



# Managing Risk in a Hostile World



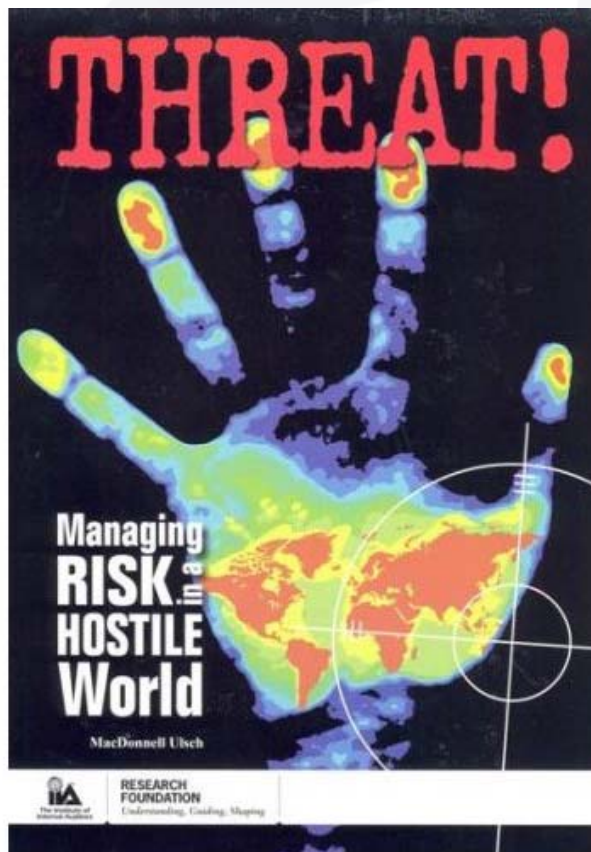
MacDonnell Ulsch  
President & C.E.O.  
Boston, Massachusetts  
U.S.A.





# About MacDonnell Ulsch

By MacDonnell Ulsch



- Served on United States Government Secrecy Commission.
- Advised intelligence office of a US President.
- Authored security policy paper for United States Senator Sam Nunn.
- Industrial espionage and security analyst at National Security Institute.
- Vice President & Chief Analyst, Security, Dun & Bradstreet Dataquest.
- Director, Global Risk Management, PricewaterhouseCoopers.
- Sr. Director, regulatory compliance, Gartner, Inc.
- Author of the book, "Threat! Managing Risk in a Hostile World."
- Author of global risk assessment tool intellectual property.
- Distinguished Fellow of the Ponemon Institute.
- Resolved one of largest industrial espionage cases in U.S. history.



## At-Risk Information

Both are corporate assets, both are targeted.

Intellectual  
Property  
&  
Trade Secrets

Personally  
Identifiable  
Information

Both classes of information assets  
have significant financial value.



# Variable and Cascading Risk

INTELLECTUAL  
PROPERTY



TRADE SECRETS

PERSONALLY IDENTIFIABLE  
INFORMATION



# Global Threat, Domestic Risk

**ZEROPOINT**  
Risk Research, LLC



## Rise of Economic and Industrial Espionage

- The Financial Impact: \$1 trillion in intellectual property and trade secrets stolen over the Internet in 2008.
- 106 nations active in economic espionage.
- China, Russia economic espionage leaders.
- Money generated from the sale of intellectual property and trade secrets, as well as personal information, is used to launder organized crime profits.



# Economic Espionage Drivers

- Military force modernization.
- Country-level economic competitiveness.
- Declining country-level economies.
- Increasing costs of research & development.
- Decreasing time to market requirements.
- Shifting country-level political alliances.
- Country-level strategic initiatives.
- Increased technological ability to acquire trade secrets.
- Growth of global organized crime and increased money laundering: trade secrets have money laundering value.
- Out-sourcing and off-shoring of data
- Mobile data distribution
- Lack of awareness



# Personal Data vs. Other Secrets

- Many regulations apply in the defense of personally identifiable information.
- Intellectual property and trade secrets are often under-protected.
- Yet, these secrets are vital to:
  - National economic competitiveness
  - Company competitiveness
  - Investors & Shareholders
  - Employees



## Who Steals Targeted Information?

- Employees
- Foreign or multinational corporations
- Foreign government-sponsored educational and scientific institutions
- Free-lance agents (some of whom are unemployed former intelligence officers)
- Computer hackers
- Terrorist organizations
- Revolutionary groups
- Extremist ethnic or religious organizations
- Drug syndicates
- Organized crime



# At-Risk Information

Personal  
Identity

Case  
History

Intellectual  
Property

Energy Technology  
Advanced Materials  
Information Technology

Trade  
Secrets

Resource & Environment Technology  
Biotechnology & Advanced Agricultural Technology  
Advanced Manufacturing and Automation Technology

These technologies are the engines of  
commerce that fuel the 21<sup>st</sup> century economy



# At-Risk Information

- Information Technology:
  - Computer Software & Hardware Technology
  - Communication Technology
  - Information Acquisition & Processing Technology
  - Information Security Technology
- Advanced Materials:
  - Photo-Electronic Materials & Devices Technology
  - Special Functional Materials Technology
  - High-Performance Structural Materials Technology



# At-Risk Information

- **Biotechnology & Advanced Agricultural Technology:**
  - Bioengineering Technology
  - Gene Manipulation Technology
  - Bio-information Technology
  - Advanced Agriculture Technology
- **Advanced Manufacturing & Automation Technology:**
  - Contemporary Integrated Manufacturing Systems (CIMS)
  - Robotics Technologies



# At-Risk Information

- Energy Technology:
  - Sustainable Energy Technology
  - Clean Coal Technology
- Resource & Environment Technology:
  - Marine Resources Exploitation Technology
  - Marine Biotechnology
  - Ocean Monitoring Technology
  - Technologies for the Prevention of Environmental Pollution
- Personal information continues to be a target.



# Information Theft Accelerators

A graphic of a target with a central bullseye and four intersecting lines. The text 'ZEROPOINT' is written in large, bold, red letters across the target, and 'Risk Research, LLC' is written in smaller, black, italicized letters below it.

**ZEROPOINT**  
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# Organized Crime

- Global organized crime gross: approximately \$2.0 Trillion annually.
- Organized crime works with narcotics traffickers and terror organizations. Linked to terrorist financing.
- Aggressive money laundering to cleanse dirty money is required.
- Organized crime is involved in trade secret theft and economic espionage, as well as personally identifiable information.
- Russia has emerged as a major international influence in organized crime:
  - US:
    - 24 crime families
    - 2,000 active members
  - Russia
    - 5,000 – 8,000 groups
    - 100,000 active members



# Mobile Data=Risk

- More than 10,000 laptop computers stolen in U.S. airports every week.
- The mobility of data increases the amount of intellectual property, trade secrets, and personal information stolen.
- The value of a compromised laptop is believed to be approximately U.S.\$850,000.
- Awareness is low, and so is compliance with policy.
- **CASE HISTORY: compromised laptop.**



# Data-Rich Blogs: High-Risk

1. Employees Use Work Email Accounts

2. Blog Databases Archive Messages

3. 100MM+ Blogs and Databases

4. Databases Scanned by Organized Crime, Hostile faction

## Blog Databases: Billions of Messages

8. Many Offices Have No Blog Restriction Policies

7. Identity Thieves, Internet Scams, Spammers Acquire Data

6. A Rich Source of Information for Trade Secrets When Analyzed

5. Millions of Messages Analyzed Using Sophisticated Data Mining Software



# Trust—But Verify

The logo for ZeroPoint Risk Research, LLC. It features a target symbol with a central bullseye and four intersecting lines. The word 'ZEROPOINT' is written in large, bold, black letters across the target, with 'Risk Research, LLC' in smaller, black letters below it.

**ZEROPOINT**  
Risk Research, LLC



# Third-Party Risk Reduction Strategy

**Security Standards Agreement**

**Privacy Standards Agreement**

**Specific Risks Defined**

*Trust But Verify!*  
**Trusted Community Development Model™**

**Audit Terms Agreement Defined**

**Enforcement Mechanisms Defined**

**Compliance Terms Defined**



# In Closing





# Case History: Personal Information Risk

CISO Receives Suspicious Activity Report

CPO/Legal Renders Opinion

CFO & Auditor Contest Legal Finding

Third-party Opinion Sought

CPO/Legal Reverses Opinion

Risk Procedures Are Remediated

Reputation Risk Deemed Most Critical



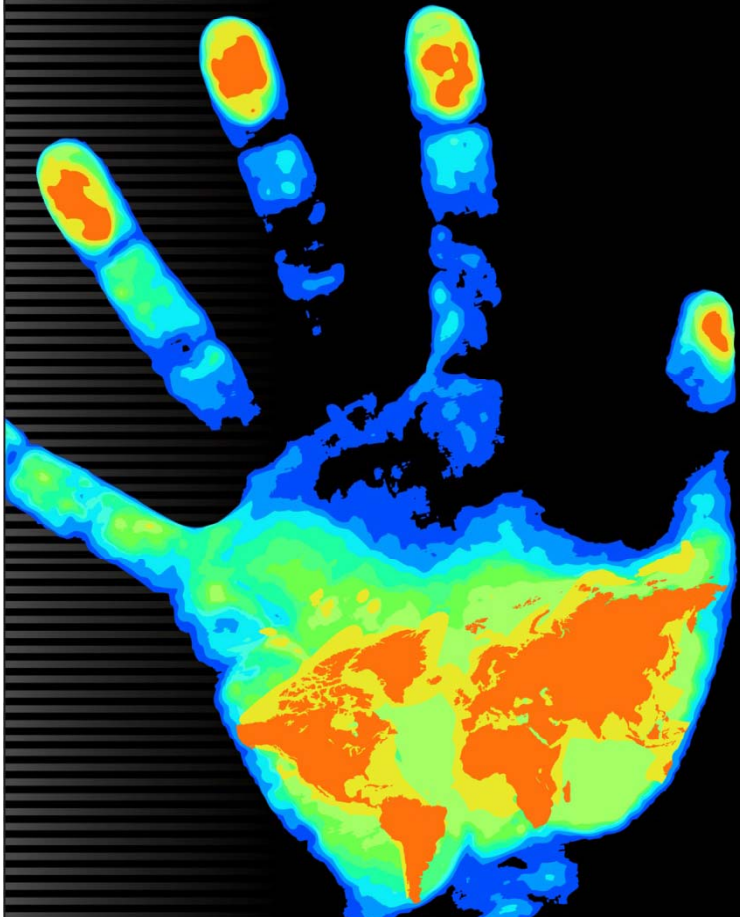
# Who Manages Risk?

- The responsibility is enormous and requires a multi-disciplinary approach:
  - Internal Audit
  - Legal: In-house Counsel and Outside Counsel
  - Physical, Logical, Administrative Security
  - Risk Management
  - Privacy and Compliance
  - Human Resources
- Key concern: security often operates independently, does not speak language of risk.





## CONTACT



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