

# The Forecast for Cloud Computing

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- Troy Adkins - VA House {2014 NALIT Achievement Award?}
- Sharon Crouch Steidel - VA House {2001 NALIT Achievement Award}
- Sean Johnson - VCE @vSeanJohn {2003 NALIT Achievement Award}

LEGISLATIVE  
SUMMIT



NCSL

STRONG STATES  
STRONG NATION

AUGUST 12-15

ATLANTA  2013



# Springfield NALIT 2001





FIFTY PERCENT  
OF AMERICANS THINK  
CLOUD COMPUTING HAS  
SOMETHING TO DO  
WITH THE CLOUDS!

YOU  
MEAN IT  
DOESN'T?



# Definitions

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- Cloud - "The practice of using a network of remote servers hosted on the Internet to store, manage, and process data, rather than a local server." - many vendors have taken existing products and appended "cloud" to reach market.
- Consumer cloud examples: Google apps/Gmail, Facebook, LinkedIn, Twitter, Shutterfly, Netflix, Maps, Iphone with sync to icloud
- Enterprise cloud examples: Salesforce, Azure, Google, Verizon, ATT, CSC, ATOS, AWS, Pivotal (some focus on running apps, some focus on your existing workloads)



You think millennials  
are bad?

next gen "cloud" babies

# Think about your personal and work life

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- How much of your personal life is cloud based?
- How much of your work life is cloud based? #Gov20



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Now with an  
A-Z guide to the  
companies leading  
the switch



THE  
**BIG SWITCH**

**REWIRING THE WORLD, FROM  
EDISON TO GOOGLE**

*"Future Shock for the Web-apps era. . . Compulsively readable—for nontechnies, too—as it compellingly weaves together news stories, anecdotes, and data." —Fast Company*

**NICHOLAS CARR**

author of "Is Google Making Us Stupid?"

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## Utility Computing

Efficient (dev time,  
time to value)

Equalizer (small budget ok)

## Risks

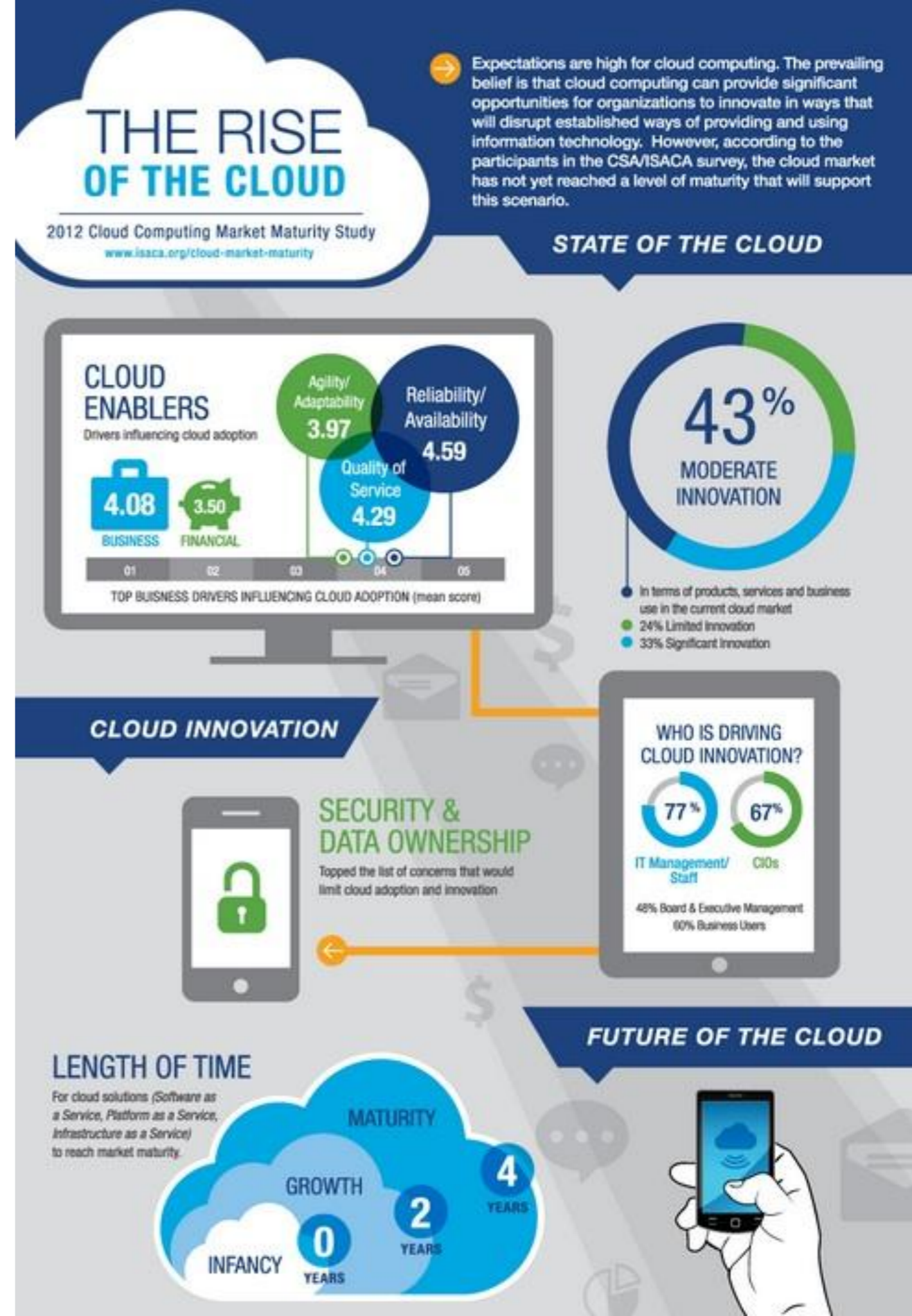
Compliance

Security (integrity)



# State of the Cloud

- Cloud Maturity - 2014-2016
- Influenced by Business, Financial, Availability, Agility
- Driven by IT Staff and CIO'





# How Cloud is Changing IT

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- The old SAN/Server/Network roles are quickly changing. If premise based then a "Converged Infrastructure Engineer" is maintaining Data Center.
- New roles that are growing are business and application focused. Developers, Dev/Ops, M&O, Compliance and Security, Data Scientists.



# Lets talk about Lessons Learned with Sharon

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- Costs
- Compliance/Security
- Availability
- Services/application development
- Patching and keeping lights on - lifecycle management
- Old way -  
plan/design/build/test/maintain/optimize/expand/upgrade



# VA House Case Study - Experience over past year

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- Email migration went extremely well
- Down time and other concerns have not occurred
- Greatest struggle has been with development efforts – feature sets not as robust with some cloud tools
- Development / programming skills needs have increased while server administration needs have decreased

# VA House Case Study - Where we are

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- Some development work now being done in a Platform as a service environment
  - Allowed for faster deployment
  - My developers aren't wrestling with server setups and configurations
  - Cost effective
  - It has a coolness factor
- Members have embraced cloud access for their services – anytime, anywhere approach models their needs
- Staffing needs have shifted



# VA House Case Study - What we learned

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- Cloud environments for hosting email vs. applications presented separate and distinct challenges
- Go slowly – pilot group helped identify issues
- Know retention requirements / laws and plan accordingly
- Research downtimes and development tools of cloud services
- Seeing it as an opportunity to reevaluate processes has improved overall service delivery

# Gartner study

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- Software-as-a-service (SaaS) contracts often have ambiguous terms regarding the maintenance of data confidentiality, data integrity and recovery after a data loss incident, which leads to dissatisfaction among cloud services users, according to a report from IT research firm Gartner. Buyers of commercial cloud services, especially SaaS, are finding security provisions inadequate, and these ambiguous terms are also making it harder for service providers to manage risk and defend their risk position to auditors and regulators. The report cautioned that, at a minimum, cloud services users should ensure that SaaS contracts allow for an annual security audit and certification by a third party, with an option to terminate the agreement in the event of a



# Things to think about

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- SLA
- FOIA
- Retention policies and costs associated from provider
- Legal holds, laws of your state and how you will comply
- Lessons learned, ask NALIT members and get advice from other states that have already tried a solution

Cloud should be treated with respect and due diligence in considering the ramifications along with benefits. Big Data has power to give you targeted ads within moments of asking the internet a question or looking up a product. It also means that every one of us has a digital fingerprint. Cookies don't matter anymore... your identity can be matched based on the uniqueness of the device you are using right now. You can go to [EFF.org](http://EFF.org) and get an idea of what your fingerprint looks like...

<http://panopticklick.eff.org/>

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