



# Why the Private Cloud Makes Perfect Sense

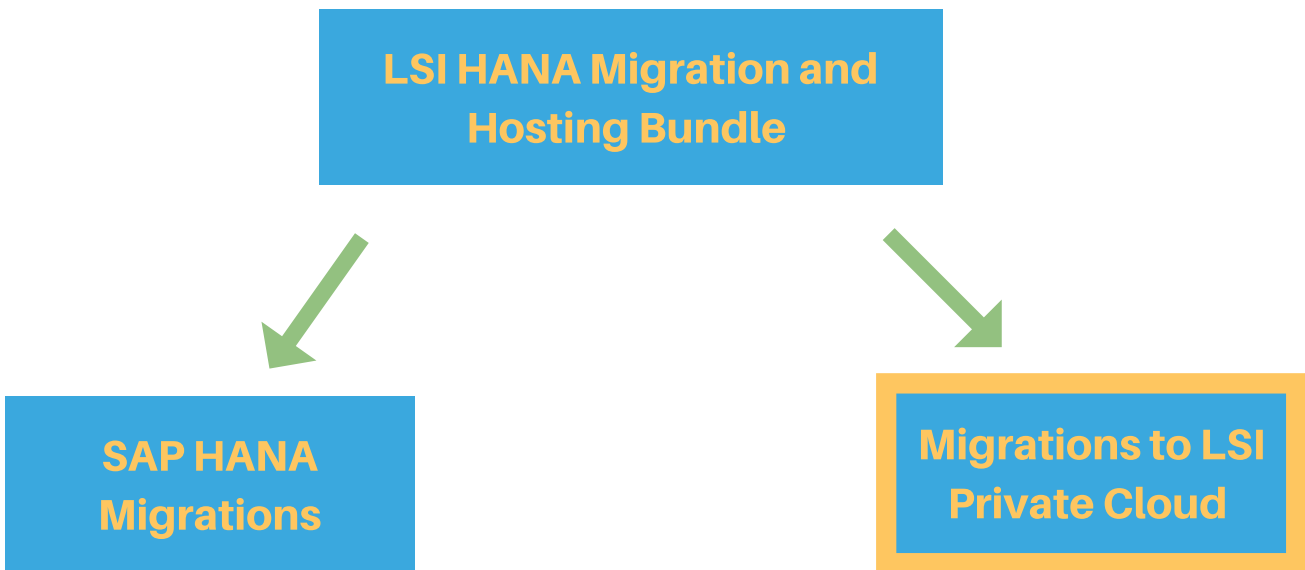


**LSI CONSULTING INC**

Innovative SAP Solutions for Public Enterprises

303 Wyman Street Suite 300, Waltham, MA 02451 | [www.lsiconsulting.com](http://www.lsiconsulting.com) | 978.261.6100

Take a deep dive into this compact summary about why organizations must consider moving to Cloud Computing as soon as possible, from both a TCO and Value perspective. LSI can provide Private Cloud options through any of our Amazon Web Services (“AWS”), Microsoft Azure as well as SAP NS2 (FedRAMP Moderate) partnerships. Please note: We offer SAP HANA Migration and Cloud Migration services as an LSI HANA Migration and Hosting Bundle, but for the purposes of this blog post we will focus entirely on the LSI Private Hosting component of the Bundle:



Source AWS

**Let’s compare On-Premise (and Colocation) with LSI Private Cloud:**

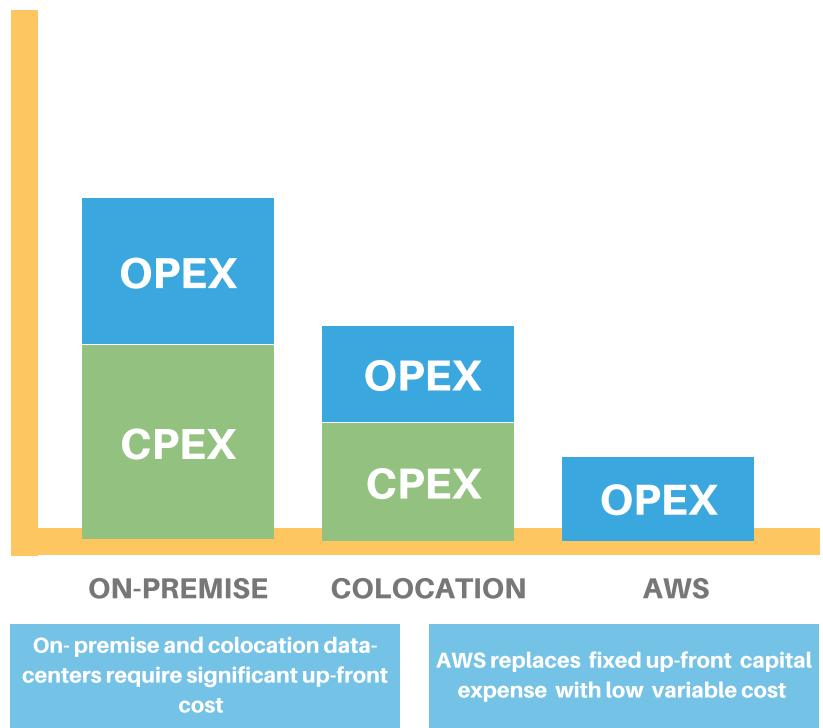
**CAPEX:**

-On-Premise:

-LSI Private Cloud:

Significant **[Bad]** 0

Zero **[Good]** 1



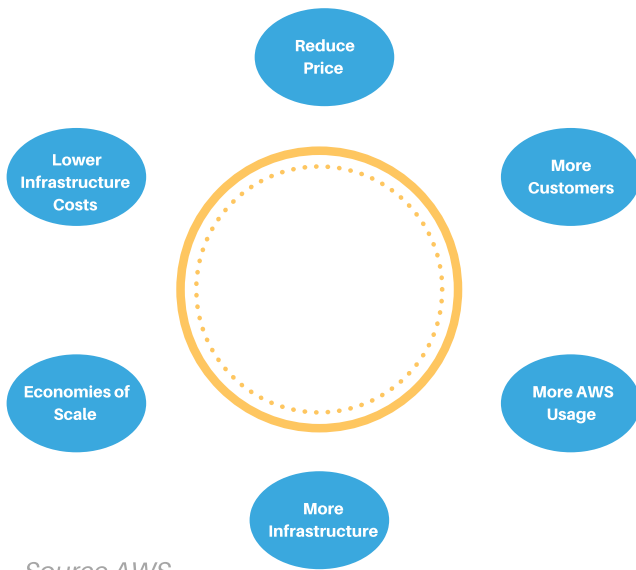
Source AWS

Can I replace Upfront CAPEX with lower Variable cost?





-On-Premise: No [Bad] 0  
 -LSI Private Cloud: Yes [Good] 1

Benefit from economies of scale: that continuously lowers my future cost?

-On Premise: Zero [Bad] 0  
 -LSI Private Cloud: Significant [Good] 1



Source AWS

-  The more that customers use the platform, the more infrastructure AWS has to purchase
-  This Results in economies of scale
-  These cost savings are passed on to customers
-  AWS has reduced AWS prices numerous times

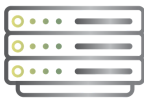
### Pay only for what you use?

-On Premise:

Yes [Bad] 0

-LSI Private Cloud:

No [Good] 1



On-Premise

With on-premise solutions the customer must buy everything



Colocation

The customer must purchase the OS, virtualization, and Management software, floor space, power and cooling bundle together



AWS

AWS takes care of everything

Services    Software    Storage    Network    Staffing  
 Utilities    Durability    Availability    Physical

Source AWS

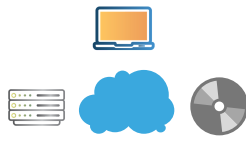
### Opportunity Cost: do I get to focus more on my business, and less on these?

-On Premise:

No [Bad] 0

-LSI Private Cloud:

Yes [Good] 1



Servers, network, hardware



Operating system and virtualization software



Colocation and Floor space



Power and cooling



Data center personnel



Storage Redundancy



OpsWorks

Resource management & software automation



Software defined network
























Source AWS

### Summary of LSI Private Cloud Benefits:

The Value Offering: Core Benefits:



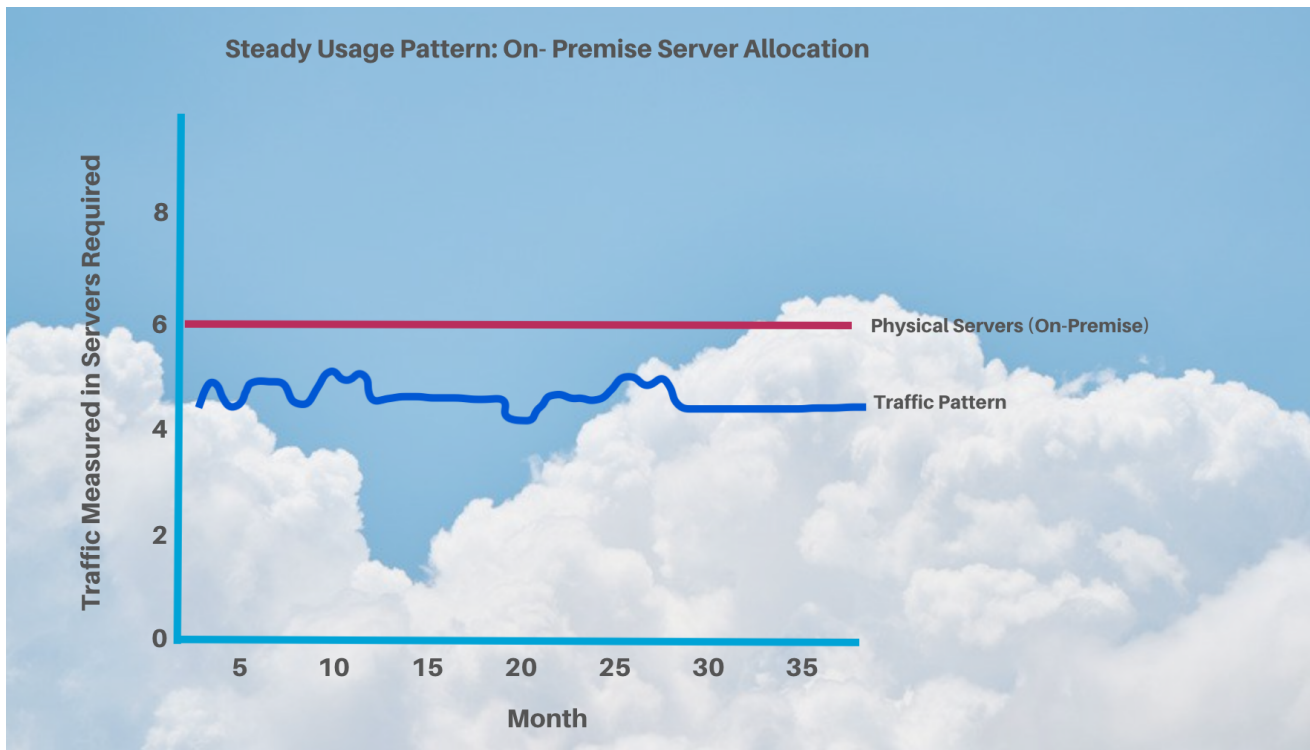
- Cost: (more on this below);
- Elasticity: Scale capacity with changing requirements;
- Flexibility: Resizable compute capacity; allowing you to quickly scale up and down for special projects like SAP HANA migrations;
- Security: Configure security and network access as needed.
- Agility: Kick off new projects immediately (instead of waiting to order and provision hardware);
- Efficiency: Administrators can manage a much larger number of systems compared to on premise; due to tools available in LSI Cloud;
- Ability to innovate: You can quickly prototype new technologies which may leverage services available in the Cloud-like Blockchain, Machine Learning, etc.
- We bundle it all for you, with immediate reduced TCO:

Server & Network Hardware	OS + Visualization Software	Datacenter + Colocation floor space	Power cooling	Datacenter Personal	Storage Redundancy	Resource Mgmt. /SW Automation	Software define networking
							
							
							

Source AWS

Your TCO decreases over time - due to the AWS scaling benefits we can provide - your Tiered Pricing with us means that your price reduces as you grow, so TCO Benefits increase over time;

Your cost will match your actual usage, with on-premise there is a mismatch as you have to allow for a Steady-State Usage pattern ~ you pay for underutilized capacity, that possible spike that never happens



Source AWS

You not only gain: {Experiment often + Fail quickly at low cost + More innovation + Elasticity, Flexibility + Security @ at significantly lower cost}, but your cost will keep getting lower through economies of scale, it's PROGRESSIVE, not linear!

### Why is this so critical? Because your data volume is exploding:

- Data volume growth: over the last two years alone 90 percent of all global data was generated;
- Your Predictive Analytics requirements are increasing, across State / County / City / University / School and using Machine Learning ("ML") as an example requires working with as much data as possible. The more data you can access while answering these questions, the better the quality and accuracy of your ML output. This is one of the reasons you might have invested into SAP HANA Technologies, so this all leads to increasing needs to not only manage your data, but also your compute and storage abilities.
- The only way to manage your cost, is by gaining benefits from economies of scale savings, and this ONLY happens with Cloud Computing.

## How secure is LSI Cloud?

Our cloud partner Amazon Web Services (“AWS”) is FedRamp certified, so the data center infrastructure meets the highest US Government standards. The LSI Cloud infrastructure has been designed and is managed in alignment with regulations, standards, and best practices, including: Federal Risk and Authorization Management Program (FedRAMP), Service Organization Controls (SOC) 1/American Institute of Certified Public Accountants (AICPA): AT 801 (formerly Statement on Standards for Attestation Engagements [SSAE] No. 16)/International Standard on Assurance Engagements (ISAE) 3402 (formerly Statement on Auditing Standards [SAS] No. 70), SOC 2, SOC 3, Payment Card Industry Data Security Standard (PCI DSS), International Organization for Standardization (ISO) 27001, ISO 27017, ISO 27018, ISO 9001, Department of Defense (DoD) Security Requirements Guide (SRG) Impact Levels 2 and 4, Federal Information Security Management Act (FISMA), US Health Insurance Portability and Accountability Act (HIPAA), FBI Criminal Justice Information Services (CJIS) and National Institute of Standards and Technology (NIST) 800-171.

As can be seen above, since this meets US Government and Army standards, it should meet your requirements. However, should any concerns remain, we can also provide these additional options:

- Scramble data that is deemed super sensitive before we export the data to the cloud;
- Restrict direct access to LSI Cloud systems by establishing a Site to Site VPN, that will only allow access to your SAP systems from within your network;
- Ensure that your SAP systems are only hosted on single tenant hardware, should you deem this level of security to be necessary

### In summary: Secure options from LSI:

**LSI Private Cloud (AWS)**

**Moderate**

**LSI NS2 Secure HANA Cloud (SCH)**

**Moderate and High**

*\* LSI is a reseller of SAP NS2 Secure HANA Cloud (SHC) for the State & Local government and Higher Education market. Combining SAP NS2’s cloud experience with LSI’s consulting services is the right cloud strategy for customers seeking end-to-end Secure Cloud Delivery (SCD) for applications, database and platform, available for customers requiring FedRAMP Moderate or commercial infrastructure services.*

**Please reach out to us, so we can perform a TCO exercise for you, free of charge.**