Modernize your SAP Landscape with PRIMEFLEX for Nutanix Enterprise Cloud

The ‘no compromise’ HCI option from FUJITSU
Our aim in this eBook is to review the SAP modernization imperative and examine how the latest developments in platform technology and new delivery models can ease the transition to a future-proof, digital foundation for your business.

In particular, we will explore how two leading players, Fujitsu and Nutanix, have combined forces to offer exciting new options for virtualizing, consolidating and optimizing SAP landscapes. Our priority is to provide ideas and insights that will help you create a modern environment that’s able to support both HANA based solutions and traditional SAP applications in a coherent manner.

In Part 1 of this document, we have asked industry analyst firm Freeform Dynamics to set the scene and lay out some key principles and requirements. This independent perspective will help you cut through the industry noise in this space and focus on the right things for the right reasons. Be sure to take note of the key imperatives highlighted on each page as you read what Freeform Dynamics has to say.

In Part 2 we return to the Fujitsu perspective and take a look at how PRIMEFLEX for Nutanix Enterprise Cloud – a combined solution from Fujitsu and Nutanix - accelerates you towards success with your SAP modernization activities. We finish off this section by zooming out to consider broader implementation practicalities, and why Fujitsu’s inclusive philosophy and approach makes it such a good strategic partner.
Business Context

The days of gearing your organization around two-speed IT delivery are behind us. In today’s highly dynamic and interconnected business environment, the notion of a slow moving ‘back office’ maintained separately from a fast-moving ‘front office’ is seriously outdated.

Today the focus is on digital transformation and providing customers with the best possible experience. This requires a joined up and automated systems environment that can respond quickly and effectively end-to-end to constant and rapid change.

The imperative is clear when you consider the dependencies. New or enhanced customer-facing functionality, for example, will often require changes to the systems and processes that support production, delivery, sourcing and overarching logistics. The fastest way to undermine that all-important customer experience is to make digital promises at the front end that the operational back end of the business cannot keep.

As a result, the lines have blurred between solutions traditionally considered ‘systems of record’ - such as ERP - and those often referred to as ‘systems of engagement’ - CRM, marketing, online sales, and so on.

As application vendors such as SAP have rearchitected their solutions and extended their reach into new domains such as cloud, AI and IoT, traditional boundaries, norms and mindsets are challenged even further.

Against this background, your SAP environment now needs to be considered part of your broader digital infrastructure. This has some important implications.

Changing regulation, new technology options, etc

Supplier facing applications

Core business processes

Customer engagement systems

Change

Market dynamics

Competitor activity

Evolving customer behavior

Requirement for fast end-to-end response to new opportunities, threats and other requirements

KEY TAKEAWAYS

Recognize that success with digital transformation depends on integration, automation and an ability to implement change quickly and effectively.

Don’t let your older SAP environment constrain your progress - ask yourself how to turn it into a strategic digital business enabler.
The SAP modernization imperative

A line often spoken in jest, but one that’s very pertinent to traditional SAP systems is: “If you want to get there, I wouldn’t start from here”. With their roots in the 1990’s ERP era, most existing SAP environments arguably don’t represent the best starting point for a leap into the digital future.

If you were designing a business systems infrastructure from scratch today, you would want to take advantage of the latest developments in application architectures, automation, machine learning, analytics, open integration and on-demand delivery.

These are the keys to enabling a modern digital business, or as SAP describes it, building ‘The Intelligent Enterprise’. To quote SAP, it’s about creating “a strategy that allows you to rapidly transform data into insight – feeding process automation, innovation, and optimal experiences.”

Our own research at Freeform Dynamics consistently confirms that in a fast-moving digital world, rapid response is more important than ever. This doesn’t just require an ability to act quickly when new threats, opportunities and ideas arise. Success often hinges on creating the visibility and insight needed to identify relevant events and generate those new ideas in the first place.

Data-driven visibility is also important to drive rapid feedback loops. Today it’s much harder to predict what will and won’t work when developing new products, services and engagement models, so experimental, fail-fast approaches are critical.

All of this, together with the drive to simplify and optimize systems, contributes to the SAP modernization imperative.

**KEY TAKEAWAYS**

Get away from the mindset of regarding any SAP upgrade as a chore to be put off, and focus on the opportunities and benefits that stem from modernization.

Think holistically when defining modernization goals, considering the value for both the business and the IT and applications support teams.
The platform as an enabler

If you operate an older SAP landscape, you’ll be familiar with the cost and overhead associated with just keeping it up and running and performing acceptably. The time, effort and level of planning required to implement even the simplest of adjustments is then never far from your mind when that next change request appears.

A lot of this stems from the historical reliance on the complex, fixed physical infrastructures. Dedicated and specially configured hardware underpins most SAP environments today.

The contrast is striking if you compare the systems-level complexity of the average SAP landscape with what’s going on at the other end of the spectrum in the world of public cloud. Watchwords here are simplicity and flexibility, with a big emphasis on dynamic virtualization and on-demand resource provisioning and scalability.

Such things have previously not been a priority from SAP landscapes, where the focus has been more on stability and predictability. As everything becomes more connected, interdependent and dynamic, however, the luxury of being able to plan around a three or five year functional roadmap and capacity plan disappears. The transaction load fed through from that volatile digital engagement front-end may fluctuate and grow in ways that are impossible to predict. The same is true as IoT and AI initiatives come online.

Against this background, you need a platform that’s capable of handling anything required of it. And, of course, with SAP’s strategy to move everything to HANA, this includes new application architectures.

KEY TAKEAWAYS

Platform needs are changing, particularly in relation to flexibility, scalability, simplicity and efficiency.

Any new platform you put into place must be change-friendly and able to stand up to the unpredictability of the digital new normal.
Developing the right platform strategy

An obvious question when considering platform needs is if, when and how you will introduce HANA. Environments based on HANA are inherently simpler, faster, more scalable, more efficient and easier to change. The in-memory approach also means they are better able to provide real-time business insights from live transaction data.

But a total switch to S/4HANA, the latest incarnation of SAP’s application suite, is a daunting prospect. Even a partial move can be a significant undertaking. It’s therefore important to move at a manageable pace.

Regardless of your S/4HANA migration plans, you are likely to be operating the old and the new side-by-side in a hybrid manner at some point down the line, if not right away. If you translate this to systems-level requirements, what’s therefore needed is an underlying platform that can support both S/4HANA and the traditional SAP stack, allowing the entire hybrid landscape to be managed coherently.

Modern hyperconverged infrastructure (HCI) fits this bill by enabling a highly flexible and scalable ‘software-defined’ approach, in many ways mimicking the public cloud.

If you’ve already started virtualizing your SAP landscapes, you could ‘stretch’ the platform you currently use into the HCI world. Another alternative is to ‘squeeze’ a platform originally designed for the public cloud into your on-premises or private hosted environment.

If, like most SAP customers, you are coming from a more traditional fixed infrastructure landscape, a better option is to ‘step’ from this to a modern platform that was designed to support HCI from the outset. This is where solutions such as the Nutanix Enterprise Cloud platform come into play.

KEY TAKEAWAYS

You can’t ignore HANA or the S/4HANA suite, but neither can you migrate wholesale to SAP’s new architecture overnight.

A modern HCI-based platform provides you with the freedom to modernize both traditional and new SAP stacks, and migrate to HANA at a pace that suits you.
Fujitsu’s view of the opportunity and need

Our strong SAP heritage at Fujitsu puts us at the center of the SAP platform modernization discussion. For decades we have provided technology and integration services to support SAP implementation and migration projects. Through our hosting and managed service offerings, we operate entire SAP environments on behalf of many of our customers.

Based on this experience, we echo the Freeform Dynamics view of the opportunity represented by S/4HANA and the SAP modernization imperative more broadly. New architectural models and the latest thinking and best practices open up an exciting range of possibilities to take agility, performance, scalability and efficiency to the next level. These are the keys to turning your SAP environment into a strategic enabler of digital transformation.

But we also recognize the importance of plotting the right course to your digital future, one which leverages past investments and the solid core of SAP-related knowledge and skills built up over the years. Digital transformation changes a lot, but despite the claims of some evangelists, it doesn’t “change everything”. Trust your instincts when they tell you that what mattered previously when delivering business critical systems will remain important in the future. It’s about building on accumulated knowhow and discipline rather than throwing everything out and starting again.

From a platform perspective, this absolutely means adopting a foundation for an SAP environment that can position you for growth and transformation, while helping you to get the traditional elements you want to keep onto a more modern footing.

BUSINESS GOALS & OBJECTIVES

**Existing SAP experience & domain expertise**

**Latest thinking, skills and best practices**

**Existing SAP landscapes and processes**

**New architectural models and platform options**

MODERNIZATION STRATEGY & PLAN

**Combine the old and the new**

**Combine the old and the new**

KEY TAKEAWAYS

- Fujitsu’s strong SAP heritage and deep commitment to partnering puts it at the center of the modernization discussion.
- The Fujitsu philosophy and approach is based on blending traditional investments and discipline with new ideas and technology options.
The integrated HCI Stack from Fujitsu and Nutanix

One of our strengths at Fujitsu is our deep-rooted culture of partnership, and this is particularly relevant in the ecosystem-driven world of SAP. Beyond our comprehensive partnership with SAP itself, encompassing joint R&D as well as collaborative delivery and support, we work closely with all mainstream software platform players. If you have already started on your SAP landscape virtualization journey, the chances are that we can accelerate your progress with relevant integrated systems solutions.

Building on this, our partnership with Nutanix will be interesting to you if you want to take that bold step to a state-of-the-art HCI-based platform. Such an approach allows you to embrace the principles of software defined infrastructure without compromise.

In practical terms, we have combined the Nutanix Enterprise Cloud software platform with our enterprise grade PRIMERGY servers, networking and systems management components. The result is PRIMEFLEX for Nutanix Enterprise Cloud, which is delivered as a total platform solution ready to host both your traditional and HANA-based SAP workloads.

The joint platform is SAP-certified and can be sized and configured depending on your needs. As importantly, it can be extended and/or reconfigured quickly and cost-effectively as your SAP landscape requirements evolve. Whether it’s a phased migration to S/4HANA or increased demands as you integrate more digital engagement or IoT solutions into your core environment, the platform will be ready.

**Solution Stack**

**BUSINESS PROCESSES**

- Traditional SAP applications
- HANA based applications
- Nutanix Enterprise Cloud (application platform layer)
- PRIMERGY Servers
- Fujitsu networking & storage
- Fujitsu systems management
- Nutanix application management

**KEY TAKEAWAYS**

- Fujitsu has partnered with Nutanix so you can step into software-defined infrastructure without compromise.
- PRIMEFLEX for Nutanix Enterprise Cloud is a ready-to-go, SAP-certified HCI platform for accelerating and de-risking your modernization initiative.
**PRIMEFLEX for Nutanix Enterprise Cloud**

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- The SAP modernization imperative
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- Fujitsu’s view of the opportunity and need

The integrated HCI stack from Fujitsu and Nutanix

**Nutanix Enterprise Cloud for state-of-the-art HCI**

It’s beyond the scope of this eBook to review the full details of PRIMEFLEX for Nutanix Enterprise Cloud, but there are a few high-level technical points it is worth highlighting.

First and foremost, the platform is highly virtualized, not in the old-fashioned static manner in which physical servers are carved up into virtual machines (VMs) on a fixed basis, but much more dynamically and flexibly. In a Nutanix Enterprise Cloud environment you can spin-up and shut-down VMs on-demand, and similarly provision and deprovision other resources such as storage and networking.

As SAP landscapes are subjected to faster and more frequent change, not least as a result of continued integration with DevOps-driven digital applications, this kind of agility is game-changing. It’s the difference between your core SAP environment being seen as a constraint on digital transformation or an enabler of it.

The other significant aspect of the platform is the underlying scale-out architecture. Apart from enabling seamless growth and highly scalable performance, this implements software-based redundancy and fault-tolerance. Together with the inherent resilience of Fujitsu hardware, this makes PRIMEFLEX for Nutanix Enterprise Cloud one of the most robust as well as flexible platforms available to support your SAP modernization activities.

**Application Workloads**
- Running on all nodes

**Nutanix Controller VM**
- One per node

**Node 1**
- VM
- VM
- VM
- CVM
- Hypervisor
- X86

**Node 2**
- VM
- VM
- VM
- CVM
- Hypervisor
- X86

**Node N**
- VM
- VM
- VM
- CVM
- Hypervisor
- X86

**Distributed Storage Fabric**
- Compression
- Erasure Coding
- Deduplication
- Resilience

**KEY TAKEAWAYS**

- Dynamic, on-demand virtualization enables a step change in platform agility.
- A modern, scale-out, HCI-based architecture delivers the performance, scalability and resilience you need.

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Fujitsu as your SAP modernization partner

SAP modernization has many facets, and this is reflected in Fujitsu’s comprehensive portfolio of offerings. To begin with we deliver data center products such as servers, storage, networking equipment and software. These elements may be provided individually, or as integrated systems aimed at reducing complexity, time and risk when building IT infrastructure. PRIMEFLEX for Nutanix Enterprise Cloud is a good example of this approach.

But product-related services may also be needed to supplement your own resources, skills and capabilities so you don’t have to go it alone. And if it suits you we can take on more of the load and responsibility via our managed infrastructure services or hosting services. Then overarching all of this, you have our SAP consulting and migration services to help you plan your objectives, set the right course, and get to your destination quickly, safely and efficiently.

Fujitsu covers all of these elements, either by itself or via strong alliances with leading edge partners. This makes us a one-stop shop to help you turn your SAP-related aspirations into actionable plans and ultimately real-world solutions.

PRIMEFLEX for Nutanix Enterprise Cloud can accelerate your SAP modernization activities.

Embracing the traditional and the new means you can move at your own pace.

As a strategic partner, Fujitsu is ready to help you turn your SAP environment into a strategic digital transformation enabler.