



# Unsecured Economies: Protecting Vital IP

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# An Interesting Quote

“Before, criminals used to steal money to become rich, but now they have realized that they can be rich by stealing corporate information.”

– An official from the US Treasury Department



# Motivation for the Study

- Information is increasingly becoming digital
  - Includes intellectual property and sensitive data.
- ... and data is moving beyond the traditional boundaries of the firm.
- Therefore, protecting information leaks is becoming increasingly harder, and risks higher.
- Information security is primarily related to the *perception* of risk.



# Questions

- How do security perceptions and practices vary across economies and industries?
- How do the perceptions regarding economies affect the transfer of intellectual properties?



# Survey

- “Senior IT decision makers” (CIO/director level) in 790 firms
- Survey administered over phone and web
- Countries surveyed:
  - US, UK, Germany, Brazil, China, Japan, India, Dubai
- Industry Sectors surveyed:
  - Defense, Retail, Product Development and Manufacturing, Financial Services, Government, Information Technology and Services



# Intellectual Property (IP)

- Majority of the IP originates from North America and Western Europe (47% of the respondents).
- On average \$17 million worth of intellectual property and sensitive information is moved outside the country of origin.



# Security and IP Loss

- Information security investment as a fraction of IT budget is lower in developed countries (US, UK, Germany, Japan) than in developing countries (China, India, Brazil).
  - Developing countries are motivated to invest to maintain competitive advantage
  - Developed countries invest in response to regulations
- On average firms lost \$4.6 million worth of IP last year



# The Perfect Storm: Economic Downturn

- 39% percent of respondents believe sensitive information has become more vulnerable now due to the current economic climate.
- 68% reported insider-threat as their top concern above un-patched vulnerabilities, cyber-terrorism and cyber espionage
- 42% are worried about laid-off workers





# Security Investment During the Downturn

- Investments are not expected to increase
  - Majority of respondents indicated that they are not considering an increase (62%)
    - China was the exception (57% expected to increase investments)
  - Majority of US firms do not expect change in investments



# Information Security Perception

- China, Russia and Pakistan were considered the serious threats
- Perceptions appear to be more rooted in historical conflicts and modern economic, cultural and political differences
  - China vs. Japan; India vs. Pakistan; US vs. Russia
- Except for Japan and US, all the countries perceived themselves better than how other countries perceived them



# Some Key Challenges Ahead

- Information security is simply not a technology issue – it is an important managerial issue
  - Organizational silos and information security
- Information security threats are global. Yet, we don't have proper procedures to deal with the global threats



Thank you!