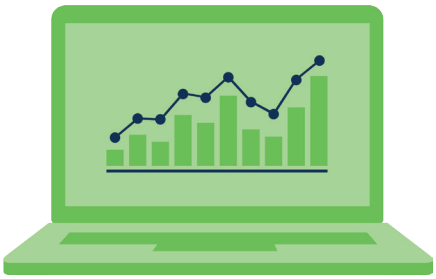
Overcoming the Complexity that Challenges Agility

Despite the great opportunity afforded by the digital economy, complexity abounds in today's digital enterprise. Without a thoughtful plan to meet customer demands through digital initiatives, businesses find themselves limited in their ability to quickly react to competitive pressures.

In fact, in a survey of executives who anticipate moderate or massive digital disruption in the next 12 months, 90% profess to having a digital strategy in place. However, given the rapid pace of change, these companies are experiencing a skills gap. Just over half of executives surveyed said they had the right people to define their digital strategy. And only 20% said their HR function enables digital transformation.

Further complicating matters is the disconnect between business user expectations and IT. According to a new survey from CIO Insight, 77% of IT managers said they prioritize the successful delivery of new initiatives and projects, yet just 41% of business users said IT does this. Rightly so, business units want to innovate and respond to customer demands at a rapid pace. They see that they can quickly provision an instance in the public cloud with the simple swipe of a credit card, and expect their internal IT organizations to be just as agile.

Despite the disconnect, IT must inject speed and agility into its processes to enable the business to quickly react to growing customer demands and competitive pressures. Otherwise, shadow IT will run rampant throughout the enterprise, posing security, cost, and maintenance challenges which ultimately put the business at risk.



Accelerating Digital Transformation with SAP HANA in the Private Cloud

To overcome the complexity and risks associated with digital transformation, successful digital enterprises capitalize on the power of SAP HANA in an OpenStack private cloud. SAP HANA promises to streamline data management in a way that frees IT staff to focus on the **innovative** projects that drive **business growth**. At the same time, deploying SAP applications in the private cloud with OpenStack cloud software enables the enterprise to take full advantage of new application and infrastructure technologies.

Together, the two technologies enable IT to provide the innovation that customers expect, using SAP applications and the cloud to deliver next-generation technologies like the Internet of Things, big data, real-time analytics, and mobility.

In-Memory Database Management with SAP HANA

As data continues to grow in volume, variety, and velocity, an infrastructure that streamlines and simplifies data management is crucial. Not only does it give business units access to data, but it also frees time for IT. In interviews with organizations currently using SAP HANA, IDC found that core analytics **operations are completed an average of 6.5 times faster, in 85% less time**, than with previous database platforms, giving users the insights they need to make evidence-based decisions in today's hyper-competitive digital economy.

> **"This platform is enabling SAP customers to build innovative custom applications that blend transaction processing with real-time analytics in order to gain competitive advantage and enhance revenue opportunities," said IDC**

In addition, SAP HANA enables enterprise IT organizations to **increase revenue** and **reduce costs**. Revenue is generated through the rapid deployment of core customer-facing services, analysis of business patterns, and customer behavior insights. Ease of management and **operational efficiency** contribute to cost reductions.

Open-Source OpenStack Private Cloud

Offering an open and programmable cloud infrastructure for SAP workloads, OpenStack enables a single, software-defined platform for application development and deployment. Among many benefits, OpenStack enables users to **streamline and automate** deployment by defining standard configuration templates. Infrastructure deployment happens in hours, not days; and complex SAP systems can be deployed in days, not weeks. Additionally, OpenStack enables the IT team to give business users self-service system resource allocation.

OpenStack is gaining popularity. According to a recent study commissioned by SUSE, 81% of senior IT professionals at large companies are planning to or have already moved to an OpenStack private cloud. With an array of advantages over proprietary cloud solutions, the open architecture supports integration with existing systems to ensure interoperability. OpenStack also enables the IT organization to increase platform independence and minimize the costs of cloud management and virtualization solutions.

PayPal's vice president of cloud and platforms, Jigar Desai, sings the praises of OpenStack: "*OpenStack has been a fantastic journey for us. The business problems for time to market and agility were the problems we wanted to solve, and we're happy with how that went, [because OpenStack] allowed us to go to the very agile model we have today.*"

Ultimately, OpenStack gives business units the speed and easy provisioning they might experience with the public cloud—without the risks associated with shadow IT. This enables the IT organization to improve infrastructure provisioning speed for business users and increase innovation while retaining control of IT budgets and data security across the enterprise.

Case Study: Private Cloud and SAP Implementation

Serving more than 25,000 SAP users worldwide, a German systems integration provider and certified SAP partner utilizes OpenStack and SAP HANA in its implementation of SAP software. With a long history of running SAP software on the SUSE Linux Enterprise platform, the company capitalizes on the partnership between SUSE and SAP to:

- **Accelerate complex system deployments from 40-60 days to just two or three days**
- **Unlock cost savings of up to 40% with commodity hardware**
- **Spend 20% less time on administration compared to other operating systems**

"Recognizing the future potential of cloud technology to support more efficient operations, we started early to embrace private cloud platforms," said the company's head of SAP delivery. "It is essential for us as a hosting provider to ensure that rising demands and complexity do not eat into our profit margins. We need solutions that truly help us to manage our booming portfolio effectively with a low manual administration workload."

Conclusion

As digital transformation continues to dominate the world's enterprises, the analytics and data management capabilities found in SAP applications built on SAP HANA play a prominent role. At the same time, the IT organization finds speed and agility in an OpenStack infrastructure solution that enables rapid public cloud deployment. Combined, the simplicity of the OpenStack private cloud and the power of the SAP HANA in-memory database enable the flexibility, agility, analytical decision-making, and operational ease to deploy the mission-critical SAP applications that today's digital enterprises require.

For more information, contact your local SUSE Solutions Provider, visit us online or call SUSE at:

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