CLOUD4C

Gold Microsoft Partner

Microsoft

Azure Expert MSP

RUNNING your business towards success with

SAP on Azure

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THE RACE IS ON

> Today I will do what others won't,
> So tomorrow I can do what others can't.

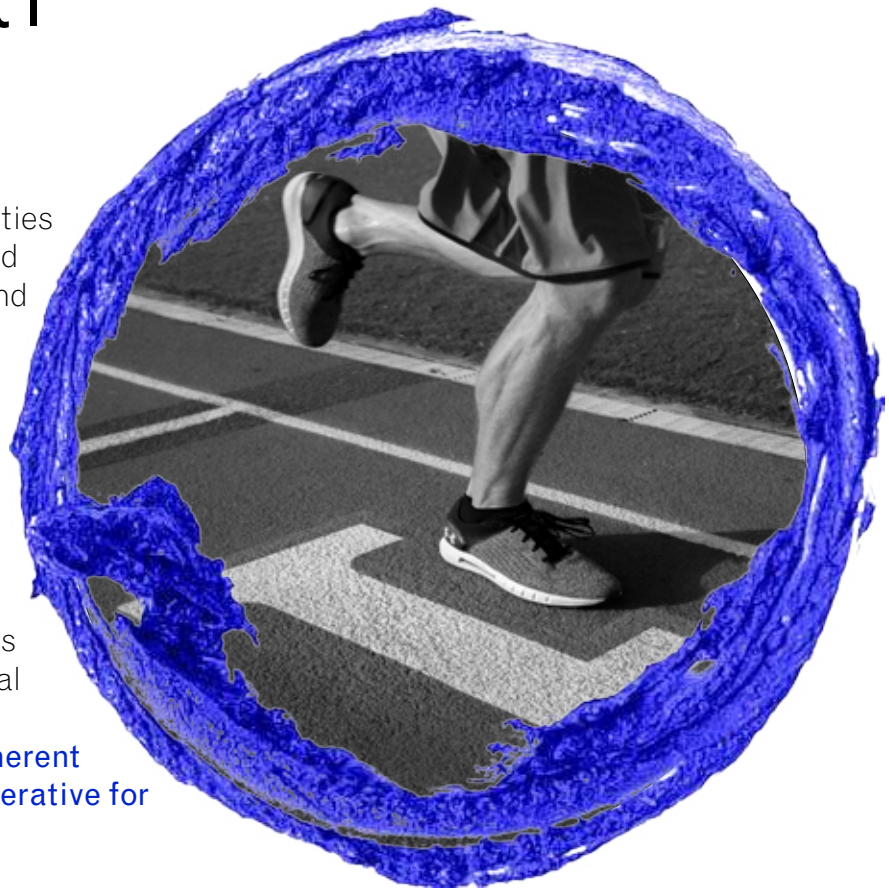
In the era of Industry 4.0, the race for businesses to constantly innovate in order to stay the most relevant has never been tougher.

With instant access to information at the tip of our fingers, and ever evolving consumer expectations, there is an increasing pressure on businesses to showcase results and growth like never before. A business is expected to react quickly, act faster, and at the same time make informed predictions to command a competitive advantage.

If you want your business to develop the right stride in the changing digital landscape, you will need to adapt and change with it. And we have the manual to help you go the distance.

First, set the goal

Immediate and future business needs



For years now, business leaders have tried to enable digital business capabilities to help them disrupt their industry, foster innovation, combat threats, respond quickly to opportunities, make their environments and transactions secure and compliant – all while not incurring immense operational costs. In order to do so, enterprises should also focus on using real-time actionable insights from the ERP systems and the non-transactional data to ace in their business plans.

Owing to the limitations posed by ERP systems and other internal reasons, not many companies have been successful in their digital transformation journey. SAP customers are working hard to realise the full potential of their SAP systems. Due to non-cloud based deployments, the data in SAP systems is isolated from other business data and systems leading to numerous manual and repetitive processes. Also, disparate systems and data silos hinders the geographical expansion or growth of an enterprise. **Connected systems, coherent data streams, intelligent data collection, real-time data processing are imperative for creating business value.**

SAP will stop support for NetWeaver and other databases by 2025, and so the transition to cloud is an executive mandate as well. Business and IT leaders need to set an end goal and start taking steps towards it – either move any database to the cloud, or move NetWeaver to cloud, or take a full step of migrating everything to the public cloud.

SAP HANA and the Cloud

SAP S/4 HANA, the most recent ERP solution by SAP, is a combination of Software and Hardware that integrates various modules such as SAP HANA Database, SAP HANA Direct Extractor connection, SAP SLT Replication Server and Sybase replication technology.

HANA has been adopted by SAP customers at an exceptional pace. It can be deployed on-premise and on cloud, which is commendable for the latest in-memory database and platform. It accelerates analytics and application on a single and in-memory platform.
SAP S/4 HANA offers multiple features and services to its customers that ensure the reliability of the technology.
Reasons why customers choose SAP S/4 HANA are:

Real Time
Real-time data provisioning and reporting

Speed
High speed processing on huge data with in-memory technology

Any Data/ Source
Access to various data source which includes structured and unstructured data from SAP or non-SAP data source

Cloud
SAP HANA application and database can be deployed on the Cloud

Simplicity
Reduces the efforts for ETL process, data aggregation, indexing, and mapping

Liberty
As the technology can be supported by different hardware vendors and software providers, users have the liberty to choose the suitable option based on their requirements

Cost
Reduces the overall IT cost of the organization

KNOW YOUR HURDLES

> **If it doesn't challenge you, it won't change you.**

Business and IT leaders are aware of the benefits that they could get from ERP systems on cloud, SAP HANA and the revolutionary capabilities that it can deliver via all its services on the cloud. But, many leaders are afraid to take the plunge because cloud was not perceived to be secure and SAP HANA seemed to be incompatible with the cloud. Initially, business critical applications with unique requirements such as mandatory certifications, integration capabilities and specialised services to support SAP workloads in the public cloud weren't available.

SAP HANA by itself is not cloud-ready and adapting a general purpose cloud to fit SAPA HANA enterprise production deployments is not easy. HANA DB is also not a born-in-the-cloud DB. The scale up sizes and features HANA needs are not available in general purpose cloud. Hence, most of the enterprises have been using the cloud for non-production SAP deployments.

The risk today is not moving to cloud but not being able to leverage all the benefits it offers, particularly for SAP HANA application landscapes. SAP HANA on the right global hyperscale cloud platform multiplies the benefits of SAP.

SELECT THE RIGHT GEAR

Choosing an infrastructure for SAP HANA

> **If you fail to prepare, you are prepared to fail**

Real-time updates and reports have become a crucial element for every organization. SAP S/4 HANA, along with big data analysis, offers real-time reporting and updates, when implemented. It builds an in-memory database which accelerates the execution of any function in the system. This will expose the customers to wide range of digital innovation strategies which will enhance the productivity of future business functions.

The journey to SAP HANA can be a major transition for your organization. The infrastructure and deployment strategy they choose today can make or break their S/4HANA migration. To unleash this power of SAP S/4 HANA, choosing the right hyperscaler cloud platform is critical for success.

Here are some key considerations:

1

Rich ecosystem

This is probably the first and foremost capability to check before choosing a hyperscaler for SAP S/4 migration. It should have a rich ecosystem to build out complementary services and a portfolio of PaaS services that can be layered on top of SAP for innovation and differentiation.

2

Security, performance, latency

Based on the current and future business plans of an enterprise, it is important to understand how a certain hyperscale cloud platform would meet the specific security, performance and latency requirements.

3

Industry specific frameworks for Migration

A clear migration plan especially the Data Migration plan with tried and tested industry specific frameworks that includes metrics to measure the impact of the migration, showcasing an easy migration path, is one of the key criteria for selecting the right cloud platform for any workload.

4

Technical capabilities

With our experience of migrating thousands of customers to the cloud, we realised that cloud strategies differ by country, industry, company size and tech maturity levels of the company. Cloud4C Migration Factory shares recommendations as to what hyperscale platforms are top choices for SAP migration today and why.

FUEL FOR THE LONG RUN

SAP on Azure

> As we run, we become

To keep up with the evolving consumer needs and market trends and demands, flexibility and agility are very crucial. SAP's cloud-based facilities like fast transaction processes, advanced analytics, cloud and infrastructure security, identity management capabilities and industry-specific solutions, enable businesses to operate and survive in the competitive digital market.

It is almost proven that the public cloud provides more business benefits considering the future of the business. SAP's workloads are proven for the public cloud and in deciding which public cloud service provider to choose and for SAP workloads; Microsoft Azure is proving to be the choice of majority of enterprise customers.

Cloud enables numerous business benefits like reduction of total cost of ownership, faster product deliveries and access to innovation.

Post the announcement of the Microsoft and SAP Strategic Partnership, Azure is providing platform capabilities for a much wider range of SAP applications. Azure is a compelling SAP certified public cloud infrastructure that can handle the largest SAP HANA workloads. It's the largest certified public cloud for SAP, with the ability to handle large HANA instances (HLI's) with scale-up for online transaction processing (OLTP) workloads up to 24TB and scale out for online analytical processing (OLAP) workloads up to 64TB today. There is also a seamless transition from bare metal large HANA instances to the new M-Series Version 1 - 4TB Azure Virtual Machines for HANA workloads and the M-Series Version 2 - 6TB and 12TB Virtual Machines.

Benefits of SAP on Azure with Cloud4C

Reduces costs up to 30-50% annually as you move to the pay as you go model for both managed services and cloud consumption

Predictive capabilities by advanced SAP solutions that enhance and manage the data

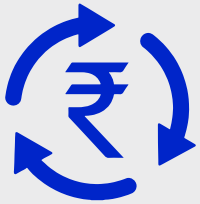
Extensive reach and dependable architecture built in high availability and disaster management for continuous business flow that results in 99.99% uptime

Comprehensive security across the entire structure which instantly makes an enterprise compliant with leading industry and geography specific regulations

Critical SAP applications are often used on the Azure platform by SAP. This gives the customer access for a seamless migration to the cloud. Some of the key benefits our customers witnessed when they opted for SAP on Azure.

Security

Security and reliability with regards to a platform with its compliance and trust certifications is a key highlight of Azure.



Cost-Effective

The Azure platform reduces the IT infrastructure cost by almost 75%. The wide range of network for private and secure connections with Azure gives the customer ease of integration.

Integration

Integration with other applications is simplified with this. It also includes Office 365.

Performance & on-demand

With the help of Azure, users can seamlessly run SAP Applications like S/4 workloads and HANA with its computing power. Azure's pay-as-you-go feature enables the customers to scale up and scale down to avoid paying for services they have not used.

Reliability

Azure is recognised as the largest cloud provider covering 42 regions. The features of disaster management and built-in availability reduce the possibility of outage. The 99.9% up-time is the maximum in the industry.

HIT YOUR STRIDE WITH THE CATALYSTS FOR SUCCESS

Need for a Cloud Adoption Framework

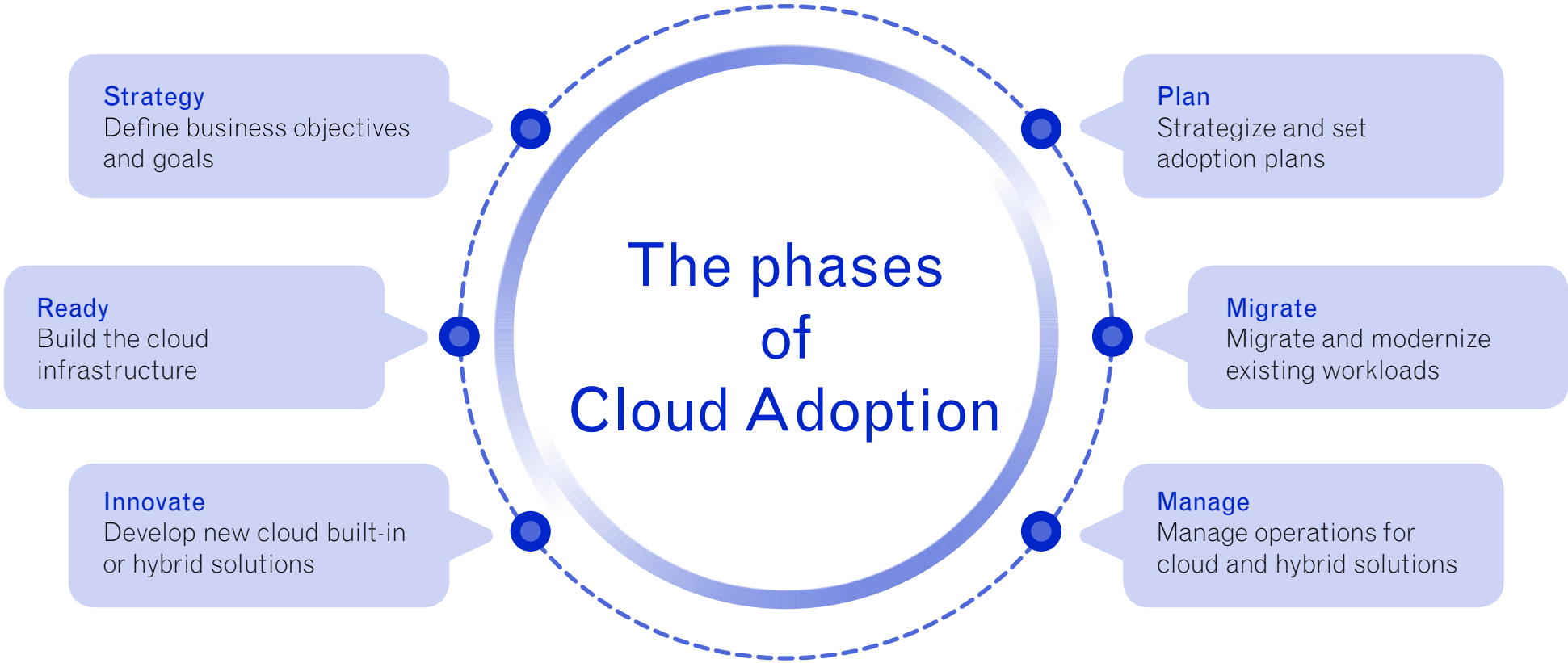
For a seamless journey to cloud, Managed Services Providers such as Cloud4C help enterprises with a Cloud Adoption Framework that provides tools, narratives and guidance needed for implementing not only cloud technologies, but also the transformation needed with respect to business, people and process, to embrace Cloud with confidence and control.

Under a Cloud Adoption framework, Cloud4C covers how to build a dynamic cloud migration roadmap to guide an enterprise's journey from core ERP systems to new analytics capabilities and new technology solutions – IoT, bots, ML and AI – all while leveraging a new cloud operating model that relieves the burden of maintenance and frees IT to focus on innovation.

The lifecycle of cloud adoption helps in choosing the correct step at the correct time. This guidance aligns to the following phases of the cloud adoption lifecycle, ensuring easy access to the right guidance at the right time. These frameworks are based on best practices and successful customer and partner experiences hence are updated regularly.

Cloud4C has established a foundation for an optimal adoption roadmap based on business context and user requirements that ensures minimal risk and maximum flexibility. We offer free cloud assessments for businesses of all verticals.

As a result of addressing crucial challenges faced by businesses in their cloud transformation journey, our cloud experts have developed a knowledge base of detailed process steps and reusable artefacts for every phase of the journey. We have created solution blueprints that simplify and accelerate the migration process.



CLOUD4C Migration Factory approach

After planning, migration is the crucial step which gives direction to your cloud adoption journey. After performing a huge number of migrations, we at Cloud4C believe that businesses need support to effectively manage and govern cloud usage and performance by themselves. Last but not the least, the risks of migrating workloads need to be kept in check at every step. The cornerstone of a migration factory approach is to lay out a business case that entails the priorities, benefits and how the move enables the company's strategic objectives.

Cloud4C has built a specialist migration team that is essentially a pool of experts having diverse experiences on leading public cloud platforms. Businesses get access to resources that have worked extensively on different cloud migration projects and receive continued support. We leverage our infrastructure, application and database expertise to design a safe, hassle-free and successful migration strategy, based on an enterprises's source system and target cloud landscape.

Cloud4C is equipped to deploy workloads to the desired cloud platform at a speed that meets any business requirements. Our collective experience assures quality and productivity while helping shift the organization's mindset in the process. We believe in creating value by giving the end to end support to an enterprise.

STAY THE COURSE

Securing current and future SAP structures

> **Don't stop when you're tired. Stop when you are done.**

For every organization today, moving their operations to cloud services and application of new technologies has increased the risk of user capabilities and cybersecurity. Mitigating those risks is the primary factor behind the multi-layered approach that is taken to design the future of SAP security infrastructure and privacy capabilities.

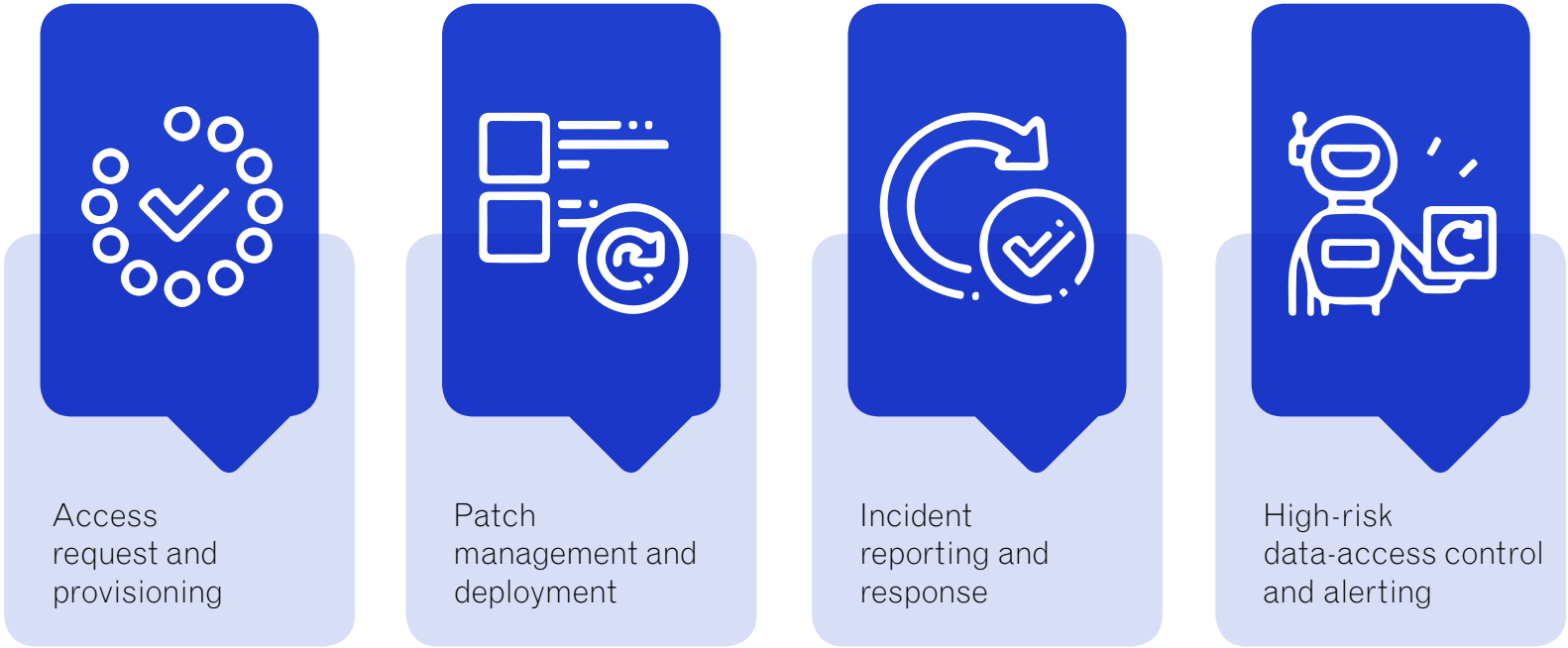
S/4 HANA framework future state: security and compliance by design

Cloud4C's approach is to build and enhance security and compliance, by design, into the entire SAP S/4 HANA solution. **The transition to SAP S/4 HANA on Azure gives Cloud4C an opportunity to modernize the complete security and governance, risk management, privacy, and compliance capabilities, so that current and future needs and challenges can be addressed well.**

Transition of SAP workloads to cloud workloads gives the enterprise an opportunity to redesign SAP application security and interface authorizations and ensure that a single sign-on (SSO) functionality is introduced utilizing tools such as Azure Active Directory (Azure AD) across all systems and applications. Azure is already an industry leader in this realm and has a lot of certifications. In addition to incorporating Azure's inherent security structure, Cloud4C's future framework will feature a highly integrated and compliant solution.

At every step in the process, Cloud4C's Business, Compliance, Audit, Engineering/IT operations, and Design teams have been working together with product groups to ensure that the standards and processes we develop are seamlessly and effectively integrated into the final framework. This differs from the traditional approach that many enterprises use, which entails first developing products and then adding security layers or controls to the finished product. We plan to leverage our technology capabilities in securing SAP workloads and include automation wherever feasible.

We will automate the following areas (and others as we identify them):



Cloud4C organization structure is better aligned to deliver the modernized authorization framework. Additionally, it simplifies the S/4 HANA user experience and provides enterprises with more flexibility and scalability to adapt to changes and growth.

GO THE DISTANCE WITH CLOUD4C

> Run in the present, for your future

Why SAP on Azure - Top 10 reasons

1 Real-time problem solving

Real-time reporting contributes to the scaling up of any business. SAP HANA has moved data architectures to complex data structures which analyse the business processes using real-time reports and updates. With this structure, SAP HANA can perform complex calculations in real-time and provide solutions to major issues in the organizational productivity.

2 Big data analysis

SAP HANA implementation has proved to enable better and well-informed decision making. It has performed multidimensional analysis that leverages spatial and business data to create applications that improve the performance of traditional databases. SAP HANA can be used as the enterprise database to create market-leading solutions.

3	All-transactions on one platform	SAP HANA implementation has proved to enable better and well-informed decision making. It has performed multidimensional analysis that leverages spatial and business data to create applications that improve the performance of traditional databases. SAP HANA can be used as the enterprise database to create market-leading solutions.
4	Flexibility	There are 2 significant HANA platforms of SAP - Appliances and Tailored Data-Centre Integration (TDI). They include pre-integrated hardware and software systems. This speeds up the performance and response time. This also ensures memory space, disk space, average load, CPU space, etc.
5	Resilience	For long term performance, SAP HANA requires the correct infrastructure for faster in-memory execution. An appropriate infrastructure can support application migration with ease. To ensure this, the user should make sure that the data is not changing rapidly and unpredictably as it can lead the in-memory to slow down drastically.
6	Scalability	Statistics show that SAP HANA, though slow initially, increases the natural growth of structured data by approximately 20% annually. SAP HANA, unlike other platforms, can get all the data on the same platform, enabling scalability in the long run.
7	S/4 HANA Suite	When a user migrates, the Suite on HANA is readily available. A Suite is a tool that can be used for migrating from databases such as Oracle to SAP HANA. It provides users with optimized objects and code that yields a better and improved business performance and migration.
8	Accelerated insights	Multi-threading features in SAP HANA ensure the availability of insights for your organization. The insights enable to analyse the changes that need to be incorporated into the current systems and the new features that need to be introduced.
9	Spatial solutions	SAP HANA helps in real-time calculations with its advanced analytical power. This helps in better prediction of approach that is required for the profitability of the business. This also helps to forecast the outcome of the integration in the new systems. Spatial and business data are thus leveraged to gain solutions for a faster business process.
10	Data protection	Business analytical technologies require protection. SAP HANA is structured in order to store hybrid applications from entry-level to large businesses. This also reduces data center footprints and increases performance.

GEAR UP TO WIN

> I may not be there yet,
> but I'm closer than I was yesterday

Reap more business benefits with your SAP applications on robust public cloud platforms such as Microsoft Azure.

To be a leader in your industry, it's time to make the decision and start planning the move of your SAP systems and applications to a global hyperscale public cloud. Microsoft Azure provides a new generation of SAP deployment options that offer on-demand infrastructure, specialised services and flexible execution, making Azure uniquely positioned as the best choice for SAP customers ready to make the move to cloud. Enterprises can integrate data on SAP systems with data from non-SAP systems on Azure's Agile cloud platform to generate end-to-end, real-time insights and quickly enter new markets, command better profits margins, and grow.

CLOUD4C

Drop us a note at **sales.azure@cloud4c.com** for a free cloud assessment and a workshop with SAP on Azure cloud architects by. We will help you develop your cloud roadmap and be your steward while you embark on the journey.

For a successful journey to the cloud, we recommend that you, as an enterprise identify change champions from your internal teams and be proactive in engaging, empowering and collaborating with your technical colleagues. Also, choose your partners in this journey carefully and bring them along. Zero down on a business unit or focus area, such as logistics, planning or financials to test and visualise the impact. For additional information please visit the **SAP on Azure webpage**

Cloud4C can help you gain the right momentum on your path to transformation.