

The Advizex logo is displayed in white text on a dark background. The 'x' at the end of the word is stylized with a blue diagonal line through it. A large, semi-transparent blue diagonal bar runs from the top left towards the bottom right of the slide, partially overlapping the logo.

# Advizex

The background of the slide is a photograph of a server room. A person wearing glasses and a light blue shirt is standing in the aisle, looking at a laptop. The server racks are filled with equipment, and the room is dimly lit with a blueish tint.

## Solving Scalability and Disaster Problems with Cloud

JOE CLARKE

# About Me



*Director of Cloud Architecture*

## Focus Expertise

*Public, Private and Hybrid Cloud Offerings, End User Computing*



## Location

Cleveland, Ohio

## Qualifications

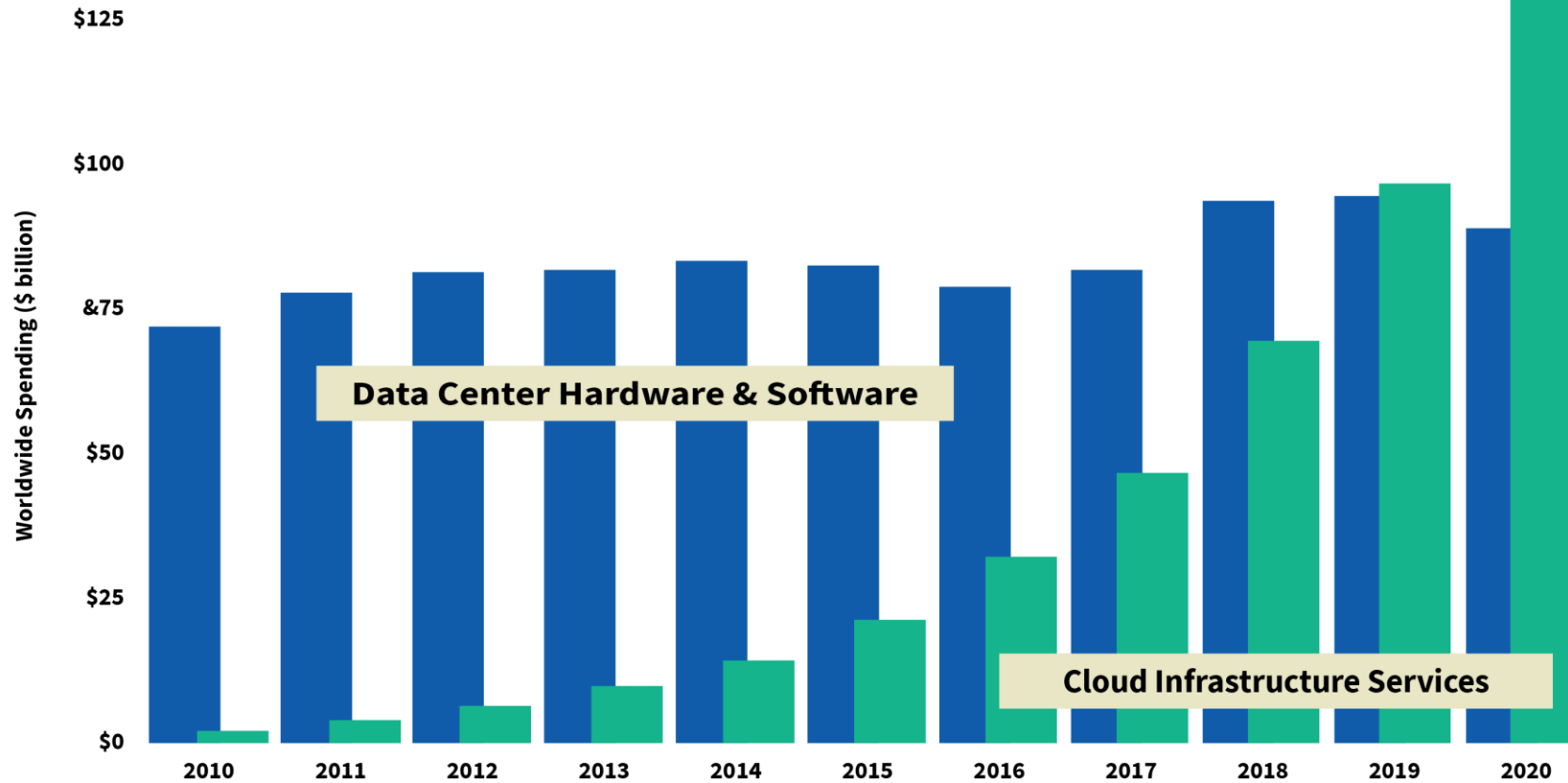
Joe brings over 12 years of architecture, planning, and implementation expertise in the hybrid cloud, virtualization space and end user computing spaces. Prior to solution architecture at Advizex, Joe worked in house at a large bank and hospital in Northeast Ohio.

- Joe is one of 8 global (5 US) dual VCDX certified professionals with an EUC specialization
- Successfully planned, designed, and implemented multiple large-scale cloud migration, virtual desktop and server projects
- Joe has led desktop and server virtualization efforts for numerous organizations
- Deep infrastructure expertise (storage, compute, networking)

## Certifications

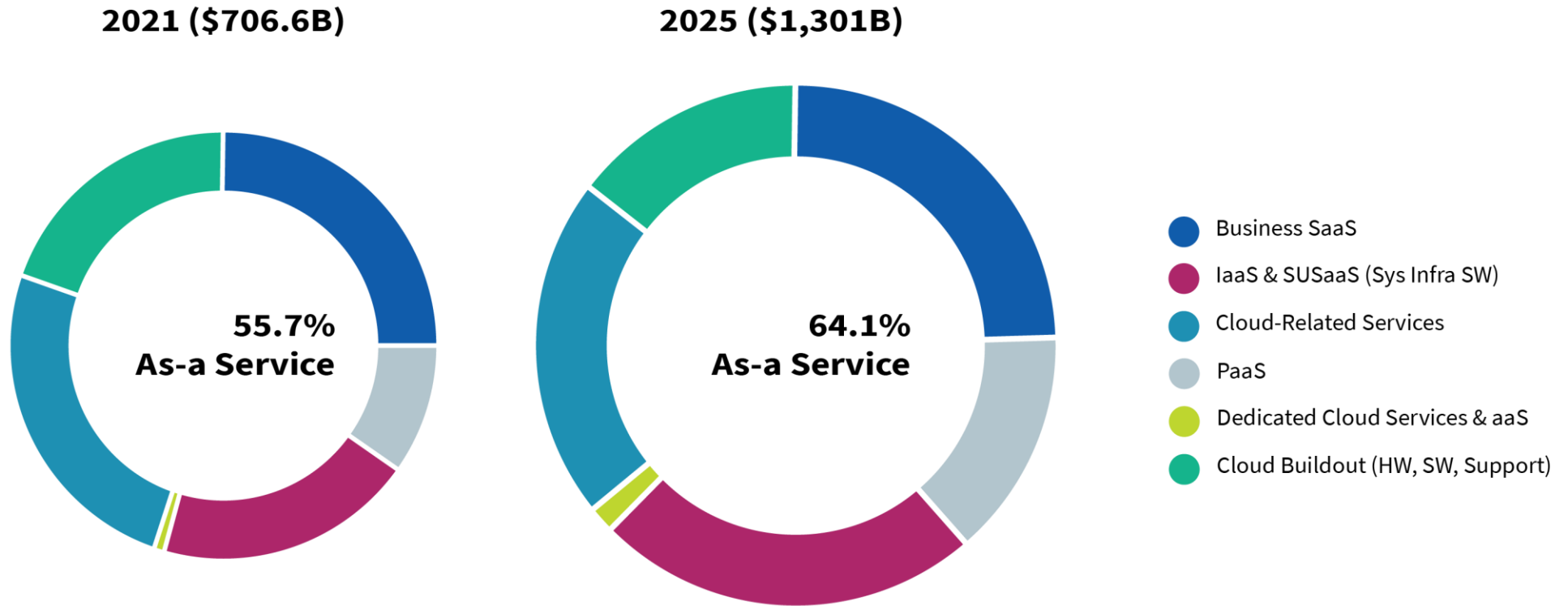
- Azure SA Expert
- AWS SA Associate
- VCDX6-DCV
- VCDX5-DTM
- MCSE, MCITP
- MCTS-SCCM

# Enterprise Spending on Cloud and Data Centers



Source: Synergy Research Group

# Worldwide Whole Cloud Outlook



Source: IDC Whole Cloud Forecast 2021-2025: The Path Ahead for Cloud in a Digital-first World, IDC #US47397521, Sept 2021

# What Businesses Want: Hybrid Cloud

- Consume IT so it looks and feels like Public Cloud – no longer want to do “hardware refreshes”
- “C” Suite Direction – not in the data center business
- Secure IT environment
- Build as you grow vs. buy as you grow

# What is desired, versus often purchased



+



+



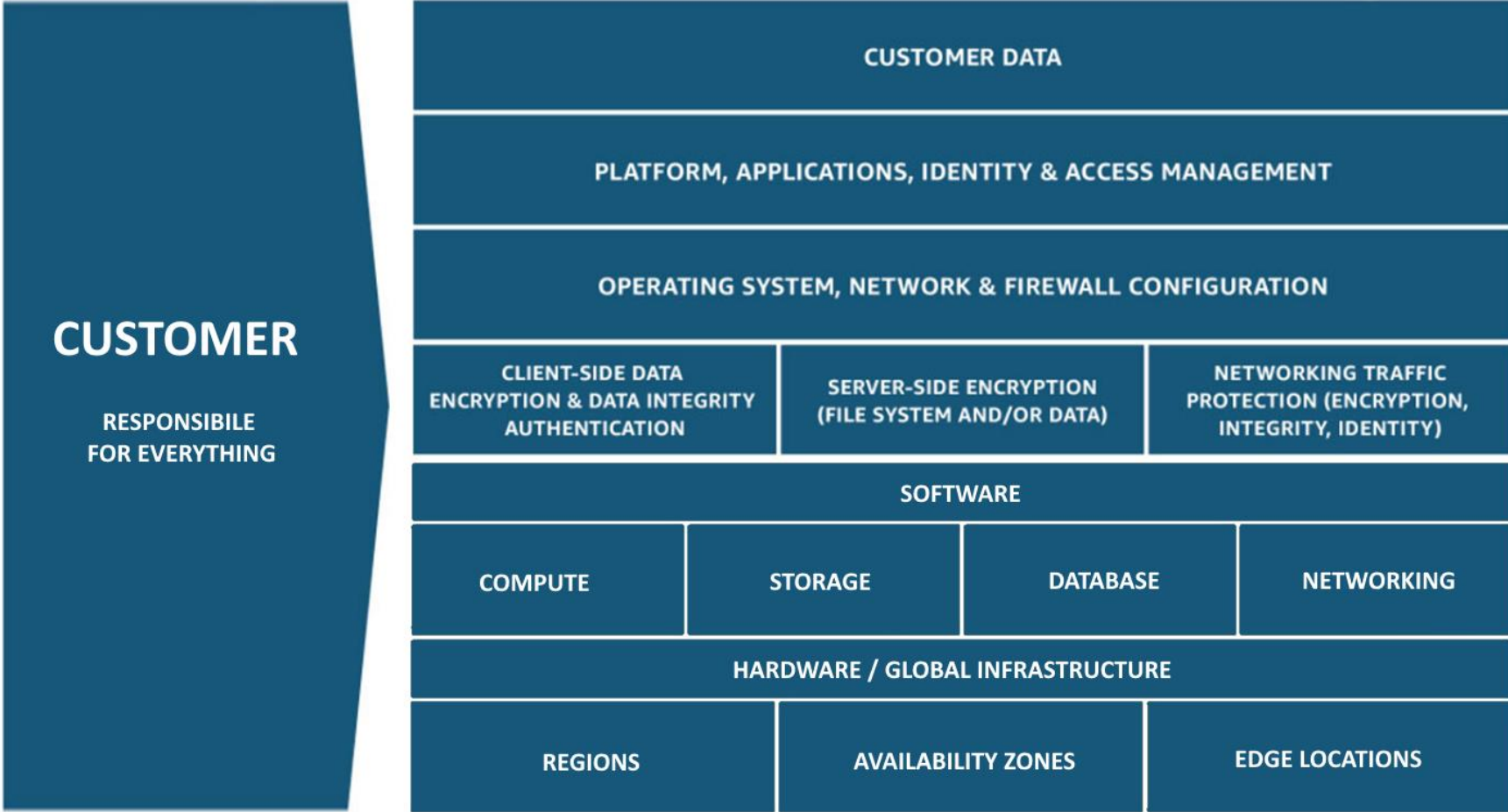
# WHAT IS CLOUD?

Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources that can be rapidly provisioned and released with minimal management effort or service provider interaction.

WHO IS  
ACCOUNTABLE

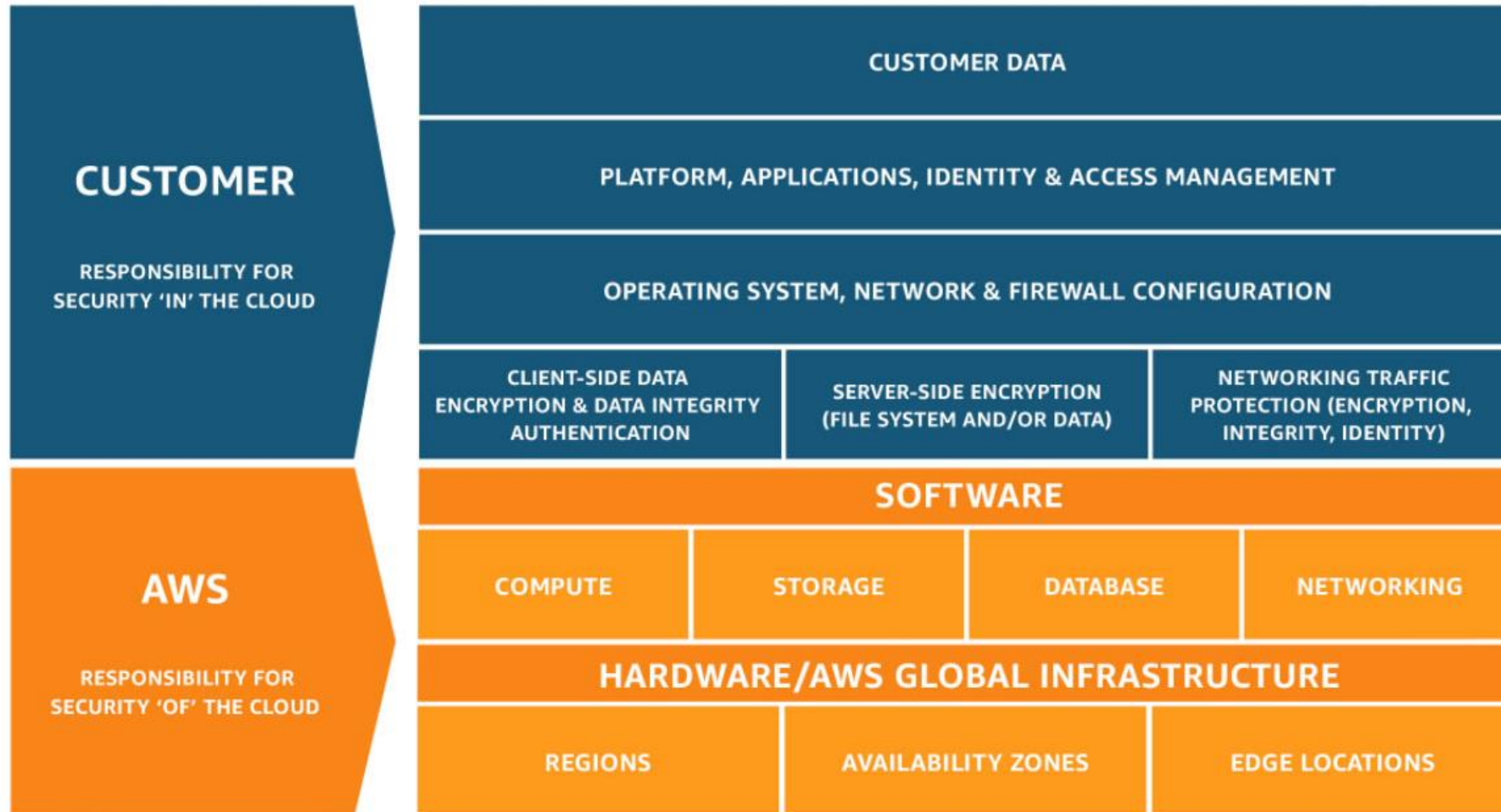


# The Customer Only Responsibility Model





# The AWS Shared Responsibility Model



# essential adjective

es·sen·tial | \ i-'sen(t)-shəl  \

## Definition of *essential* (Entry 1 of 2)

- 1 : of, relating to, or constituting essence : INHERENT
- 2 **a** : of the utmost importance : BASIC, INDISPENSABLE, NECESSARY  
*// an essential requirement for admission to college*

# CHARACTERISTICS OF CLOUD

**ESSENTIAL**

- Broad network access
- Resource Pooling
- Measured Service
- Rapid elasticity
- On-demand self service

## Private Cloud

The cloud infrastructure is provisioned for exclusive use by a single organization comprising multiple consumers (e.g., business units).

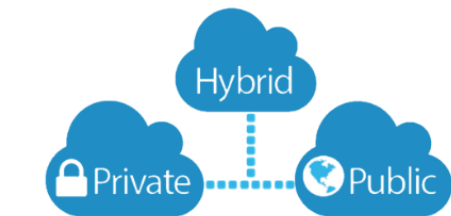
## Public Cloud

The cloud infrastructure is provisioned for open use by the general public. It may be owned, managed, and operated by a business, academic, or government organization, or some combination of them. It exists on the premises of the cloud provider.

## Hybrid Cloud

The cloud infrastructure is a composition of two or more distinct cloud infrastructures (private, community, or public) that remain unique entities, but are bound together by standardized or proprietary technology that enables data and application portability (e.g., cloud bursting for load balancing between clouds).

# HYBRID CLOUD





## Unified Operating Model

Private Clouds



Public Clouds

Seems obvious, but...



Scaling out...  
without scaling back in...  
is growth.





Sorry about that - Message (HTML)

File **Message** Insert Options Format Text Review Help Acrobat Tell me what you want to do

Calibri (Body) 11 B I U A

To: Joe Clarke

Cc:


Bcc:

Subject: Sorry about that

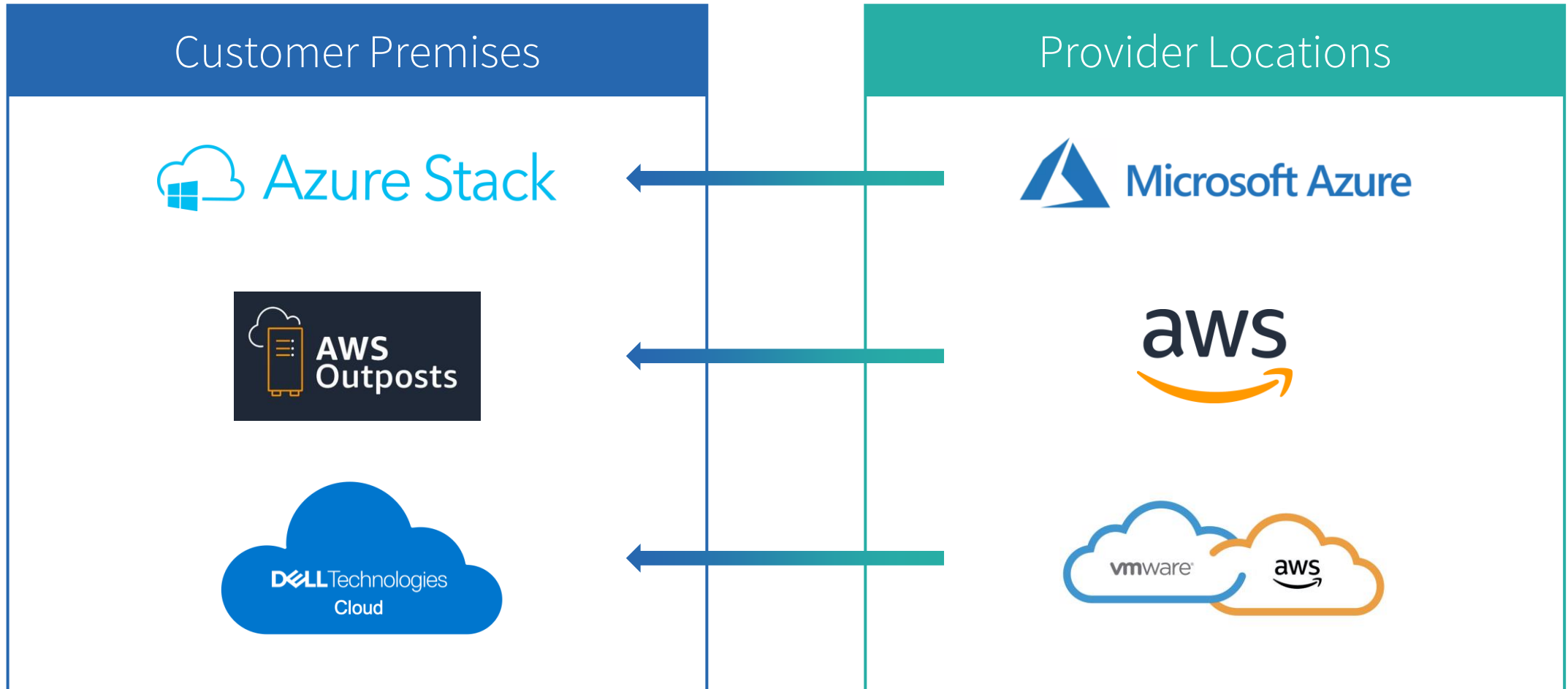
Send

We don't really do cloud. Thanks!

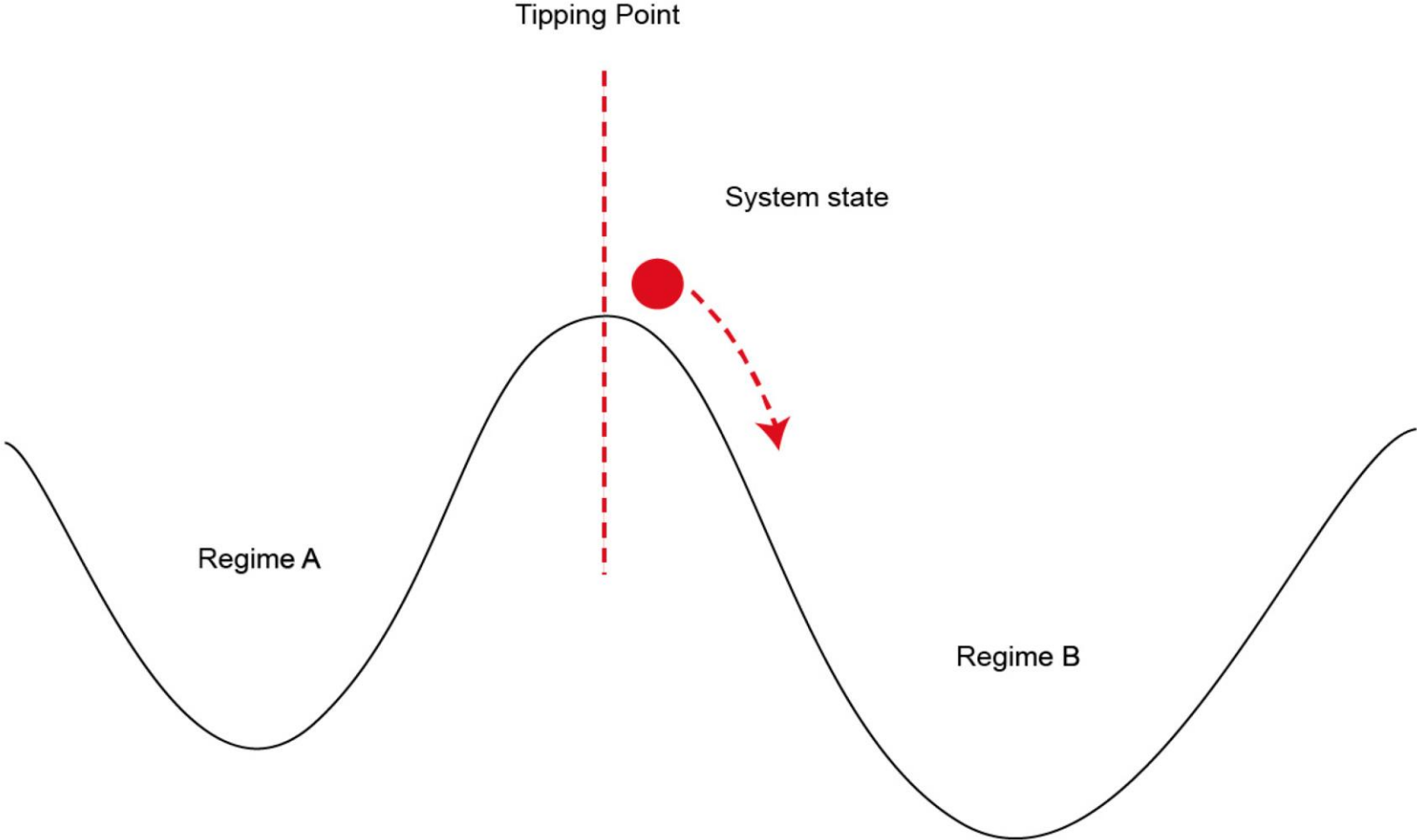
Mr. Customer  
CIO  
**Mobile:** 123.456.7890

Sent by 

Public Cloud OEMs are also moving in the direction of hybrid so they can exist in on-premises datacenters when the use case is right.



# What are the tipping points for leveraging hybrid cloud?



# What are the tipping points for leveraging hybrid cloud?

- Executive mandate
- Hardware lead time becomes untenable for the business
- A need to quickly service a region without an existing datacenter footprint
- Continued flexibility to expand to new regions quickly
- Desired services are not currently available in the private cloud catalog and can't be added quickly
- Scale and Descale
- Availability requirement makes leveraging cloud a better option
- The SaaS offering makes more sense
- The applications demand it
- Lack of expertise to build a private cloud

## So how is Advizex helping solve problems with cloud today?

- Matching the “grid power” vs “generator” IT use cases to the right problem
- Solving the hardware lead time problem with hyper-scalers at the ready
- Enabling true hybrid cloud capability through CMP offerings and our services teams
- Building custom compute light, storage dense DR offerings
- Optimizing configurations by helping move to well architected
- Managed services to ensure cloud providers are fulfilling their duties
- Modernization of collaboration tools to work from anywhere securely
- Building applications in cloud native formats to be portable
- Untangling the complexity of the cloud bill and helping optimize costs

The first time an out-of-control cloud bill shows up





## Unified Operating Model

Private Clouds



Public Clouds



vm vRealize Automation



VMware Tanzu

Hewlett Packard  
Enterprise

vmware®  
DELL Technologies



Microsoft Azure

aws





## Closing Comments

- Exciting – Change is omnipresent
- Challenging – Evolve vs. Transform
- Story Problems – These excite us