

# Unsecured Economies: Protecting Vital IP

Jackie Rees, Ph.D.

Associate Professor of Management Information Systems

Krannert School of Management

Center for Education and Research in Information Assurance and  
Security

Purdue University

# Unsecured Economies: Behind the Scenes

- 87-item questionnaire administered to over 1,000 firms in late October-early November 2008
- Questionnaire targeted to “Senior IT Decision Maker” (CIO/ Director level)
- Administered via phone and WWW
- Countries surveyed:
  - US
  - UK
  - Germany
  - Brazil
  - China
  - Japan
  - India
  - Dubai
- Industry Sectors:
  - Defense
  - Retail
  - Product Development and Manufacturing
  - Financial Services
  - Government
  - Information Technology and Services
  - “Other”

# Unsecured Economies: Highlights of an Industry-level Analysis

- Why is intellectual property stored outside the home country?
  - Finance: **Safer to store the data elsewhere** (38%)
  - IT and Prod. Development & Manufacturing: **More efficient for supply chain partners** (37% and 40%)
  - Retail and Defense: **Better expertise available elsewhere** (35% and 44%)

# Unsecured Economies: Highlights of an Industry-level Analysis

- Spend:
  - 67% of Finance industry respondents report spending “**just the right**” amount on security
  - 30% of Retail industry respondents report spending “**too little**” on security
- Risk Assessments:
  - **Most Frequent:** Defense (67% monthly or more often)
  - **Least Frequent:** Product Development and Manufacturing (31% annually or less often)

# Unsecured Economies: Highlights of an Industry-level Analysis

- Security Investment Drivers:
  - All industries except IT: **Compliance with regulations**
  - IT: **Competitive advantage**
- Threat Sources:
  - **Own employees** (all industries)
  - Patching vulnerabilities (all except Defense)
  - Cyberterrorism (Defense)

# Unsecured Economies: Highlights of an Industry-level Analysis

- Worst part of a security breach?
  - **Impact to Reputation**
- Most likely to report a breach?
  - **Defense**
- Least Likely?
  - **Retail**
- Most likely to investigate a breach?
  - **IT**
- Least Likely?
  - **Defense**
  - Reasons:
    - Cost
    - Bad PR

# Unsecured Economies: Highlights of an Industry-level Analysis

- Pakistan seen as big problem by most industries
  - Greatest threat to integrity of sensitive information
  - Poor reputation for pursuing security incidents originating within country
    - Poorly skilled law enforcement
    - Corruption
    - Lack of cooperation from federal and local officials
  - Respondents reported avoiding storing/processing information in country

# Any questions?

Thank you!