RSAConference2016

San Francisco | February 29 – March 4 | Moscone Center

DRAFT

Protect

SESSION ID: GRC-F02

Cyber Risk Diligence in M&A and Investing: Negotiating a Better Deal

Emilian Papadopoulos

President

Good Harbor Security Risk Mgmt

emilian@goodharbor.net

@epapadopoulos

Bradley Schaufenbuel

Global Director of IT Security

Sidley Austin LLP

bschaufenbuel@sidley.com

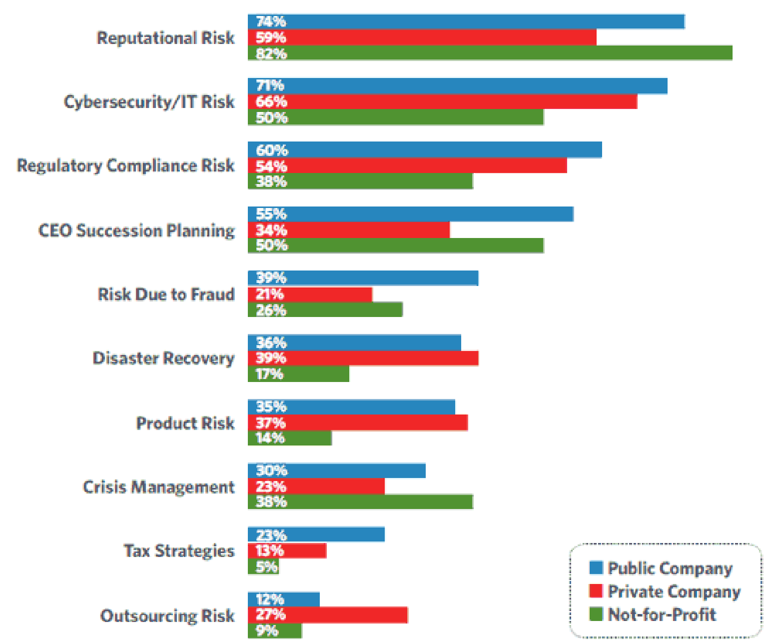
@bschaufe

#RSAC

The Problem

DRAFT

- Cyber security risk is considered one of the greatest risks faced by many organizations
- Yet, cyber risk is not typically considered in M&A or investment due diligence
- Results:
  - incomplete understanding of risk
  - over-valuation of assets
  - new risks for the buyer/investor



The Opportunity

DRAFT

- Know what you are buying: has the target already been compromised?
  - Intellectual Property
  - Trade Secrets
  - Business strategy

DRAFT

The Opportunity

- Today, cyber risk management only indirectly contributes to business objectives (e.g., through nebulous measures of "risk reduction")
- The "Holy Grail" of cyber risk managers is to contribute directly to the bottom line
- Obtaining a measurable discount on the purchase price of an asset is a direct contribution to P&L
  - More accurate valuation of target than the competition
  - More negotiating leverage (synergies or expected return discounted by cyber risk)

The Opportunity

DRAFT

- Protect yourself and your investment
  - Plan ahead to reduce risk to the buying/investing entity
  - Incentivize sellers to build and maintain effective cyber security programs
  - Prepare for a successful exit

(How Much) Does it Matter?

#RSAC

DRAFT

- 2015: $4.7 trillion worth of M&A
  - Pfizer & Allergan ($150b), Royal Dutch Shell & BG Group ($70b), Anthem & Cigna ($52b), Dell & EMC ($67b)
- 2016 may come close
  - “Oil and gas deals to ‘ramp up’” – FT 1/6/2016
- Marriot & Starwood
  - Nov. 16, 2015: Marriott International announces deal to acquire Starwood for $12.2b
  - Nov. 20, 2015: Starwood discloses debit/credit card theft from 54 hotels

When Is Cyber Risk "Material"?

DRAFT

- Target possesses regulated consumer or employee data (PII, PHI, etc.)
- Target possesses cardholder data (subject to PCI DSS)
- Target possesses intellectual property (e.g., source code, trade secrets, etc.)

Determining a “Cyber Risk Discount”

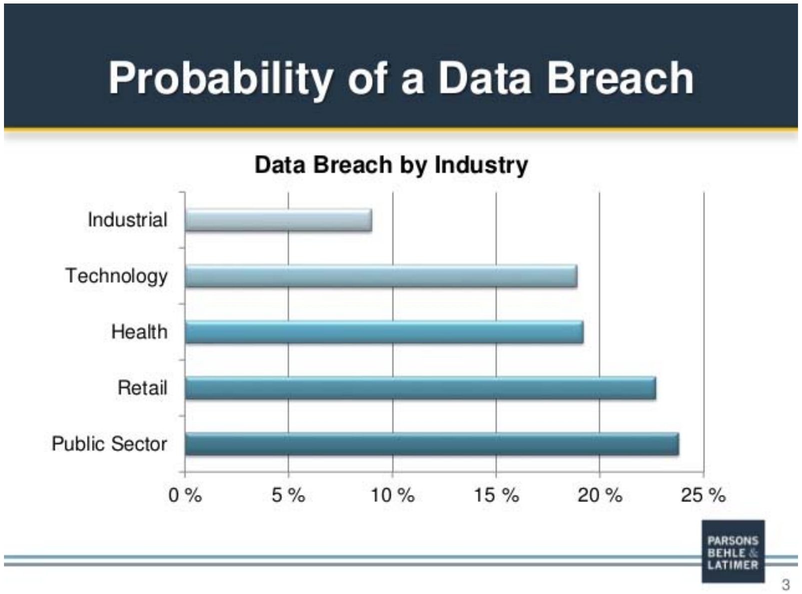
DRAFT

- Cost of breach: Number of unique records x Average cost per record (Ponemon)
- Annual loss expectancy: Cost of breach x probability of breach
- ALE of future years then discounted to present to determine risk discount

Calculating Probability of Future Losses

DRAFT

- **Historical data breach loss data (becoming available as insurers track losses)**
- **Assessment of target's cyber security program maturity (e.g., questionnaire, audit)**
- **Organizational threat and vulnerability assessment**



Others Factors Affecting Calculation

DRAFT

- Presence and amount of cyber insurance coverage
- Reserves (ability to absorb financial costs of a breach)
- However, it is important to remember that <u>reputation</u> cannot always be repaired with money

SIDLEY AUSTIN LLP SIDLEY

GOOD HARBOR SECURITY RISK MANAGEMENT, LLC

It Can Go Both Ways in M&A Context

DRAFT

- The relative strength of buyer's and seller's cyber security program matters
- If seller's program is stronger, the buyer will gain from the transaction
- The valuation of the seller may therefore increase

Don't Forget Target's Relationships

DRAFT

- In an interconnected world, the cyber security stance of partners, customers, suppliers, etc. matters
- In addition to assessing the vendor management program, buyers should assess major upstream and downstream players in the supply chain

Measuring Cyber Security Posture

- Existing third party cyber security assessment processes can be leveraged (if they exist)
- Can combine a number of techniques (questionnaires, visits, testing, etc.)
- Goal: Quantify target's ability to reduce the probability of a data breach

DRAFT

Case Study

- Large, diversified community bank acquiring a BIN rental business with nine clients
- As the issuing bank, the acquirer was responsible for PCI DSS compliance
- Acquirer leveraged cyber risk diligence to negotiate a risk discount on the purchase price

Other Potential Applications

DRAFT

- Cyber insurance underwriting (premiums adjusted for cyber security risk)
- Changes in accounting rules (e.g., discounting intangibles such as goodwill)
- SEC disclosures for publicly traded companies (requiring issuers to quantify cyber security risk)

Application of the Concepts

DRAFT

- Next week, you should…
  - Understand your organization’s involvement in M&A, investment, and integration activities
  - Identify opportunities to leverage cyber risk diligence in your organization

Application of the Concepts

DRAFT

- In the first three months following this presentation, you should…
  - Gather tools (cyber risk assessment methodology, historical loss statistics)
  - Socialize the concept internally and get agreement to include cyber risk in diligence
  - Develop capabilities in cyber risk diligence, cyber risk measurement, and loss prediction

Application of the Concepts

DRAFT

- **Within six months, you should…**
  - **Leverage cyber risk diligence in M&A or investing to improve a valuation and get a better deal**
  - **Use cyber risk diligence to improve IT/security integration on a recent or planned investment/acquisition**

Other Resources to Consult

DRAFT

#RSAC

- *Is the Insurance Industry Keeping Up with the Rapidly Evolving Cyber Risk Landscape?*, Asia Insurance Review, Nov. 2015
- *An Introduction to Factor Analysis of Information Risk*, http://riskmanagementinsight.com/media/documents/FAIR_Introduction.pdf
- *An Introduction to the Open FAIR Body of Knowledge* and other resources from The Open Group, https://www2.opengroup.org/ogsys/jsp/publications/mainPage.jsp

DRAFT

Questions?

- Emilian Papadopoulos – President – Good Harbor Security Risk Management – www.goodharbor.net – emilian@goodharbor.net
- Bradley Schaufenbuel – Global Director of IT Security – Sidley Austin LLP – www.sidley.com – bschaufenbuel@sidley.com