

Information Security as a Source of Innovation

Complex Adaptive Systems Conference

David Cass, SVP & CISO

Elsevier Information Security & Data Protection Office



Agenda



- Innovation Drivers
- What's Changed?
- What's Old is New Again?
- Guidelines / Framework for Innovation
- How Can Security Innovate?

Some notable quotes

“If change is happening on the outside faster than on the inside then the end is in sight.”

- Jack Welch

“If everything is under control you’re not going fast enough.”

- Mario Andretti

Or What kills CISO's?



Used to be:



Failure to help the business with:



3 Minute Business Case – Innovation Drivers



- Companies are very vulnerable to disruption!
- Low barrier to entry
- Disruption defined:
 - The same value delivered in different ways
- Innovation allows companies to pivot

3 Minute Business Case – Examples



- iTunes vs. Tower
 - Now is iTunes vs. Pandora, Spotify etc.
- Netflix
 - Shipping DVDs
 - Streaming videos
 - Producing top shows

What's Changed?



- External Factors
 - Emerging Markets
 - Outsourcing



What's Changed?

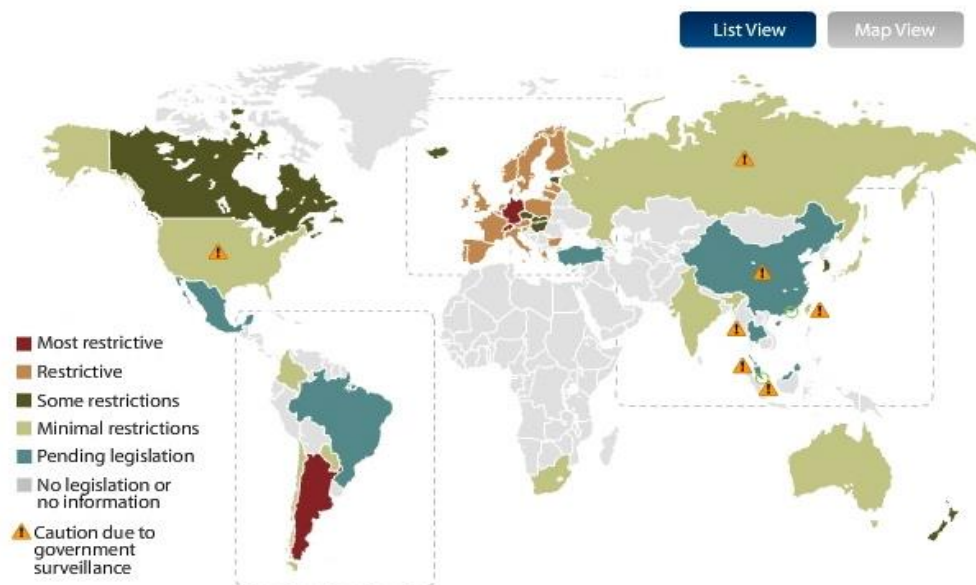


- External Factors

- Privacy

- > 80 Countries with Privacy Laws
 - US vs. EU vs. APAC definitions
 - Opt in vs. Opt out

Interactive Data Protection Heat Map



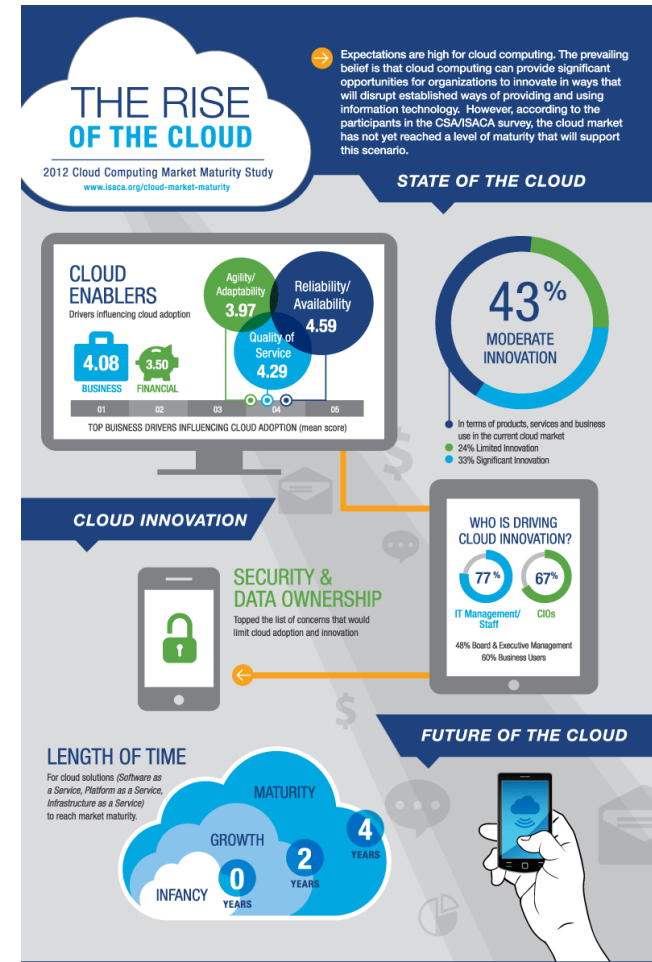
Source: US Department of Commerce and country specific legislation

Source: Forrester Research, Inc.

What's Changed?



- External Factors
 - Law & Cyber
 - HIPAA, GLBA, MA, CA...
 - Cloud
 - Fundamental change to the way people work



SOURCES
Information based on the 2012 Cloud Computing Market Maturity Study conducted jointly by:

ISACA
Media Inquiries: news@isaca.org
General Inquiries: info@isaca.org
www.isaca.org

CLOUD SECURITY ALLIANCE
Media Inquiries: pr@cloudsecurityalliance.org
General Inquiries: info@cloudsecurityalliance.org

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What's Changed?



- External Factors
 - Mobile Apps
 - BYOD



What's Changed?



- External Factors
 - Big Data
 - Social



What's Changed?



- Internal Factors
 - Increased need for business agility
 - Tech skills/expectations of workforce



What's Changed?



- Internal Factors
 - Changes in IT staff core competencies
 - Increased focus on Risk Management



What's Old is New Again?

Key Threats



- Have multiple sources of threat intelligence
- APTs
- DDOS
- Open Source

What's Old is New Again?

Key Threats



- SQL Injection
- Spear Phishing
- Insider

Guidelines / Framework for Innovation



1. Build nothing from scratch
 - Research first

1. Innovate process at small scales
 - Improves ability to deliver
 - Allow everyone to innovate

2. Share as much as you can
 - Break down silos
 - Transparency = Speed

Guidelines / Framework for Innovation



4. Sell it before you make it
 - See what works
 - Get traction
 - Don't build solutions in search of problems

5. Act Responsibly
 - Reputation
 - Say what you do and do what you say!
 - Aspirational vs. attainable

How can Security Innovate?



- Understand what is the Critical Business Knowledge
- Business Transformation
- Policies, Standards, Training & Awareness
- Communications at the Board and Exec Level
- Privacy and Security by Design

- Critical Business Knowledge
 - Define it
 - Is it a source of competitive advantage
 - Is there a regulatory requirement
 - Define a goal

- Business Transformation
 - What is the experience we want?
 - How do we deliver what they want?
 - Transparency

- Policies & Standards
 - Right size them
 - 1 page with bullet points
- Training & Awareness
 - Deliver the message in the way people consume info today

- Communications at the Board and Exec Level
 - Become a better story teller
 - Frame the conversation using FORR
 - Financial
 - Operational
 - Reputational
 - Regulatory

- Practice Privacy by Design
 - Proactive not Reactive
 - Privacy as the Default Setting
 - Privacy Embedded into Design



- Practice Privacy by Design
 - Full Functionality
 - End-to-End Security – Full Life Cycle Protection
 - Visibility and Transparency
 - Respect for User Privacy

- Security by Design
 - Protect the data and application
 - Security Awareness Training
 - Partner with the business
 - M&A process
 - Cloud

- Security by Design
 - Risk & Assurance
 - Application Security COE
 - Security Architecture
 - Incident Response

- Understand the way the business works
- Apply the 5 guidelines for innovation
- Ability to maintain agility
 - Answer is not binary
- We win by accomplishing business goals

Questions?



David Cass

SVP & CISO, Elsevier

E-mail: d.cass@elsevier.com

Twitter: [@dcass001](https://twitter.com/dcass001)