



proudly present:



# Cloud and Big Data – A Perfect Storm

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# CLOUD COMPUTING

Revolutionizing Entertainment & Media  
The Impact of Mobile Cloud Computing & Big Data

# WEST 2013

OCTOBER 27-29, 2013  
The Cosmopolitan  
Las Vegas, NV

# Agenda

- ViaWest
- Cloud
- Big Data
- Hybrid and Solving Big Data Challenges
- Q&A



## Who we are

**We enable businesses to leverage both their existing IT infrastructure and emerging cloud resources to deliver the right balance of cost, scalability and security, with comprehensive colocation, managed, and cloud services.**

# 27

Data Centers  
Centers

# 600+

Square Feet

# 75

MW UPS  
Power

# 16

Redundant  
NOCs



# 28

Unique  
Carriers

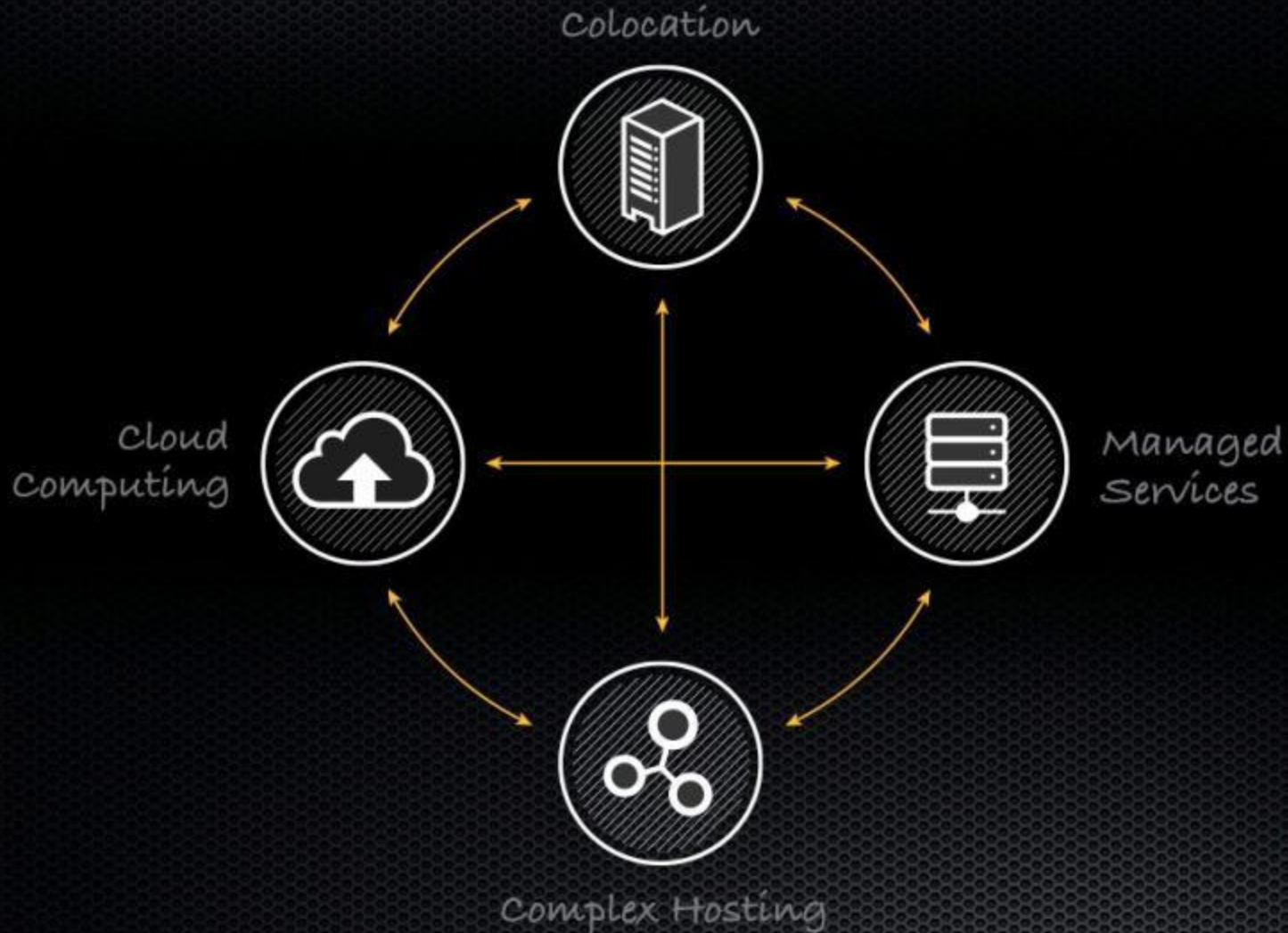
# A Solid Foundation - Our Next Generation Data Centers

- Tier 4 Design Certified, 24x7 Security - Biometrics, Video Surveillance
- Industry leading sub 1.3 Power Usage Effectiveness (PUE)
- 700 watts per square foot of high density compute power
- 9 MW redundant, fault tolerant UPS system
- 3,000 tons of redundant, fault tolerant cooling capacity
- State-of-the-art patent pending cooling technology utilizing
  - Autonomous super CRACs
  - Thermal masking and continuous cooling
- Green technology
  - LEED certified
  - Energy Star certified
  - Green Building Initiative (GBI) Green Globe certified



# FLEXIBLE

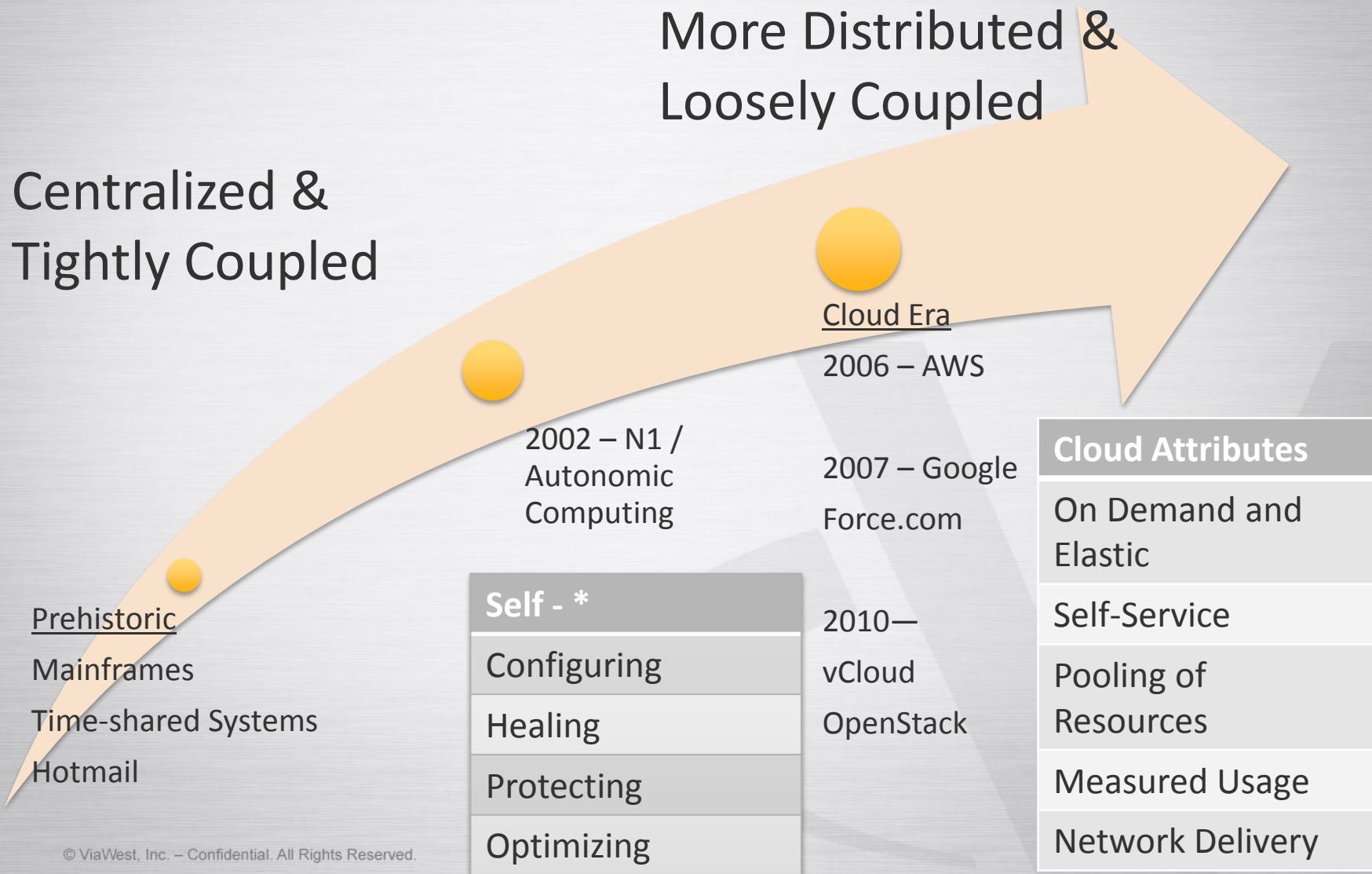
*Seamless integration of services*



# Cloud and Challenges

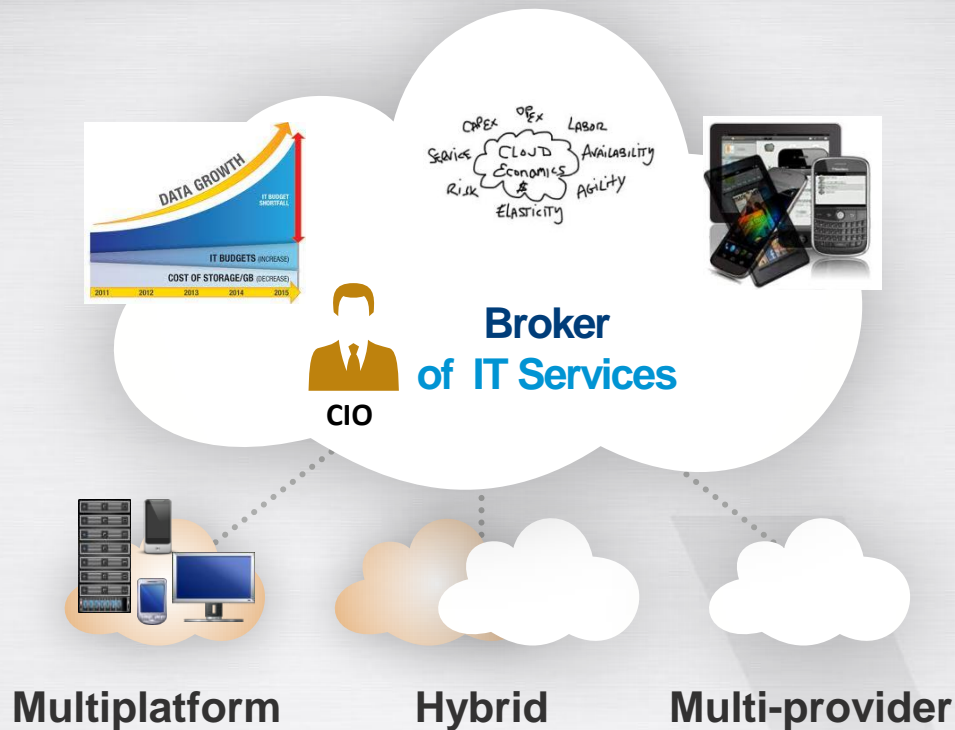


# A Very Short History of Cloud





# The Changing Role of the CIO



From  
Technologist  
to...

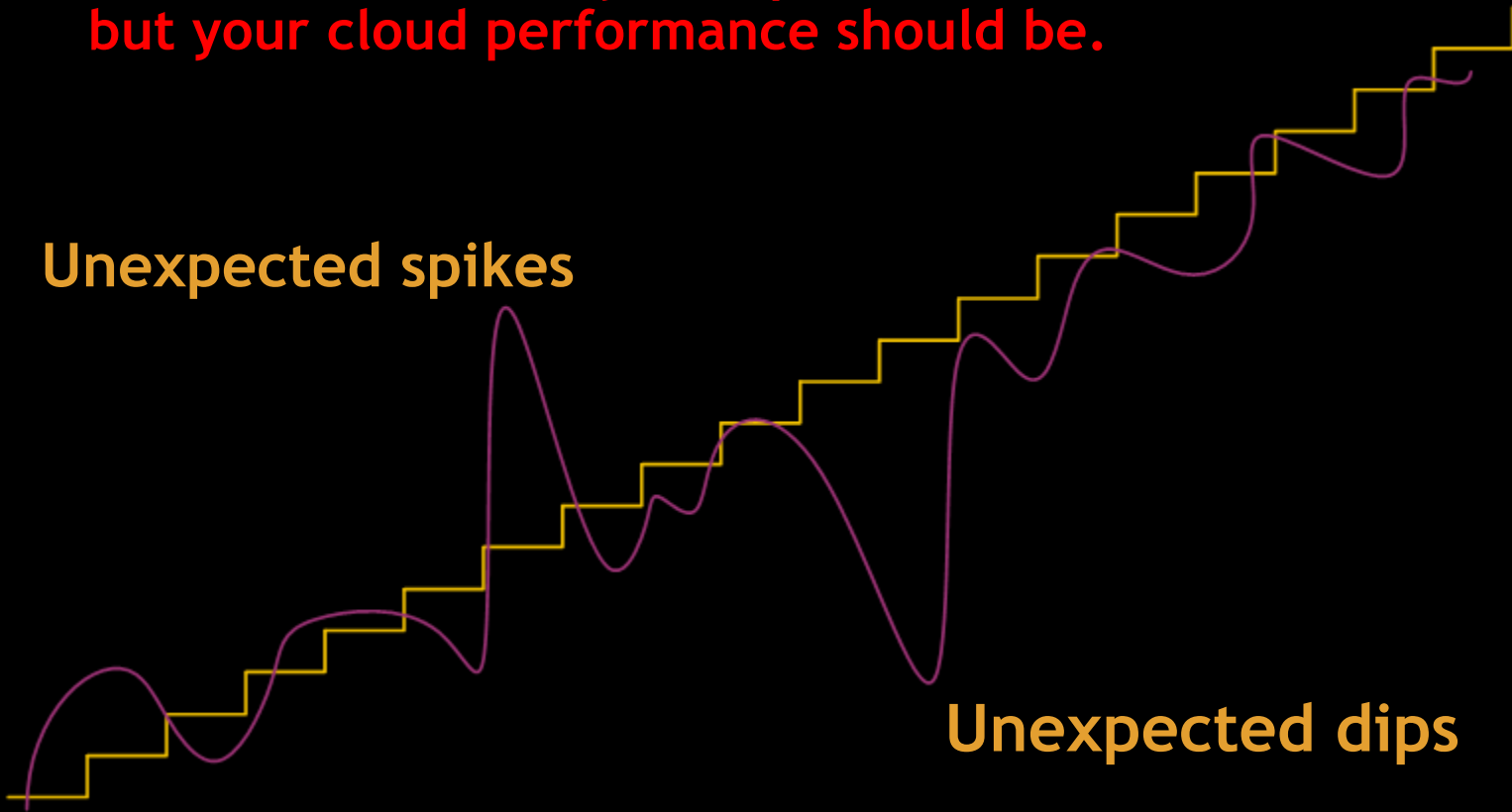
Portfolio Manager, Business Architect, Superhero

# Predictable / Trusted / Transparent

Capacity Demand

Demand isn't usually that predictable,  
but your cloud performance should be.

Unexpected spikes



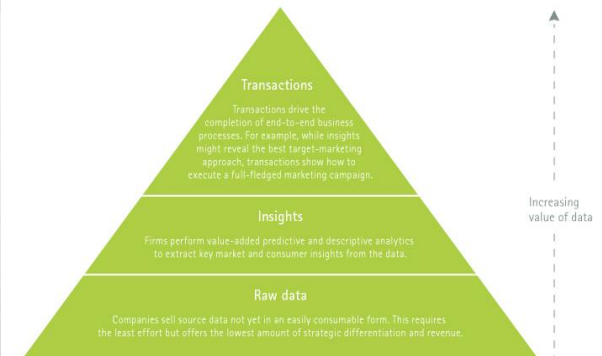
Unexpected dips

# Dealing with Big Data

- ▶ What is BIG DATA? Why Should I Care?
- ▶ Data is collected at an increasing rate, From diverse sources
- ▶ Data is leveraged more and more at near real-time
- ▶ Data is critical to our business models and competitive advantage

## What's your data worth?

Companies hoping to drive information services growth need to understand what kinds of raw data exist in the organization and then decide which tier of information value they should aspire to provide. We use the Accenture Information Value Pyramid to illustrate various information services strategies. The pyramid has three levels: raw data, insights and transactions. The potential value and profitability of an information services business depends in large part on the condition of the data an enterprise owns. The base of the pyramid features raw, less differentiated and thus less valuable data. Moving up the pyramid creates larger revenue opportunities, but these tend to be more difficult to execute.

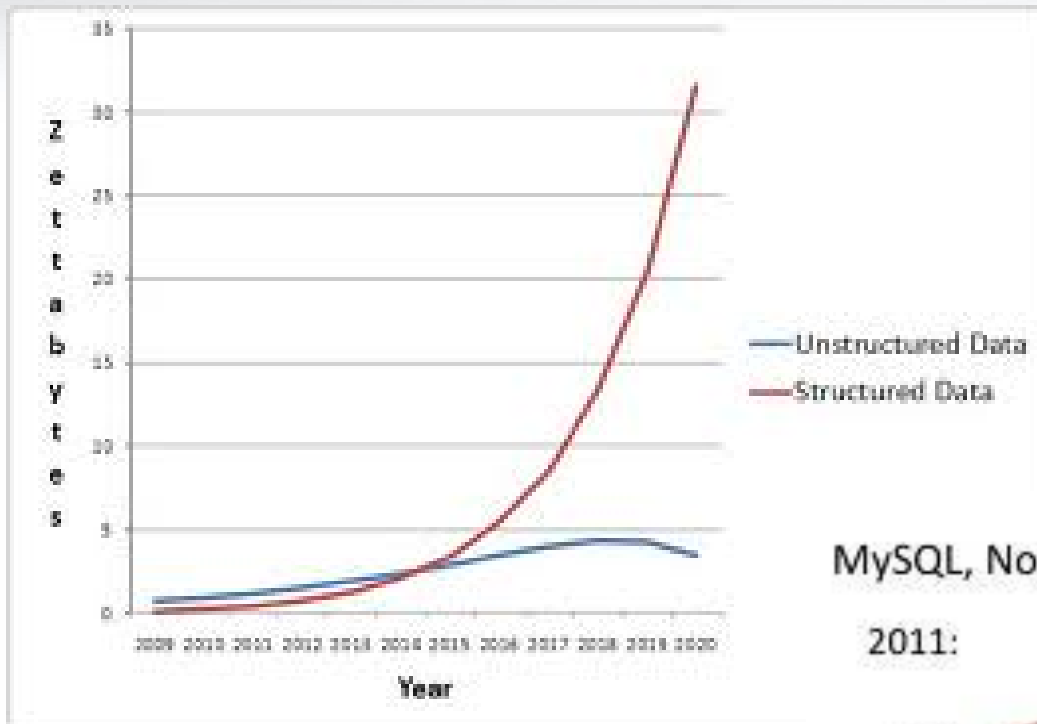


Source: Accenture analysis

# Data Explosion!

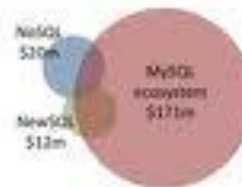


# No Structure?

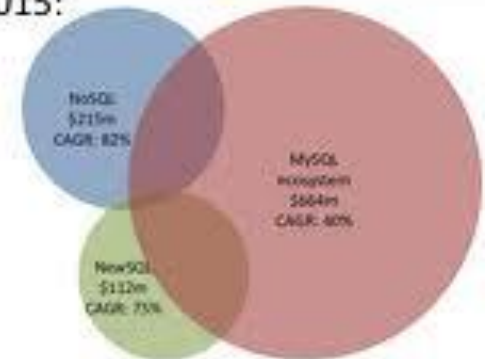


## MySQL, NoSQL, NewSQL revenue 451 Research

2011:



2015:



# Storage Wars!

Google™

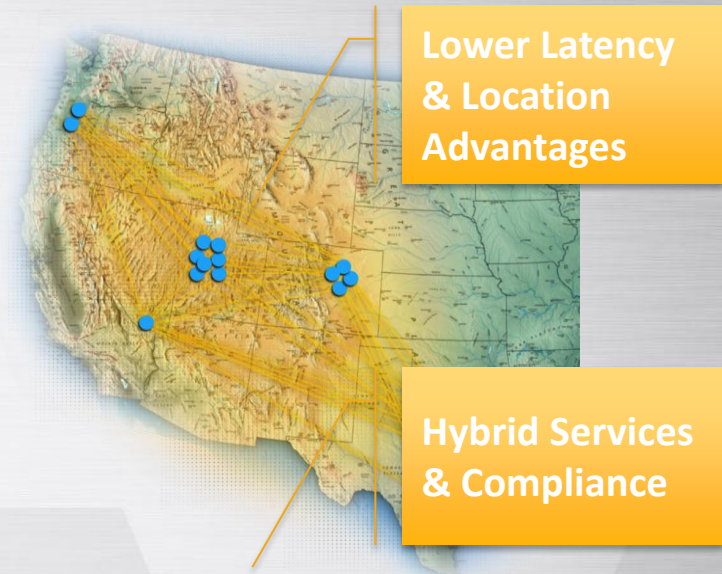
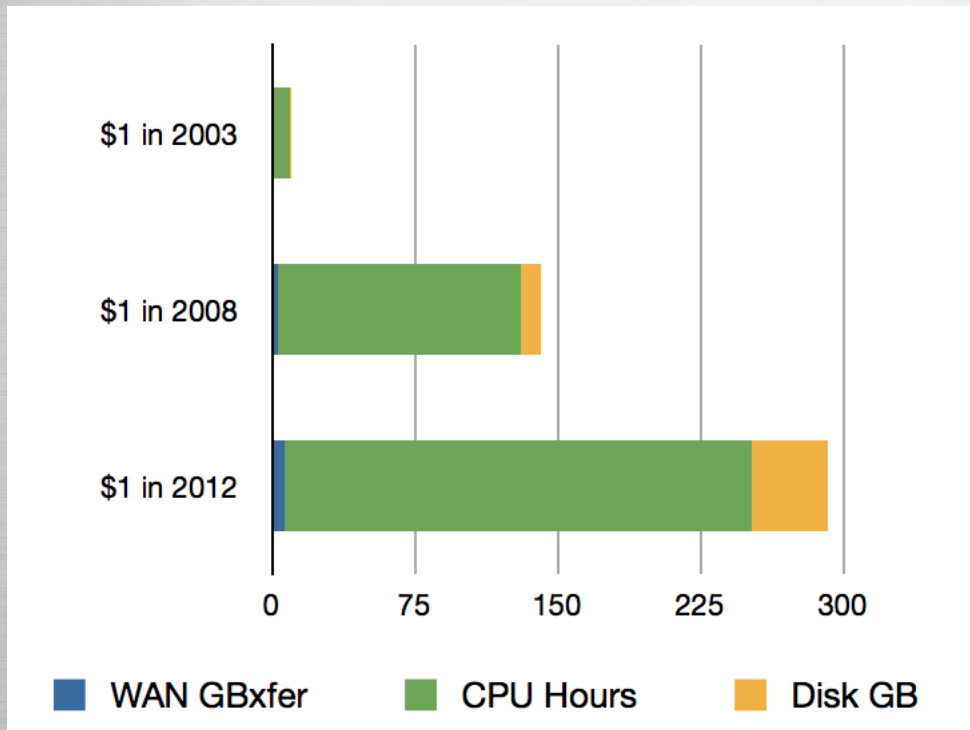
Caution:  
SLA?!?

amazon.com®



# Surplus Computing and It's Effects

Cloud means IT Becoming More Abundant but Key Differentiators Emerging...



Operational Excellence



Source: 2003-2008 UC Berkeley, 2012 JTC

# Why Hybrid Solutions?



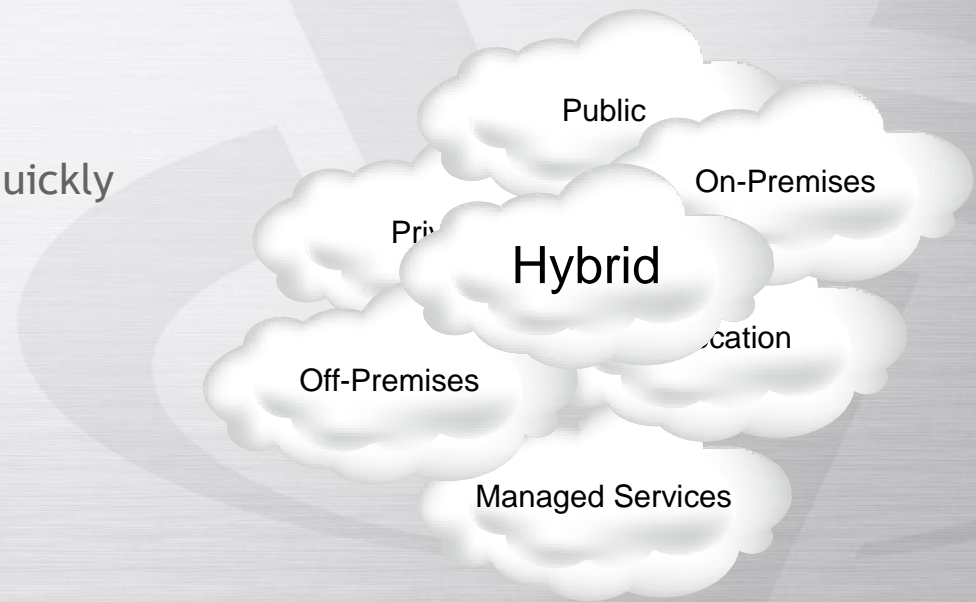


# First, It's about Physics



# The Value of Hybrid

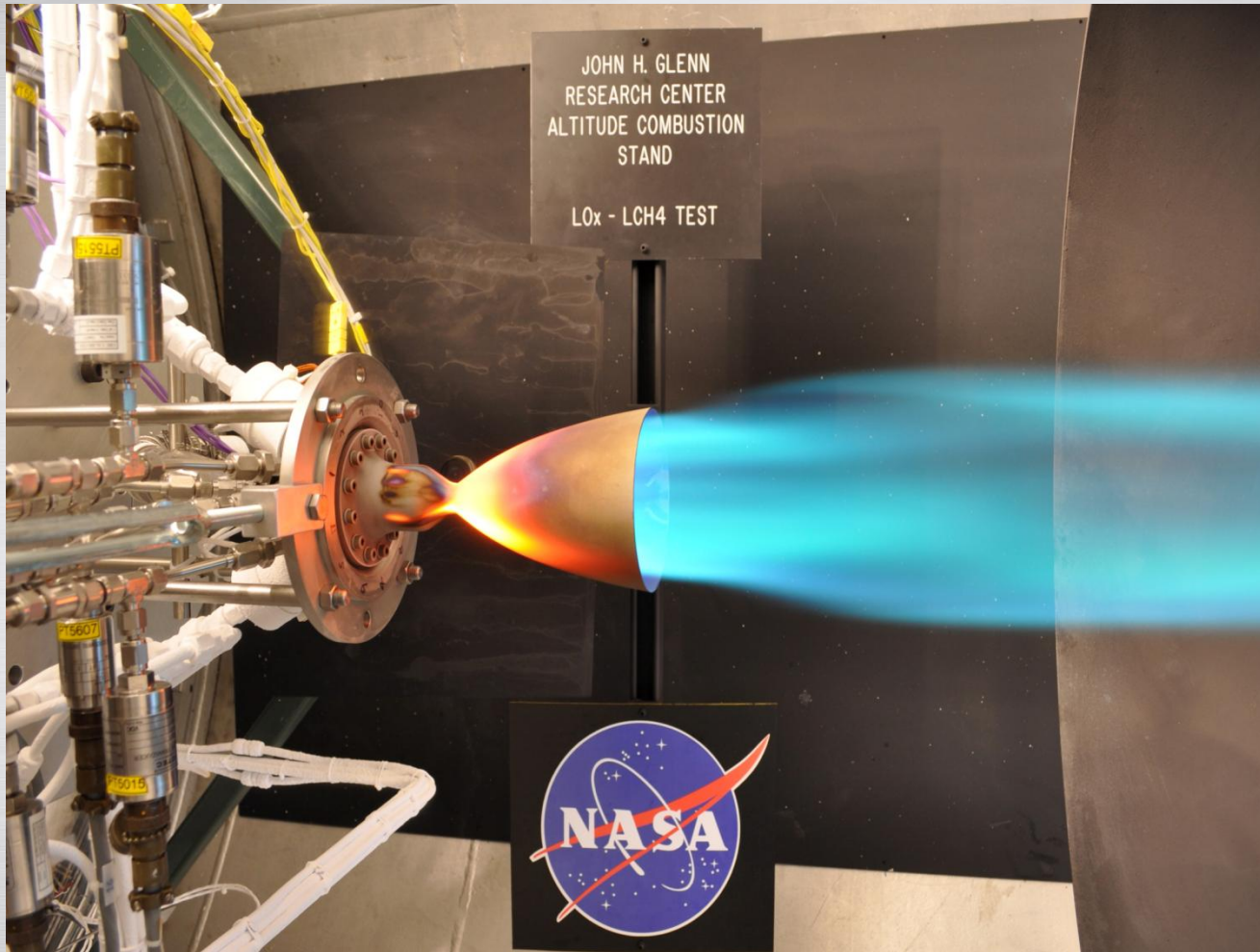
- ▶ Hybrid? - *Hybrid cloud* is a composition of two or more clouds (private, community, etc.)
- ▶ Opportunities
  - Mix Traditional Managed and Un-managed services
  - Use Local Network Connections instead of WAN/Internet
  - Keep data in its cage
  - Burst to additional resources quickly
  - Cost Effective & Elastic



# Now I'm Cooking with Gas!!



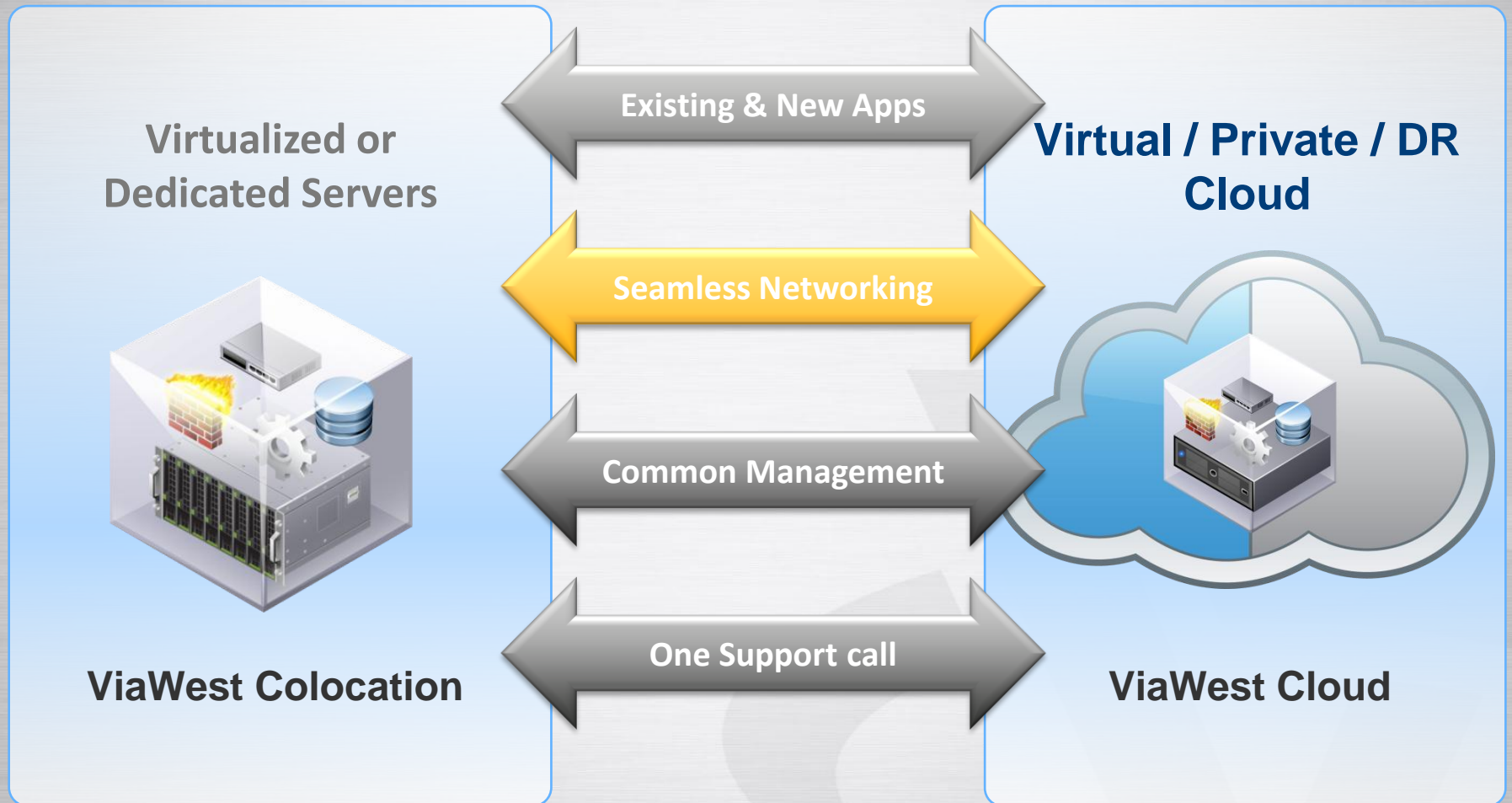
# Your Cage to the Cloud! - Cloud Backplane Access!



**Secure, Dedicated 10 Gigabit Redundant Trunks  
+ KINECTed Transport Network Options**

# Hybrid is Now

Best Location, Flexible Capabilities, Highest QOS



# Security FUD

- ▶ **92-98% of all organizations breached**
- ▶ 81% of Breaches utilized Hacking
- ▶ 69% of Breaches utilized Malware
- ▶ 79% of targets were targets of opportunity
- ▶ 96% of successful attacks were not complicated/ very intelligent
- ▶ **Average Cost of Breach is \$222 per record (\$240 for healthcare, \$247 in Finance)**
- ▶ **Average total Cost of Breach \$5.5 to \$7.2 million**
- ▶ Total number of personal records breached since 2005 - 562,943,732
- ▶ Breach Incidents up 40% in 2012 over 2011
- ▶ 22% of all data breaches happen in Healthcare, 10% in Finance
- ▶ **Visa Says 95% of CC breaches are at SMB**
- ▶ 84% of SMB think they are too small to be concerned - 98% breach rate
- ▶ Not only is SMB not immune - they are a HUGE target!

**More DDoS Attacks on the Way?  
Hacktivists Claim Three Banks  
Recently Hit  
By BankInfoSecurity, January 22, 2013**

# Secure and Compliant Colocation and Cloud Services

▶ **ViaWest policies, procedures and standards are created based on aspects of multiple control specifications:**

- ISO/IEC 27000 series
- NIST 800-53
- ITIL 3.0
- HIPAA/HITECH
- Federal Information Systems Management Act (FISMA)
- Gramm-Leach-Bailey Act (GLBA) Interagency Guidelines
- Payment Card Industry (PCI) Data Security Standard v2.0
- Trust Services Principles and Criteria

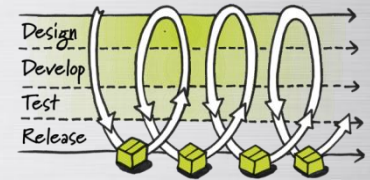
▶ **Independent service auditor reports**

- PCI DSS
- SSAE 16/ SOC 1
- SOC 2 and SOC 3 on the Security and Availability Trust Services Principles
- HIPAA



# Summary

- Data is one part of the equation, and once collected is a very important asset
- Compute and network plays an important role - so does latency
- Analysis and correlation make data valuable to your business
- Become familiar with data models, types, next gen DBs, etc
- Look for a cloud provider that understands and can provide hybrid services  
- Colocation + Cloud + Managed Services - ViaWest!







proudly present:

viawest™

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- **Thank You!**

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