Awareness 2.0

Spreading the Security Awareness Message Using Social Media

Information Shield

David Lineman

President and CEO

Presentation Overview

- Awareness 1.0
  - Losing the Cyber War
  - Rapid Diffusion of Cyber Crime
- Awareness 2.0
  - Awareness Concepts
  - Awareness Tools
  - Example at MySecurityIQ.org
- Get Involved!

Awareness 2.0 Proposition

- What if the security solution (awareness) could spread as fast as the problem?

- What if we could use the very tools that criminals use against us to fight back?

Awareness 1.0: Losing the cyber "war"

- Incidents and losses are growing…
  - Criminals are more motivated, organized, financed and networked
  - More networked and mobile users create more risks
- Widespread agreement that this is fundamentally a "human problem"
  - 85% of incidents involve human error,
  - Yet less than 1% is spent on awareness!

Examples of Rapid "Diffusion"

- Spread of botnets
- Virus/Worm Infections
- Adoption of YouTube, Facebook
- Use of Social Networking "Widgets"

Awareness 2.0 Proposition #2

- *We will continue to lose until the message of security awareness spreads just as fast and efficiently as an attack.*

Diffusion Research – Part 1

- The study of how an *innovation* is *communicated* through *channels* over a *period of time* through members of a *social system*.

- Examples:
  - New Corn Seeds in Iowa Farmers
  - Radios in Ships
  - Birth Control in Africa
  - Cell Phones in US

A Classic Diffusion Curve

Cumulative Innovation Adoption Curve

Late Adopters

Early Adopters

100%

0%

Time
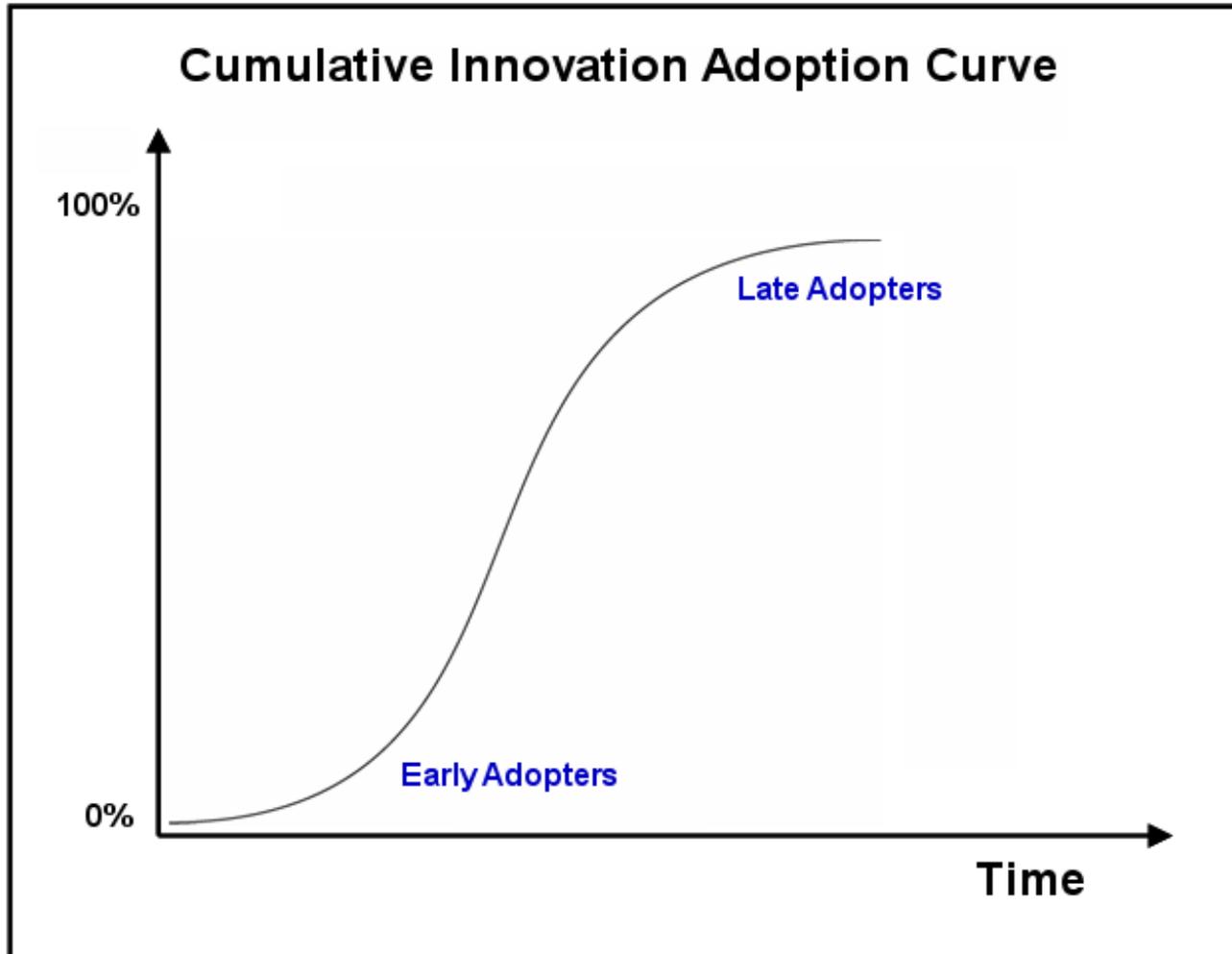
Diffusion Research – Part 2

- Conclusion #1
  - The rapid adoption of any idea/innovation relies at some point on the network of peers

- Conclusion #2
  - The population needs some type of motivation to adopt the innovation
    - Social status, money, self-preservation

Security Awareness 1.0

- Classroom and online training
- Security Awareness "Day"
- Awareness Reminders
  - Cups, posters, pens, electronic
- Unidirectional Messages

Security Awareness 2.0

- Compact, Engaging messages
- Delivered on familiar platforms
- From trusted peers, rather than "management"
- Leverages new technology
- Has a feedback, forwarding and rating system.
- Available "real time" when users need it.
- Has a motivational advantage
  - Prestige, Job Security, Money, etc.

Security Awareness "2.0"

- Use the network to work for us, rather than against us!

- Use modern communication tools to spread awareness messages
  - Blogs, RSS, SMS, Widgets, Video

- Re-purpose the messages the fit into these communication channels

- Use incentive systems to spread the message

informationshield.com

Example: MySecurityIQ

- Goal: *Every internet user should have basic knowledge of security principles*

- Free Security IQ "Quiz" & Certificate
  - www.mysecurityiq.org
  - Based on *Information Protection Made Easy*

- Web 2.0 Tools
  - MySecurityIQ Awareness Blog
  - Security Awareness Widget
  - Security Awareness Quiz Widget
  - Social Networking Features

Awareness 2.0: RSS

- **Real Simple Syndication (RSS)**
- **News Syndication Model**
- **Structured Message**
- **Dozens of free tools**
  - Create RSS feeds
  - Readers/Aggregators

- **Security Awareness Widget**

Awareness 2.0: Blogs

- **Inexpensive/Free Web Publishing**
  - WordPress, Blogger

- **Easy imbedding of multi-media**

- **Easy to Use**

- **Built-in feedback, RSS**

- **Example**
  - MySecurityIQ Blog

Awareness 2.0: Widgets

- **Small, portable applications**
  - Easily post on blogs, web pages, social network sites
  - Based on common standards
  - Free creation/publishing
  - Enables network effect

- **MySecurityIQ Quiz Widget**
  - MyStudiyo
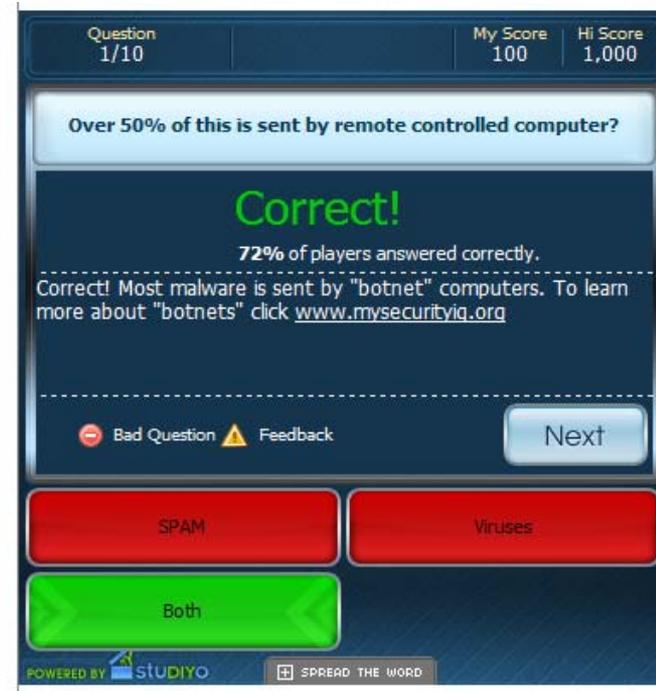
Awareness 2.0: Video

- **Visual Learning Experience**
  - Easily post on blogs, web pages, social network sites
  - Dozens of free tools for creating/publishing
  - "On Demand" training

- **Example: Password Video**
  - YouTube.com

Awareness 2.0: Social Networking

- **Peer-to-Peer Social Networking**
  - Integrates other web2.0 tools
  - Enables "network" effect
- **Examples**
  - Communities
    - Facebook, LinkedIn, MySpace.
  - Rating:
    - Digg, de.licio.us, yelp
  - "Micro-blogging" - Twitter

Get Involved! www.MySecurityIQ.org

Awareness 2.0 Summary

- Goal: To *protect* our critical infrastructure by ensuring that *every* user understands *basic* security principles

- Method: Rethink our approach to enable the "network effect" within our user population.
  - New Tools, Delivery Platforms
  - New Message Structure
  - Peer-to-Peer Feedback
  - Motivational Systems

- Get Involved at MySecurityIQ

Contact Information

- **David Lineman, President**
  - dave@informationshield.com
  - (888) 641-0500
  - www.informationshield.com
- **MySecurityIQ/Blog/Tools**
  - www.mysecurityiq.org
- **Book**
  - Information Protection Made Easy

informationshield.com
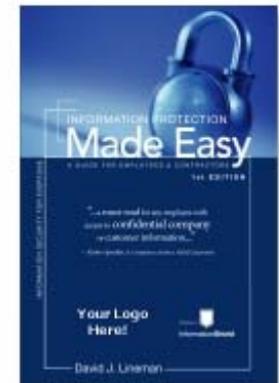
Research and References

- **Diffusion Research**

  - Diffusion of Innovations (Everett M. Rogers)

  - Made to Stick – Chip and Dan Heath

  - The Tipping Point – Malcolm Gladwell

- **Web 2.0 Examples**

  - www.MySecurityIQ.org

  - WidgetBlox

  - MyStudiyo