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:

- Unauthorized entry constitutes a security breach
- Authorized personnel only

-Innovation-
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
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
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
Innovation

• Critical Business Knowledge
  ◦ Define it
    • Is it a source of competitive advantage
    • Is there a regulatory requirement
  ◦ Define a goal
Innovation

• Business Transformation
  ◦ What is the experience we want?
  ◦ How do we deliver what they want?
  ◦ Transparency
Innovation

• Policies & Standards
  ◦ Right size them
    ◦ 1 page with bullet points

• Training & Awareness
  ◦ Deliver the message in the way people consume info today
Innovation

- 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

“Personal data is the new oil of the Internet and the new currency of the digital world.”
Meglena Kuneva, European Consumer Commissioner, March 2009
Innovation

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

- Security by Design
  - Protect the data and application

- Security Awareness Training

- Partner with the business
  - M&A process
  - Cloud
Innovation

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

• 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