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RISK

Cyber Risk Management
and
National Strategy to Secure Cyberspace

Presented By

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AIG eBusiness Risk Solutions

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AIG eBusiness Risk Solutions

- Formed in January 2000
- Unit of American International Group (largest U.S. based international Insurer- $400B in assets)
- Mission: Evaluate the risks of the New Economy and design solutions combing risk management advice, technology and insurance.
- Approximately 2000 policyholders
- 70% market share of network security insurance in the world. (Source: Forbes, BusinessWeek)

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The Problem

- 90 of companies reported at least 1 successful computer attack (FBI/CSI)
- $2,000,000 average cost per attack for those which can be quantified (FBI/CSI)
- $13B in damage from viruses in 1991 (*National Strategy to Secure Cyberspace)*
- NIMDA- 86,000 computers affected *(National Strategy); $*500M damages worldwide (Reuters)
- Code Red- 150,000 computers affected in 14 hours, billions of dollars in damage (*National Strategy)*
- Melissa Virus- Estimated damage: $80M (Best's Review)
- "Love Bug" – Estimated damages: $10B (Best's Review)
- 2/200 DOS attacks- Estimated Damages: $1.2B (Yankee Group)

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Not to mention…Cyber-Terrorism

"It is very important to concentrate on hitting the U.S. economy through all possible means…look for the key pillars of the U.S. economy. The key pillars of the enemy should be struck…"

Osama Bin Laden

December 2001

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Response: The President's Draft *National Strategy to Secure Cyberspace*

- "Draft" released on September 18, 2002. (60 day comment period)
- Collaboration between federal gov't and private sector
- 86 Recommendations plus Items for "Discussions" and programs
- Levels (1-5)
  - The Home User and Small Business
  - Large Enterprises
  - Critical Sectors
  - National Priorities
  - Gobal
- www.securecyberspace.gov

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National Strategy Themes

- Private Sector action is critical because 85% of infrastructure is private
- Cyber-attacks are increasing in frequency and severity
- But government primary role is to encourage not regulate
- So, public sector must help, facilitate, persuade and create a friendly environment for private action across multiple industries and services
- There is no technological sliver bullet to cyber-threats
- A Risk Management approach is required.

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Selective Remarks in *National Strategy* on Risk Management

"The potential adversaries have the intent. The tools of destruction are broadly available, and the vulnerabilities of the nation's systems are many and well known. These factors mean that no strategy can completely eliminate risk,

but the nation can and must act to manage risk…"

Cyberspace Threats and Vulnerabilities: A Case for Action. "Individual and National Risk Management" (p. 5), *National Strategy to Secure Cyberspace (Sept 2002)*

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How do we respond?

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A Total Risk Management Approach

- Technology alone cannot eliminate security risk. There is no magic bullet.
- People and Process (social engineering training) must be combined with technology,

AND

- Since even the best combination of people, process and technology will not totally eliminate financial risk
- Insurance is needed as a financial and service safety net.

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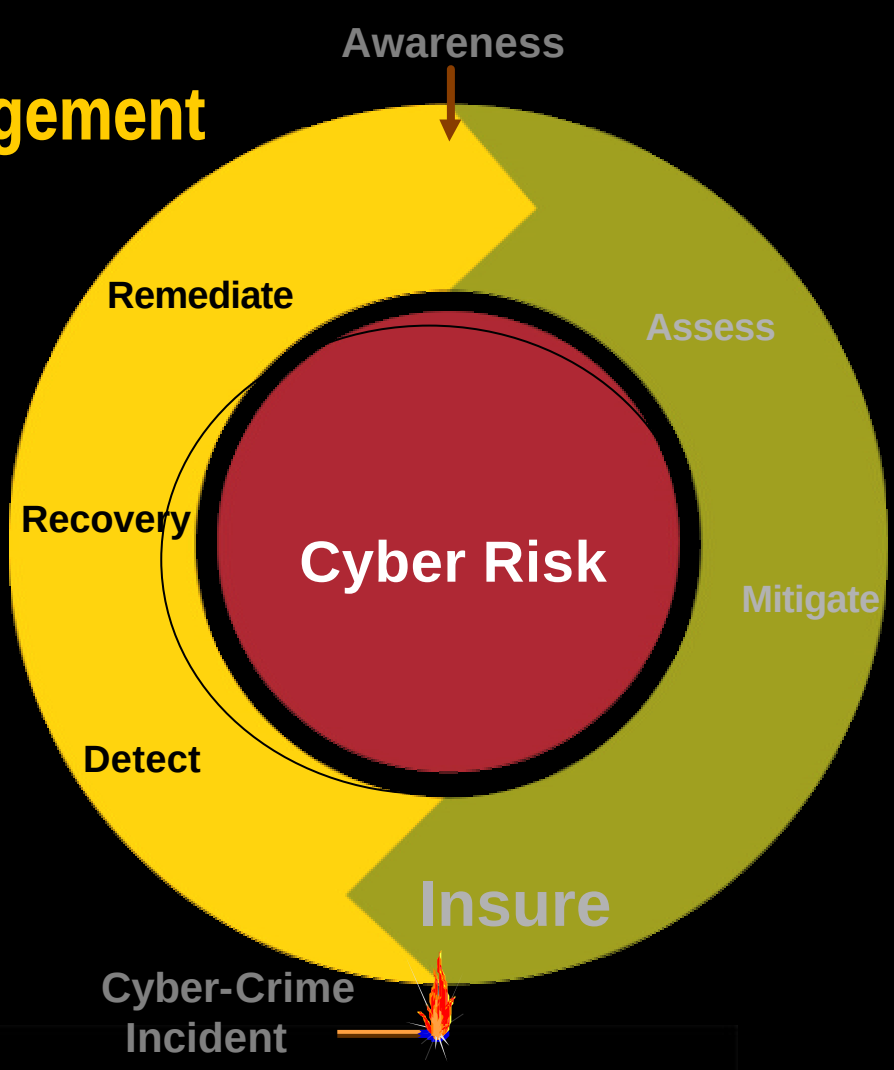
Corporate Cyber Risk Management



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Clarke on the role of the Insurance Industry

The insurance industry can play a pivotal role in securing cyberspace by creating risk-transfer mechanisms, working with the government to increase corporate awareness of cyber risks and collaborating with leaders in the technology industry to promote best practices for network security. ”

Richard A. Clarke, Chairman of the President’s Critical Infrastructure Board)

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Is there a role for the Risk Manager or Chief Risk Officer?

- Recommended Questions to the Board of Directors:
  - "What board members are responsibility for IT Security and Risk Management oversight?"
- Recommendation R2-1. Formation of a Corporate Security Council whose members are:
  - COO
  - CIO, CTO, CSO, Physical Security Officer,
  - Privacy Officer
  - Chief Risk Officer (sometimes called a Risk Manager)

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Activities of the Private Cyber-Insurance Market

- Product created in late 1999/early 2000
- Handful of carriers offering policies of different types and kinds
- One carrier commands 70% of the market but more are coming
- Current market is $100-200M but is expected to grow to $2.5B by 2005 according to Insurance Information Institute
- Programs typically include:
  - Low Cost or Free security assessment services (with no obligation to buy)
  - Both property, business interruption and legal liability coverages
  - Post incident support funds

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Can't traditional insurance help?

- NO. Traditional insurance was written for a world that no longer exists. Attempting to fit New Economy Risks into Traditional Insurance is like putting a round peg into a square hole. Examples:
    - CGL- No. Covers only bodily and tangible property. AI/PI section has potential exclusions/limitations in the area of web advertising.
    - Property- No. 99% of courts have said Data isn't "property". "Direct physical loss" requirement not satisfied.
    - Crime- Requires intent. Only covers money, securities and tangible property.

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AIG Cyber Risk Insurance Differentials

- 6 coverage grants, free assessments and post incident support
- Definition of claim to include both monetary and non-monetary relief
- *Express* cyber-terrorism coverage options
- Coverage for theft of customer information/credit card information
- Does not restrict coverage based on intent or motive of cyber-attacker, or if the attacker is an employee
- AAA S&P rating
- Global policy covering all web sites

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Insurance Options

AIG netAdvantage Suite COVERAGES	netAdvantage	netAdvantage Professional	netAdvantage Liability	netAdvantage Security	netAdvantage Complete
Web Content Liability	•	•	•	•	•
Professional Errors and Omissions		•	•		•
Network Security Liability			•	•	•
Cyber-Extortion			•	•	•
Network Security Property Loss (Intangible/Information) (1st Party)				•	•
Network Security Business Interruption Coverage (1st Party)				•	•
Cyber-Criminal Reward Fund				•	•
Crisis Communication Management Fund				•	•

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6 Insurance Coverages

- **Web Content Liability**
  - Covers copyright, trademark infringement, invasion of privacy, deep linking, framing violations etc arising from the content of web site
- **Professional Liability**
  - Covers acts, errors and omissions in the rendering of failure to render internet professional services to clients for a fee
- **Network Security third party liability**
  - Covers legal liability and legal costs for claims arising out of computer attacks caused by failures of security including theft of client information, negligent transmission of computer viruses and denial of service liability
  - Cyber-Terrorism coverage options available (required under TRIA)

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6 Insurance Coverages

- **(intangible/information) property loss**
  - Covers the cost of recollecting or retrieving data destroyed, damaged or corrupted due to a computer attack; can also cover theft of trade secrets and other information assets
- **Loss of eRevenue**
  - Covers cost of lost net revenue arising from a denial of service attack. Especially valuable for e-tailers.
- **Cyber-extortion**
  - Covers both the cost of investigation and the extortion demand amt.

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Summary

- The proposed *National Strategy to Secure Cyberspace* recommends a Risk Management approach to cyber security
- Risk management means efficient use of people, process, technology and risk transfer (insurance)
- Cyber-insurance programs must include security assessment services, robust coverage and post incident support funds.
- Cyber-insurance coverage can include:
  - Web content liability,network security liability,
  - Intangible assets damage & theft protection,
  - business Interruption protection,cyber-extortion, *express* cyber-terrorism

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For More Information

- Contact your insurance broker,
- Contact your local AIG office, or
- Emily Freeman, Vice President, AIG eBusiness Risk Solutions
  - 415-836-7262
  - emily.freeman@aig.com
- **www.aignetadvantage.com (the AIG cyber insurance web site)**

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