LTI
Let's Solve

A Larsen & Toubro Group Company

Whitepaper

Accelerate Your SAP® Transformation with **Microsoft Azure**

Microsoft | Advanced Specialization
SAP on Azure

SAP® is an enterprise technology platform that powers critical business process for many global organizations. However, in a digitally connected world, enterprise applications need to be flexible and scalable to meet the demands of a dynamically changing business environment. The significant fluctuations in SAP® demand and the need for rapid scaling make the on-premise infrastructure sized for peak demand option economically unviable.

With the need for agility, speed and cost reduction, the cloud is now a compelling choice for organizations looking to optimize their SAP® workloads. The cloud has changed the economics of buying and deploying a technology solution. Rather than investing upfront and buying servers with the constant worry that the infrastructure may fail to keep up with the demand, organizations are now proactively transitioning their workloads to the cloud at an accelerated pace. Further supporting this trend, Gartner has predicted that 80% of enterprises will no longer use traditional data centers by 2025. With more and more organization understanding the value of cloud v/s on-premises, many organizations plan to adopt cloud as the primary choice for deploying all kinds of SAP workloads (ECC, S/4HANA etc.)

Organizations can no longer justify the time and money spent in maintaining and constantly configuring hardware and infrastructure on-premises when deploying to the cloud. In fact, it can be used for better scaling, performance, and resilience at a fraction of the cost. SAP Customers who are commencing their journey towards S/4HANA based business transformation are choosing Cloud as the primary infrastructure platform for the S/4HANA implementation. Equally, those SAP customers who want to start their S/4HANA journey far out in the future (and want to take advantage of the extension to SAP ECC product support till 2027) are migrating their as-is SAP ECC workloads to cloud now to take advantage of the benefits that cloud offer.

Key business drivers for migrating SAP® to a Cloud infrastructure

Compelling reasons for moving to the cloud are cited in an independent research commissioned by LTI and conducted by Gatepoint Research, and are depicted in the figure below:

Primary reasons for moving SAP® applications to cloud:

- **39%** Scale to meet expanding business needs
- **42%** Driving efficiencies
- **54%** Reduce costs technology
- **59%** modernization

Key factors that are influencing organizations to move to the cloud include:

Agility: The biggest benefit is the time saved due to the reduced time for configuring, testing and implementing SAP solution change in the cloud. Enterprises can select from SAP® a range of solutions that can be quickly deployed on the cloud platform. This also helps in significantly reducing the time for implementation and enhances business satisfaction due to faster time-to-market.

Technology modernization: By migrating SAP® to the cloud, enterprises can integrate and take advantage of emerging technologies such as artificial intelligence (AI), Internet of Things (IoT) or Blockchain more easily. For example, SAP® BW/4HANA is optimized for SAP® S/4HANA and can give answers to complex queries in a matter of seconds, while the SAP® IoT solutions can be leveraged to recognize and understand usage patterns and derive insights from sensor data embedded in business processes. Additionally, organizations can also use SAP® Intelligent RPA to use business process automation and take advantage of conversational AI capabilities to reduce manual activities.

Mergers & Acquisitions: Given the flexibility offered by a cloud-based ERP, it is perfect for a scenario involving mergers & acquisitions as well as divestitures. A cloud-based implementation gives organizations the ability to quickly continue business activities without any business disruption. Standardized templates can be used to ensure that the business processes of all the firms under the merger are in sync with each other. Data transfer is also relatively easier and can be monitored for any discrepancies. In addition, the low cost of usage, coupled with low maintenance costs and no investments for hardware, makes the value proposition of cloud-based SAP® applications more attractive.

Performance and better efficiencies: The cloud edition can offer faster upgrade cycles and better performance, as the software is optimized constantly by a dedicated team. Organizations that are looking to scale their infrastructure quickly and power their growth in a rapidly changing business environment will find the that the SAP deployments on Cloud are often able to offer better system performance compared to On-Premise model. Azure offers the ability to tap into more than 100 cloud services, access SAP Business Technology Platform (SCP), apply intelligent analytics, and integrate with an organization's existing productivity and collaboration tools such as Microsoft 365, Microsoft Teams, Microsoft Power Apps, and Microsoft Power BI.

Hardware end of life: For many organizations, the hardware used for hosting SAP® infrastructure has reached a stage where finding technical support is challenging. In such cases, the cloud-based model provides an advantage, as organizations do not have to invest anything upfront and can consume resources on a pay-per-use subscription model.

Cost: In the cloud model, an organization does not have to invest in the internal IT support for SAP® infrastructure, as the responsibility of maintaining the uptime is with SAP® or a cloud partner. This can save substantial costs. There is no need to purchase IT infrastructure for hosting SAP® applications. A subscription pay-as-you use model allows organizations to have a predictable cost that includes everything. In addition, with a cloud-based model, organizations do not have to worry about the costs of infrastructure upgrades, as software is instantly updated and does not require implementation support. In a cloud-based model, organizations will also save costs on spending for servers, infrastructure monitoring, archiving, and securing the SAP® applications. Overall, deploying SAP® environments in the cloud can lower the total cost of ownership (TCO). Moving to Azure not only eliminates capital expenditure and cost of underutilized

hardware, but it also offers cost management tools such as on-demand scaling during peak usage periods, using cheaper storage, and optimizing disaster recovery environments.

Scale to meet expanding business needs: With a cloud model, organizations can start small and grow their SAP® infrastructure as the business expands. This flexibility levels the playing field between mid-sized organizations and large organizations, as even smaller organizations have access to the same transformational digital capabilities as larger organizations.

Choice: Customers have the option to choose from a wide range of offerings in the marketplace that meets their unique business requirements. Azure offers organizations one of the broadest choices for SAP®-certified cloud-native instances. Organizations can lift and shift their existing on-premises SAP® environment and use Azure services to modernize existing business processes and gain new capabilities.

There are over 100+ Azure services including offerings for IoT, data lakes, AI/ML, BI and App services. This enables organizations to rapidly improve and differentiate their business and leverage to gain a competitive edge. Organizations can also take advantage of the growing list of Azure-native offerings from partners like LTI.

Why SAP® on Azure is a compelling value proposition?

After decades of working together to serve their joint customers, SAP and Microsoft deepened their relationship in recent years. In Oct 2019, SAP and Microsoft announced a new development in SAP's 'Embrace' program with a three-year agreement to use Microsoft Azure as the preferred hyperscaler infrastructure provider for SAP systems. While this exclusive arrangement has ended as of June 2021, Microsoft Azure and SAP continue to work together to help customers move their SAP ERP and SAP S/4HANA workloads to the cloud through industry-specific best practices, reference architectures, and cloud-delivered services.

With Azure, organizations can integrate their SAP and non-SAP data through an extensive portfolio of Azure data services and create real-time dashboard views of the current operations using SAP and Microsoft business intelligence tools.

SAP and Microsoft have been partners for more than 25 years and are also mutual customers. Microsoft is the only cloud provider that's been running SAP for its own finance, HR, and supply chains for the last 20 years, including SAP S/4HANA. Likewise, SAP has chosen Azure to run a growing number of its own internal system landscapes, including those based on SAP S/4HANA. More than 95% of Fortune 500 companies run their business on Azure. Their combined experience and history give them a powerful understanding of the needs of SAP enterprise customers. Together with SAP, customers have trusted Microsoft Azure with their most critical workloads such as SAP.

Some common risks and possible solutions

Focus on Total Cost of Ownership (TCO), not full cloud economics: The focus on TCO instead of the full cloud economics for any organization, is the most common mistake made by organizations. For gauging the value of an SAP® HANA Azure implementation, it is important to go beyond TCO and look at the overall value delivered, which could include improved availability, scalability, speed, security, and compliance. Value is also derived from deployment of new features or applications more quickly and with less errors. The economic value derived from these changes, can be far greater than the TCO. Increased business productivity can result in additional revenues and an increase in market share.

For example, a leading vehicle manufacturing firm was facing issues with private cloud hosting of SAP S/4HANA. The firm was unable to launch services quickly, as it had a highly fragmented landscape with three data centers. LTI, an Azure SAP Advanced Specialization Partner, created a comprehensive application modernization plan and deployed tools to reduce migration time by 40%. LTI focused on the overall cloud economics to help the firm create a scalable IT infrastructure, with a potential 35% reduction in TCO over three years. LTI also leverages its own LTI Infinity LAMPS, an insight-driven, digitally integrated platform that orchestrates the power of new SAP® solutions and technologies. It performs business process mapping as well as automated code remediation saving up to 50% of manual efforts.

Ignoring the impact of intangibles: One of the biggest benefits of a cloud-based infrastructure is reduced time to market. A new product or a service that can be launched quickly has a greater probability of succeeding in the market than competing in an overcrowded market. Typically, organizations focus only on the tangibles such as uptime, performance, TCO or ROI. However, intangibles such as agility, ability to rapidly innovate, ability to address new market opportunities, reduced bugs, and improved product quality must also be considered in determining the value of an implementation.

A case in point is where LTI worked with a global company to deliver enhanced financial insights with SAP® HANA implementation. The company saved US$1 million dollars annually due to the decommissioning of older technology solutions. The backup window was also reduced from 10 hours to 1.5 hours due to improved data compression.

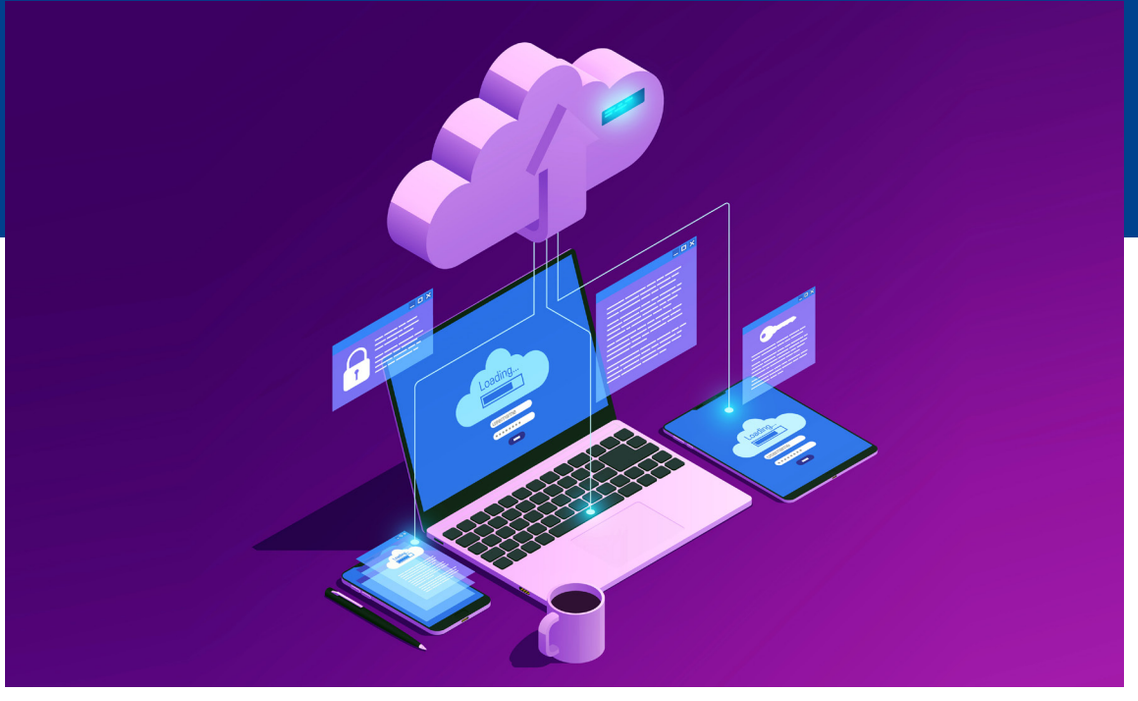
For another leading retailer company, LTI enhanced POS insights and the sales order management process. This SAP® on Azure implementation helped the company save US$3 million dollars annually through decommissioning out of contract old appliances, in addition to a 30% improvement in report performance.

Increasing risk via fragmented accountabilities across vendors: In an inter-connected world, Almost every application is connected to another application. If organizations have many IT vendors, it can sometimes lead to difficulty in assigning accountability and responsibility to certain vendors. In some cases, certain components or solutions may be incompatible with another vendor. To avoid such issues, it is recommended that organizations must not have too many IT vendors where accountabilities can be fragmented in an environment where systems are interdependent.

Not optimizing performance through heterogeneous migrations as they are complex: Many organizations fail to do a detailed sizing exercise on their compute, storage, and network requirements. Organizations should ensure that their storage configuration is designed or architected appropriately to meet the high throughput or IOPS (input/output operations per second) requirements of the SAP® database. This becomes more complex in a heterogeneous migration, as the source database and target databases are different.

If the migration is done properly, it can lead to huge benefits. LTI has leveraged its cloud platform LTI Infinity LAMPS, which helps organizations design and simulate different cloud solutions to identify the ones that best fit their specific business requirements. It helps clients with cloud resource provisioning, delivery, and governance for SAP® implementations on Azure. It also provides an end-to-end cloud management portal and governance tool to manage SAP® and non-SAP® workloads on Azure. In addition, LTI has also leveraged its LTI Infinity Smart Analyzer and LTI Infinity Profiler. These tools have been used for making the business case to create the roadmap to ensure the final delivery.

"For a leading Process Manufacturer, headquartered in the Switzerland", LTI analyzed process maturity for S/4HANA in less than 12 weeks providing recommendations of future fit to standard processes and effort needed to undergo technical code remediation/ retirement.



Shallow pre-migration assessments: Before migrating to the cloud, it is important to do a pre-migration check to avoid any last-minute surprises at later stages. Organizations should analyze and identify any incompatibilities or issues related to a migration. Once the compatibility check is completed, the results are then displayed and classified into database and applications compatibility. It is therefore imperative to have robust pre-migration assessments to ensure seamless transition to cloud while leveraging its benefits fully.

A well-planned migration can lead to many benefits. For example, LTI is helping a French Cosmetics Major, migrate more than 200 TB of legacy SAP systems comprising of ECC, CRM, SRM, Console, PI, etc. to Azure with the largest database being 40 TB. This was a cross platform migration from AIX to Oracle Linux. LTI will work with SAP's specialized NZDT (Near Zero Downtime Technology) services to achieve this complex migration with minimum downtime in a de-risked manner.

To explore the infinite possibilities for your enterprise, get in touch with one of our SAP Cloud experts by sharing a few details on https://solve.lntinfotech.com/questionnaire or write to us at sapcloud@lntinfotech.com.