



## **Building & Securing a S/4HANA Cloud Environment** **AI – Cybersecurity – Scalability – Resiliency**

**Brett Murphy**

**Nov**  
**09**  
**2023**



## Trusted Advisor

**Brett Murphy**  
Client Executive



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<https://www.cleartechnologies.net/sap/>

Passionate evangelist for Enterprise Compute, Storage & Software infrastructure. Recognized specialist in enterprise architecture, software cost reduction and competitive selling. Focus over the past 12 years has been on Architecture & Solution Design for clients running large, complex ERP environments.

<https://www.linkedin.com/in/murphy-brett/>



## About Clear Technologies



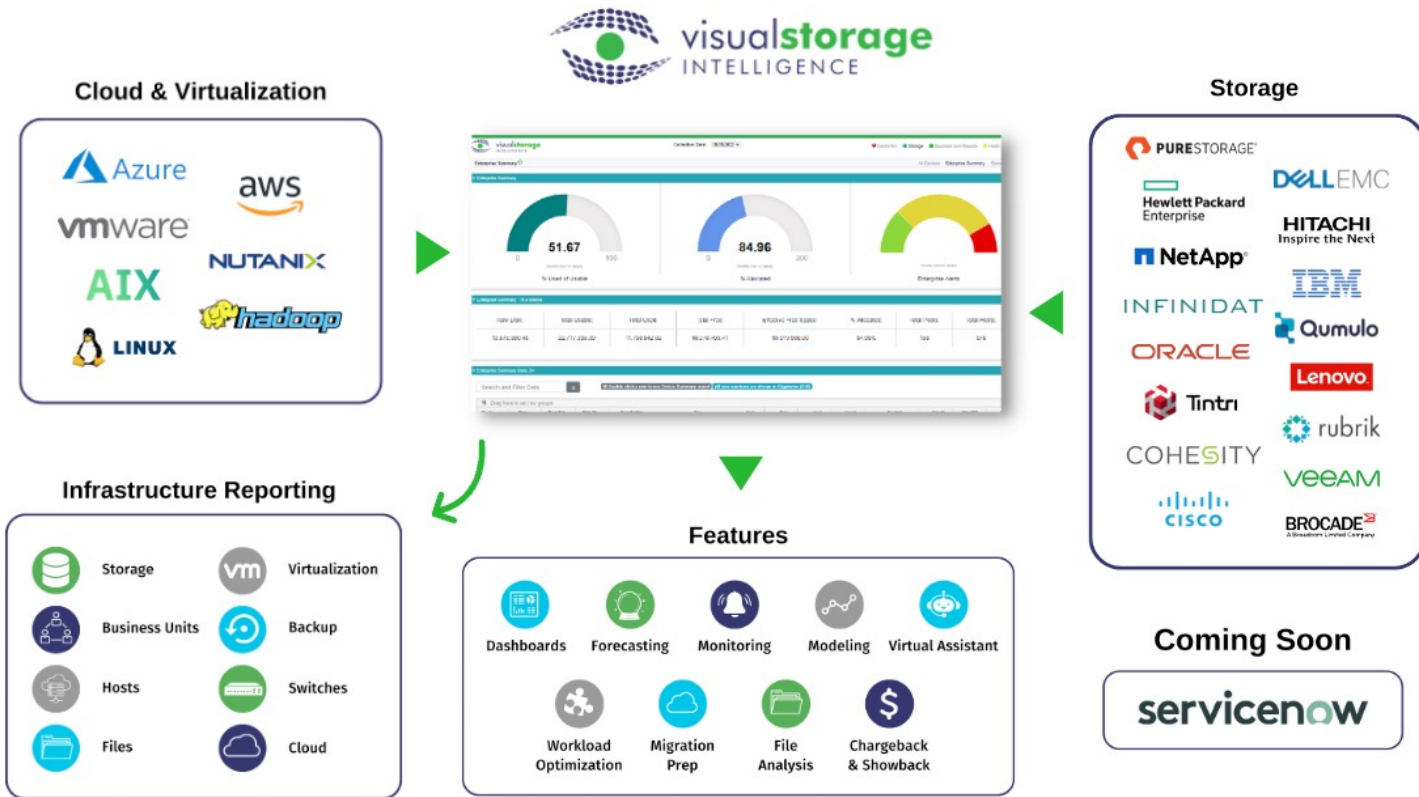
- Traditional Infrastructure VAR
  - Compute, Storage & Networking
- SAP Infrastructure Practice
- Security Practice
- Small Managed Service Practice
- Infrastructure Consulting Services
- Woman owned business (WBENC)



- Cloud based storage reporting, capacity planning and analytics
- VMware vSphere and SAN multi-platform storage dashboard
- Proactively audit and monitor IT infrastructure



# Visual Storage Intelligence



## Clear's SAP Practice

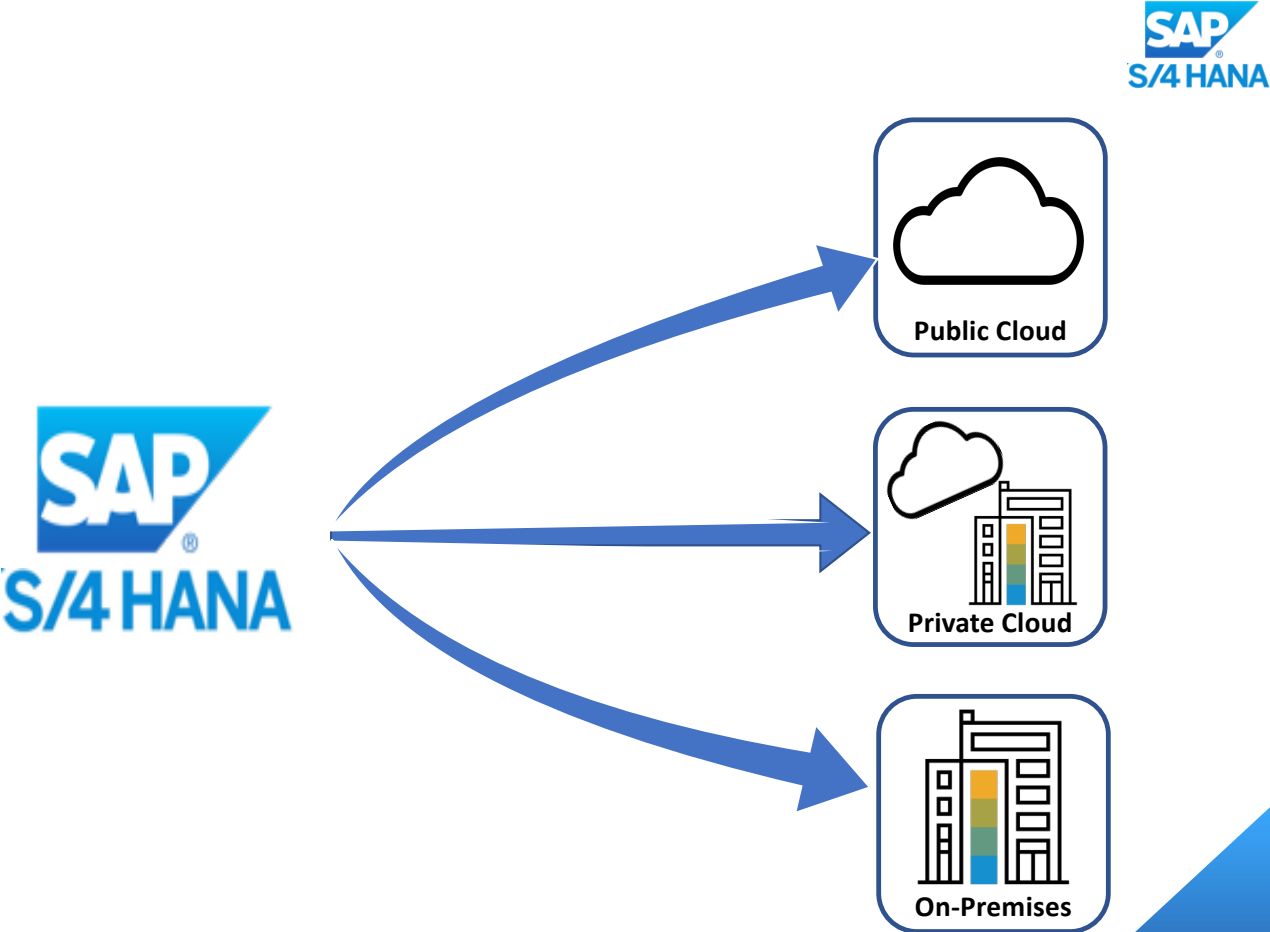


- On-premises, Private Cloud and Public Cloud hosting & infrastructure reseller
- HANA sizing
- Hardware, Software & Services focused

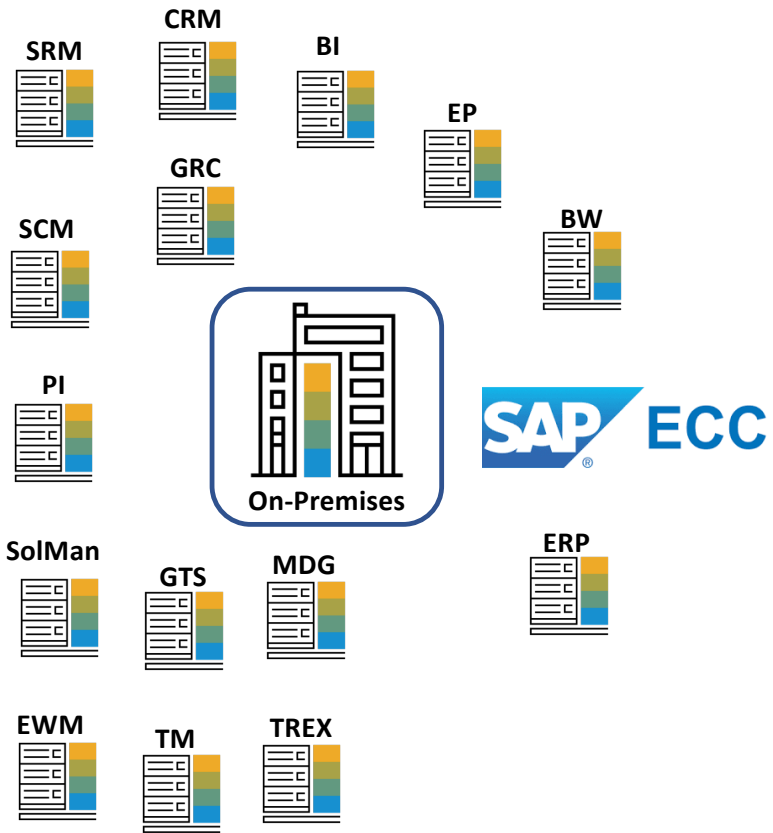
- SAP HANA Readiness Assessment
- Cyber Resiliency Assessment
- Affiliated with a SI Partner
- Affiliated with Migration Partner(s)
- Affiliated with Managed Service Partner(s)



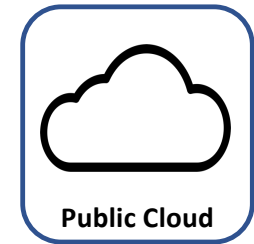
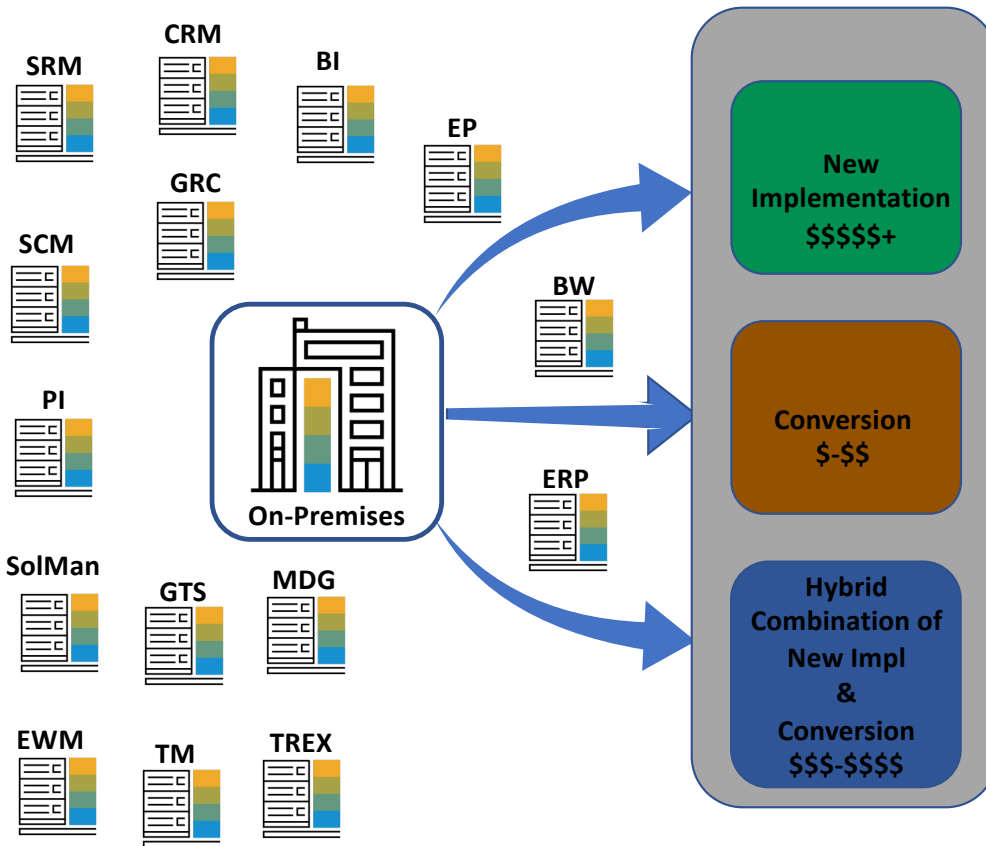
Hosting HANA



In the beginning ...

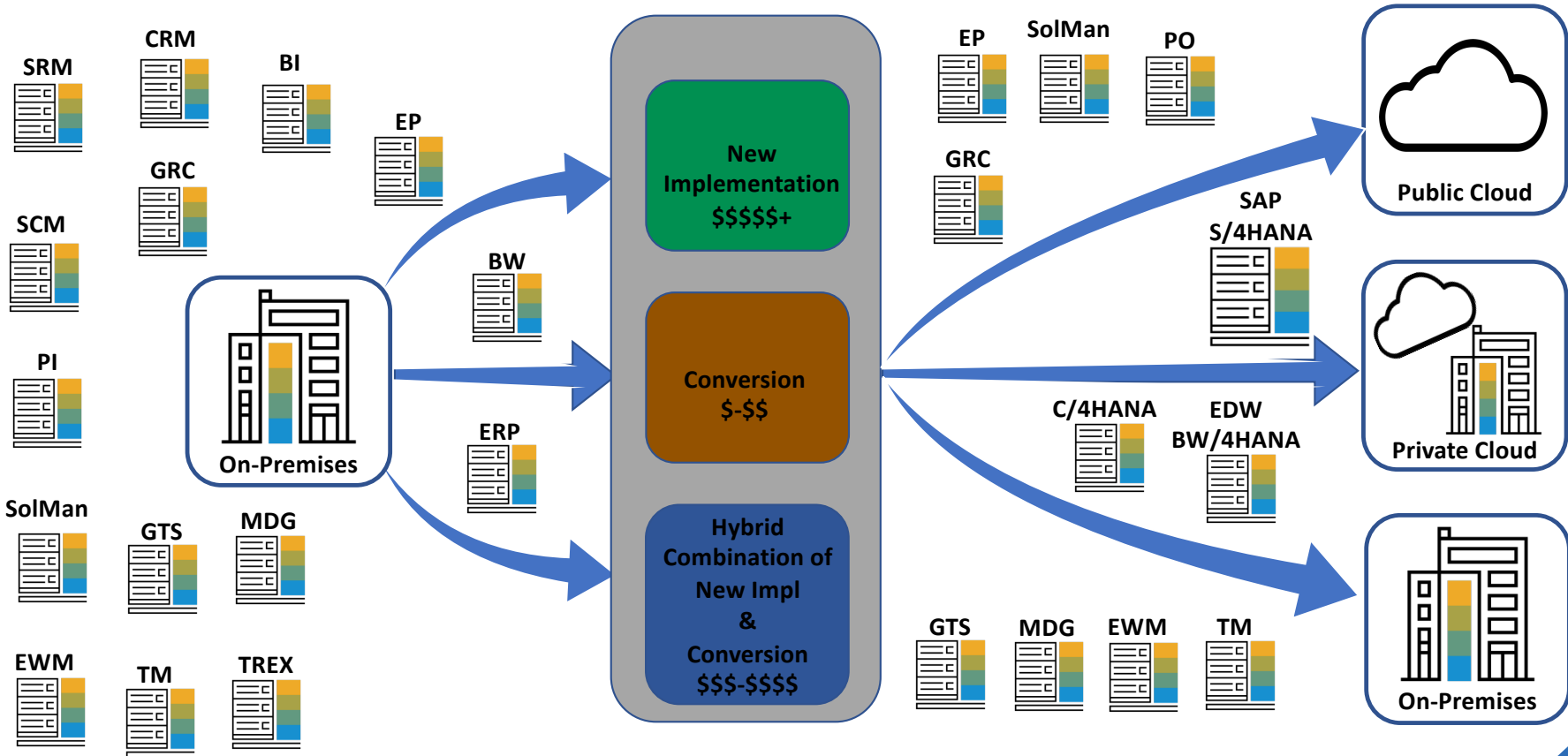


# Decisions - Decisions





# HANA Ready



# Be an Informed Consumer

## Ford's CEO had a charging 'reality check' on his electric F-150 Lightning road trip

Nora Naughton

Updated August 14, 2023 · 2 min read

↑ 937

"Charging has been pretty challenging,"

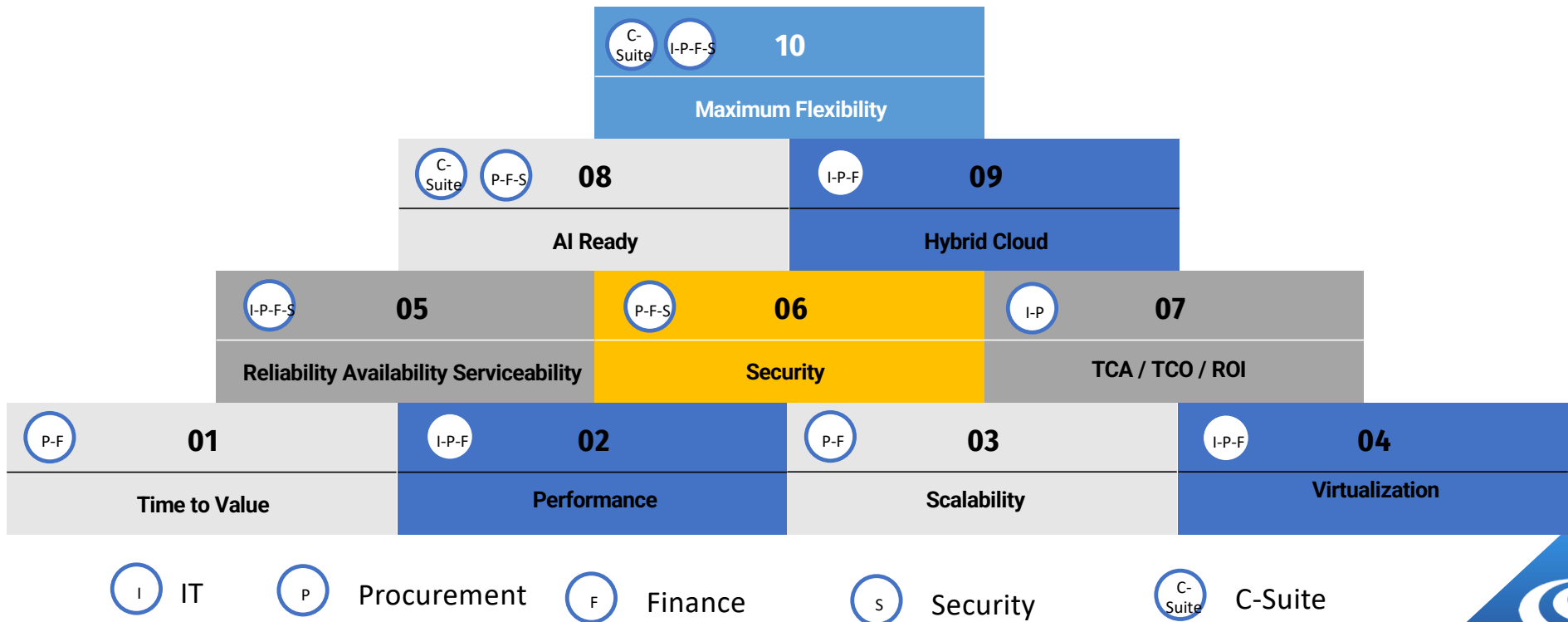
Ford CEO Jim Farley hit the road in an electric F-150 Lightning last week.

Just because companies claim something is the direction everyone is going, or the next wave could also mean it is where they are driving you to versus consumers asking for it.

*B. Murphy*



# Obtaining the Desirable End State



# IBM Power

Visit us: <https://www.ibm.com/it-infrastructure/power>  
Watch "The Legacy and Future of IBM POWER with IBM POWER10"

## SAP HANA EXCELLENCE



Best SAP Performance

**2.7x** ~8,000 **SAPS/co**

Per core performance of 8-socket E1080 two-tier SAP SD benchmark compared to best x86 8-socket HPE Superdome Flex



Largest Customers

**45**

IBM Cloud - PowerVS Private Cloud

of America's top 50 largest revenue generating companies are active Power customers



Most Reliable

**>=99.9999%**

Availability rating in ITIC survey of 1,200 corporations across 28 vertical markets



Scale SAP on Power

**100GB**



**40TB**

Largest certified Memory instance



SAP on Power

**>4,500**

SAP HANA on Power customers



Highly Secure

Default Encrypted Memory @ no additional cost  
Trusted (Secure) Boot, Firewall & , EDR, MFA, SCAP  
4X crypto engines supporting AES, SHA2, and SHA3

**<0.013%**

Security vulnerabilities in PowerVM hypervisor compared to VMware



SAP on Power

**16 LPARs**

Highest # of production virtual partitions

4 core 64GB to 240 core 64 TB Systems



AI on Power

**42%**

More inferencing throughput v x86

**<1s**

Inferencing latency

Decision Time



IBM Cloud with PowerVS



IBM Power Servers



IBM Power Servers



# Customer repatriation of critical Enterprise workloads

*"While cloud clearly delivers on its promise early on in a company's journey, the pressure it puts on margins can start to outweigh the benefits, as a company scales and growth slows"*

*"some companies have taken the dramatic step of 'repatriating' the majority of workloads, or in other cases adopting a hybrid approach. Those who have done this have reported significant cost savings."*

*"market value is being lost among them due to cloud impact on margins — relative to running the infrastructure themselves. Extending this analysis to the broader universe of scale public companies that stands to benefit from related savings, we estimate that the total impact is potentially greater than \$500B."*

*"companies need to optimize early, often, and, sometimes, also outside the cloud. When you're building a company at scale, there's little room for religious dogma."*

-- Sarah Wang and Martin Casado,  
Andreessen Horowitz Capital Management

## Cloud 'sticker shock' explored: We're spending way too much

'Repatriation' from the cloud on the horizon? Andreessen Horowitz partners discuss the paradox of long-term cloud adoption. 'You're crazy if you don't start in the cloud; you're crazy if you stay on it.'

 By Joe McKendrick for Service Oriented | June 26, 2021 – 11:00 GMT (04:00 PDT) | Topic: Cloud

Cloud computing is probably the biggest business around these days -- it has become a \$100-billion-a-year industry. And there's a chance companies are paying way too much for it.



Cloud 'sticker shock' explored: We're spending way too much.  
<https://www.zdnet.com/article/cloud-sticker-shock-were-spending-way-too-much/>



## Cloud \$ Increases

# Cloud service firms lock customers in while nickel-and-diming them

Big cloud is upping its prices everywhere. During this period [Microsoft](#) raised the prices of its Microsoft 365 office applications in various countries by about 9%. Its closest competitor in this space, [Google](#), increased its Workspace monthly prices by as much as 20%.

[Salesforce.com](#), the leading provider of customer relationship management products, bumped up the monthly fees on many of its products by 9%.

The largest providers of cloud storage and applications – [Microsoft](#), [IBM](#), [Amazon Web Services](#) and [Google Cloud](#) – all have increased their hosting and storage fees anywhere from 11% to as much as 50% compared with a year ago.

**This is a business model unlike anything we've seen in the past and it's awesome ... for the software providers. But what about users? What about my small business?**

Let's say you're a company that has invested significantly in one of these cloud platforms to run your business. You've got all your data there. You've built integrations, customizations and specialized applications. You've spent great amounts of money on consultants, experts and trainers to help your employees get the most from these platforms. Like Netflix and [Spotify](#), you're used to these products and value their familiarity. So when there's a price increase you may grumble, but you're not going to change. You know it would be too costly and too disruptive. So you just accept it.

US small business

## Cloud service firms lock customers in while nickel-and-diming them

It's a company's dream business model - the services are too difficult to switch, and small price hikes are often overlooked

Gene Marks

@genemarks

Sun 5 Nov 2023 07:00 EST



A business model where a company can increase prices almost at will? That's the cloud. Some say that security of our data is the biggest challenge when hosting in the cloud. But that's not it. For most users, control is the real issue.



## Resources

### Clear Technologies

<https://www.cleartechnologies.net/sap/>

### ITIC Security Survey Results

<https://www.ibm.com/downloads/cas/BGARGJRZ>

### ITIC Reliability Survey Results

<https://lnkd.in/dDbwVe77>

### SAP Blog – SAP HANA on Power10

<https://blogs.sap.com/2023/03/17/sap-hana-on-ibm-power10/>

- ✓ SAP Note 2100010  
SAP HANA: Popular Misconceptions

- ✓ Cloud service firms lock customers in while nickel-and-diming them  
[https://www.theguardian.com/business/2023/nov/05/cloud-service-provider-consumer-prices-netflix-microsoft?CMP=oth\\_b-aplnews\\_d-1](https://www.theguardian.com/business/2023/nov/05/cloud-service-provider-consumer-prices-netflix-microsoft?CMP=oth_b-aplnews_d-1)
- ✓ Gartner says hold onto your wallets as SAP's cloud pitch trades control for convenience  
[https://www.theregister.com/2023/09/01/gartner\\_rise\\_with\\_sap/](https://www.theregister.com/2023/09/01/gartner_rise_with_sap/)
- ✓ No customer left behind; SAP's Klein tells users angered by cloud-only decision  
[https://www.theregister.com/2023/09/25/no\\_customer\\_left\\_behind\\_saps/](https://www.theregister.com/2023/09/25/no_customer_left_behind_saps/)
- ✓ Users slam SAP's public cloud and S/4HANA migration strategy  
[https://www.theregister.com/2023/04/05/sap\\_s4\\_hana\\_cloud\\_strategy/](https://www.theregister.com/2023/04/05/sap_s4_hana_cloud_strategy/)
- ✓ RISE with SAP: Shared Security Responsibility for SAP Cloud Services (slide 11 Security bullet)  
<https://blogs.sap.com/2021/09/15/rise-with-sap-shared-security-responsibility-for-sap-cloud-services/>





# **No-cost!**

**SAP HANA Readiness Assessment**

**Cyber Security Assessment**

**Storage & Capacity Planning Assessment**



Thank you

**Q&A**



# 13 Layers of SAP Security

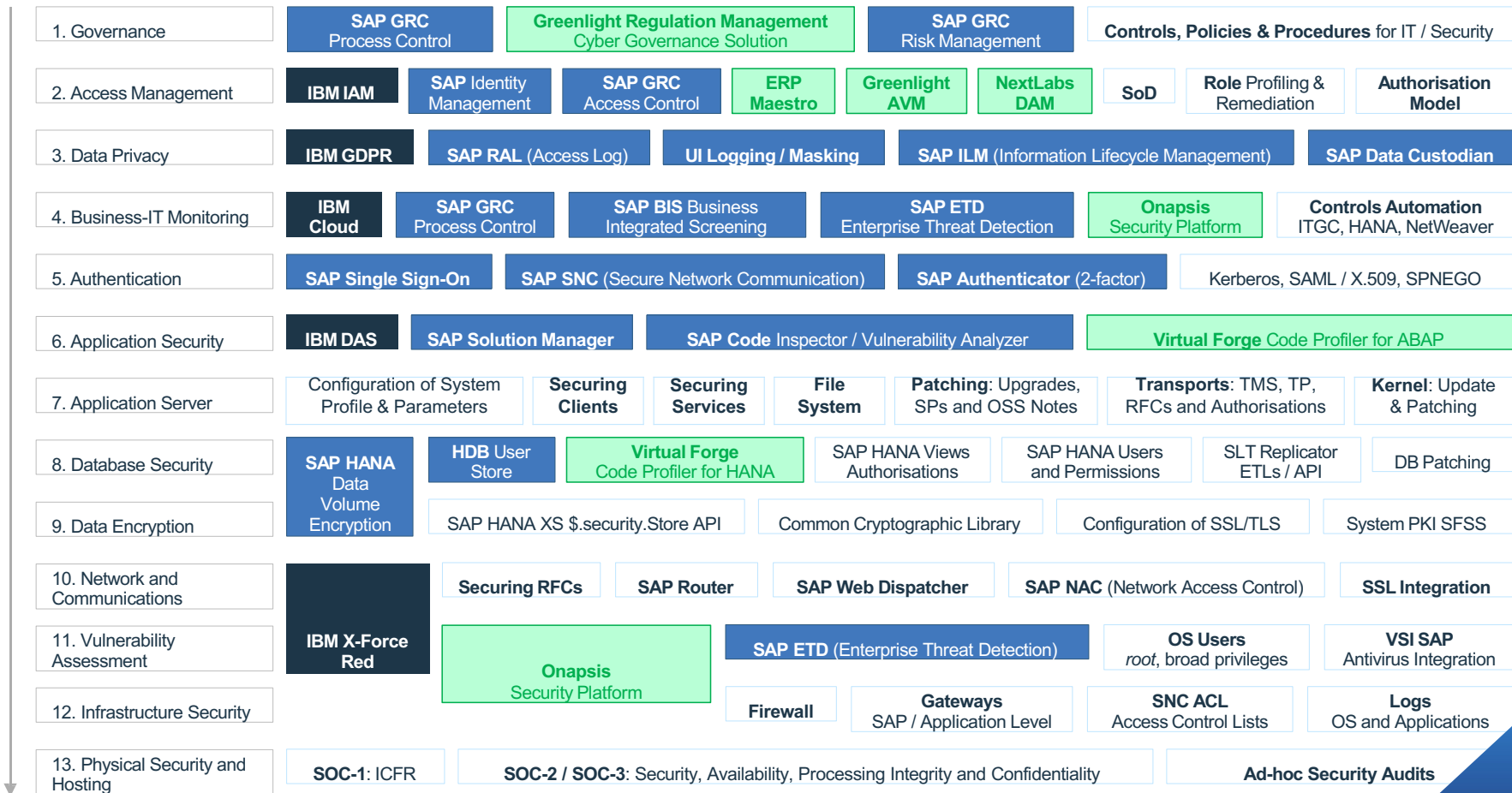
Security Layers

SAP product

Sub-competency

3rd Party product

## IBM point of view of SAP Security



## Partnership & Trusted Advisor

We are a single point of contact, committed to consistently delivering the solution and services that are the best fit for your business.

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- 30-year Value-Added Reseller
- Long history with Systems & Storage
- Strategic focus on SAP, and other innovative solutions
- Extraordinary Net Promotor Score
- Cognitive Leadership Program
- 3 IBM Champions

